Medical Guidelines

Region: New Mexico

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Corporate Authorization

This Medical Guidelines has been reviewed and approved by the following individual(s):

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Regional or State Medical Director

Facility Medical Director

Site Administrator/Site Manager (If applicable)

Date of Effectiveness: January 5, 2023

The Medical Guidelines are reviewed annually but may not require revision. If a change is made, a revision date will be added and updated accordingly.

The contents of this manual are proprietary and confidential. This manual must be returned to the corporate office of Wexford upon employee termination or end of contract.

Preface

This manual is intended to serve as a reference tool for clinicians practicing medicine in the jails and prisons served by Wexford Health Sources, Inc. (Wexford Health). The manual contains clinical pathways, treatment protocols, and algorithms designed to promote a standard level of quality and care at Wexford Health sites. The goal of each clinical pathway is to assist the clinician in reaching the best possible outcome for each patient, while reducing opportunities for errors or inefficiencies. Wexford Health's clinicians should incorporate the tools in this manual into daily practice.

The manual has been developed, and is maintained, by the Medical Advisory Committee of Wexford Health. This committee is composed of clinical and administrative peers charged with developing consensus on clinical issues utilizing the most recent professional standards, evidence-based studies, and accepted practices.

Clinical pathways do not replace sound clinical judgment, nor are they intended to strictly apply to all patients. The specific strategies and pathways presented in this manual provide a clinical management approach, but their application is a decision made by the practitioner accounting for individual circumstances.

Medical management and information is continually changing as better treatments, testing, or approaches are learned. Consequently, some items in this manual may become obsolete and, as a result, this manual will continually evolve**. Clinicians practicing at Wexford Health sites are encouraged to assist in keeping this manual updated and useful by presenting new information, sharing successful clinical approaches, and informing of adverse or suboptimal outcomes.**

As always, Wexford Health encourages its practitioners to utilize all accepted resources in providing care, as well as the leadership and advisement of its varied staff of medical directors and administrators. The "Quest for Excellence" is never complete.

If there are any conflicts between these guidelines and client-specific guidelines, administrative directives or institutional directives, then the respective client-specific guidelines, administrative directives or institutional directives language is controlling to resolve such conflict. In cases where state and local laws differ from these guidelines, Wexford Health will comply with the applicable local or state law.

Revised: 8/26/2015

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Medical Advisory Committee: Mission Statement and Guidelines

The Medical Advisory Committee (MAC) is composed of health care clinicians and administrative professionals appointed by the Corporate Medical Director (CMD) to guide medical and behavioral health practices resulting in the best outcomes for individuals and agencies served by Wexford Health.

I. MISSION STATEMENT

It is the mission of the MAC to develop consensus on clinical issues utilizing the most recent professional standards, evidence-based studies, and accepted practices.

II. PHILOSOPHICAL APPROACH

The MAC will actively advise and provide a diversity of perspectives to the CMD and corporate office on matters relating to the effective and appropriate provision of medical and behavioral health care to incarcerated persons.

The MAC will guide clinical services to reflect "best practices" and standards in correctional medicine. Positions will be developed with reference to professional medical and correctional standards, medical and correctional ethics, evidenced-based medicine, community standards of care, and the clinical and field experience of committee experts. Mechanisms of guideline development and practice include the development and implementation of treatment protocols, algorithms and guidelines, and continuous quality improvement. Consistent with NCCHC Standard P-A-03, clinical decisions and actions regarding health care provided to patients to meet their serious medical needs are the sole responsibility of qualified health professionals.

MAC protocols, guidelines, and algorithms do not replace sound clinical judgment and may not need to be strictly applied to every patient.

III. GOALS

A. To advise and develop treatment tools for practitioners that will result in the best possible outcome for each patient.

B. To promote practices that will reduce medical errors and encourage a uniform quality of care.

C. To determine the most effective and efficient practices in approaching clinical and treatment challenges.

D. To guide practices which reduce medical risks.

E. To develop and promote practices that increase continuity of care.

F. To alert clinical and administrative staff of changes and updates in clinical knowledge, practices, technology, trends, and emerging concerns.

G. To provide clinical and ethical advice for specific or complex patient cases.

H. To review patient cases where a difference of opinion exists between the site provider and the Regional Medical Director and/or UM Medical Director. Qualified outside physicians may be consulted for independent review when differences of opinion continue to exist between the various members of the Medical Advisory Committee.

I. To participate in quality assurance activities.

IV. MEMBERS

A. Members will be appointed by the Wexford Health CMD.

B. The Wexford Health CMD shall serve as the Chair of the Committee.

C. The size of the MAC will be determined by the CMD, and shall include at least one representative from each major Wexford Health region.

D. Wexford Health clinical practitioners will constitute a majority of members at all times, but the MAC will include Wexford Health administrative staff and reflect professionals from a variety of disciplines.

E. Members will serve for a term of two years and may be reappointed.

F. Candidates may be nominated by a member of the Committee and approved by the CMD.

V. MEETINGS

A. Frequency: Meetings will be conducted monthly at the discretion of the Chair.

B. Agenda: The agenda will be developed by the Chair and/or designee with the assistance of the Vice President of Medical Services. Any member wishing to include an item on the agenda should present the agenda item to the Chair for approval and inclusion.

The agenda will be developed by an individual designated by the Chair and/or designee and distributed to the members at least one week prior to the next meeting.

C. Minutes: Minutes from the meeting will be completed by an individual designated by the Chair and will be distributed to the members one week prior to the next meeting. The MAC will review and approve the minutes.

VI. MEMBERSHIP EXPECTATIONS

A. MAC members are expected to review the agenda and be prepared to offer suggested revisions prior to the meeting.

B. All members are expected to actively participate and offer comments related to their expertise.

C. All members are expected to be present and timely.

D. All members will notify the Medical Director or designee if the member will not be in attendance. If there are more than two unexcused absences by a member, the member may be discharged from the MAC by the Chair.

M-003A: Pregnancy and Opioid Use

References: ACOG, ASAM, SAMSHA, ACA: 5-ACI-6A-41, 5-ACI-5E-11, 5-ACI-6A-10; NCCHC: P-F-05, MH-G-07, J-F-05

I. GUIDELINE

For the management of opioid use in pregnant patients Wexford Health's guidance is based on the guidelines set forth by SAMSHA, American Society of Addiction Medicine (ASAM) and The American College of Obstetricians and Gynecologists (ACOG).

Pregnant patients with opioid use disorder should not undergo withdrawal from opioids.

Medication Assisted Treatment (MAT) is the standard of care for pregnant women with opioid use disorder and will be provided for the duration of the pregnancy.

Coordination of care between with the OB/GYN and onsite medical/behavioral health is important for pregnant women with opioid use disorder.

Decisions on MAT during the postpartum period will be based on client guidance and guideline.

II. BACKGROUND INFORMATION

The National Institute on Drug Abuse (NIDA) defines addiction as a chronic disease that can be managed and treated successfully. Like other chronic disease processes (e.g. diabetes, hypertension), the successful treatment of substance use disorders depends on social support, patients-provider rapport, as well as treatment availability.

Approximately 40–60% of patients relapse and resume illicit drug use in the first year after discharge from substance abuse treatment programs, which is similar to a 60% relapse rate for adults undergoing treatment for hypertension or asthma.

Barriers to treatment in pregnancy created by misguided guideline approaches result from a fundamental misunderstanding of the chronicity of addiction and the need to provide ongoing treatment for addiction disorders with both medical and psychosocial interventions.

Opioid use disorder (OUD) may involve illicit or prescription medications, as well as heroin, methadone, buprenorphine diverted or misused prescription opioids, or other morphine-like drugs. Opioid addiction is a chronic, relapsing disease.

Acute opioid withdrawal is physiologically stressful, characterized by profound activation of the sympathetic nervous system with hypertension, tachycardia, and gastrointestinal symptoms. MAT during pregnancy improves prenatal care, reduces illicit drug use, and minimizes the risk of fetal in utero withdrawal.

Opioid use in pregnancy has escalated dramatically in recent years, paralleling the epidemic observed in the general population. The number of women with opioid use disorder in labor and delivery has recently more than quadrupled.

Opioid use during pregnancy is associated with substantial maternal, fetal, and neonatal risks. These risks are related to repeated opioid exposure (e.g., risk of overdose) as well as factors associated with opioid use (e.g., smoking, poor nutrition, needle sharing, unstable lifestyle).

Opioid exposure during pregnancy has been linked to negative health effects for both mothers and their babies. These include maternal death and poor fetal growth, preterm birth, stillbirth, possible specific birth defects, and neonatal abstinence syndrome. The effects of prenatal opioid exposure on these children over time are largely unknown. However, using prescribed opioids for treatment of opioid use disorder during pregnancy may be necessary and outweigh the risks of these potential negative health outcomes.

Opiate use or misuse may include heroin, codeine, morphine, OxyContin, Tylenol #3, hydromorphone, buprenorphine (Suboxone or Subutex), Tramadol, Fentanyl, etc. regardless of the route of transmission.

III. INTERVENTION

Medication Assisted Treatment (MAT) is defined as the use of FDA-approved medications, in combination with counseling, and behavioral interventions to provide individualized whole patient approach to treat opioid use disorders. This treatment combination can lead to more favorable outcomes.

Medication Assisted Treatment (pharmacotherapy) of opioid use disorder (OUD) is recommended for pregnant women with OUD and should be accompanied by close supportive clinical follow-up. The goal is to prevent obstetric and neonatal complications associated with OUD as well as detox, facilitate prenatal care, and help women avoid the myriad risks from the unstable lifestyle associated with the drug culture (e.g., drug-related criminal activity, homelessness, domestic violence, and infectious diseases).

The Substance Abuse and Mental Health Services Administration (SAMHSA) the American Society of Addiction Medicine (ASAM) and the American College of Obstetricians and Gynecologists. (ACOG) recommend MAT with either methadone or buprenorphine (without naltrexone which is Subutex) for pregnant women with opioid use disorder.

IV. MEDICATIONS USED FOR MAT

A. Buprenorphine - Subutex vs. Suboxone

1. Buprenorphine belongs to a class of drugs called partial opioid agonist.
2. The primary difference between **Suboxone** and **Subutex** is that Suboxone also contains a substance called “naloxone” while Subutex does not:
    a. **Subutex** contains a single active ingredient: **buprenorphine**.
    b. **Suboxone** contains two active ingredients: **buprenorphine** and **naloxone**.

B. Methadone

1. Methadone is a long-acting full opioid agonist.
2. Understanding the signs and symptoms of intoxication verses withdrawal is imperative when providing MAT intervention. If a patient is currently “intoxicated,” adding medication could, in fact, cause an overdose. Clinical judgment is crucial during this process since methadone is a Schedule II controlled medication.

C. Methadone or Buprenorphine

1. While methadone has been the standard choice for pharmacotherapy of OUD during pregnancy since the 1970s, buprenorphine is increasingly used because neonatal withdrawal (also known as neonatal abstinence syndrome) appears to be less severe when the mother is treated with buprenorphine as opposed to methadone.
2. When determining the appropriate course of treatment, multiple factors must be evaluated including medication availability, during and after incarceration.

D. Pregnant individuals already established on MAT (methadone or buprenorphine) should continue the established medication.

1. Switching/ changing from methadone to buprenorphine or from buprenorphine to methadone is not recommended and may lead to withdrawal.

V. Recognizing Signs and Symptoms of Opioid Intoxication and Withdrawal

The table below lists signs and symptoms of opioid intoxication and withdrawal.

Opioid Intoxication	Opioid Withdrawal
Signs	Signs
• Bradycardia (slow pulse)	• Tachycardia (fast pulse)
• Hypotension (low blood pressure)	• Hypertension (high blood pressure)
• Hypothermia (low body temperature)	• Hyperthermia (high body temperature)
• Sedation	• Insomnia
• Miosis (pinpoint pupils)	• Mydriasis (enlarged pupils)
• Hypokinesis (slowed movement)	• Hyperreflexia (abnormally heightened reflexes)
• Slurred speech	• Diaphoresis (sweating)
• Head nodding	• Piloerection (gooseflesh)
	• Increased respiratory rate
	• Lacrimation (tearing), yawning
	• Rhinorrhea (runny nose)
	• Muscle spasms
Symptoms	Symptoms
• Euphoria	• Abdominal cramps, nausea, vomiting, diarrhea
• Analgesia (pain-killing effects)	• Bone and muscle pain
• Calmness	• Anxiety

Source: Consensus Panelist Charles Dackis, M.D.

VI. MAT OF INCARCERATED PREGNANT PATIENTS – GENERAL GUIDANCE

A. DO NOT STOP OPIOIDS IN PREGNANT PATIENTS.

B. Contact the clinician as soon as possible for any pregnant patients suspected of being severely intoxicated.

C. For MAT, the patient should have clinical evidence of opioid dependency as well as a positive pregnancy test.

D. Screening will be provided by staff upon discovery of opioid use to determine frequency and severity of use. (See attached *M-003A.01 Opioid Use Screening* form.)

E. Record amount, route, and duration of habit/use considering the possibility of exaggerated dosages.

F. All female patients assessed for opioid use will be tested for pregnancy prior to beginning an opioid detox protocol. If pregnant, do not detox.

G. If available, an onsite urine drug test should be performed to confirm opioid use.

H. A Clinical Opiate Withdrawal Scale (COWS) assessment should be conducted as soon as possible to track and monitor the pregnant patient. (See attached *M-003A.05 Clinical Opiate Withdrawal Scale*.)

I. Call the clinician as soon as possible for any patients suspected of having a severe narcotic withdrawal if determined by either signs/symptoms or through the COWS assessment.

J. Frequency of the COWS is typically directed by a clinician.

1. The recommended frequency for a pregnant patient with a confirmed opioid use disorder is typically between 4 to 8 hours until stable and the provider requests that COWS is discontinued.

K. The clinician will be notified as soon as possible to ensure appropriate course of action is taken to ensure the safety of the mother and her fetus.

1. The provider should review both the *Opioid Use Screening* form and the COWS to determine the course of action needed to determine the time frame to start MAT.

2. The planned course of action will depend on the source of the opioids as described in later sections.

L. An additional form called DSM-5 Opioid Use Disorder (OUD) Diagnostic Criteria has been attached to this guideline to provide additional guidance when diagnosing OUD. (See attached *M-003A.04 DSM-5 Opioid Use Disorder (OUD) Diagnostic Criteria*.)

VII. PREGNANT PATIENTS ENTERING THE FACILITY ESTABLISHED ON METHADONE THROUGH AN OTP

A. A Release of Information (ROI) should be obtained to discuss protected health information with the OTP.

B. Confirmation of established methadone dose should be obtained as soon as possible.

C. A pregnant patient should NOT DETOX.

D. A clinician needs to be involved/contacted as soon as possible to ensure detoxing does not occur.

E. If a pregnant patient arrives at the facility already established on methadone the onsite provider will **BRIDGE** the prescription of methadone to ensure no harm comes to the patient as well as the fetus.

1. The DEA has clearly stated BRIDGING methadone in a PREGNANT INNMATE-PATIENT is considered a MEDICAL intervention for the safety of the fetus, NOT an opioid treatment intervention. Therefore, any clinician with a DEA license can BRIDGE methadone.

a. In bridging methadone, the primary purpose is not to provide drug treatment; rather, it is to provide medical intervention to the fetus and to ensure no harm comes to the fetus and mother until the patient can be taken to an opioid treatment program OR services are continued by the current OTP provider.

b. “Bridging” methadone is considered the period 72 hours following the first dose administered.

c. Contacting the patient’s current methadone provider and/or referring the patient to the methadone clinic that manages your site's methadone patients must certainly be a priority to ensure continuity of care within the time frame expected. This can be accomplished by the following steps:

i. Contact the patient’s current OTP provider and have them provide an order (prescription) to your site to continue methadone. The 72-hour clock stops when the methadone order from the OTP is received.

ii. Contact your site's OTP and set up the next available appointment for the patient to be enrolled in their OTP (if the patient's current OTP is outside the geographic boundaries of your site).

d. Linking the patient to an OTP provider that can continue their current methadone prescription will ensure that they receive needed treatment while incarcerated.

2. The site's contracted pharmacy will supply the methadone once the site's DEA licensed provider has written the patient-specific order.

a. The bridged order MUST include the verbiage "PREGNANT FEMALE."

3. The site clinician should continue the current dose the pregnant patient is established on UNLESS detox symptomatology becomes present.

a. In this event the OTP clinician should be contacted for additional guidance.

F. Coordination with an OTP must be established for ongoing treatment of the pregnant patient.

G. Transportation must be arranged for a pregnant patient for transport to the OTP as determined by the OTP physician and the onsite medical provider if deemed appropriate.

VIII. PREGNANT PATIENTS ENTERING THE FACILITY ESTABLISHED ON SUBUTEX THROUGH AN OTP

A. A release of information (ROI) should be obtained to discuss protected health information with the OTP.

B. Confirmation of established Subutex dose should be obtained as soon as possible from the OTP.

1. A copy of the prescription is to be faxed from the current supervising OTP clinician.

C. A pregnant patient should NOT DETOX.

D. A clinician needs to be contacted as soon as possible to ensure detoxing does not occur.

E. If a pregnant patient arrives at the facility already established on Subutex, a provider with a DEA-X should order the Subutex to ensure no harm comes to the patient as well as the fetus.

1. The new prescriber will typically assume the care of the opioid use disorder while the patient is pregnant and incarcerated.

2. If there is no available clinician with a DEA-X waiver then the patient will need to continue care at the OTP.

F. The site clinician should continue the pregnant patient's current established dose UNLESS detox symptomatology becomes present.

1. In this event the OTP clinician should be contacted for additional guidance.

G. Coordination with OB/GYN should be established for ongoing treatment of the pregnant patient.

IX. PREGNANT PATIENTS ENTERING THE FACILITY ON PRESCRIBED OPIOIDS

A. A release of information (ROI) should be obtained to discuss protected health information with the patient's clinician.

B. A pregnant patient should NOT DETOX.

C. A clinician needs to be contacted as soon as possible to ensure detoxing does not occur.

D. If a pregnant patient arrives at the facility already established on ongoing prescribed opioids, a clinician should order the prescribed opioids to ensure no harm comes to the patient as well as the fetus.

1. The continuing of opioids does not automatically apply to opioids prescribed for an acute condition.

E. The site clinician should continue the pregnant patient's current established medication/dose UNLESS detox symptomatology becomes present.

1. In this event the OB clinician should be contacted for additional guidance.

F. Coordination with OB/GYN should be established for ongoing treatment of the pregnant patient on opioids.

X. PREGNANT PATIENTS ENTERING THE FACILITY ON OPIOIDS THAT WERE NOT PRESCRIBED AND AVAILABILITY OF A PRESCRIBER WITH A DEA-X WAIVER TO PRESCRIBE SUBUTEX

A. Opiate use may include heroin, codeine, morphine, OxyContin, hydromorphone, buprenorphine (Suboxone or Subutex), Tramadol, Fentanyl, etc. regardless of the route of transmission.

B. A pregnant patient should NOT DETOX.

C. A clinician needs to be contacted as soon as possible to ensure detoxing does not occur.

D. If a pregnant patient arrives at the facility on opioids that were not prescribed for the patient, then a designated provider with a DEA-X license should be contacted for consideration of a Subutex induction protocol.

E. Coordination with OB/GYN should be established for ongoing treatment of the pregnant patient on opioids.

XI. SUBUTEX (BUPRENORPHINE WITHOUT NALOXONE) INDUCTION PROTOCOL

A. Because Suboxone (buprenorphine with naloxone) can precipitate withdrawal, pregnant patients should not typically receive Suboxone.

B. Induction to Subutex typically involves considering the type of opioid – i.e., short-acting opioids or long-acting opioids – that a patient is using.

C. If a patient is using short-acting opioids, there should be a minimum of 12 to 24 hours between opioid use and buprenorphine administration, and, as a result, the patient should exhibit mild to moderate withdrawal symptoms (as assessed by the COWS).

D. Induction can take place in one day or over a week.

1. A typical induction takes place over a three-day to one-week period.

2. The induction period is a time frame where constant monitoring is needed as well as possible dosage adjustment – to ensure the individual is on an appropriate dose.

3. It is important to ensure that the individual remains stable on that dose.

E. The following are general recommendations on Subutex induction:

1. Recognizing that each patient is unique the following guidance is meant to be a guidance not a prescribed plan of care.

2. Providers should consider a patient's recent drug history when determining a therapeutic dose.

3. Most patients can stay in outpatient status through induction.

4. Initial dose may begin with 2 mg or 4 mg of Subutex and monitored for 2 to 4 hours.
5. If withdrawal symptoms are not relieved, then additional Subutex can be administered, followed by ongoing monitoring.
6. If withdrawal symptoms persist, manage symptomatically with a suggested maximum first day dose of Subutex of 8 mg.
7. Patients who require an initial dose greater than 8 mg should be under direct observation.
8. If a patient is still exhibiting withdrawal on subsequent days, follow the same procedure with a first dose equal to the total amount administered on the previous day plus 4 mg until the patient has no withdrawal symptoms since the last dose.
9. Typical recommendations are 8 mg –16 mg per day until withdrawal no longer occurs.
10. The typical dose for most patients is 8 mg –16 mg per day by the end of the first week.
11. Doses greater than 24 mg per day are not believed to offer any clinical advantage in treatment.

XII. SUBUTEX MAINTENANCE

A. The dose of Subutex must be adequate to be therapeutic for the individual.

B. Pregnant women may develop symptoms of withdrawal as pregnancy progresses and may require dose increases in order to maintain the same plasma level.

C. The maternal dose should not generally be reduced during pregnancy to minimize neonatal abstinence syndrome (NAS).

D. Buprenorphine (Subutex) dose reduction during pregnancy does not improve fetal outcomes and may increase the risk of recurrent substance use disorder in the mother.

XIII. PREGNANT PATIENTS ENTERING THE FACILITY ON OPIOIDS THAT WERE NOT PRESCRIBED AND WITHOUT THE AVAILABILITY OF A PRESCRIBER TO PRESCRIBE SUBUTEX

A. Opiate use may include heroin, codeine, morphine, OxyContin, Tylenol #3, hydromorphone, buprenorphine (Suboxone or Subutex), Tramadol, Fentanyl, etc. regardless of the route of transmission. A pregnant patient should NOT DETOX.

B. A clinician needs to be contacted as soon as possible to ensure detoxing does not occur.

C. If a pregnant patient arrives at the facility on opioids that were not prescribed for the patient the clinician should be contacted for consideration of an OTP.

D. Coordination with the accepting OTP needs to occur ASAP.

E. If the patient starts to exhibit significant withdrawal symptoms prior to being evaluated by the OTP, then the patient should be sent to the ER for evaluation.

1. The plan of care will follow the ER's/hospital's plan of care until follow-up with an OTP can be arranged.

F. Coordination with OB/GYN should be established for ongoing treatment of the pregnant patient on opioids.

XIV. PATIENTS ON MAT POSTPARTUM TREATMENT

A. Subutex/Buprenorphrine – Postpartum

1. Wexford Health recognizes that each client may have different guidelines or policies related to MAT in the postpartum period. Wexford Health will work cooperatively with their client's policies and guidelines related to this subject.
2. Following birth, most patients will be tapered off the MAT, unless the site has an existing MAT program for non-pregnant patients.
3. Tapering the patient off the MAT after birth should typically be done at a comfortable rate and without inducing severe withdrawal symptoms.
    a. Tapering a patient off the MAT varies depending on the patient's current dosage of Subutex as well as the providers medical determination of the taper schedule.
    b. Tapering schedules should consider postpartum pain management for the individual.
    c. Start nursing assessments with the COWS to monitor withdrawal symptomatology.
        i. When Subutex leaves the body, the patient will experience not only physical but emotional withdrawal.
        ii. With the risk of postpartum depression, the possibility of mother-child separation following birth which could cause depression, as well as the withdrawal from Subutex inducing depression, it is recommended that the patient is referred to mental health services if available; if not available, monitor the patient's emotional status and follow up as needed.
    d. Gradually reduce the dose.
    e. Quitting or stopping Subutex abruptly is NOT recommended.
    f. Buprenorphrine half-life is 37 hours for a single dose.
    g. Create a taper schedule reducing the amount of Subutex given in increments.
    h. When monitoring withdrawal symptoms, if symptomatology is too prevalent and causing extreme discomfort, return to the previous dose for a few days then decrease again.

B. Methadone – Postpartum

1. Wexford Health recognizes that each client may have different guidelines or policies related to MAT in the postpartum period. Wexford Health will work cooperatively with their client's policies and guidelines related to this subject.
2. Following birth, most patients will be tapered off the MAT, unless the site has an existing MAT program for non-pregnant patients.
3. Tapering the patient after birth should typically be done at a comfortable rate and without inducing severe withdrawal symptoms.
    a. Tapering a patient varies depending on the patient's current dosage of methadone and should be determined by the off-site OTP medical provider (if applicable).
    b. Tapering schedules should consider postpartum pain management.
    c. Postpartum patients should be monitored for over sedation as therapeutic dosing requirements may change.
    d. Frequent clinical assessments need to occur in monitoring methadone dosing delivery to ensure over-sedation doesn't occur.
    e. Start nursing assessments with the COWS to monitor withdrawal symptomatology.

i. When methadone leaves the body, the patient will experience not only physical but emotional withdrawal.

ii. With the risk of postpartum depression, the possibility of mother-child separation following birth which could cause depression, as well as the withdrawal from methadone inducing depression, it is recommended that the patient is referred to mental health services if available, if not available monitor the patient's emotional status and follow up as needed.

f. Quitting or stopping methadone abruptly is NOT recommended.

g. A gradual reduction in dosing is recommended.

h. Methadone half-life is 24 to 36 hours for a single dose.

i. This can vary person to person, there are several mitigating factors that can influence half-life.

i. Reduce the amount of methadone given in increments as instructed by the OTP provider.

j. When monitoring withdrawal symptoms, if symptomatology is too prevalent and causing extreme discomfort, return to the previous dose for a few days then decrease again or contact the OTP provider as soon as possible to discuss.

XV. REFUSAL OF MAT – HOW TO MANAGE PREGNANT PATIENTS WITH OUD WHO REFUSE MAT

A. ALL individuals have a right to refuse treatment, if a pregnant female chooses to exercise these rights, and refuse medical intervention, the following should occur:

1. An urgent consultation with the OB/GYN specialist for your facility should occur within 48 hours.

2. The OB/GYN specialist will determine the appropriate treatment for the pregnant patient.

3. This consultation can occur the following ways.

a. The OB/GYN clinician can be consulted via conference call for a peer-to- peer review with the onsite provider.

b. A face-to-face consultation occurs.

c. If no OB/GYN is available for consultation within 48 hours, the pregnant patient can be taken to the nearest emergency room to receive clearance as well as a treatment plan.

4. Informed consent: the pregnant patient will be informed of ALL risks associated with detoxification during pregnancy and a refusal of medical treatment form should be signed and witnessed by staff.

B. The patient should be supervised throughout the duration of the detoxification process; follow the OB/GYN clinician's guidance as well as the following:

1. Document signs and symptoms with the COWS assessment.

a. A COWS assessment should generally occur at minimum every 8 hours. The frequency should be ordered by the onsite clinician.

2. If symptoms begin, suggesting a miscarriage may be occurring, inform the OB/GYN clinician and follow their instructions, as well as:

a. Transport the pregnant patient to the hospital when medically indicated.

3. Communication and monitoring the patient in collaboration with the OB/GYN specialist is crucial throughout this process.

C. A referral to behavioral health services and/or a mental health screening should occur. This will be determined by what is available at your facility, follow your facility's protocol.

1. Individuals withdrawing/detoxing from opioids will exhibit several behaviors and emotions throughout the detox process as the opiates leave their system.

2. An individual may change their mind during the actual detox process. It is important to "check with the individual" to ensure they want to continue detoxification without MAT.

D. If the OB/GYN clinician agrees with managing the patient's detox symptomatology, consider other options to increase the individual's comfort level throughout the detox process. If the patient consents, additional support can be provided in the following ways:

1. Mild withdrawal can be treated with acetaminophen (Tylenol), aspirin, or nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen.

2. Plenty of fluids and rest are important.

3. Medications such as loperamide (Imodium) can help with diarrhea and hydroxyzine (Vistaril, Atarax) may ease nausea. (Please refer to *M-003: Drug Intoxication/ Withdrawal Guidelines* for additional information.)

XVI. ATTACHMENTS

Provider Resources

References

M-003A.01 Opioid Use Screening Form

M-003A.02 Consent to Participate in Medication Assisted Treatment (MAT)

M-003A.03 Refusal to Participate in Medication Assisted Treatment (MAT)

M-003A.04 DSM-5 Opioid Use Disorder (OUD) Diagnostic Criteria

M-003A.05 Clinical Opioid Withdrawal Scale (COWS)

Provider Resources

Wexford Health supports all providers seeking additional experience as well as obtaining their waiver to provide treatment with Buprenorphine. The following is a list of resources available to providers.

Substance Abuse Mental Health Services Administration (SAMHSA)

The Substance Abuse and Mental Health Services Administration (SAMHSA) (https://www.samhsa.gov) is the agency within the U.S. Department of Health and Human Services (HHS) that leads public health efforts to advance the behavioral health of the nation and to improve the lives of individuals living with mental and substance use disorders, and their families.

Provider Clinical Support System (PCSS)

The Provider Clinical Support System (PCSS) (https://pcssnow.org/medication-assisted-treatment/) is a program funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) created in response to the opioid overdose epidemic to train primary care providers in the evidence-based prevention and treatment of opioid use disorders (OUD) and treatment of chronic pain.

The project is geared toward primary care providers who wish to treat OUD. PCSS is made up of a coalition, led by American Academy of Addiction Psychiatry (AAAP), of major healthcare organizations all dedicated to addressing this healthcare crisis. Through a variety of trainings and a clinical mentoring program, PCSS's mission is to increase healthcare providers' knowledge and skills in the prevention, identification, and treatment of substance use disorders with a focus on opioid use disorders.

American Society of Addiction Medicine (ASAM)

The American Society of Addiction Medicine (ASAM) (https://www.asam.org/asam-home-page) founded in 1954, is a professional medical society representing over 6,000 physicians, clinicians and associated professionals in the field of addiction medicine. ASAM is dedicated to increasing access and improving the quality of addiction treatment, educating physicians and the public, supporting research and prevention, and promoting the appropriate role of physicians in the care of patients with addiction.

National Institute on Drug Abuse (NIDA)

The mission of the National Institute on Drug Abuse (NIDA) (https://www.drugabuse.gov/) is to advance science on the causes and consequences of drug use and addiction and to apply that knowledge to improve individual and public health. This involves:

- Strategically supporting and conducting basic and clinical research on drug use (including nicotine), its consequences, and the underlying neurobiological, behavioral, and social mechanisms involved.
- Ensuring the effective translation, implementation, and dissemination of scientific research findings to improve the prevention and treatment of substance use disorders and enhance public awareness of addiction as a brain disorder.

References

The following is a list of references consulted, reviewed and/or utilized in the development of this guideline:

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Center for Substance Abuse Treatment, Medication-Assisted Treatment for Opioid Addiction in Opioid Treatment Programs. Treatment Improvement Protocol (TIP) Series 43. HHS Publication No. (SMA) 12-4214. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2005.

Peeler M, Fiscella K, Terplan M, Sufrin C. Best Practices for Pregnant Incarcerated Women with Opioid Use Disorder. *J Correct Health Care*. 2019;25(1):4–14. doi:10.1177/1078345818819855.

ASAM National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use; 2015.

Substance Abuse and Mental Health Services Administration. A Collaborative Approach to the Treatment of Pregnant Women with Opioid Use Disorders. HHS Publication No. (SMA) 16-4978. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2016.

Substance Abuse and Mental Health Services Administration. Clinical Guidance for Treating Pregnant and Parenting Women with Opioid Use Disorder and Their Infants. HHS Publication No. (SMA) 18-5054. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2018.Substance Abuse and Mental Health Services Administration (SAMHSA) by the Knowledge Application Program (KAP), a Joint Venture of The CDM Group, Inc., and JBS International, Inc., under contract number 270-04-7049, with SAMHSA, U.S. Department of Health and Human Services (HHS). Christina Currier served as the Government Project Officer, 2014.

M-003A.01 Opioid Use Screening Form (SAMPLE)

Opioid Use Screening

Patient Name:_____ Date:_____

	QUESTION	YES	NO
1	Do you use opioids for larger amounts or over a longer period of time than intended?		
2	Have you tried to cut down or control your opioid use?		
3	Are you taking a lot of time finding opioids, using opioids, or recovering from opioids?		
4	Do you have cravings or a strong desire to use opioids?		
5	Have opioids interfered with your roles at work, school, or home?		
6	Have you continued to use opioids despite people telling you that you need help?		
7	Have you given up social, occupational or recreational activities due to opioids?		
8	Have you continued to use opioids in situations where it is physically hazardous?		
9	Do you continue using opioids despite knowing it is hurting you physically and mentally?		
10	Have you noticed you needing more opioids to get the desired effect you want?		
11	Have you gotten ill when trying to quit opioids or do you keep using to avoid withdrawal symptoms?		
12	How many times have you been in treatment for opioid addiction?		
13	Are you currently in an opioid treatment program?		
	If Yes to 13 – Which one?		
14	Are you currently on methadone under the supervision of a provider?		
15	Are you currently on buprenorphine under the supervision of a provider?		

This section is to be completed by staff.

Contact information of opioid treatment program:_____

_____

Was contact made with OTP? _____

Was methadone/or buprenorphine RX confirmation received from OTP?_____

Signature:_____ Title:_____

Date:_____

M-003A.02 Consent to Participate in Medication Assisted Treatment (MAT) (SAMPLE)

Consent to Participate in Medication Assisted Treatment (MAT)

☐ Methadone ☐ Buprenorphine Treatment

☐ Pregnant ☐ Not Pregnant

Patient's Name:_____ ID:_____

I authorize and give voluntary consent to Wexford Health Sources Inc. to dispense and administer Medication Assisted Treatment medications—including methadone or buprenorphine—to treat my opioid use disorder. Treatment procedures have been explained to me, and I understand that I should take my medication at the scheduled time determined by the program physician, or his/her designee, in accordance with federal and state regulations.

I understand that, like all other medications, methadone or buprenorphine can be harmful if not taken as prescribed. It has been explained to me that I must follow the medication protocol of the program and safeguard these medications and not attempt to "cheek" them nor share with anyone because they can be fatal to children and adults if taken without medical supervision. I also understand that methadone and buprenorphine produce physical opioid dependence. Like all medications, they may have side effects. Possible side effects, as well as alternative treatments and their risks and benefits, have been explained to me.

I understand that it is important for me to inform any medical provider who may treat me that I am currently in MAT. In this way, the provider will be aware of all the medications I am taking, can provide the best possible care, and can avoid prescribing medications that might affect my treatment as well as my fetus.

I understand that I may withdraw voluntarily from this treatment program and discontinue the use of these medications at any time. If I choose this option, I understand I will be offered medically supervised withdrawal as well as a need to sign a refusal of treatment, and this may affect my unborn fetus and could possibly cause a miscarriage.

I understand that pregnant women treated with methadone or sublingual buprenorphine (SUBUTEX) have better outcomes than pregnant women not in treatment who continue to use opioid drugs. Newborns of mothers who are receiving methadone or buprenorphine treatment may have opioid withdrawal symptoms (i.e., neonatal abstinence syndrome). The delivery hospital may require babies who are exposed to opioids before birth to spend a number of days in the hospital for monitoring of withdrawal symptoms. Some babies may also need medication to stop withdrawal.

If I am or become pregnant, I understand that I should tell the medical staff right away so that I can receive or be referred to prenatal care. I understand that there are ways to maximize the healthy course of my pregnancy while I am taking methadone or buprenorphine.

Patient Name (Print): _____

Patient Signature:_____ Date: _____

M-003A.02 Consent to Participate in Medication Assisted Treatment (MAT) (SAMPLE)

Treatment Agreement

I agree to accept the following treatment contract for buprenorphine office-based opioid addiction treatment:

1. The risks and benefits of buprenorphine treatment have been explained to me.
2. The risks and benefits of other treatment for opioid use disorder (including methadone, naltrexone, and nonmedication treatments) have been explained to me.
3. I will keep following my medication schedule that has been explained to me by the medical staff.
4. I will show up to medication time (as indicated by the facility) to receive my dosing on time as prescribed by the provider, and I understand if I no-show to the medication time that I could possibly begin "withdrawal" which could be harmful to my baby.
5. Medication times: _____ _____ _____ _____ _____
6. I will take the medication exactly as my healthcare provider prescribes. If I want to change my medication dose, I will speak with my healthcare provider first.
7. Taking the medication by snorting or by injection is also medication misuse and may result in supervised dosing at the clinic, referral to a higher level of care, or change in medication based on my healthcare provider's evaluation.
8. If I am going to have a medical procedure that will cause pain, I will let my healthcare provider know in advance so that my pain will be adequately treated.
9. I understand that random urine drug testing is a treatment requirement. If I do not provide a urine sample, it will count as a positive drug test.
10. I understand that people have died by mixing buprenorphine with alcohol and other drugs like benzodiazepines (drugs like Valium, Klonopin, and Xanax).
11. I understand that treatment of opioid use disorder involves more than just taking medication. I agree to comply with my healthcare provider's recommendations for additional counseling and/or for help with other problems.
12. I understand that I may experience opioid withdrawal symptoms when I stop taking buprenorphine.
13. I have been educated about the increased chance of pregnancy when stopping illicit opioid use and starting buprenorphine treatment and been informed about methods for preventing pregnancy.

Patient Name (Print): _____

Patient Signature: _____ Date: _____

This form is adapted from the American Society of Addiction Medicine's Sample Treatment Agreement, which is updated periodically; the most current version of the agreement is available online at: (https://www.asam.org/docs/default-source/advocacy/sample treatmentagreement30fa159472bc604ca5b7ff000030b21a.pdf?sfvrsn).

M-003A.03 Refusal to Participate in Medication Assisted Treatment (MAT) (SAMPLE)

Refusal to Participate in Medication Assisted Treatment (MAT)

☐ Refusal of MAT Intervention ☐ Pregnant

Patient's Name: _____ Patient ID: _____

I REFUSE TO give voluntary consent to Wexford Health Sources Inc. to dispense and administer Medication Assisted Treatment medications—including methadone or buprenorphine—to treat my opioid use disorder. Treatment procedures have been explained to me, and I understand that, should I REFUSE medication INTERVENTION WHILE PREGNANT, that this puts me at risk for miscarriage.

I understand that, I CAN REVOKE THIS REFUSAL AT ANY TIME. If I decide to change my mind, I will immediately notify medical personnel.

I understand I will be offered medically supervised withdrawal as well as a need to sign a refusal of treatment, and this may affect my unborn fetus and could possibly cause a miscarriage.

I understand that pregnant women treated with methadone or sublingual buprenorphine (SUBUTEX) have better outcomes than pregnant women not in treatment who continue to use opioid drugs. Newborns of mothers who are receiving methadone or buprenorphine treatment may have opioid withdrawal symptoms (i.e., neonatal abstinence syndrome). The delivery hospital may require babies who are exposed to opioids before birth to spend a number of days in the hospital for monitoring of withdrawal symptoms. Some babies may also need medication to stop withdrawal.

Signature of Patient: _____

Date: _____

Witness: _____

Name & Title (print): _____

Date: _____

Witness: _____

Name & Title (print): _____

Date: _____

M-003A.04 DSM-5 Opioid Use Disorder (OUD) Diagnostic Criteria (SAMPLE)

DSM-5 Opioid Use Disorder (OUD) Diagnostic Criteria

Patient Name:_____ ID:_____

This form is to provide assistance as well as documentation to diagnose individuals with OUD. Reviewing the *Opioid Use Screening* tool, the *COWS*, as well as discussing the individual's presentation with staff, should allow all providers to appropriately diagnose individuals with an OUD to start MAT intervention or withdrawal management. Please refer to M-003 and M-003A for additional guidance.

This tool is intended for guidance purposes only. Each provider has individual experience with OUD, and this tool is to assist when certainty is questionable.

A problematic pattern of opioid use leading to clinically significant impairment or distress is manifested by *at least two* of the following, occurring within a 12-month period:

1. Opioids are often taken in larger amounts or over a longer period than was intended.
2. There is a persistent desire or unsuccessful efforts to cut down or control opioid use.
3. A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.
4. Craving, or a strong desire or urge to use opioids.
5. Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home.
6. Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.
7. Important social, occupational, or recreational activities are given up or reduced because of opioid use.
8. Recurrent opioid use in situations in which it is physically hazardous.
9. Continued opioid use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance.
10. Tolerance, as defined by either of the following:
    a. A need for markedly increased amounts of opioids to achieve intoxication or desired effect.
    b. A markedly diminished effect with continued use of the same amount of an opioid.
11. Withdrawal, as manifested by either of the following:
    a. The characteristic opioid withdrawal syndrome.
    b. Opioids (or a closely related substance) are taken to relieve or avoid withdrawal symptoms.

Note: The last two criteria are not considered to be met for those individuals taking opioids solely under appropriate medical supervision.

Number of criteria:	0–1	2–3	4–5	6+____
Interpretation:	No OUD	Mild OUD	Moderate OUD	Severe OUD

Comments/TX plan: _____

_____

_____

_____ _____ _____

Provider's Signature Title Date

M-003A.05 Clinical Opioid Withdrawal Scale (COWS) (SAMPLE)

Wexford Health SOURCES INCORPORATED

Clinical Opiate Withdrawal Scale (COWS)

Clinical Opiate Withdrawal Scale (COWS)

For each item, circle the number that best describes the patient's signs or symptoms. Rate on just the relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increase pulse rate would not add to the score.

Patient's Name: _____ **Date and Time:** _____/_____/_____:_____
Reason for this assessment: _____

Resting Pulse Rate: _____beats/minute
Measured after patient is sitting or lying for one minute

0	pulse rate 80 or below
1	pulse rate 81 – 100
2	pulse rate 101 - 120
4	pulse rate greater than 120

GI Upset: *Over last ½ hour*

0	no GI symptoms
1	stomach cramps
2	nausea or loose stool
3	vomiting or diarrhea
5	multiple episodes of diarrhea or vomiting

Sweating: *Over past ½ hour not accounted for by room temperature or patient activity*

0	no report of chills or flushing
1	subjective report of chills or flushing
2	flushed or observable moistness on face
3	beads of sweat on brow or face
4	sweat streaming off face

Tremor *Observation of outstretched hands*

0	no tremor
1	tremor can be felt, but not observed
2	slight tremor observable
4	gross tremor or muscle twitching

Restlessness: *Observation during assessment*

0	able to sit still
1	reports difficulty sitting still, but is able to do so
3	frequent shifting or extraneous movements of legs/arms
5	unable to sit still for more than a few seconds

Yawning *Observation during assessment*

0	no yawning
1	yawning once or twice during assessment
2	yawning three or more times during assessment
4	yawning several times/minute

Pupil size

0	pupils pinned or normal size for room light
1	pupils possibly larger than normal for room light
2	pupils moderately dilated
5	pupils so dilated that only the rim of the iris is visible

Anxiety or irritability

0	none
1	patient reports increasing irritability or anxiousness
2	patient obviously irritable / anxious
4	patient so irritable or anxious that participation in assessment is difficult

Bone or joint aches *If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored*

0	not present
1	mild diffuse discomfort
2	patient reports severe diffuse aching of joints/muscles
4	patient is rubbing joints or muscles and is unable to sit still because of discomfort

Gooseflesh skin

0	skin is smooth
3	piloerection of skin can be felt or hairs standing up on arms
5	prominent piloerection

Runny nose or tearing *Not accounted for by cold symptoms or allergies*

0	not present
1	nasal stuffiness or unusually moist eyes
2	nose running or tearing
4	nose constantly running or tears streaming down cheeks

Total Score: _____

The total score is the sum of all 11 items

Initials of person completing assessment: _____

SCORE: 5 -12 = mild; **13 -14** = moderate; **25 -36** = moderately severe; **more than 36** = severe withdrawal

Source: Wesson and Ling 2003

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M-003A.05

M-004: Primary Care Guidelines

Reference: ACA: 5-ACI-6D-10; NCCHC: A-05

I. GUIDELINE

Wexford Health's primary care guidelines are intended to assist the health care staff in clinical decision-making by describing a range of generally acceptable approaches for the diagnosis and management of specific diseases or conditions. Although these guidelines are based on evidence-based research, they should not preclude the use of other methods directed at obtaining the same results.

II. PROCEDURE

A. The guidelines are continually updated and reviewed by the Medical Advisory Committee for their suitability to the patient health care setting.

B. The guidelines do not supersede established state/county guidelines and/or facility contractual obligations nor are they mandated for sites which have limited facility equipment and resources.

C. All medical decisions regarding the care of patients should be made with consideration given to the individual circumstances presented by the patient.

M-006: Therapeutic Shoes

Reference: ACA: 5-ACI-6A-40; NCCHC: F-01

I. PURPOSE

The purpose of this guideline is to provide clinical guidelines to determine the need for therapeutic shoes and instructions for issuance.

II. DEFINITIONS

A. Therapeutic shoes: Shoes that are designed or altered to provide a therapeutic benefit or accommodation of a specific foot or lower extremity disorder. These should appear as black leather boots to look as close as possible to the standard shoe or brogan issued to the patient by the state. Different colors or styles should not be used.

B. Soft shoes: Shoes that are typically defined as tennis shoes, sneakers, running shoes, and athletic shoes. Soft shoes are not issued by medical.

III. CLINICAL CRITERIA

A. Post-surgical recuperation and recent foot trauma may require a therapeutic shoe or orthotic device for a limited time only. The surgeon or attending clinician must describe in the order the specific type of shoe or orthotic device required and the timeframe it will be used for.

B. Significant deformities usually require a specially designed orthotic device that assists the patient in maintaining or approximating normal ambulation. These may be traumatic, post-surgical or congenital.

C. Bunions, calluses, corns, blisters, and hammer toes, do not require a therapeutic shoes. Sometimes the aggravation of these conditions is due to ill-fitting shoes. If it is determined that the patient would benefit from a better fitting shoe, the patient should be advised to contact the laundry or appropriate area that issues shoes. Improper fitting shoes are a frequent cause of foot problems, so at times, it may be necessary to contact health administration for assistance in obtaining properly fitting shoes.

D. Patients who are suffering from flat feet and who are symptomatic may be issued arch supports for their brogans in severe cases if clinically indicated.

E. Diabetic patients may be considered for therapeutic shoes if the following are met:

1. Must have a documented history of previous foot ulcers or with a current ulcer and/or significantly integumentary concerns despite conservative measures.

2. Documentation in Diabetes chronic care clinic notes of failed trials of appropriate conservative measures with regards to diabetic foot care. These include appropriately fitting shoes, hygiene, and skin care.

IV. ACTION

A. When the therapeutic shoes are issued, the patient will sign a form approved by the facility (see Wexford Health's "Receipt for Accountable Items," Form #037) with the understanding that replacement will be the obligation of the patient if such is needed in less than a year. This form must be signed by a witness, stamped and dated, and filed under the miscellaneous portion of the medical health record.

B. In the event that a patient may require shoe replacement less than one year following initial receipt of the shoes and may not be able to obtain shoes at his/her own expense, the Corporate Medical Director will carefully evaluate the circumstances involved and may prescribe replacement shoes as an exception to guideline. In such case, the Corporate Medical Director will properly record the conditions that warranted an exception to this guideline.

V. ASSOCIATED FORMS

Receipt for Accountable Items

M-006: FORM: Receipt for Accountable Items (SAMPLE)

Receipt for Accountable Items

I hereby acknowledge receipt of this item(s): (Circle one)

_____	Glasses	_____	Crutches	
_____	Orthotics/special shoes	_____	Cotton blanket	
_____	Hearing aid	_____	Cane	
_____	Wheelchair	_____	Brace (specify)	_____
_____	Ace bandage	_____	Athletic support	
_____	Elastic stockings	_____	Splint (specify)	_____
		_____	Other (specify)	_____

Check which statement applies:

_____ I agree to take care of this item (s)_____
I understand that in the event of loss, misuse or abuse, I will not be issued another within a one-year period. If I am transferred or released from this facility, I will be allowed to take this item with me.

_____ I understand that I am temporarily being issued this item (specify_____) so that my medical treatment can continue. I agree to take care of this. I am being issued this item from ___/___/___ to ___/___/___. I understand that I must return this to the medical department upon request or end of treatment.

_____ I understand that I am being issued this item while I am incarcerated at this facility. I agree to take care of this item. Upon transfer or release, I will return _____ to the medical department.

_____ _____
Inmate's Signature **Date**

_____
Inmate's DC #

_____ _____
Witness Signature and Stamp **Date**

Rev. 7/25/17

M-007: Hearing Aids

Reference: ACA: 5-ACI-6A-04; NCCHC: F-01

I. DEFINITIONS

A. Hearing Aid: Any wearable instrument or device designed for, offered for, or represented as aiding persons with or compensating for, impaired hearing.

B. Hearing Loss: A threshold by audiographic interpretation that falls outside of the range of normal hearing. For adults we tend to assume the upper range of normal hearing is being 25 dB HL.

C. Degree of Hearing Loss:

Pure Tone Average	Degree of Handicap
≤15 dB HL	None
16–25 dB HL	Mild
26–40 dB HL	Mild-to-moderate
41–65 dB HL	Moderate
66–90 dB HL	Severe
≥91dB HL	Profound

II. GUIDELINE

A. This guideline is used to determine a patient's candidacy for hearing amplification. Hearing loss alone cannot determine candidacy for amplification. The individual's communicative requirements become the primary determining factor.

B. Hearing aid(s) will be provided when the criteria is met.

1. Hearing loss in the better ear of 40 dBHL or greater for the pure tone average of 500, 1000 and 2000 Hz.
2. A spondee threshold (bisyllabic words equally emphasizing both syllables) in the better ear of 40 dBHL or greater when pure tone thresholds cannot be established.
3. As a general rule, one hearing aid will be provided, if there is bilateral hearing loss. The audiologist will provide recommendation as to which ear will provide greatest hearing improvement with amplification. In selected cases of severe, bilateral hearing loss, two (2) hearing aids may be provided in consultation with the audiologist.
4. Repair or replacement will be provided if the hearing aid is non-functional or damaged. If there is negligence involved in losing or breaking a hearing aid, the offender will be given a disciplinary ticket and will be charged for a replacement.
5. Wexford Health will provide the most appropriate, cost-effective hearing aid.

III. PROTOCOL

A. Good health practice requires that a person with a hearing loss have a medical evaluation before a hearing aid is considered. The purpose of the medical evaluation is to assure that all medically treatable conditions that may affect hearing are identified and treated before a hearing aid is considered. Conditions to be noted are:

1. Visible congenital or traumatic deformity of the ear
2. History of active drainage from the ear within the previous 90 days

3. History of sudden or rapidly progressive hearing loss within the previous 90 days
4. Acute or chronic dizziness
5. Unilateral hearing loss of sudden or recent onset within the previous 90 days
6. Audiometric air-bone gap equal to or greater than 15 decibels at 500, 1000, and 2000 Hertz
7. Visible evidence of significant cerumen accumulation or a foreign body in the ear canal
8. Pain or discomfort in the ear

B. Pure tone audiometric testing should be performed after medically ruling out causes of hearing loss. To determine candidacy for an audiogram, an on-site screening will be performed utilizing the AudioScope 3 hearing screening tool (see below instructions). Results will be discussed in collegial conference for consideration of audiogram once testing is completed.

C. Patients with any hearing loss, especially if due to a surgical correction, such as otosclerosis or acoustic neuroma, should be referred to an otolaryngologist for otomicroscopic exam.

D. Patients with presbycusis (loss of ability to perceive or discriminate sounds as a part of the aging process) should be referred to an audiologist for possible hearing aid fitting.

E. The AudioScope 3 is to be used by the on-site medical staff when it is deemed necessary that the patient may need an audiology work-up for hearing loss. The results of this screening should be faxed to the UM department for physician review and collegial discussion if necessary.

F. Operating instructions for the AudioScope 3

1. Screening area should be relatively quiet and free from distracting conversation.
2. Select the small, medium, or large ear speculum. Use the largest speculum that can be inserted comfortably into the ear canal, a snug fit assures seal. There are no covers; speculum should be cleaned with alcohol wipe between uses.
3. Turn the AudioScope 3 “ON” by sliding the switch to 40 dB HL. The green “READY” indicator will become illuminated indicating it is ready for use.
4. Instruct the patient that he/she will hear a loud tone (or beep) and then some fainter tones (or beeps). The patient is to respond every time a tone is heard with a verbal yes or gross motor (raising a hand).
5. Retract the patient’s pinna with the thumb and index finger, gently pull it up and back.
6. Gently insert the speculum tip into the ear canal so you can visualize the tympanic membrane (should look white/gray). If you cannot visualize the tympanic membrane due to wax, the ear should be cleaned prior to performing the hearing exam.
7. Depress the “START” button, the green light will then go out and the tone indicators will illuminate sequentially.
8. Observe each tone indicator and the patient’s response. If the test is disrupted, it can be restarted by depressing the Start button again. You must keep the AudioScope3 stationary during the test.
9. Repeat steps on opposite ear, rescreen if necessary. Turn the instrument “OFF” by sliding the switch down.
10. Complete the AudioScope Screening results form (sticker) and attach it to the patient’s chart. Fax the results to the UM department for physician review.

Example:

AudiöScope™ Screening Results

☐ 20db HL ☐ 25db HL ☒ 40db HL

Patient _____

Tested by _____ Date _____

	Y = Response			N = No Response
Right Ear	Y	N	Y	N
Left Ear	Y	Y	Y	Y
	500	1000	2000	4000

Frequency (Hz)

WelchAllyn®

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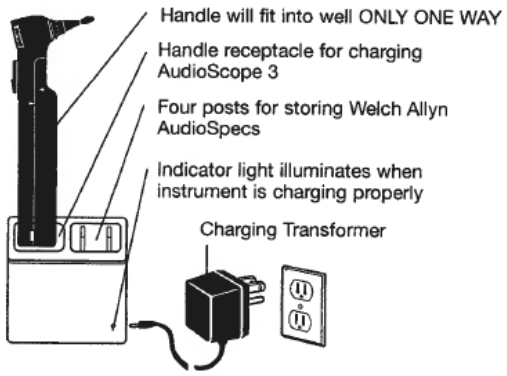
Skaneateles Falls, NY 13153-0220
USA

Form 230148-1

Recharging:



M-008: Blood Administration

I. GUIDELINE

A. In those facilities that have contracts with community vendors to provide blood components (red blood cells, platelets, blood protein, and plasma) to the facility, Wexford Health has established procedures for administering blood to those patients who have a demonstrated deficiency. In such facilities, Wexford Health will:

1. Replace and maintain the patient's blood volume and/or oxygen carrying capacity
2. Ensure compatibility between the patient's blood and the whole blood or packed red blood cells that may be transfused
3. Prevent the infusion of fibrin clots and microaggregates (broken-down blood cells)

II. WHO MAY PERFORM BLOOD ADMINISTRATION

Only licensed RN's may administer blood.

III. EQUIPMENT/FORMS

A. Blood unit and 250-cc bottle of normal saline. Clinical alert: Whole blood and red blood cells, when administered with IV solution, must be given with saline solution.

B. Blood administration set, either straight line or Y-set.

C. Venipuncture tray, if patient does not already have an IV in place. An 18-gauge needle or 18-gauge catheter should be used.

D. An 18-gauge needle if patient already has a primary IV line in place.

E. Alcohol swabs and tape

IV. UNIVERSAL PRECAUTIONS

All clinical staff must adhere to universal blood and body fluid precautions while performing blood administration. At a minimum, disposable gloves must be worn when handling blood products and associated equipment. Refer to Wexford Health's Infection Control Guidelines manual: "Universal Blood and Body Fluid Precautions," guideline number IC-004.

V. PROCEDURES

A. Check order for transfusion in patient's chart

B. Examine patient's IV. An 18-gauge catheter or needle should be placed in a medium or large-sized vein.

C. Take the patient's vital signs to establish a baseline.

D. Take and record patient's temperature. If patient is febrile (37.8° C or 100.0° F), notify the provider before initiating the transfusion.

E. Assess for signs and symptoms of blood reactions during infusion.

F. Obtain or confirm signed consent from patient.

G. Obtain whole blood unit or packed blood cells unit from blood lab or blood bank.

H. Obtain the requisition form for the transfusion.

I. With lab technologist, check requisition form and lab blood record against the blood unit for essential data: patient's name and ID number, blood group and type (ABO and Rh), blood unit number, and expiration date of blood unit.

J. With another RN, check the requisition form and the lab blood record with the information on the patient's identification band to make sure that all data matches. Essential data includes patient's name and ID number, blood group, blood type, blood unit number, and an expiration date on the blood unit.

K. Sign the form with the other RN according to facility guideline. Remember that blood must be started within 30 minutes from the time it is removed from refrigeration.

L. Document transfusion on the appropriate facility-approved form.

M. Monitor and document vital signs at a minimum of 5 minutes, 15 minutes, and then every 30 minutes after starting the transfusion and continue until one hour after the completion of the transfusion.

VI. ADMINISTERING BLOOD THROUGH A STRAIGHT LINE

A. Rotate the blood unit bag gently to mix the blood cells and plasma.

B. With blood administration set ready, pull back the tabs on the blood unit bag and expose the port.

C. Carefully spike the port and hang the unit.

D. Fill the drip chamber by gently squeezing its flexible sides. Make sure the filter is submerged in the blood.

E. Open the clamp on the tubing, run the blood through the tubing and cap the tubing.

F. If the patient needs a venipuncture, select a vein an insert an IV needle and tubing.

G. If the patient has a primary IV in place with an appropriate-sized needle, place an 18-gauge needle (or larger needle) in the end of the blood unit tubing.

H. If the primary IV solution is not compatible with the blood to be infused, remove the primary IV solution and cap it for sterility.

I. Spike a small bottle of normal saline and run this solution through the tubing.

J. Prime the blood unit tubing.

K. Swab the injection port with alcohol.

L. Insert the needle carefully and tape it into place.

M. Shut off the primary IV and begin the blood transfusion.

N. Give blood slowly for the first 15 minutes, approximately 20 drops per minute that equates to 100 cc/hr

O. Observe the patient closely for adverse reactions such as chilling, backache, headache, nausea, vomiting, tachycardia, tachypnea, skin rash, or hypotension.

P. If there are no adverse effects, administer the blood unit at the prescribed rate.

Q. Transfusion of the blood should be completed in less than four hours since blood deteriorates rapidly after a two-hour exposure to room temperature.

R. Continue to monitor the patient throughout the transfusion.

S. When you have completed the transfusion, flush the line with normal saline, inject the primary IV solution, and adjust the drip to the desired rate.

T. Remove the blood unit bag and administration set. If you are going to transfuse a second unit of blood, obtain that unit and a new administration set and repeat the procedure described above.

VII. INTERVENTION: ADMINISTERING BLOOD THROUGH A Y-SET

A. Close all clamps on the Y-set.

B. Spike the small saline bottle, using aseptic technique, and then spike the blood bag.

C. Hang both the saline bottle and blood bag.

D. Open the clamp to the saline bottle and squeeze the sides of the drip chamber until the filter is half covered and the drip chamber is full.

E. Open the main clamp and prime the rest of the tubing. To ensure easier flow, remove the cap that protects the end of the IV tubing.

F. When the tubing is primed, replace the cap and close the main clamp.

G. Cleanse the injection port on the primary IV.

H. Affix a large-gauge needle to the end of the tubing and prime.

I. Insert the needle into the injection port and clamp off the primary IV flow.

J. Using saline solution, open the clamp to the saline bottle and turn clamp on the main tubing to begin the flow to clear primary IV tubing

K. Clamp off the saline bottle and open the clamp to the blood bag.

L. Squeeze the sides of the Y-set drip chamber so that blood covers the entire filter.

M. Follow the procedure as you did with previous bottle.

N. When the blood bag is empty, clamp off the tubing to the bag, open the clamp to the normal saline bottle and flush the line.

O. Close all clamps and remove the needle from the injection port.

P. Open the clamp on the primary IV and establish the desired rate of administration.

VIII. INTERVENTION: ADMINISTERING BLOOD COMPONENTS

A. Obtain blood component from lab or appropriate sources.

B. Obtain appropriate administration set.

C. Read directions for proper administration of the solution.

D. Identify rate at which blood component should infuse.

E. Check blood component therapy chart for appropriate rate, risk factors, and possible complications.

F. For any adverse reaction, immediately stop the transfusion and notify the provider.

Transfusion Reactions

CLINICAL MANIFESTATIONS	NURSING INTERVENTIONS
TYPE: Bacterial	
1. Sudden increase in temperature	1. Stop transfusion immediately.
2. Hypotension	2. Maintain IV site; change tubing as soon as possible.
3. Dry, flushed skin	3. Observe for shock. Monitor vital signs every 15 minutes until stable.
4. Abdominal pain	4. Obtain urine specimen. Insert foley if necessary.
5. Headache	5. Notify physician and obtain order for broad spectrum antibiotic.
6. Lumbar pain	6. Draw blood cultures before antibiotic administration.
7. Sudden chill	7. Send blood tubing and bag to lab for culture and sensitivity; control hypothermia.
TYPE: Allergic	
1. Uricaria and hives, pruritis	1. Stop transfusion immediately if symptoms are severe.
2. Respiratory wheezing, laryngeal edema.	2. Monitor vital signs for possible anaphylactic shock.
3. Anaphylactic reaction.	3. If symptoms are mild, slow down transfusion and obtain order for antihistamine; monitor for signs of progressive allergic reaction as transfusion continues.
TYPE: Hemolytic	
1. Severe pain in kidney region and chest.	1. Stop transfusion immediately.
2. Pain at needle insertion site.	2. Change IV tubing as soon as possible, maintaining patient IV. If necessary, disconnect IV tubing from needle and run normal saline through IV tubing into emesis basin. Reconnect tubing to needle and obtain new tubing as soon as possible.
3. Fever (may reach 105°F), chills	3. Administer oxygen.
4. Dyspnea and cyanosis	4. Send two blood samples, from different sites, urine sample (cath if necessary), blood, and transfusion record to lab.
5. Headache	5. Obtain orders for IV volume expansion and diuretic (mannitol) to ensure flushing of kidneys to prevent acute renal tubular necrosis.
6. Hypotension	6. Monitor vital signs every 15 minutes for shock.
7. Hematuria	7. Monitor urine output hourly for possible renal failure. Foley catheter may need to be inserted.

IX. PREVENTING TRANSFUSION REACTIONS

A. Identify patient and blood bottle or bag.
   1. ID band number matches transfusion record number.
   2. Names spelled correctly on transfusion record.
   3. Blood bottle number and pilot tube number are same.
   4. Blood type matches on transfusion record and blood bottle.

B. Check with other RN before infusing.

C. Ask patient about allergy history and report any previous blood reactions.

D. Establish baseline vital sign data.

E. Start transfusion slowly to observe for severe reactions.

F. Maintain aseptic technique during procedure.

G. Observe time rules (length of time blood can hang) for administering blood.

H. Observe blood bag or bottle for bubbles, cloudiness, dark color, or black sediment, which is indicative of bacterial invasion.

I. Do not allow blood to remain at room temperature unnecessarily.

Blood Component Therapy

TYPE	USE	ALERTS	ADMINISTRATION EQUIPMENT
Fresh Plasma	To replace deficient coagulation factors. To increase intravascular compartment.	Hepatitis is a risk. Administer as rapidly as possible. Use within 6 hours.	Any straight line administration set.
Platelets	To prevent or treat bleeding problems, especially in surgical patients. To replace platelets in patients with acquired or inherited deficiencies (thrombocytopenia, aplastic anemia). To replace when platelets drop below 30,000 cu/mm (normal 150,000–350,000 cu/mm)	Administer at rate of 10 minutes a unit (usually come in multiple platelet-packs).	Platelet transfusion set with special filter to allow platelets to infuse through filter.
Granulocytes	To treat oncology patients with severe bone marrow depression and progressive infections. To treat granulocytopenic patients with infections that are unresponsive to antibiotics. To treat patients with gram-negative bacteremia or infections where marrow recovery does not develop.	Administer slowly, over two to four hours. Give one transfusion daily until granulocytes increase or infection clears. Use within 48 hours after drawn. Give when granulocytes are below 500. Observe for shaking, fever, chills (treat with Tylenol before transfusions). Observe for hives and laryngeal edema (treat with antihistamines).	Use Y-type blood filters and prime with physiological saline. A microaggregate filter is not used as it filters out platelets.
Serum Albumin	To treat shock. To treat hypoproteinemia.	Available as 5% or 25% solution. Infuse 25% solution slowly 1 ml/minute to prevent circulatory overload. Administer 100–200 cc (25% solution) for shock patients and 200–300 cc for hypoproteinamia.	Special tubing accompanies albumin solution in individual boxes.
Gamma Globulin	To treat agammaglobulinemia. To act as prophylaxis for hepatitis exposure.	Pooled plasma contains antibodies to infectious agents. Administer 0.25 ml–0.50 ml of immune serum globulin per kg of body weight every to four weeks.	Given IM
Coagulation Factors Factor VIII (cryoprecipitate)	To treat patients with von Willebrand's disease. To treat patients with factor VIII, hemophilia A.	Made from fresh-frozen plasma. Administer one unit cryoprecipitate for each 6 kg of body weight initially,	Standard Syringe for component drip set only.

TYPE	USE	ALERTS	ADMINISTRATION EQUIPMENT
		followed by 1 unit/3 kg of body weight at 6- to 12-hour intervals until treatment discontinued. Administer one unit per five minutes. Observe for febrile reactions: shaking, fever, chills, and headache.	
Factor IX	To treat patients with factor IX, hemophilia B.	Administer in 12- to 24-hour cycle. Preparation for administration is 400 to 500 u/vial. Must reconstitute in 10- to 20-cc diluent. One unit/lb. of body weight increases the circulating factor activity by 5%. Serum hepatitis can be transmitted.	Any straight line set.

M-010: Enteral Nutrition and Nutritional Supplementation

Reference: ACA: 5-ACI-5C-06; NCCHC: D-05

I. GUIDELINE

A. Enteral Nutrition Therapy

1. Enteral nutrition generally refers to any method of feeding that uses the gastrointestinal (GI) tract to deliver part or all of a person's caloric requirements.
2. For the purposes of this guideline, enteral nutrition may be given by nasogastric, jejunostomy, or gastrostomy tubes and can be provided safely and effectively in facilities with appropriate infirmary capabilities.
3. Enteral nutrition is considered reasonable and necessary for a patient with a functioning gastrointestinal tract for whom oral feeding is impossible.
4. Each request for enteral nutrition must contain a physician's written order or prescription and sufficient medical documentation (e.g., hospital records, clinical findings from the attending physician) to permit an independent conclusion that the patient's condition meets the requirements of the guideline and that enteral nutrition therapy is medically necessary.
    a. Approved requests are to be reviewed at periodic intervals of no more than monthly by the Site and/or Regional Medical Director. Additional medical documentation may be required to be obtained as part of this review.
5. Approval will be provided for no more than one month's supply of enteral nutrients at any one time. If a pump is involved, it must be supported by sufficient medical documentation to establish that the pump is medically necessary, i.e., gravity feeding is not satisfactory due to aspiration, diarrhea, dumping syndrome, etc. Pump selection is based on the reasonable charge for the simplest model that meets the medical needs of the patient as established by medical documentation.

B. Nutritional Supplementation

1. Some patients, or clinicians on behalf of a patient, may request the addition of oral supplementation of daily protein and caloric intake. Nutritional supplements (e.g. Boost, Glucerna, Ensure, etc.) are often cited as one method to provide an additional caloric source between meals and to boost protein and general caloric intake. Nutritional supplementation is not covered under the guideline for patients with a functioning GI tract and ability to utilize oral intake.
2. Since oral nutritional supplements presumably produce clinical benefits through increased nutrient intake, a similar increase in nutrient intake achieved by dietary means should lead to similar clinical benefits.

NOTE:

This guideline is designed to address medical guidelines that are appropriate for the majority of individuals with a particular disease, illness, or condition. Each person's unique clinical circumstances may warrant individual consideration, based on review of applicable medical records and discussion with the treating physician(s). This guideline does not constitute medical advice, nor is it intended to govern the practice of medicine.

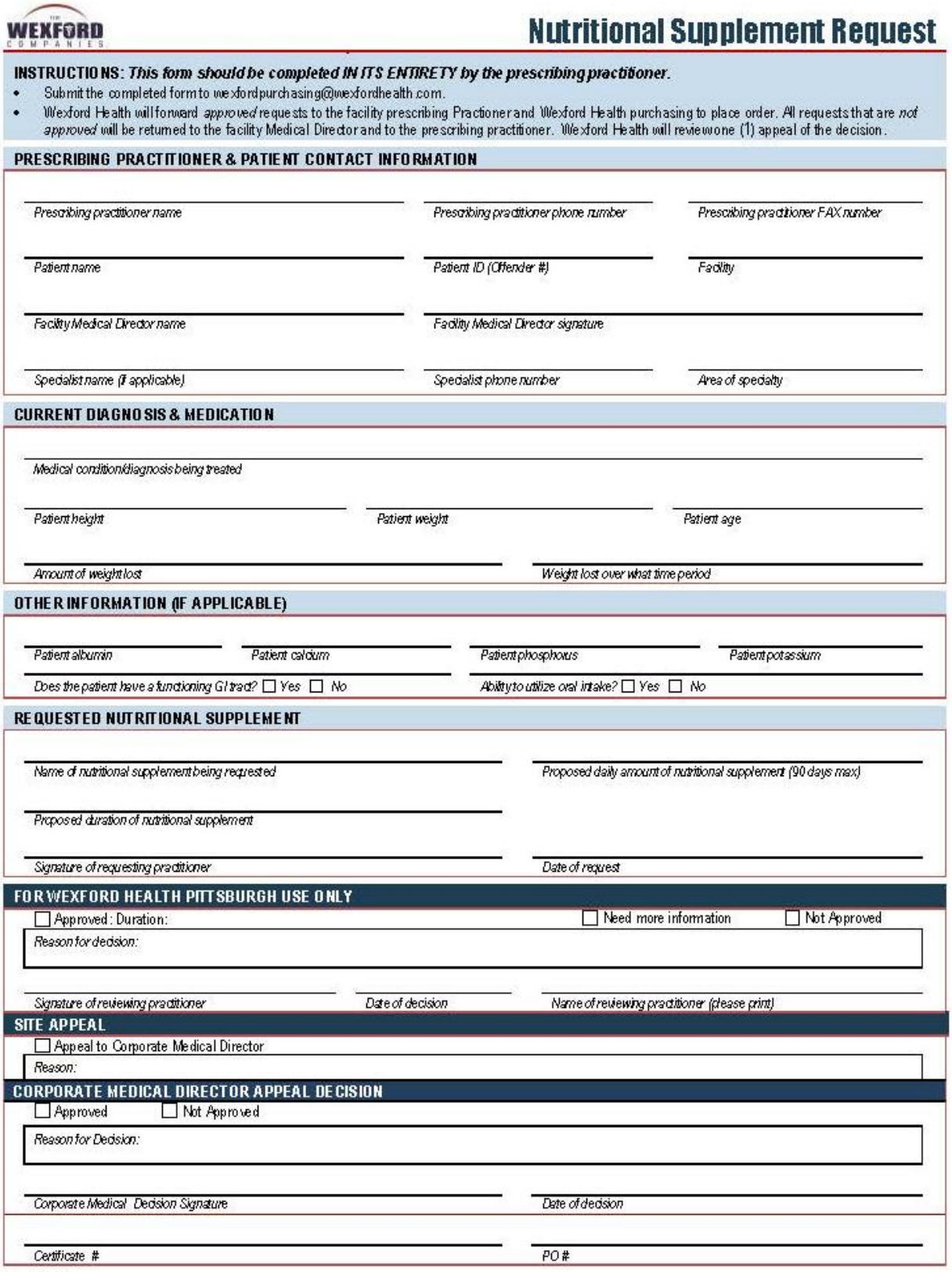
3. Complete the *Nutritional Supplement Request* form and submit the completed form to wexfordpurchasing@wexfordhealth.com by e-mail.
4. A collegial review will be scheduled if necessary.
5. Notification of approval status will be sent to the prescribing practitioner.

6. Urgent requests are handled in a manner similar to urgent collegial requests for offsite care. The site provider completes the *Nutritional Supplement Request* form, emails this form to the UM nurse, and calls the UM Medical Director to discuss the urgent need for the nutritional supplement

II. RELATED DOCUMENTS

Nutritional Supplement Request Form (Guideline and Form adopted from SCIP Manual)

M-010: FORM: Nutritional Supplement Request Form (SAMPLE)



WEXFORD COMPANIES

Nutritional Supplement Request

INSTRUCTIONS: ***This form should be completed IN ITS ENTIRETY by the prescribing practitioner.***

- Submit the completed form to wexfordpurchasing@wexfordhealth.com.
- Wexford Health will forward *approved* requests to the facility prescribing Practioner and Wexford Health purchasing to place order. All requests that are *not approved* will be returned to the facility Medical Director and to the prescribing practitioner. Wexford Health will review one (1) appeal of the decision.

PRESCRIBING PRACTITIONER & PATIENT CONTACT INFORMATION

Prescribing practitioner name | *Prescribing practitioner phone number* | *Prescribing practitioner FAX number*

Patient name | *Patient ID (Offender #)* | *Facility*

Facility Medical Director name | *Facility Medical Director signature*

Specialist name (if applicable) | *Specialist phone number* | *Area of specialty*

CURRENT DIAGNOSIS & MEDICATION

Medical condition/diagnosis being treated

Patient height | *Patient weight* | *Patient age*

Amount of weight lost | *Weight lost over what time period*

OTHER INFORMATION (IF APPLICABLE)

Patient albumin | *Patient calcium* | *Patient phosphorus* | *Patient potassium*

Does the patient have a functioning GI tract? ☐ Yes ☐ No | *Ability to utilize oral intake?* ☐ Yes ☐ No

REQUESTED NUTRITIONAL SUPPLEMENT

Name of nutritional supplement being requested | *Proposed daily amount of nutritional supplement (90 days max)*

Proposed duration of nutritional supplement

Signature of requesting practitioner | *Date of request*

FOR WEXFORD HEALTH PITTSBURGH USE ONLY

☐ Approved : Duration: ☐ Need more information ☐ Not Approved

Reason for decision:

Signature of reviewing practitioner | *Date of decision* | *Name of reviewing practitioner (please print)*

SITE APPEAL

☐ Appeal to Corporate Medical Director

Reason:

CORPORATE MEDICAL DIRECTOR APPEAL DECISION

☐ Approved ☐ Not Approved

Reason for Decision:

Corporate Medical Decision Signature | *Date of decision*

Certificate # | *PO #*

Rev. 7/25/17

Morbidity Survey Report Form (SAMPLE)

Morbidity Survey Report Form

(To be completed on all inmates who died in your facility and/or inmates sent to a hospital from your facility who died)

Last Name:_____ **First Name:**_____ **Date:**_____

DOC#: _____ **Facility Location:** _____

Person Completing Form: _____

Had the inmate been receiving treatment for the medical condition after admission to your correction facilities?

Please check all that apply:

_____ Evaluated by the Physician/Medical staff

_____ Had diagnostic test (e.g., X-rays, MRI, blood test)

_____ Received medications

_____ Had surgery

_____ Confined in special medical unit

_____ Not applicable – cause of death was accidental injury, intoxication, suicide, or homicide

Was the cause of death the result of a pre-existing medical condition or did the condition develop after admission?

_____ Pre-existing medical condition

_____ Inmate developed condition after admission

_____ Could not be determined

_____ Not applicable – cause of death was accidental injury, intoxication, suicide, or homicide

Where did the incident take place?

_____ In the inmate's cell/room

_____ In a temporary holding area/lock up

_____ In a common area within the facility (yard, day room, recreation or workshop)

_____ Outside the prison facility (work release or on work detail, under community supervision, in transit)

_____ Elsewhere – specify: _____

_____ Not applicable – cause of death was illness/natural causes, intoxication, or AIDS related

Rev. 7/25/2017

Mortality Review Worksheet (SAMPLE)

Morbidity Review Worksheet

Name:_____ Date:_____ Time_____

ID Number:_____Institution:_____DOB/Age:_____/_____

Date of Admission (infirmary or hospital):_____

Date of Death:_____Time of Death:_____

History:

PMHx:

PSurgHx:

PSocHx:

Allergies:

Medications at the time of death:

1)_____
2)_____
3)_____
4)_____
5)_____
6)_____
7)_____
8)_____

Admission Physical Examination (if admitted to infirmary prior to death):

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Morbidity Review Worksheet

GEN:

HR RR Temp. BP

HEENT:

Neck:

Lungs:

Cor:

Abdomen:

Rectal:

Extremities:

Neurologic:

Skin:

Laboratory Exam (if available):

H/H = _____ WBC = _____ Plts = _____

Na = _____ K= _____ Cl = _____ CO2 = _____ BUN = _____ Cr = _____ Glucose = _____

AST = _____ ALT = _____ Bili = _____

Alk Phos = _____

CXR = _____

U/A = _____

ABG = _____

Hospital Course or Circumstances Surrounding Death:

Presumptive Cause of Death:

Administrative Review Results:

Clinical Mortality Review:

Could the medical response at the time of death be improved?

Was an earlier intervention possible?

Independent of the cause of death, is there any way to improve patient care?

Autopsy Results (if available): _____

Provider Signature: _____

Rev 7/25/2017

Page **2** of **2**

M-018: Naloxone (Narcan): Guidance for Use in Opioid Suspected Ingestion/Overdose

Reference: ACA: 5-ACI-6A-08; NCCHC: D-01; D-07

I. BACKGROUND

A. Opioids include not only prescription painkillers such as morphine, oxycodone, or hydrocodone, but also heroin which has recently caused a spike in deaths related to overdoses.

B. Opioid intoxication marked by unresponsiveness and respiratory depression is a life-threatening emergency that requires staff cooperation at all levels.

C. Opioid overdose may result in death from coma and respiratory arrest.

D. Opioid overdose is reversible through the immediate administration of a quick-acting opioid antagonist that blocks the action of the opioids, including heroin.

E. Naloxone (Narcan) is a quick-acting opioid antagonist and is indicated as a reversal agent for known or suspected prescription or illicit opiate overdose.

F. Aggressive airway control must take precedence over pharmacologic reversal because the vast majority of morbidity and mortality results from respiratory depression.

G. Contacting Emergency Medical Services after airway control is established is critical in order to assure transfer to a facility equipped to handle drug overdoses.

II. THE SCOPE OF THE OPIOID EPIDEMIC

A. According to NCCHC, drug overdose, primarily from opioids, is the fifth leading cause of death in state prisons and the third leading cause of death in jails.

B. Deaths related to opioid painkillers and heroin in the community have quadrupled since1999.

C. Opioid overdoses may occur when a higher than recommended dose is ingested in a short period of time, when the medication is combined with other drugs, such as benzodiazepines or antidepressants, or when it is combined with "street" drugs, such as heroin. There may also be a predisposition to drug dependence.

D. Use of opioid painkillers is a gateway to heroin abuse due to heroin being much cheaper and easier to obtain and possessing a stronger effect.

III. STOCKING NALOXONE (NARCAN)

A. Individual facilities should make decisions about stocking naloxone based on characteristics of the facility including any history of opiate overdose, patient population, site-specific or contract-specific guidelines, and recommendations of the Quality Management Committee.

B. If the correctional facility should consider maintaining naloxone as stock, sufficient quantity of 1 mg/ml naloxone (Narcan) injection should be stocked to treat suspected opiate ingestion in a patient.

IV. Procedure FOR Evaluation and Treatment of a Suspected Opioid Ingestion

A. Initial Assessment

1. Assess the patient for signs and symptoms of opioid toxicity/OD. Respiratory depression, with respiratory rate of less than 12, requires use of naloxone (Narcan).

2. Examples of clinical findings include:

   a. Shallow respirations/apnea, bradycardia

b. Lethargy, decreased alertness, inability to talk

c. Unresponsiveness

d. Pupillary constriction

e. Decreased muscle tone/limp body

f. Slurred or unintelligible speech

g. Pale, clammy skin

h. Peripheral or central cyanosis

i. Choking sounds, i.e., "death rattle"

3. Consider ruling out hypoglycemia by obtaining fingerstick glucose prior to Narcan administration.

4. Establish airway and adequate oxygenation with a bag mask, if clinically appropriate.

5. If clinically justified, have a staff member contact ambulance services for transport to the emergency department.

B. Treatment

1. Naloxone (Narcan) is a life-saving drug that can reverse the effects of an opioid overdose when administered in time.

2. Naloxone is non-addictive and is easy to administer, whether it's given IV or IM.

3. Naloxone is a short-acting medication that will not reverse all opioid effects immediately. Symptoms of opioid intoxication such as confusion, sedation, respiratory depression, bradycardia, and decreased muscle tone may persist after administration of naloxone.

4. If naloxone is used for a suspected long-term opiate user, only an amount sufficient to return spontaneous respirations is recommended.

5. Naloxone is Category C in pregnancy, and can be used if potential benefit justifies the risk. Pregnant patients with opioid addiction issues are usually prescribed methadone or Suboxone in addiction treatment centers to avoid drug withdrawal symptoms.

C. Preparation, Administration and Initial Monitoring of Naloxone (Narcan)

1. **For IV administration without cardiac arrest**, dilute 1 mg naloxone with 9 ml NS in a syringe to a total volume of 10 ml (diluted concentration of 0.1 mg/ml).

a. Administer in 4 ml (0.4 mg) increments over 30 sec, while checking for respiration.

b. If no respirations within 2 minutes, repeat the dose.

c. Stop when breathing normally or when 10 mg limit has been reached.

d. Obtain vitals (HR, BP, RR) every 15 minutes and monitor the patient for respiratory depression for 1–2 hours, or until the patient is transported by ambulance services.

e. Monitor pupil size and assess for decreased level of consciousness/sedation.

f. Watch for signs of opioid withdrawal (restlessness, anxiety, lacrimation, diaphoresis)

2. **For IV administration with cardiopulmonary arrest** from opioid overdose, may administer 2 mg IV along with CPR procedure and repeat every 2 minutes.

3. **If no IV access can be obtained**, administer 2 mg (undiluted) IM using anterolateral aspect of thigh and monitor for spontaneous respirations.

a. Clinical reversal typically occurs within 5–10 minutes.

b. If patient is still unresponsive, administer another dose.

c. If a total dose up to 10 mg is not effective, opioid toxicity may not be the correct diagnosis.

d. Obtain vitals (HR, BP, RR) every 15 minutes and monitor the patient for respiratory depression for 1-2 hours, or until the patient is transported by ambulance services.

e. Monitor pupil size and assess for decreased level of consciousness/sedation.

f. Watch for signs of opioid withdrawal (restlessness, anxiety, lacrimation, diaphoresis).

D. Possible Adverse Effects of Naloxone (Narcan)

1. Occasionally, naloxone can cause seizures, cardiac disturbances, and precipitate rapid onset of opioid withdrawal symptoms. However, it still remains a life-saving drug for those patients with suspected opioid overdose.

2. To reduce the likelihood of withdrawal, naloxone should be given in small doses every few minutes till the desired effect is reached.

V. REFERENCES

1. National Commission on Correctional Healthcare Position Statement. "Naloxone in Correctional Facilities for the Prevention of Opioid Overdose Deaths". http://www.ncchc.org/naloxone-for-the-prevention-of-opioid-overdose-deaths
2. Micromedex® 1.0 (Healthcare Series), (electronic version). Truven Health Analytics, Greenwood Village, Colorado, USA. Available at: http://www.micromedexsolutions.com October 5, 2016.
3. Department of Health and Human Services. "The Opioid Epidemic: By the Numbers", www.hhs.gov/opioids.
4. Khazan O. "The New Heroin Epidemic", *The Atlantic* 2014, October 30.
5. West Virginia Department of Health and Human Resources, Office of Emergency Medical Services. "Access to Opioid Antagonist Act: Senate Bill 335", accessed October 5, 2016.
6. Consensus Statement of the American Academy of Pain Medicine and the American Society of Addiction Medicine. http://www.asam.org/docs/default-source/public-policy-statements/1opioid-definitions-consensus-2-011.pdf?sfvrsn=0

M-019: Medical Management of Patient Exposure to Bloodborne Pathogens

Reference: ACA: 5-ACI-6A-12; NCCHC: B-02

I. PURPOSE AND OVERVIEW

- Note: Specific guidance for management of exposures for employees or correctional staff is a separate guideline.
- These guidelines for the Medical Management of Exposures are based on the recommendations of the Federal Bureau of Prisons Clinical Guidance on exposures, U.S. Public Health Service (USPHS) and the Centers for Disease Control and Prevention (CDC), as well as the requirements of the Occupational Safety and Health Administration (OSHA).
- These guidelines provide specific recommendations for medically managing patients who have experienced potential exposures to human immunodeficiency virus (HIV), hepatitis B virus (HBV), and hepatitis C virus (HCV) through various means, including human bites and sexual assaults.
- **IMPORTANT:**

Expert consultation on post-exposure management for HIV, HBV, and HCV is available:
Call PEPline, the National Clinicians' Post-exposure Prophylaxis Hotline, at 1-888-448-4911 (every day, 9 a.m. - 2 a.m. EST).

II. TRANSMISSION RISK

HIV – Transmission Risk

The risk of viral transmission following an exposure incident depends on the type and extent of the exposure. The per-incident transmission risk for HIV infection depends on the type of exposure, as shown in the table below:

Table 1. Estimated Per-Incident Risk for Acquisition of HIV, by Exposure Route			
Needle-sharing (injection drug use)	0.67%	Insertive anal intercourse	0.065%
Receptive anal intercourse	0.5.%	Insertive penile-vaginal intercourse	0.05%
Percutaneous needle stick	0.3%	Receptive oral intercourse	0.01%
Receptive penile-vaginal intercourse	0.1%	Insertive oral intercourse	0.005%
Source: CDC. Antiretroviral post-exposure prophylaxis after sexual, injection –drug use, or other non-occupational exposure to HIV in the United States: recommendations from the U.S. Department of Health and Human Services, MMWR, 2005:54 (No. RR-2):7.			

The risk of HIV infection appears higher with:

- Exposure to a larger quantity of blood or other infectious fluid
- Exposure to the blood of a patient with advanced, uncontrolled HIV disease, as indicated by higher viral load
- A deep percutaneous injury
- Injury with a hollow-bore, blood-filled needle
- Exposure to a source with concomitant hepatitis C viral infection
- Sexual assault (due to mucosal trauma, multiple assailants, or traumatic intercourse)
- The presence of a sexually transmitted infection in either the source or the exposed individual.

HBV and HCV – Transmission Risk

The risk of viral transmission after a percutaneous exposure incident is highest for HBV (especially when the source is both HBsAg-positive and HBeAg-positive), followed by HCV and HIV, as shown in Table 2 below.

Table 2. Average Transmission Risk After Percutaneous Injury	
Hepatitis B:	
• HBsAg-positive/HBeAg-positive*	37-62%
• HBsAg-positive/HBeAg-negative*	23-37%
Hepatitis C	1.8% (range 0-7%)
HIV	0.3%
* HBsAg = hepatitis B surface antigen; HBeAg = hepatitis B e antigen	

Human Bites – Transmission Risk

Human bites have rarely resulted in transmission of HIV or HBV infection. There have been no reports of transmission of HIV or HBV following a human bite that occurred as part of an occupational exposure.

III. STEPS IN POST-EXPOSURE MANAGEMENT

Background – Exposure with Intact Skin

Frequently, evaluation of a reported "exposure" reveals that no significant exposure actually occurred (e.g., contact of **intact skin** with blood). These individuals should be counseled that this type of exposure is not considered a "true exposure" and that no further follow-up is needed.

Exposed Patients

- If HIV post-exposure prophylaxis (PEP) is indicated, it is ideal to administer it within two hours of the exposure incident.
- Prompt evaluations of both the exposed person and the source case are essential.

Consultation on post-exposure management for HIV, HBV, and HCV is available at:
PEPline, the National Clinicians' Post-exposure Prophylaxis Hotline, at 1-888-448-4911 (every day, 9 a.m. - 2 a.m. EST).

- Follow Steps 1- 5 below for post-exposure management.

Step 1. Evaluate the Exposure

The following are general instructions for treating the exposure site:

- The injured skin or wound should be emergently cleaned with soap and running water for two minutes.
- Mild bleeding should be allowed to continue freely for 30 seconds.
- Pressure should then be applied to stop bleeding and bandage as necessary.
- Aspiration, forced bleeding, and wound incision are not recommended.
- Antiseptics, bleach, or other cleansing agents should not be used.
- Mucous membranes should be rinsed with water for at least two minutes.
- Exposed eyes should be flushed with water or saline for at least two minutes.

1. **Notate the type of body fluid.**

   - **Infectious body fluids are those that can potentially spread bloodborne pathogens.**
     - Such body fluids include blood; tissue; fluids containing visible blood; semen; rectal and vaginal secretions; breast milk; and cerebrospinal, synovial, pleural, peritoneal, pericardial, and amniotic fluids.
     - Exposure to any of these fluids requires further evaluation.
   - **Non-infectious body fluids are those that have not been demonstrated to spread bloodborne pathogens.**
     - These include feces, nasal secretions, saliva, sputum, sweat, tears, urine, and vomitus.
     - Exposure to these body fluids is not considered a significant exposure, unless they contain visible blood.
       - Unless the fluid is visibly bloody, no further evaluation is required.

2. **Notate the exposure type:**

   - **Percutaneous (injuries that occur when the skin is penetrated by a contaminated sharp object).**
     - Document the specific type of sharp, including the brand and gauge in the case of needles.
     - Indicate whether the injury is:
       - Less severe (e.g., superficial injury; penetration with a solid needle such as a suture needle)
       - More severe (e.g., deep puncture; penetration with a large bore, hollow needle; blood visible on the device; needle that was used in an artery or vein).
   - **Mucous membrane exposure (inside the eyes, nose, or mouth) or exposure to non-intact skin (e.g., chapped, dermatitis, abrasion, or open wound).**

- **Human bite**
  - Clinical evaluation must include the possibility that the person bitten and the person who inflicted the bite both may have been exposed to a bloodborne pathogen.
  - Identify whether blood exposure is suspected.
    - This includes examining:
      - ✓ The mouth of the biter (if known), to assess the likelihood that the bitten person was exposed to the biter's blood.
      - ✓ The wound of the person bitten, to determine if blood exposure to the mouth of the biter (if known) occurred.
      - ✓ All individuals who sustain a human bite should be assessed for tetanus prophylaxis and possible antibiotic prophylaxis.
- **Sexual**
  - Any allegation made by a patient of recent sexual assault should receive prompt forensic evaluation by a healthcare professional trained in collecting sexual assault forensic evidence.
  - For Post-Exposure Prophylaxis (PEP) evaluation, indicate the type of sexual exposure: receptive anal intercourse, receptive vaginal intercourse, or other sexual exposure.
  - If the behavior is recurrent or occurred more than 72 hours ago, PEP is not typically indicated.
- **Shared injection drug use equipment**
  - Assess the nature/timing of the exposure and whether or not the behavior is recurrent.
  - If the behavior is recurrent or occurred more than 72 hours ago, PEP is not typically indicated.
- **Intact skin**
  - Exposure of intact skin (without signs of abrasion) to blood or other infectious body fluid does not constitute an exposure and does not require follow-up.

Step 2. Evaluate the Source Case or Cases (If Known)

- To obtain information about the source case or cases, utilize all available information including review the sources medical records and interviewing the source.
- Record previous and current laboratory results (HIV test results, HBsAg, and HCV antibody).
- **If the source is known to be HIV+:**
  - Obtain results of the most recent HIV viral load and CD4+ T-cell count, history of antiretroviral therapy, results of any resistance testing.
  - Resistance testing of the source case at the time of exposure is not useful because the results will not be available in time to select the PEP regimen.
- **If HIV status of source is unknown:**
  - Obtain an HIV test.
- Whenever the source case is known, the HIV status of the exposure source patient should be determined to guide appropriate use of HIV PEP.
- Administration of PEP should not be delayed while awaiting test results.

- If the source patient is determined to be HIV negative,
  - PEP should be discontinued, and no follow-up HIV testing for the exposed patient is indicated.
- **If source is HBsAg+:**
  - Review documentation in the medical record and discuss the case.

Step 3. Evaluate the Health Status of the Exposed Person

- Obtain the following baseline labs on the exposed person (preferably within 24 hours):
  - HIV Test
  - Anti-HBs (if previously completed hepatitis B (Hep B) vaccination series or vaccination status is uncertain, and if post vaccination anti-HBs test results are unavailable)
  - Total Anti-HBc (if post-vaccination anti-HBs < 10 ml U/mL or if not vaccinated or incompletely vaccinated)
  - HCV Antibody (HCV Ab) (if not HCV Ab +)
  - A pregnancy test should ordinarily be obtained for females unless they have a history of hysterectomy or are post-menopausal.
- Assess vaccination status for tetanus and Hep B.
  - If available, note dates of Hep B vaccination and results of vaccine response testing. (Persons with anti-HBs > 10 ml U/ml are considered responders and immune; those with anti-HBs < 10 ml U/ml are non-responders and potentially susceptible.)
  - Persons with unknown Hep B vaccine response status should be tested for anti-HBs.
- Note other medical conditions, current medications, and drug allergies.

Step 4. Determine Need for HIV PEP (Post-Exposure Prophylaxis)

- Outlined below is the assessment process for determining need for HIV post-exposure prophylaxis.
- Prompt assessment and follow-up is essential.
- Ideally, HIV PEP is initiated within two hours of the exposure.
- If PEP is delayed more than 36 hours, seek expert consultation.

Consultation on post-exposure management for HIV, HBV, and HCV is available at:
PEPline, the National Clinicians' Post-exposure Prophylaxis Hotline, at 1-888-448-4911 (every day, 9 a.m. - 2 a.m. EST).

- **Determining the need for HIV PEP:**
  - Recommendations for PEP are based on the HIV status of the source case, and the type and conditions of the exposure.

- The table below is adapted from USPHS/CDC recommendations and can be used as a clinical tool to assist in determining the need for PEP.
- **Individuals exposed to a known or suspected HIV-infected source case should be counseled about the need for the PEP regimen to be initiated promptly and carried out for 28 days.**

Table 3. HIV Exposures: PEP Recommendations

1. Exposure Type	2. Condition	3. Recommendations Based on HIV Status of the Source	
		HIV+	HIV Status Unknown
Percutaneous (includes illicit tattoo)	Any severity	PEP	Consider PEP
Mucous Membrane	Small volume	PEP	Generally no PEP
	Large volume	PEP	Consider PEP
Non-intact skin	Small volume	PEP	Generally no PEP
	Large volume	PEP	Consider PEP
Sexual[1,2] (<72 hrs/not recurrent)	Receptive anal or vag sex	PEP generally recommended	Consider PEP
	Other sexual exposure	PEP	PEP not recommended
Sharing IDU equip[1]	<72 hrs/not recurrent	PEP	Consider PEP

[1] PEP is generally not indicated ≥ 72 hours after exposure or if behavior is either frequent or recurrent. PEP may considered after longer intervals (e.g., one week) on a case-by-case basis for exposures that represent an extremely high risk of transmission.
[2] For the purposes of these guidelines, receptive anal and vaginal intercourse are the only types of sexual exposures that should be considered for PEP (except if trauma or assault).

Adapted from:
CDC, MMWR. 2005;54(No. RR-9). At http://www.cdc.gov/mmwr/pdf/rr/rr5409.pdf
CDC, MMWR. 2005;54(No. RR-2). At http://www.cdc.gov/mmwr/PDF/rr/rr5402.pdf
USPHS. Infect Control Hosp Epidemiol. 2013;34(9); 875-892. At http://www.jstor.org/stable/10.1086/672271

- **Preferred regimens for HIV PEP**
  - PEP can still be associated with severe side effects and is not justified for exposures that pose a negligible risk for transmission.
  - Recognizing that each case is unique. Consultation is available at: **PEPline, the National Clinicians' Post-exposure Prophylaxis Hotline, at 1-888-448-4911 (every day, 9 a.m. - 2 a.m. EST).**
  - The CDC along with the U.S Department of Health and Human Services has suggested HIV medications as HIV PEP. Based on these suggestions we recommend:

    Tenofovir Disoproxil Fumarate 300 mg 1 tablet daily **plus**
    - Lamivudine 300 mg 1 tablet daily **plus**
    - Tivicay (dolutegravir) 50 mg 1 tablet daily
    -

    – This regimen is given once daily as 3 different pills, typically for 28 days.
    – The regimen is tolerable, potent, conveniently administered, and associated with minimal drug interactions.
    – Persons with decreased renal function, active HBV (HBsAg+) and/or pregnant may need an alternative regimen.

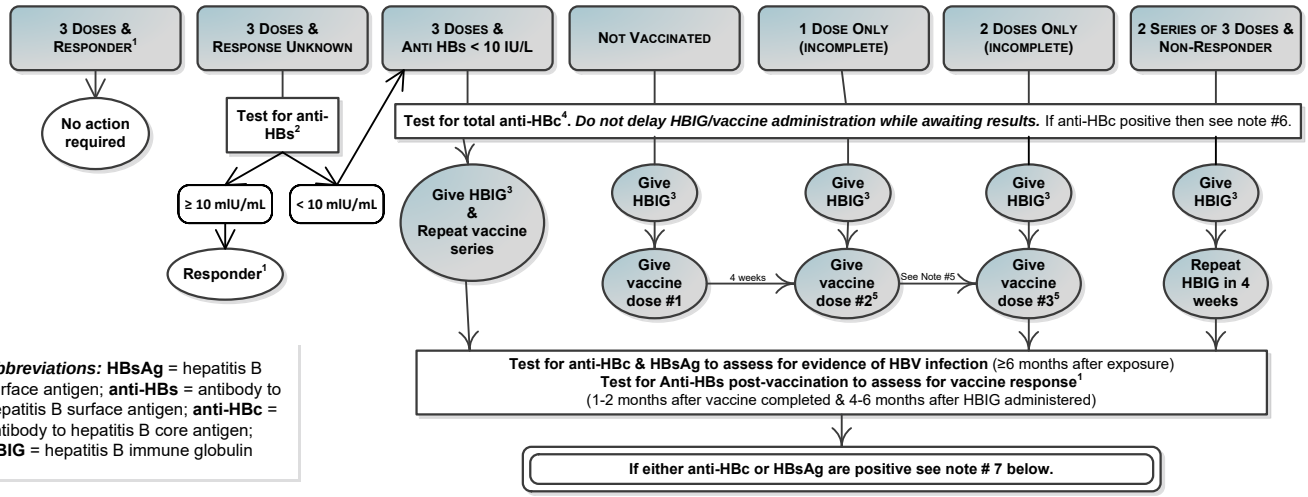
- **Monitoring and management of PEP toxicity**
  - Exposed individuals who are prescribed PEP should be monitored for drug toxicity by testing at baseline and again at two weeks after starting PEP.
  - Monitoring should include at least a CBC and a CMP.
  - If toxicities are identified, modification of the regimen should be considered after expert consultation.
- **Post-exposure follow-up**
  - Individuals with exposure to HIV should receive follow-up counseling, post-exposure testing, and medical evaluation-regardless of whether they receive PEP.
  - Follow-up HIV Testing:
    - After baseline testing at the time of exposure, follow-up HIV-antibody testing should be performed at the following intervals after the exposure date: **6 weeks, 12 weeks, and 6 months.**
- **Special considerations for HIV PEP**
  - While expert consultation regarding provision of HIV PEP is generally advised, it is considered essential in the following special situations listed below.
  - Delayed initiation of HIV PEP: PEP for occupational exposures should generally not be delayed beyond 24-36 hours post-exposure, PEP for sexual and injection drug use related exposures should not typically be provided after 72 hours.
    - The maximum time interval after which PEP provides no benefit is unknown.
  - Unknown source (e.g., needle in a sharps container/tattoo needles):
    - Decide about using PEP on a case-by-case basis, in consultation with the PEPline.
  - The CDC does not recommend testing needles or other sharp instruments for HIV.
  - Known or suspected pregnancy in the exposed person:
    - Pregnancy does not preclude the use of optimal PEP regimens, and PEP should not be withheld on the basis of pregnancy.
      - Expert consultation should be sought in <u>all</u> cases in which antiretroviral medications are prescribed to pregnant patients for PEP.
    - The following medications are contraindicated for use in pregnant Women efavirenz (during first trimester) and nelfinavir, as well as the combination of didanosine and stavudine.
  - Source case has evidence of antiretroviral resistance:
    - When the source patient's virus is known or suspected to be resistant to one or more of the drugs being considered for the PEP regimen, then expert consultation is strongly advised.
      - If this information is not immediately available, the initiation of PEP, if indicated, should not be delayed.
      - The regimen can be modified after PEP has been initiated whenever such modifications are deemed appropriate, based on relevant information received.
  - PEP side effects:
    - Health care providers who are knowledgeable about the possible drug toxicities, drug interactions, and need for adherence should discuss these issues with the patient.

- RAL/FTC/TDF is generally well-tolerated, but side effects, if they occur, frequently can be managed without changing the PEP regimen. Seek consultation when side effects are difficult to manage.

Step 5. Determine Need for HBV Post-exposure Management

- **General Principles**
  - Prompt assessment and follow-up is essential in the evaluation and decision-making regarding HBV post-exposure management.
  - Management of exposures to possible Hepatitis B virus (HBV) is **dependent** upon the source case lab test results and the vaccination status of the exposed person.
  - ***No HBIG should be given prior** to examination of the lab serology and HBV vaccination status of those involved in the exposure.
  - **The source case:**
    - The source (if known) should be tested for Hepatitis B surface antigen (HBsAg); those source cases that are HBsAg positive should be tested for HBeAg (Hepatitis B e antigen).
  - **The exposed person:**
    - The exposed person should be assessed for Hepatitis B vaccination status and vaccine response status (previous anti-HBs result).
    - Previously vaccinated persons who were not tested for anti-HBs (Hepatitis B surface antibody = HBsAB) post-vaccination should be tested for anti-HBs.
      - A HBV vaccine ***responder*** is defined as a person with anti-HBs ≥10 mIU/mL.
      - A HBV vaccine ***non-responder*** is defined as a person with anti-HBs <10 mIU/mL.
  - **Testing the source patient and the exposed person should occur simultaneously.**
    - Testing the source patient should not be delayed while waiting for the exposed person's anti-HBs test results; likewise, testing the exposed person should not be delayed while waiting for the source patient HBsAg results.
  - If the **source is unknown**, the Clinician should contact Dr. Dina Paul, Chronic Disease and Case Management Director at Wexford Corporate for direction.
    - Dr. Paul is available at dpaul@wexfordhealth.com
    - Please write in the email subject line:
      - **URGENT QUESTION – HBIG**
    - She may also be called at 412-937-8590 extension 221
- Recommendations for post-exposure management of persons who sustain a bloodborne exposure to an HBsAg positive or unknown source are outlined in the attached flow chart taken from the Federal Bureau of Prisons Medical Management of Exposures guidelines. The diagram on the following page (*Management of Exposure to an HBsAg+ or Unknown Sources, by Vaccination Status*) makes recommendations based on serology and vaccination results.

Management of Exposure to an HBsAg+ or Unknown Sources, by Vaccination Status



Abbreviations: **HBsAg** = hepatitis B surface antigen; **anti-HBs** = antibody to hepatitis B surface antigen; **anti-HBc** = antibody to hepatitis B core antigen; **HBIG** = hepatitis B immune globulin

[1] A **responder** is defined as a person with anti-HBs ≥10 mIU/mL after ≥3 doses of HepB vaccine. A **nonresponder** is defined as a person with HBs <10 mIU/mL after 2 complete vaccine series (usually ≥6 doses) of HepB vaccine

[2] **Test for anti-HBs** should be performed 1–2 months after the last dose of the HepB vaccine series and 4–6 months after administration of HBIG, to avoid detection of passively administered anti-HBs. Testing should use a quantitative method that allows detection of the protective concentration of anti-HBs (≥10 mIU/mL).

[3] HBIG should be administered intramuscularly as soon as possible after exposure when indicated. The effectiveness of HBIG when administered >7 days after percutaneous, mucosal, or nonintact skin exposures is unknown. HBIG dosage is 0.06 mL/kg.

[4] Persons who have anti-HBs <10mIU/mL, or who are unvaccinated or incompletely vaccinated, and sustain an exposure to a source patient who is HBsAg-positive or has unknown HBsAg status, should undergo baseline testing for HBV infection as soon as possible after exposure, and follow-up testing approximately 6 months later. Initial baseline tests = total anti-HBc; testing at approximately 6 months = HBsAg and total anti-HBc. If total anti-HBc or HBsAg are positive then see note # 7.

[5] If exposed person is currently in the middle of the HepB vaccination series, then continue vaccine series according to routine schedule. If exposed person started vaccine sometime in the past, then give immediate post-exposure vaccine dose ASAP. Dose 2 should be at least 4 weeks from dose 1; dose 3 should be at least 8 weeks from dose 2; and there should be at least 16 weeks between dose 1 and dose 3.

[6] A positive anti-HBc indicates past or current HBV infection. Stop vaccination. Test for HBsAg: If positive see Note #7.

[7] If anti-HBc positive and HBsAg is negative person is considered to have natural immunity to HBV and requires no additional vaccination and no special evaluation unless they become immunosuppressed or immunocompromised. If HBsAg positive, then evaluate for chronic HBV infection. See: BOP Clinical Practice Guideline. Stepwise Approach for Detecting, Evaluating and Treating Chronic Hepatitis B Virus Infection

Adapted from: CDC guidance for evaluating health-care personnel for hepatitis B virus protection and for administering postexposure management. *MMWR. 2013, 62(10):1–24.*

- **** If HBIG/HBV vaccine is recommended by Dr. Dina Paul or based on blood testing results, it should be given within 7 days of exposure.**
- **Timeline:**
  - Blood for serology testing should be drawn immediately after notification of possible exposure.
  - Lab results should be received within 24-48 hours of submission.
  - HBsAg status of the source patient and anti-HBs status of the exposed patient should be reviewed as soon as possible upon receipt of results and treatment plan determined.
  - If post-exposure management is warranted, Hepatitis B Immune Globulin (HBIG) should be obtained and administered as soon as possible, within 7 days of initial exposure.

- HBIG Drug Acquisition:
  - **HBIG can be obtained within 24 hours from your facility's emergency back-up pharmacy or via next day shipment from Cardinal Health.**
  - Cardinal Health is available by contacting Dr. Michelle Marrone, Senior Clinical Pharmacist.
    - Dr. Marrone is available at mmarrone@wexfordhealth.com

  - She may also be called at 412-937-8590 extension 271
- Standard weight-based dosing is 0.06 mL/kg.
  - Available HBIG products:
    - Hepagam B, 5 mL vial
    - Hyper Hep B SD, 5 mL vial
    - Nabi-HB, 5 mL vial
- One 5 mL vial will treat a patient weighing up to 185 lbs.

M-020: Air Ambulance Guidelines

Reference: ACA: 5-ACI-6A-06; NCCHC: D-07

I. PURPOSE AND OVERVIEW

Air ambulance vehicles are specially equipped to transport individuals with life threatening emergencies to the hospital.

This guideline is designed to address medical guidelines that are appropriate for the majority of individuals with a particular disease, illness, or condition. Each person's unique clinical circumstances may warrant individual consideration, based on review of applicable medical records.

II. GUIDELINE

Air ambulance transportation may be considered medically necessary when **ALL** the following criteria are met:

- The emergency transport vehicle must be specially designed and equipped for transporting the sick or injured; **and**
- It must have customary patient care equipment, supplies and also must have safety and lifesaving equipment; **and**
- The ambulance crew must consist of at least two (2) attendants. One (1) of these attendants must be duly qualified to provide the medical care required during transport; **and**
- The patient's medical condition must require immediate and rapid transportation that cannot be provided by land ambulance; **and**
- Great distances or other obstacles (for example, heavy traffic) are involved in getting the patient to the **nearest** hospital with **appropriate facilities** for treatment.

The term "appropriate facility" refers to a hospital that is capable of providing the required level and type of care for the patient's illness and has available the type of physician or specialist needed to treat the patient's condition.

Medical necessity for air transportation is established when the patient's condition is such that the time needed to transport the patient by land (greater than 30-60 minutes) poses a threat to the patient's survival or seriously endangers the patient's health.

Following is a list of examples of cases for which ambulance could be justified; this list is not inclusive of all situations that justify air emergency transportation, nor is it intended to justify air emergency transportation in all locales for the circumstances listed.

- Intracranial bleeding which requires neurosurgical intervention; **or**
- Cardiogenic shock; **or**
- Major Burns requiring treatment in a Burn Center; **or**
- Conditions requiring treatment in a Hyperbaric Oxygen Unit; **or**
- Multiple severe injuries; **or**
- Life-threatening trauma; **or**
- High risk pregnancy – (high risk of preterm delivery or high medical risk to mother or fetus).

The vehicle and crew utilized for air ambulance transport must meet all applicable local, state, and federal regulatory certification and licensing requirements.

The transfer of a patient from one hospital to another may be considered medically necessary if medical appropriateness criteria are met and the transferring hospital does not have adequate facilities to provide the medical services needed by the patient.

Examples of such services include:

- Burn units; **or**
- Cardiac care units; **or**
- Trauma units; **or**
- Severe rejection of transplant to transplant hospital.

The ambulance transport is covered ONLY if the hospital to which the patient is transferred is the nearest with appropriate facilities.

Air ambulance transportation is considered not medically necessary when the above criteria have not been met.

III. NON-EMERGENCY TRANSPORT

In general, non-emergency air ambulance services are not considered medically necessary for the treatment or transport of patient patients.

Non-emergency air ambulance transport is NOT considered medically necessary for the convenience of the patient, family members/companions, or the provider(s) treating the patient.

Examples of non-covered air ambulance transportation:

- Air emergency transportation used to transport a patient to a facility for treatment because family or patient or treating provider(s) want treatment at that facility when there is an equally competent facility nearby.
- Air transport utilized for the patient or family's convenience in a non-life threatening circumstance.

IV. PRONOUNCEMENT OF DEATH

Payment may be considered for an air ambulance service when the air ambulance responds to pick up a patient, but the patient is pronounced dead before being loaded onto the ambulance for transport (either before or after the ambulance arrives on the scene).

- This is provided the air ambulance service would otherwise have been medically necessary.

In such a circumstance, the allowed amount is the appropriate air base rate for helicopter or other aircraft.

- However, no amount will be allowed for mileage that would have been allowed had the transport of a living patient been completed.

A pronouncement of death is valid only when made by an individual authorized under State law to make such a pronouncement.

Additionally, no payment is made if the dispatcher received pronouncement of death and had sufficient time to abort the transport. Further, no payment is made if an aircraft has merely taxied but not taken off or, at a controlled airport, has been cleared to take off but has not actually taken off.

Air ambulance companies must use the modifier QL (Patient pronounced dead after ambulance called) to indicate the circumstance when an air ambulance takes off to pick up a patient but the patient is pronounced dead before the pickup can be made.

Air ambulance companies must maintain documentation, sufficient to show that:

- The air ambulance was dispatched to pick up a patient;
- The aircraft was en route to make the pickup;
- The patient to whom the dispatch relates was pronounced dead before being loaded onto the ambulance for transport;
- The pronouncement of death was made by an individual authorized by State law to make such a pronouncement; and
- The dispatcher did not receive notice of such death pronouncement in sufficient time to permit the transport to be aborted before in route for pick-up.

V. ADDITIONAL AIR MILEAGE

Additional air mileage or wait time may be considered in situations where additional mileage or wait time is incurred due to circumstances beyond the ambulance pilot's control. These circumstances include, but are not limited to, the following:

- Military base and other restricted zones, air-defense zones, and similar FAA restrictions and prohibitions
- Hazardous weather
- Variances in departure patterns and clearance routes required by an air traffic controller

If the air transport meets the criteria for medical necessity, claims for air transports may account for all mileage from the point of pickup including where applicable: ramp to taxiway, taxiway to runway, take-off run, air miles, roll out upon landing, taxiing after landing.

If no transport of a patient occurs, no covered service is rendered. Therefore, when multiple ground and/or air ambulance providers respond, payment may be made only to the ambulance provider that actually furnishes the transport. Ambulance providers that arrive on the scene but do not furnish a transport are not due payment.

If no transport of a patient occurs no covered service is rendered. Therefore, payment will not be made to the ambulance company. This applies to situations in which the patient refuses to be transported, even if medical services are provided prior to loading the member onto the ambulance.

M-021: Supplemental Oxygen Guideline

Reference: ACA: 5-ACI-6C-06; NCCHC: F-01

I. OVERVIEW

Oxygen is administered by devices that provide controlled oxygen concentrations and flow rates. Oxygen therapy should maintain adequate tissue and cell oxygenation while avoiding oxygen toxicity. Patient monitoring is provided to assure that the proper mixtures of gases, mists, and aerosols are being received.

II. GUIDELINES

Oxygen and oxygen supplies may be considered medically necessary for appropriately selected patients only in cases when oxygen is prescribed by a physician, and the prescription must specify:

- A diagnosis of the disease requiring use of oxygen.
- Oxygen concentration and flow rate.
- Frequency of use (if an intermittent or leave in oxygen therapy, order must include time limits and specific indications for initiating and terminating therapy).
- Method of delivery.
- Duration of use (if the oxygen is prescribed on an indefinite basis, care must be periodically reviewed to determine whether a medical need continues to exist).

Oxygen therapy may be considered medically necessary for:

- Severe lung disease, defined as either: a resting arterial oxygen partial pressure (PaO2) below 55 mm Hg; or O2 saturation less than 90%; or symptoms associated with oxygen deprivation, (i.e. Impairment of cognitive processes, restlessness, or insomnia). Examples of severe lung disease include, but are not limited to:
    - Chronic obstructive pulmonary disease (COPD)
    - Pulmonary fibrosis
    - Cystic Fibrosis
    - Bronchiectasis
    - Recurring congestive heart failure due to chronic cor pulmonale
    - Chronic lung disease complicated by erythrocytosis (hematocrit >56%)

Supplemental oxygen therapy may be considered medically necessary during sleep in an individual with ANY of the following conditions:

- Unexplained pulmonary hypertension, cor pulmonale, edema secondary to right heart failure, or erythrocytosis and hematocrit is greater than 56%.
- When obstructive sleep apnea (OSA), other nocturnal apnea, or a hypoventilation syndrome has been ruled out and there is documentation of desaturation during sleep to an SaO2 of equal to or less than 88% for greater than 30% of the night.
- When an individual with documented OSA, other nocturnal apnea, or a hypoventilation syndrome experiences desaturation during sleep to a SaO2 of equal to or less than 88% for greater than 30% of the night which persists despite use of continuous positive airway pressure (CPAP) or non-invasive positive pressure ventilation (NIPPV) devices.

Oxygen therapy is considered not medically necessary for the following conditions:

- Angina pectoris in the absence of hypoxemia.
- Breathlessness without evidence of hypoxemia.
- Severe peripheral vascular disease resulting in clinically evident desaturation in one or more extremities.
- Terminal illnesses that do not affect the lungs.

Portable oxygen systems may be considered medically necessary only if the patient ambulates on a regular basis.

Oxygen saturations cannot be performed by a Durable Medical Equipment company or a respiratory equipment provider.

Services that do not meet the criteria of this guideline will not be considered medically necessary.

Medical guidelines do not constitute medical advice, nor are they intended to govern the practice of medicine. They are intended to reflect Wexford Health Sources' medical necessity guidelines. This guideline is designed to address medical guidelines that are appropriate for the majority of individuals with a particular disease, illness, or condition. Each person's unique clinical circumstances may warrant individual consideration, based on review of applicable medical records.

M-022: Vivitrol® (Naltrexone) Re-Entry Program

Reference: ACA; SAMSHA; ALKERMESE; FDA Vivitrol® Prescribing Guidelines

Reviewed: May 27, 2022

I. GUIDELINE

Medication Assisted Treatment (MAT) in the form of Vivitrol, prior to release, has been shown to lessen chances of relapse or overdose of opioids once the patient is released back into the community.

In facilities with a Vivitrol program, Wexford Health medical personnel will collaborate with site administration, Behavioral Health Therapists and, if applicable, community stakeholders to identify incarcerated patients who would benefit from an initial dose of Vivitrol prior to release from incarceration.

Wexford Health's guidance is based on the recommended best practices, as well as guidelines set forth by the pharmaceutical company Alkermes that manufactures Vivitrol, Substance Abuse and Mental Health Administration (SAMSHA) and the Food and Drug Administration (FDA) and the American Correction Association (ACA).

II. INFORMATION

There are two (2) forms of naltrexone, Vivitrol is an extended-release naltrexone injection and naltrexone is a short-acting oral tablet. Both versions of naltrexone are U.S. Food and Drug Administration approved to help patients avoid relapse in opioid as well as alcohol dependence AFTER detoxification.

The U.S. Federal Drug Administration (FDA) approved naltrexone oral in 1983 and Vivitrol in 2010 for the treatment of opioid addiction. Naltrexone and Vivitrol were both FDA-approved to treat alcohol dependence in 2006.

Vivitrol® (naltrexone injection) is the extended-release version of naltrexone and is administered by intramuscular injection once a month. Vivitrol helps patients avoid relapse and reduces recidivism.

Vivitrol injection is also used to treat alcoholism by reducing the urge to drink alcohol. This may help patients drink less or stop drinking altogether. Naltrexone (oral or extended-release injection) will not decrease the effects of alcohol recently consumed.

Vivitrol or naltrexone is not a cure for drug addiction or alcoholism.

Vivitrol® is manufactured by Alkermes Inc., which ***may provide*** the first shot, at no cost, for a patient in a correctional facility.

III. WARNINGS AND PRECAUTIONS

A. **Vulnerability to Opioid Overdose Following Vivitrol Injection**

1. After opioid detoxification, patients are likely to have a reduced tolerance to opioids.
2. Vivitrol blocks the effects of exogenous opioids for approximately 28 days after administration.
3. As the blockade wanes and eventually dissipates completely, use of previously tolerated doses of opioids could result in potentially life-threatening opioid intoxication (respiratory compromise or arrest, circulatory collapse, etc.).
4. Cases of opioid overdose with fatal outcomes have been reported in patients who used opioids at the end of a dosing interval, after missing a scheduled dose, or after discontinuing treatment.

5. Patients should be informed of this increased sensitivity to opioids and the risk of overdose.

6. Any attempt by an individual to overcome the Vivitrol blockade by taking opioids may lead to fatal overdose.

    a. Although Vivitrol is a potent antagonist with a prolonged pharmacological effect, the blockade produced by Vivitrol is surmountable. The plasma concentration of exogenous opioids attained immediately following their acute administration may be sufficient to overcome the competitive receptor blockade.

    b. This poses a potential risk to patients who attempt, on their own, to overcome the blockade by administering large amounts of exogenous opioids.

7. Patients should be told of the serious consequences of trying to overcome the opioid blockade.

    a. This increased sensitivity and risk of fatal outcome including death should be explained to patient by both the Behavioral Health Therapists and medical staff members.

B. **Possible Injection Site Reactions Following Vivitrol Injection**

1. Vivitrol injections may be followed by pain, tenderness, induration, swelling, erythema, bruising, or pruritus; however, in some cases injection site reactions may be very severe.

2. Injection site reactions not improving may require prompt medical attention, including, in some rare cases, surgical intervention.

3. Inadvertent subcutaneous/adipose layer injection of Vivitrol may increase the likelihood of severe injection site reactions.

4. Select proper needle size for the patient body habitus and use only the needles provided in the carton.

5. Patients should be informed that any concerning injection site reactions should be brought to the attention of their healthcare provider.

C. **Possible Precipitation of Opioid Withdrawal Following Vivitrol Injection**

1. When withdrawal is precipitated abruptly by administration of an opioid antagonist to an opioid-dependent person, the resulting withdrawal syndrome can be severe.

    a. Some cases of withdrawal symptoms have been severe enough to require hospitalization, and in some cases, management in the ICU.

2. To prevent occurrence of precipitated withdrawal, opioid-dependent patients, including those being treated for alcohol dependence, should be opioid-free (including tramadol) before starting Vivitrol treatment:

    a. An opioid-free interval of a minimum of 7–10 days is recommended for patients previously dependent on short-acting opioids.

    b. Patients transitioning from buprenorphine or methadone may be vulnerable to precipitated withdrawal for as long as two weeks (14 days).

3. If a more rapid transition from agonist to antagonist therapy is deemed necessary and appropriate by the healthcare provider, monitor the patient closely in an appropriate medical setting where precipitated withdrawal can be managed.

4. Patients should be made aware of the risk associated with precipitated withdrawal and be encouraged to give an accurate account of last opioid use.

D. **Possible Hepatotoxicity Following Vivitrol Injection**

1. Cases of hepatitis and clinically significant liver dysfunction have been observed in association with Vivitrol.

2. Warn patients of the risk of hepatic injury; advise them to seek help if experiencing symptoms of acute hepatitis.

3. Discontinue use of Vivitrol in patients who exhibit acute hepatitis symptoms.

E. **Possible Depression and Suicidality Following Vivitrol Injection**

1. Alcohol- and opioid-dependent patients taking Vivitrol should be monitored for depression or suicidal thoughts.

F. **When Reversal of Vivitrol Blockade Is Required for Pain Management**

1. For Vivitrol patients in emergency situations, suggestions for pain management include regional analgesia or use of non-opioid analgesics.

2. If opioid therapy is required to reverse the Vivitrol blockade, patients should be closely monitored by trained personnel in a setting staffed and equipped for CPR.

IV. PROCESS FOR REFERAL AND EVALUATING APPROPRIATENESS FOR PROGRAM PARTICIPATION

A. **Referrals**

1. Referrals will be identified by the onsite Behavioral Health Therapists working collaboratively with the NMCD and potentially other stakeholders.

2. Once a possible candidate is identified the patient will be referred to Medical for evaluation of the medical appropriateness in program participation.

B. **Criteria for Evaluating Appropriateness for Program Participation**

1. The patient must have a clinically significant problem with alcohol and/or opioids.

2. The patient must be motivated for treatment and committed to staying substance free.

3. Drug and alcohol use:

a. The patient must be free from ***active*** substance use (of all substances).

b. The patient must be free from **ALL** opioids for a minimum of 7–10 days. Longer acting opioids may need 14 days or longer (e.g., methadone).

c. The patient must be at least seven (7) days free from ALCOHOL use. (Studies show increase success with alcohol abstinence if the individual is at least seven (7) days without alcohol consumption.) This is for individuals prescribed Vivitrol for alcoholism, not opioid use disorder (OUD).

d. Refer to the *Opioid Use Screener* tool (see *M-022.01 Opioid Use Screener).*

4. Timing with release date:

   a. Referrals to medical from Behavioral Health Therapists should typically occur approximately **four (4) to five (5) weeks prior** to the patients release from custody date (PRD).

   b. Screening Labs should be conducted approximately **three (3) weeks** prior to the patients PRD.

   c. The patient will ideally be assessed by the medical provider for program participation appropriateness **two (2) weeks** prior to the patients PRD.

   d. If found to be medically appropriate by the medical provider, the patient will participate in the nursing assessment and naltrexone challenge preferably immediately following the provider assessment.

   e. If the patient passes the nursing assessment, as well as the Naltrexone Challenge, the patient should receive 0the Vivitrol injection the same day.

   f. The patient should be **within two (2) weeks** of his/her projected release date (PRD) for the Vivitrol injection to be administered.

5. ***Choosing the patient — additional criteria for the Behavioral Health Therapist and medical to consider:***

   a. For the program to be successful, the patient must have access to Vivitrol following release.

   b. The patient must sign an agreement to participate in ongoing treatment following release, ***this may include a treatment program or a provider's office.***

   c. The patient must have insurance coverage (or is eligible to receive an application for benefits upon release or qualifies for grant funding program).

   d. The patient also must be absent from any manufacturer-identified exclusion criteria as well as contraindications listed below:

      i. The patient is currently receiving opioid analgesics.

      ii. The patient is expected to require opioid analgesics for pain.

      iii. A patient who is in acute opioid withdrawal.

      iv. A patient with a positive urine drug screen for opiates.

      v. A patient who has failed the naltrexone challenge.

      vi. Hepatotoxicity has been observed, by elevated AST or ALT or both.

      vii. Stable chronic Hepatitis B or C is <u>not</u> a contraindication to receiving the injection, but a provider's evaluation is needed.

         1) Acute Hepatitis is a contraindication.

      viii. Testing indicates severe renal failure, or moderate to severe renal insufficiency.

      ix. The patient has a diagnosed unstable psychiatric illness.

x. The patient has a positive pregnancy test.

xi. The patient has exhibited hypersensitivity to Vivitrol/naltrexone or any of the components of Vivitrol/naltrexone.

V. TESTING/EVALUATION FOR PROGRAM APPROPRIATENESS

A. The designated Behavioral Health Therapist shall discuss the course of treatment with the patient and complete a *Consent for Vivitrol®/Naltrexone Program Participation* form (see *M-022.02, Consent for Vivitrol®/Naltrexone Program Participation*).

1. The Behavioral Health Therapist will also need to obtain the patients' signature on the consent form.

2. This paperwork needs to be forwarded to the designated medical staff member.

B. The designated Nurse will enter the orders for the designated laboratory testing at the to be completed **three (3) weeks** prior to release and set up a provider appointment for two (2) weeks prior to release from custody.

C. The laboratory tests shall include:

1. Urine pregnancy test (females)

2. CMP

3. Hepatitis B Surface Antigen (HBsAG)

4. Hepatitis C Antibody (HCV Ab)

D. During the medical provider visit the designated provider will review the lab results and conduct the examination.

1. If the provider determines that the patient is clinically appropriate for Vivitrol, the designated provider shall order (preferably to occur the same day):

a. An onsite urine drug screen

i. Upon the urine drug screen being negative, the naltrexone challenge.

b. Upon the naltrexone challenge being negative and the nursing assessment has determined the patient appropriate, the provider will order:

i. One (1) Vivitrol 4cc deep intramuscular injection to be administered.

2. This injection will occur concurrently with the provider examination so there is a provider present during the injection to monitor any reaction.

VI. THE ROLE OF BEHAVIORAL HEALTH THERAPIST

A. To assure that the patient experiences a smooth transition back into the community linking the patient with post-release care is imperative to the success of the patient.

1. **Scheduled follow-up after release:**

a. The patient must have a scheduled follow-up appointment with a designated community-based ***treatment program or a community-based provider that*** will continue Vivitrol once released.

i. Coordination of this follow-up service after release from custody will be the responsibility of the ***Behavioral Health Therapist.***

1) This appointment will be scheduled to ensure resources are available to the patient upon release.

2) The post-appointment must be scheduled prior to the referral to medical services to ensure the patient has adequate access to services post-release.

3) Individuals without community resources upon release, would not be appropriate for the Vivitrol release program.

ii. Providing a warm hand-off to transfer care upon release provides the patient with a follow-up appointment for their second injection, as well as ensures that continuity of care is provided.

iii. Obtaining a release of information with the provider and/or clinic will provide a foundation to ensure the patient has a smooth transition upon reentry.

B. **Three (3) to five (5) weeks** prior to the PROJECTED RELEASE DATE, the Behavioral Health Therapist or designee, shall confirm that an appointment has been made with the partnered community Vivitrol provider to allow for continued services following release, and inform the medical team, as well as the patient of the confirmed appointment.

VII. NURSING PROCEDURES

A. **Assessment Prior to Naltrexone Oral Challenge**

1. Nursing staff will conduct the nursing readiness assessment once the provider orders a naltrexone challenge.

2. The nursing assessment is completed to ensure no signs or symptoms of opioid withdrawal are present.

3. Nursing should ensure negative results on urine pregnancy tests for all female candidates. Vivitrol has not been studied in pregnancy.

4. Reminder: Withdrawal from opiates is dangerous to the fetus and a pregnant patient should be referred the Subutex program (see *M-003A: Pregnancy and Opioid Use*) for treatment.

5. Nursing should ensure that the onsite urine drug screen (UDS) is negative for opiates.

   a. If the UDS is positive for any substance confer with the provider prior to administering the naltrexone challenge.

6. Nursing should ensure that the provider has evaluated the patient and reviewed the relevant laboratory studies prior to administering the challenge.

B. **Naltrexone Oral Challenge**

1. The naltrexone challenge is a one-time dose of naltrexone 25 mg (half of a 50mg tab) by mouth to ensure the patient has no adverse effects from the medication and is fully opiate free.

2. The naltrexone challenge shall occur in the health services unit where the patient shall be observed for withdrawal signs and symptoms.

3. Refer to the nursing decision making tree for the step-by-step process (see *M-022.03, Vivitrol®/Naltrexone – A Step-by-Step Guide for Nurses*) as well as the nursing assessment for directions.

    a. Complete the *Patient Readiness Assessment* form (see *M-022.04, Patient Readiness Assessment*).

        i. Vital signs

        ii. Recent opioid use

        iii. Pregnancy test (if applicable)

        iv. Conduct baseline COWS

        v. If score is 4 or less – and good evidence exists of no use in the past 7–10 days, proceed with naltrexone challenge by administering naltrexone 25mg by mouth.

        vi. The naltrexone challenge involves oral administration of 25 mg of naltrexone (i.e., half of a 50 mg tab), and is negative if no withdrawal signs or symptoms are apparent **after 1½ hours (90 minutes)**.

        vii. Observe for 90 minutes

        viii. Repeat COWS

        ix. Upon clearance from the naltrexone challenge, the nursing staff shall follow the provider's order for the daily naltrexone oral or Vivitrol injection as well as documentation of the process on the assessment form.

C. **Assessment Prior to Vivitrol Injection**

1. A nursing assessment should be reviewed to ensure no signs or symptoms of opioid withdrawal are present. (If the injection occurs, directly following the naltrexone challenge additional assessment is not indicated.)

2. Nursing should ensure negative results on urine pregnancy tests for all female candidates.

3. Nursing should ensure that the urine drug screen is negative for all substances and the patient had a negative naltrexone challenge (25 mg administered orally) with no opioid withdrawal present.

4. Administer the Vivitrol injection per provider order if deemed appropriate by the nursing assessment, naltrexone challenge and urine drug screen.

D. **Nursing Preparation and Administration of Vivitrol**

1. Vivitrol is supplied in single-use cartons.

2. The products shall be visually inspected for particulate matter and discoloration prior to administration.

3. Vivitrol shall be suspended only in the diluent supplied and must be administered only with one (1) of the needles supplied.

4. Select needle length based on the patient's body size.

   a. Consider using the 2-inch needle with protection device for patient with a large amount of subcutaneous tissue overlying the gluteal muscle.

   b. Alternative treatment shall be considered for patients whose body type precludes an intramuscular injection with one of the provided needles.

5. Warming the injection:

   a. If there is not the mechanism to pull the injection from refrigeration 30–45 minutes prior to administration, then warm the diluent vial to near body temperature by rolling it in the hand until no longer cool to the touch. (If the dose is not used, return to refrigeration as soon as possible).

6. After preparation, a properly mixed suspension will be milky white, will not contain clumps, and moves freely down the walls of the vial.

E. The injection:

1. Vivitrol should be injected into deep muscle tissue to minimize risk of adverse injection site reaction.

   a. Vivitrol should NOT be administered intravenously, subcutaneously, or into adipose tissue.

2. Proceed with dorsogluteal injection (upper outer quadrant, aspirate for blood).

   a. Avoid injecting subcutaneously or into adipose.

3. If unable to inject due to a clogged needle, withdraw, replace the needle, and repeat procedure.

4. Observe/monitor patient for an additional 10 minutes after injection for any immediate adverse reaction.

5. Check for injection site reaction.

6. Give patient educational material (see *M-022.05, Patient Counseling Tool – Vivitrol®*) as well as educate patient on signs and symptoms.

7. Remind patients they cannot take opiates while on naltrexone.

8. Note in the patient's chart noting the patient has received a Vivitrol injection and that no narcotics should be given to the patient.

9. Inform patient of what procedures to follow if they need to follow up with medical regarding side effects.

F. It is important to remember: each Vivitrol shot is extremely costly, administering the shot at the right time is important, since Alkermes only supplies one, no-cost shot per patient, so timing is everything.

1. ***If a patient receives an injection and the patients release does not occur when originally scheduled, the medical team and MNDOC administrators shall***

determine the course of action, whether Vivitrol is continued, or if an alternative plan of care is appropriate.

2. ***Upon review, if it is determined that there is not additional funding available for the continuance of vivitrol, the patient would be transitioned at the appropriate time, to Naltrexone Oral 50 mg tablet daily. This transition should occur in place of the next injection.***

G. **Storage of Vivitrol**

1. Vivitrol shall be stored under specific temperature-controlled conditions to ensure proper delivery and patient safety.

2. The entire carton should be stored in the refrigerator (2°C–8°C, 36°F–46°F). Unrefrigerated, Vivitrol microspheres can be stored at temperatures not exceeding 25°C (77°F) for no more than seven (7) days prior to administration. Do not expose unrefrigerated product to temperatures above 25°C (77°F).

3. Vivitrol should not be frozen.

H. **Vivitrol Injection Training**

1. Training will be provided by Alkermes, the pharmaceutical company that provides Vivitrol, as well as Wexford staff.

2. Training on the Vivitrol guideline will be provided to all appropriate staff as well. This training will be provided by staff members knowledgeable about this Vivitrol guideline.

VIII. ATTACHMENTS

M-022.01 Opioid Use Screener

M-022.02 Consent for Vivitrol®/Naltrexone Program Participation

M-022.03 Vivitrol®/Naltrexone Step-by-Step Guide for Nurses

M-022.04 Patient Readiness Assessment

M-022.05 Patient Counseling Tool - Vivitrol®

M-022.01 Opioid Use Screener (SAMPLE)

Opioid Use Screener

Patient Name _____ ID:_____ Date: _____

	Question	YES	NO
1	Have you used opioids for larger amounts or over a longer period than intended?		
2	Have you tried to cut down or control your opioid use?		
3	Were you taking a lot of time finding opioids, using opioids, or recovering from opioids?		
4	Do you have cravings or a strong desire to use opioids?		
5	Have opioids interfered with your roles at work, school, or home?		
6	Have you previously continued to use opioids despite people telling you that you need help?		
7	Have you given up social, occupational or recreational activities due to opioids?		
8	Have you continued to use opioids in situations where it is physically hazardous?		
9	Do you continue using opioids despite knowing it is hurting you physically and mentally?		
10	Have you noticed you needing more opioids to get the desired effect you want?		
11	Have you gotten ill when trying to quit opioids or do you keep using to avoid withdrawal symptoms?		
12	How many times have you been in treatment for opioid addiction?		
13	Are you currently in an opioid treatment program?		
	If yes to 13 – Which program?		
14	Are you currently on methadone under the supervision of a provider?		
15	Are you currently on buprenorphine under the supervision of a provider?		

This section is to be completed by staff

Contact information of opioid treatment program (OTP):_____

_____

_____

Was Contact made with OTP? _____

Was methadone / or buprenorphine RX confirmation received from OTP?_____

_____

Staff Signature/ Title:_____ Date:_____

M-022.02 Consent for Vivitrol®/Naltrexone Program Participation (SAMPLE)

Consent for Vivitrol Injection or Naltrexone Oral Program Participation

Patient Name:_____DOB:_____Patient ID#:_____

This document is presented to you, as you have expressed interest in participating in the Vivitrol/naltrexone program offered by Wexford Health to assist you in your recovery process. Medication Assisted Treatment (MAT) for Opioid Use Disorder or Alcoholism is not a substitute for addiction counseling or treatment and must be used in conjunction with counseling and/or treatment to promote positive outcomes.

Naltrexone (or the injection Vivitrol) will assist you in your early recovery efforts by reducing cravings to use alcohol and/or opiates.

Utilizing MAT allows individuals to focus on addressing additional treatment needs to include cognitive, emotional, and social issues as well as re-entry needs such as housing, employment, and community re-unification.

To be referred for MAT, you have met certain criteria, which suggest you are engaged in recovery and intend to refrain from future substance misuse.

You must be free from opioids 7 to 10 days prior to starting Vivitrol injection or naltrexone oral.

When used as prescribed, Vivitrol/naltrexone reduces your craving for alcohol and/or opiates, as stated above, and if you do relapse, it will block the high that accompanies opioid or alcohol use.

Discontinuing naltrexone or Vivitrol could result in a life-threatening overdose when returning to a previous level of drug use, as tolerance to opiates decreases because of the use Vivitrol/naltrexone.

The use of Vivitrol/naltrexone could be associated with not feeling the usual effects of opioid-containing medications. This includes medicines for pain, nausea, and diarrhea.

Prior to your first dose of medication, program staff will meet with you to discuss specifics of Vivitrol/naltrexone use. To ensure you are appropriate for the medication, a liver enzyme panel and a measurement of BUN and creatinine will be performed to ensure that you do not have active liver impairment.

Additional tests or procedures could be ordered by the provider depending on your medical history. After being medically cleared, you will be scheduled to receive your first small dose of medication, prior to administering a full dose. Medical staff will monitor your response to the medication to ensure no reaction occurs before administering your first Vivitrol injection or full dose of naltrexone oral.

Vulnerability to Opioid Overdose:

- After opioid detoxification, individuals are likely to have a reduced tolerance to opioids. Vivitrol blocks the effects of opioids for approximately 28 days after administration. As the blockade wanes and eventually dissipates completely, use of previously tolerated doses of opioids could result in potentially life-threatening opioid intoxication (respiratory compromise or arrest, circulatory collapse, etc.).
- Cases of opioid overdose with fatal outcomes have been reported in individuals who used opioids at the end of a dosing interval, after missing a scheduled dose, or after discontinuing treatment. There is an increased sensitivity to opioids and the risk of overdose. Narcan/naloxone for the emergency treatment of opioid overdose, should be kept on hand. Narcan/naloxone is available at most pharmacies, at no cost.
- Although Vivitrol/naltrexone is a potent antagonist with a prolonged pharmacological effect, the blockade produced by Vivitrol/naltrexone is surmountable. The plasma concentration of opioids attained immediately following administration may be sufficient to overcome the competitive receptor blockade. This poses a potential risk to all individuals who attempt, on their own, to overcome the blockade by administering large amounts of opioids.
- Any attempt to overcome the Vivitrol/naltrexone blockade by taking opioids may lead to fatal overdose.

I have fully reviewed the information provided to me on Vivitrol/naltrexone. I understand that participation in this program begins with successful participation in treatment programing. I understand that by agreeing to participate in this program, I am agreeing to remain drug-free, attend all scheduled appointments, and remain compliant with the medication regimen. Upon agreeing to engage in this program, I will meet with medical staff to review specific details of taking Vivitrol/Naltrexone. I understand that the Vivitrol injection is extended release and will last approximately 4 weeks before needing an additional injection, and the Naltrexone oral is short acting and will last up to 24 hours before needing your next dose

I have fully reviewed the information provided to me on Vivitrol/naltrexone. I understand that participation in this program begins with successful participation in treatment programing. I understand that by agreeing to participate in this program, I am agreeing to remain drug-free, attend all scheduled appointments, and remain compliant with the medication regimen. Upon agreeing to engage in this program, I will meet with medical staff to review specific details of taking Vivitrol/naltrexone. I understand that the Vivitrol injection is extended release and will last approximately 4 weeks before needing an additional injection, and the naltrexone oral is short acting and will last up to 24 hours before needing your next dose

I understand that my participation in this program is voluntary, and that I may revoke this consent at any time. By signing this form, I am indicating my interest in further pursuing the use of Vivitrol/naltrexone as part of my recovery efforts.

Patient Signature:_____Date:____/___/____ Patient ID#: _____

Staff Signature: _____Date: ____/___/____

M-022.03 Vivitrol ®/Naltrexone Step-by-Step Guide for Nurses

Vivitrol ®/Naltrexone – A Step-by-Step Guide for Nurses[1]

Step 1. Patient History

Initial Assessment (Naltrexone Readiness Form)

- Patient Information
- Drug use: type, amount, route
- Treatment history: medications, response, adherence

Step 2. Medical Evaluation

Medical History

- Complications (infections, overdoses, liver disease)
- Physical exam: vital signs, infections (abscesses, cellulitis)
- Labs: CBC, chemistry, UA, pregnancy, hepatitis panel, drug toxicology, breathalyzer

Step 3. Shared Decision-Making

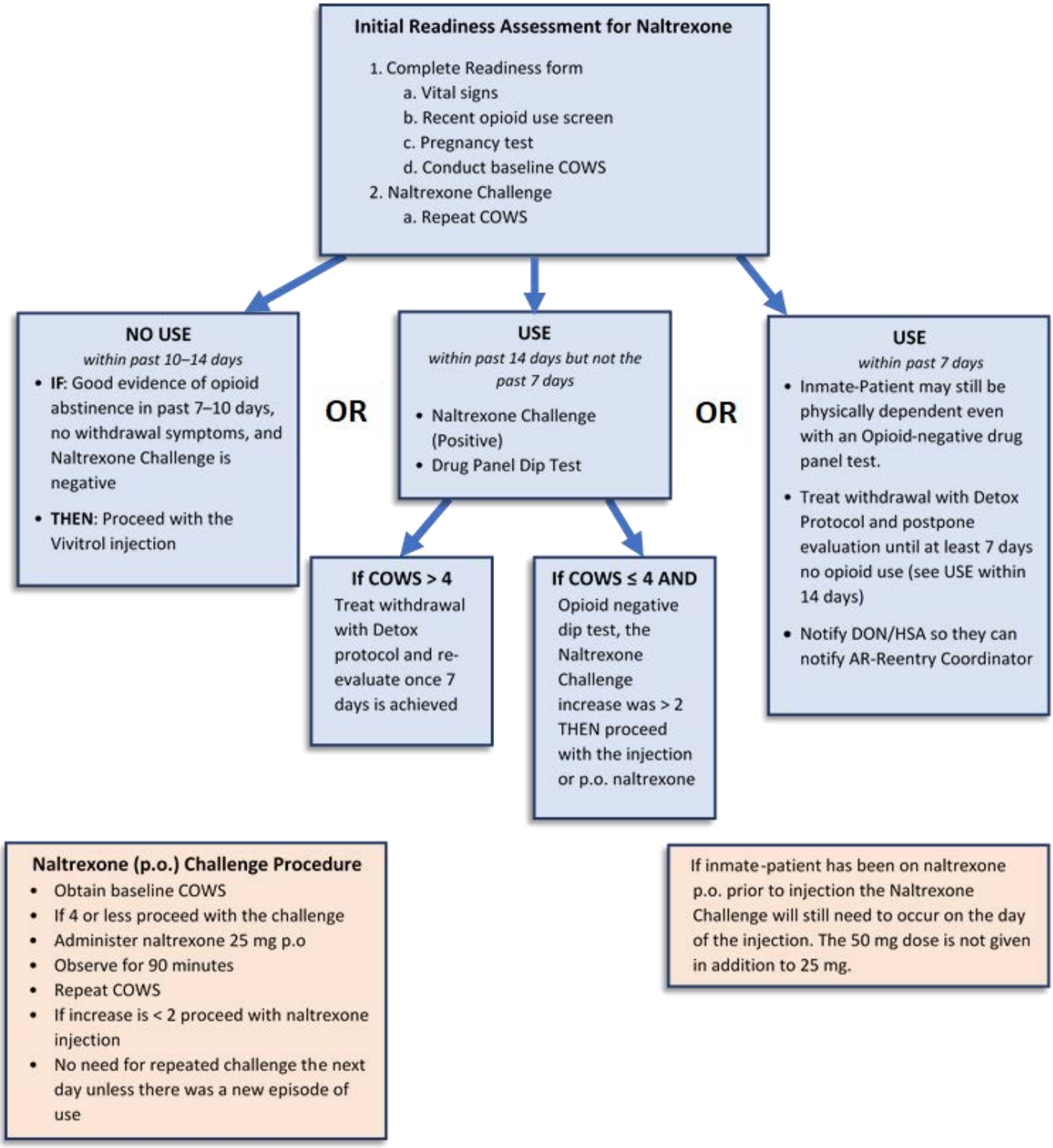
Appropriateness for XR-Naltrexone

- Provide information about patient's medical status and diagnosis
- Review consequences of opioid use
- Provide information about opioid use disorder and its treatment
- Review information on use and side effects of naltrexone (Naltrexone Education Form)
- Review diagnostic information (patient's medical status and diagnosis)

[1] *Adapted from MAT Training, Providers' Clinical Support System for Medication Assisted Training*, SAMHSA

Vivitrol ®/Naltrexone – A Step-by-Step Guide for Nurses (cont'd)

Step 4. Assessment–Patient Readiness



Vivitrol ®/Naltrexone – A Step-by-Step Guide for Nurses (cont'd)

Step 5. Materials

- **Refrigeration**: Keep XR-naltrexone (VIVITROL®) always refrigerated (36°F–46°F).
- Remove from refrigeration at least 30 minutes before administration. If not used, it can be returned to the refrigerator.
- **IM Injection setup** (gloves, alcohol, and/or betadine swab, sterile gauze pads, adhesive bandage, and sharps container)
- Follow directions on the package

Step 6: Drug/Patient Preparation

- Assess body habitus of patient – layer of fat over muscle not greater than length of injection needle (2"/usually BMI < 40)
- Review medication preparation and injection via package insert
- There is a video available for instructional teaching; ask your DON for the link.

Step 7: Injection

- Vivitrol should be injected into deep muscle tissue to minimize risk of adverse injection site reaction
- Proceed with dorsogluteal injection (upper outer quadrant, aspirate for blood)
- Alternate buttock with subsequent injection
- Avoid injecting subcutaneously or into adipose
- If unable to inject because of clogged needle, withdraw, replace the needle, and repeat procedure

Step 8. Observation

- Oral naltrexone – administer remaining 25 mg dose
- Observe patient for 10 minutes for any immediate adverse reaction.
- Check for injection site reaction
- Give patient educational material as well as educate patient on signs and symptoms
- Remind patients they cannot take opiates while on naltrexone
- Flag patient's chart
- Inform patient of what procedures to follow if they need to follow up with medical regarding side effects

Step 9. Follow-Up (Medical)

- Facilitate appointment scheduling for the patient's next follow-up with a Wexford provider. If the client is on the pre-release program the appointment was scheduled by the Behavioral Health Staff and written in the chart. If the patient is on oral while incarcerated follow-up is every 90 days unless otherwise indicated by provider.
- MAR is updated and accurate
- Missed doses are reported to your DON/HSA for

M-022.04 Patient Readiness Assessment (SAMPLE)

Patient Readiness Assessment
Vivitrol®/Naltrexone Nursing Administration

Patient Name _____ ID:_____ Date:

_____

Consent Received and Signed: ☐ Yes ☐ No

☐ Pre-release MAT (Estimated Injection date:_____) ☐ MAT While Incarcerated ☐ Yes ☐ No

Vital Signs

BP:_____Pulse:_____RR:_____Baseline COWS Score:_____

Is the patient currently on any Withdrawal Management? ☐ Yes ☐ No

Females: Provide Urine Pregnancy test: ☐ Positive (inform clinician) ☐ Negative (proceed)

Questions for Patient

					Yes	No
1	Are you currently taking any opiates?				☐	☐
2	Do you understand that starting Naltrexone can cause immediate withdrawal if you are currently using any opiates?				☐	☐
3	Drug Use in the Past 14-30 Days	Date of Last Use	Route	Amount		
	Heroin					
	Suboxone					
	Tramadol					
	Oxycodone					
	Vicodin					
	Any Other Drug Use (Describe):					
					Yes	No
4	Patient enrolled in substance abuse treatment services?				☐	☐
5	Provided Vivitrol education materials and reviewed potential side effects as well as discussed importance of compliance and the risk of overdose.				☐	☐

Naltrexone (p.o.) Challenge Procedure

1. Baseline COWS_____ (if 4 or less proceed with the challenge) (see *COWS*, page 3)
2. Administer naltrexone 25 mg p.o. and observe for 90 minutes
3. COWS Challenge score_____(if change is less than 2 proceed with XR-naltrexone injection or additional 25 mg of oral naltrexone)
4. Positive naltrexone challenge assessment (COWS increases more than 2); conduct a urinalysis – panel dip test and follow nursing *Naltrexone Step-by-Step Guide* for "use"
   Results:_____
5. No need for repeated challenge on the day following the naltrexone challenge unless there was a new episode of use
6. Any additional contraindications to starting naltrexone? (Upcoming surgery) ☐ Yes ☐ No
   List:

   _____

   _____

Patient Readiness Assessment (Cont'd)

Vivitrol Injection Administration

Injection Delivered: ☐ Yes ☐ No Time:_____

IM - Dorsolateral/Upper outer quadrant (side): _____

Observe for 10 minutes following the injection

Any injection complications? ☐Yes ☐ No Immediate sensitivity reaction? ☐ Yes ☐No

If yes describe reaction/ plan:

_____

_____

_____

_____

If no Injection was given, please explain reason.

_____

_____

_____

_____

_____

_____

Nurse Signature Print Name

File in Medical Record or Scan to EMR – File as Vivitrol/Naltrexone: Nurse ADM

Patient Readiness Assessment (Cont'd)

Clinical Opiate Withdrawal Scale (COWS)

For each item, circle the number that best describes the patient's signs or symptoms. Rate on just the relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increase pulse rate would not add to the score.

Patient's Name: _____ Date and Time: _____/_____/_____:_____

Reason for this assessment: _____

Resting Pulse Rate: _____ beats/minute

Measured after patient is sitting or lying for one minute

0	pulse rate 80 or below
1	pulse rate 81 – 100
2	pulse rate 101 - 120
4	pulse rate greater than 120

Sweating: *Over past ½ hour not accounted for by room temperature or patient activity*

0	no report of chills or flushing
1	subjective report of chills or flushing
2	flushed or observable moistness on face
3	beads of sweat on brow or face
4	sweat streaming off face

Restlessness: *Observation during assessment*

0	able to sit still
1	reports difficulty sitting still, but is able to do so
3	frequent shifting or extraneous movements of legs/arms
5	unable to sit still for more than a few seconds

Pupil size

0	pupils pinned or normal size for room light
1	pupils possibly larger than normal for room light
2	pupils moderately dilated
5	pupils so dilated that only the rim of the iris is visible

Bone or joint aches *If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored*

0	not present
1	mild diffuse discomfort
2	patient reports severe diffuse aching of joints/muscles
4	patient is rubbing joints or muscles and is unable to sit still because of discomfort

Runny nose or tearing *Not accounted for by cold symptoms or allergies*

0	not present
1	nasal stuffiness or unusually moist eyes
2	nose running or tearing
4	nose constantly running or tears streaming down cheeks

GI Upset: *Over last ½ hour*

0	no GI symptoms
1	stomach cramps
2	nausea or loose stool
3	vomiting or diarrhea
5	multiple episodes of diarrhea or vomiting

Tremor *Observation of outstretched hands*

0	no tremor
1	tremor can be felt, but not observed
2	slight tremor observable
4	gross tremor or muscle twitching

Yawning *Observation during assessment*

0	no yawning
1	yawning once or twice during assessment
2	yawning three or more times during assessment
4	yawning several times/minute

Anxiety or irritability

0	none
1	patient reports increasing irritability or anxiousness
2	patient obviously irritable / anxious
4	patient so irritable or anxious that participation in assessment is difficult

Gooseflesh skin

0	skin is smooth
3	piloerection of skin can be felt or hairs standing up on arms
5	prominent piloerection

Total Score: _____

The total score is the sum of all 11 items

Initials of person completing assessment: _____

M-022.05 Patient Counseling Tool - Vivitrol® (Naltrexone)

Patient Counseling Tool

VIVITROL® (naltrexone for extended-release injectable suspension)

Risk of sudden opioid withdrawal during initiation and re-initiation of VIVITROL

Using any type of opioid including street drugs, prescription pain medicines, cough, cold or diarrhea medicines that contain opioids, or opioid dependence treatments buprenorphine or methadone, in the 7 to 14 days before starting VIVITROL may cause severe and potentially dangerous sudden opioid withdrawal.

Risk of opioid overdose

Patients may be more sensitive to the effects of lower amounts of opioids:

- After stopping opioids (detoxification)
- When the next VIVITROL dose is due
- If a dose of VIVITROL is missed
- After VIVITROL treatment stops

Patients should tell their family and people close to them about the increased sensitivity to opioids and the risk of overdose even when using lower doses of opioids or amounts that they used before treatment. Using large amounts of opioids, such as prescription pain pills or heroin, to overcome effects of VIVITROL can lead to serious injury, coma, and death.

Risk of severe reactions at the injection site

Remind patients of these **possible** symptoms at the **injection site:**

- Intense pain
- The area feels hard
- Large areas of swelling
- Lumps
- Blisters
- Open wound
- Dark scab

Some of these injection site reactions have required surgery.
Tell your patients to contact a healthcare provider if they have any reactions at the injection site.

Risk of liver injury, including liver damage or hepatitis

Remind patients of the possible symptoms of liver damage or hepatitis.

- Stomach area pain lasting more than a few days
- Dark urine
- Yellowing of the whites of eyes
- Tiredness

Patients may not feel the therapeutic effects of opioid-containing medicines for pain, cough or cold, or diarrhea while taking VIVITROL.

Patients should carry written information with them at all times to alert healthcare providers that they are taking VIVITROL, so they can be treated properly in an emergency.

A Patient Wallet Card or Medical Alert Bracelet can be ordered from: 1-800-848-4876, Option #1.

PLEASE SEE PRESCRIBING INFORMATION AND MEDICATION GUIDE.

Alkermes

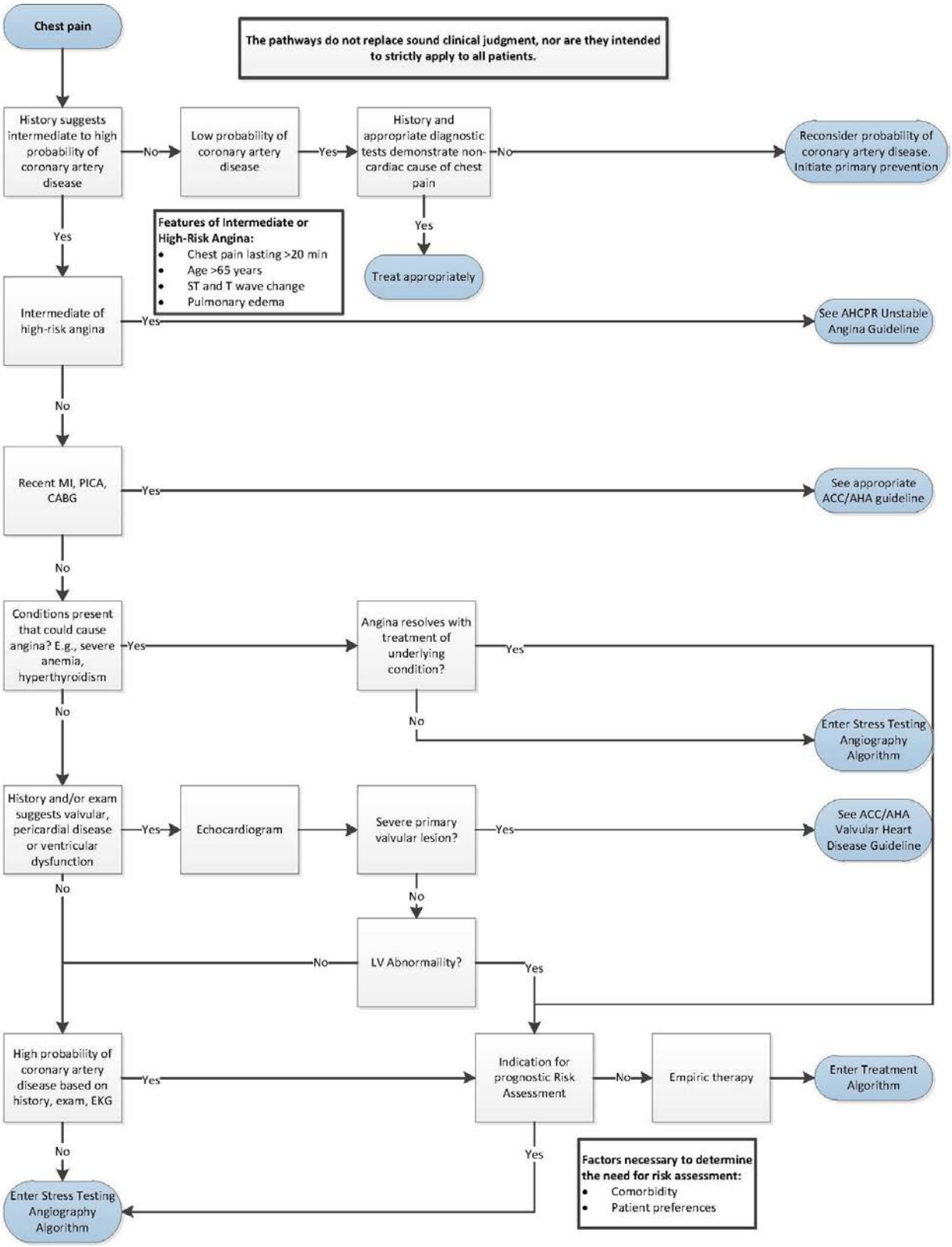
www.vivitrol.com

Vivitrol
(naltrexone for extended-release injectable suspension)

Cardiology Guidelines

Chronic Stable Angina: Clinical Assessment

Figure 1
AHCPR indicates Agency for Health Care Guideline and Research



*Adapted from THE UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM – MAY 2000
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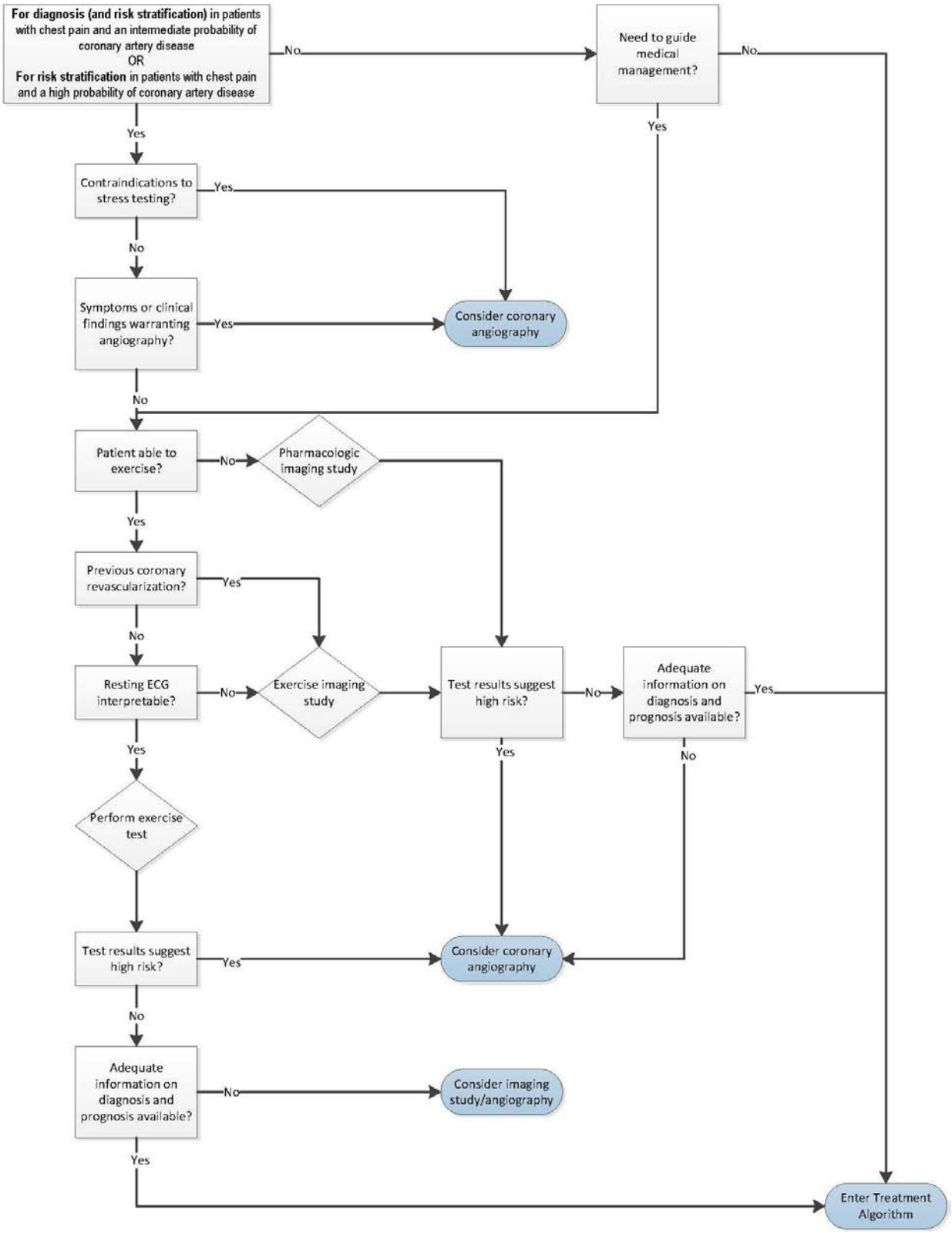
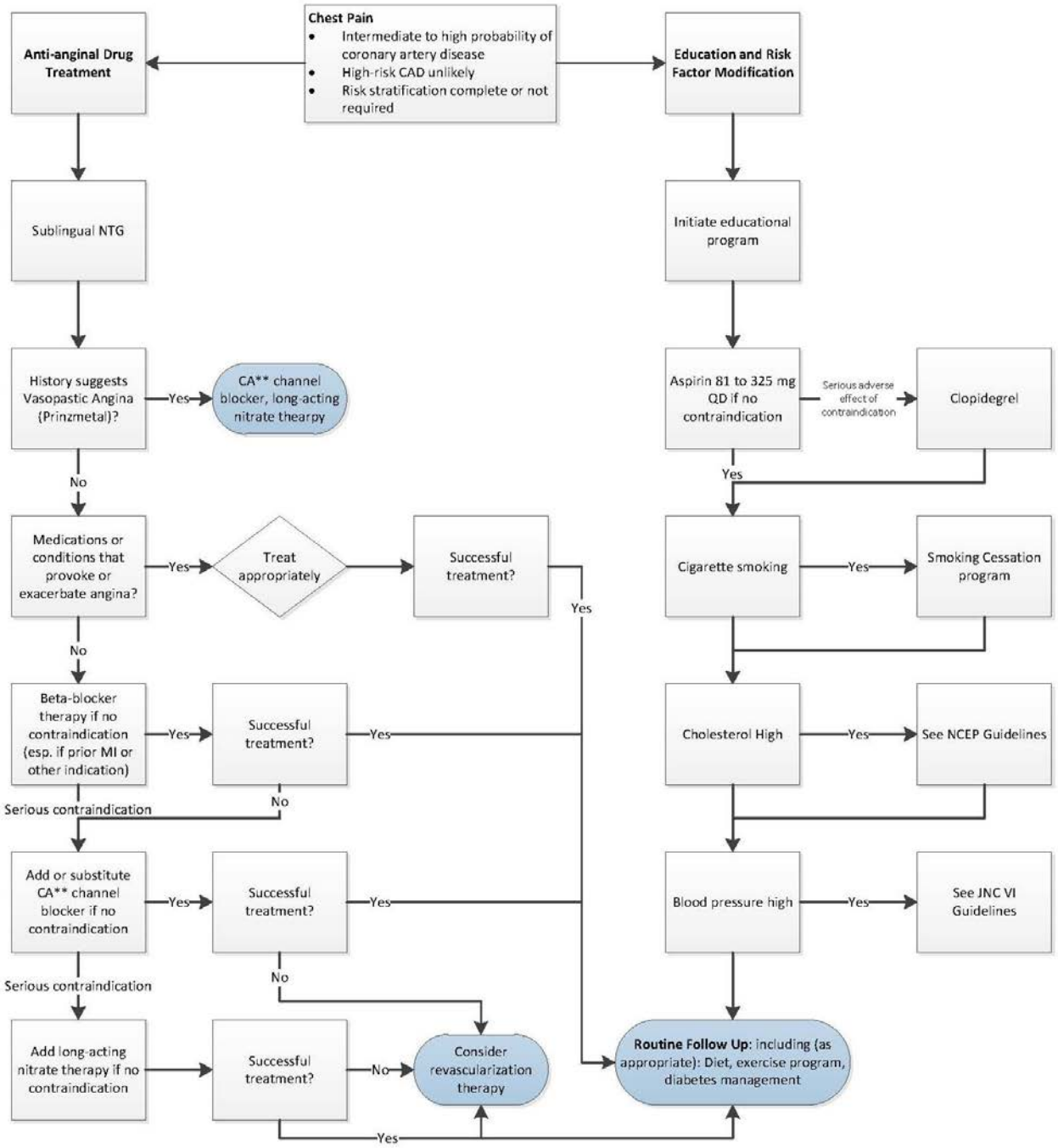
Each state/region may have individual variances, and a copy of those variances should be attached to this guideline

Chronic Stable Angina: Stress Testing/Angiography

Figure 2


For diagnosis (and risk stratification) in patients with chest pain and an intermediate probability of coronary artery disease
OR
For risk stratification in patients with chest pain and a high probability of coronary artery disease
No
Need to guide medical management?
No
Yes
Yes
Contraindications to stress testing?
Yes
No
Symptoms or clinical findings warranting angiography?
Yes
Consider coronary angiography
No
Patient able to exercise?
No
Pharmacologic imaging study
Yes
Previous coronary revascularization?
Yes
No
Resting ECG interpretable?
No
Exercise imaging study
Test results suggest high risk?
No
Adequate information on diagnosis and prognosis available?
Yes
Yes
Yes
No
Perform exercise test
Test results suggest high risk?
Yes
Consider coronary angiography
No
Adequate information on diagnosis and prognosis available?
No
Consider imaging study/angiography
Yes
Enter Treatment Algorithm

Chronic Stage Angina: Treatment



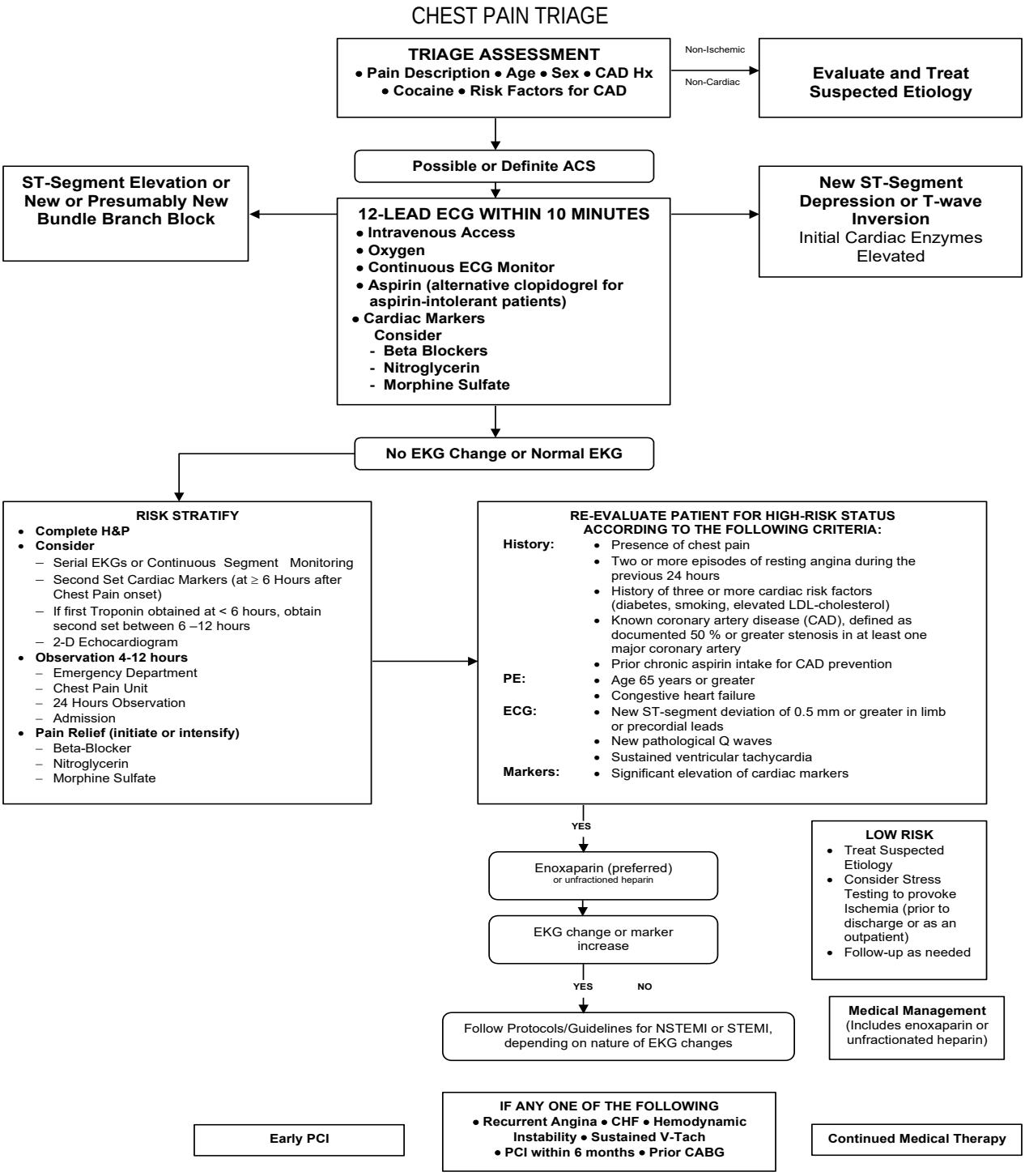
Conditions that exacerbate or provoke angina

Medications:	Other medical problems:	Other cardiac problems:
• Vasodilators	• Profound anemia	• Tachyarrhythmias
• Excessive thyroid replacement	• Uncontrolled hypertension	• Bradyarrhythmias
• Vasoconstrictors	• Hyperthyroidism	• Valvular heart disease (espec. AS)

**At any point in this process, based on coronary anatomy, severity of anginal symptoms and patient preferences, it is reasonable to consider evaluation for coronary revascularization. Unless a patient is documented to have left main, three-vessel, or two-vessel coronary artery disease with significant sterosis of the proximital left anterior descending coronary artery, there is no demonstrated survival advantage associated with revascularization in low-risk patients with chronic stable angina; thus medical therapy should be attempted in most patients before considering PTCA or CABG

Unstable Angina—Practical, Evidence-Based

GUIDELINES FOR OUTCOME-EFFECTIVE MANAGEMENT
Patients with Unstable Angina with and Without PCI
Adapted, updated, and based upon ACC/AHA Recommendations (September 2000) for UA/NSTEMI and ACC/AHA 1999 MI Guidelines.



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Calculating the Risk of Coronary Artery Disease (CAD)

I. HIGH RISK (85–99%)

A. ANY OF THE FOLLOWING

1. Definite angina in men greater than 60 years, women greater than 70 years
2. Hemodynamic or ECG changes with pain
3. History of CAD
4. Maried symmetrical T-wave inversion in precordial leads
5. ST increase or decrease of greater than 1 mm
6. Variant angina
7. Rest pain greater than 20 minutes
8. Pulmonary edema
9. Low blood pressure

II. INTERMEDIATE RISK (15–84%)

A. NO HIGH-RISK FACTORS, BUT ANY OF THE FOLLOWING

1. Definite angina in men less than 60 years, women less than 70 years
2. Probable angina in men greater than 60 years, women greater than 70 years
3. Probable nonanginal chest pain in patients with diabetes or patients without diabetes with more than two other risk factors
4. Extracardiac vascular disease
5. ST depression of 0.5–1 mm
6. T-wave inversion greater than 1 mm in leads with dominant R waves

III. LOW RISK (0.01–14%)

A. **NO HIGH- OR INTERMEDIATE-RISK FACTORS, BUT MAY HAVE**

1. Chest pain, probably not angina
2. One risk factor (not diabetes)[1]
3. T-wave flat or inverted less than1 mm in leads with dominant R waves
4. Normal ECG

[1] Risk factors: diabetes, smoking, hypertension, and elevated cholesterol levels

NYHA Functional Classification

NYHA CLASS	DEFINITION
I	No Limitations: Ordinary physical activity does not cause undo fatigue, dyspnea, or palpitation.
II	Slight Limitation of physical activity: Such patients are comfortable at rest, ordinary physical activity results in fatigue, palpitation, dyspnea, or angina.
III	Marked Limitation of physical activity: Although patients are comfortable at rest, less than ordinary activity will lead to symptoms.
IV	Inability to carry on any physical activity without discomfort: Symptoms of congestive failure are present even at rest. With any physical activity, increased discomfort is experienced.

Patient Risk Questionnaire

Patient Risk Questionnaire

Please consider the following questions when interviewing patients:

Name_____ **DOB**_____ **Gender**_____ **Date**_____

Please check one response for each question		
1. Exercise Ability	**YES**	**NO**
Can you walk 5 city blocks on level ground without shortness of breath?	☐	☐
Can you walk 1 flight of stairs without stopping?	☐	☐
Can you carry 1 bag of groceries into your home without shortness of breath?	☐	☐
2. Sleeping	**YES**	**NO**
Can you sleep flat at night with one pillow?	☐	☐
Do you wake up at night with shortness of breath?	☐	☐
3. Eating	**YES**	**NO**
Can you eat a full meal without shortness of breath?	☐	☐
Do you experience nausea when you eat a meal	☐	☐
How do you use salt? (Circle one) NONE COOK WITH IT ADD IT TO FOOD		
4. Daily Activities	**YES**	**NO**
Do you experience heart palpitations?	☐	☐
Can you shower, brush your teeth or hair without shortness of breath?	☐	☐
Do you have episodes of fainting	☐	☐
5. Since your last visit have you received medical care in an emergency room?	**YES**	**NO**
Have you been admitted to a hospital?	☐	☐
Taken your medication as prescribed?	☐	☐
6. During the past month	**YES**	**NO**
Have you often been bothered by feeling down, depressed, or hopeless?	☐	☐
Have you been bothered by little interest of pleasure in daily things?	☐	☐
Have your physical or emotional problems interfered with your normal social activities with family, friends, neighbors or groups?	☐	☐

Rev. 7/25/2017

*Adapted from THE UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM – MAY 2000

H&P Form/Guide

Patient Name:	DOB:	MR#:

HISTORY

INITIAL HISTORY

Has the patient had:	YES	NO	Explain
Previous MI	☐	☐	
Heart bypass surgery	☐	☐	
Valve surgery	☐	☐	
Is there a history of:	**YES**	**NO**	**Explain**
Hypertension	☐	☐	
High cholesterol	☐	☐	
Diabetes	☐	☐	
Rheumatic fever	☐	☐	
Heart disease in the family	☐	☐	
Does the patient use tobacco?	☐	☐	
If yes: _____ ppd x _____ # years			

FOLLOW-UP HISTORY

Since last visit: (from questionnaire)	Same	Better	Worse
Effort Tolerance	☐	☐	☐

	YES	NO	Explain
Has been hospitalized	☐	☐	
Has been treated in ER	☐	☐	
Seems compliant with medications	☐	☐	
Is having side effects from medications	☐	☐	
If yes, explain			

PHYSICAL EXAM

Wt: _____ Ht. _____
Blood pressure: _____ JVP: _____
Rate _____ /Min: Reg/Irg

Heart Exam	Yes	No	Extremities	Yes	No
Heart sounds	☐	☐	Cyanosis	☐	☐
S3	☐	☐	Edema	☐	☐
Presence/absence of:			All pulses palpable		
Systolic murmurs	☐	☐	Any bruits	☐	☐
Diastolic murmurs	☐	☐			

Lungs			Explain
Rales	☐	☐	
Wheezes	☐	☐	
Rhonchi	☐	☐	
Liver			
Tender	☐	☐	
Enlarged	☐	☐	

DIAGNOSTIC TESTS

INITIAL VISIT (frequency)

Lipid panel – (5 yearly if normal)	Chest X-ray (PA & lateral)
Fasting Glucose/Hgb A15 (once)	Electrocardiogram
TFTS, Iron, ESR – if indicated	Echocardiogram (if not done previously)

ADDITIONAL LABORATORY TESTS*

Creatinine	Magnesium	*Should be done initially (if not done previously) & when changing diuretic
Sodium	Albumin	
Potassium		

TREATMENT PLAN

NYHA Functional Classification: ☐ I ☐ II ☐ III ☐ IV

Patient Status: ☐ Improved ☐ Stable ☐ Worse

Follow up items:

Nutrition	Exercise	Referral
Education	Adverse factors	Medications
		Follow-up frequency

Rev. 7/25/2017

*Adapted from THE UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM – MAY 2000

Diagnostic Tests

INITIAL VISIT (frequency)

- Lipid Panel – (5 yearly if normal)
- Fasting Glucose/Hgb A $_{1c}$ – (once)
- TFTS
- Iron
- ESR

(If indicated)

- Chest x-ray (PA & lateral)
- Electrocardiogram
- Echocardiogram (if not done previously)

ADDITIONAL LABORATORY TESTS*

- Creatinine
- Sodium
- Potassium
- Magnesium
- Albumin

**Should be done initially (if not done previously) & when changing diuretic*

Treatment Plan

(Circle one of the following)

NYHA Functional Classification: I II II IV

Patient Status: Improved Stable Worse

Follow-up Items:

☐ Nutrition ☐ Exercise ☐ Referral
☐ Education ☐ Adverse factors ☐ Medications
☐ Follow-up Frequency

NUTRITION ADVICE	EDUCATIONAL ADVICE
INSTRUCT PATIENT TO: ❑ Follow a low-salt diet ❑ Avoid salty or processed foods, or canned foods with a high salt content ❑ Avoid adding salt to food when cooking or at the table ❑ Read labels – Avoid food with more than 300 mg of sodium per serving ❑ Give nutrition information material ❑ Arrange visit with CHF Care Manager where applicable	❑ Supply office education materials ❑ Arrange referral to CHF Care Manager ❑ Remind patient to: • Weigh themselves every day before breakfast • Record the weight • IMMEDIATELY report any weight gain of 2 lbs. or more a day for two consecutive days

MEDICATIONS	EXERCISE
❑ Provide office education materials *INSTRUCT PATIENT TO:* ❑ Get and keep prescriptions filled ❑ Take medications every day Talk to doctor or nurse about ways to remember and what to do if a dose is missed	*INSTRUCT PATIENT TO:* ❑ Be as active as possible ❑ Break down tasks to small activities to avoid becoming short of breath or overly tired ❑ Avoid heavy lifting (more than 10 pounds)

ADVERSE FACTORS NEEDING ATTENTION
❑ Environmental (smoking, alcohol, drugs) ❑ Co-morbidities (elevated lipids, elevated blood pressure, obesity, diabetes) ❑ Lifestyle issues (age, occupation, economically challenged) ❑ Psychological (mentally challenged (IQ), predictable poor compliance, depression, weak family or at-home support)

Treatment Plan: Referral Guidelines

CONSIDER REFERRAL TO CARDIOLOGIST FOR:

- ❑ Any patient at your discretion
- ❑ RV failure greater than LV failure
- ❑ Valvular disease as the cause of failure
- ❑ Diastolic failure
  - HOCM
  - Arrythmia
  - Chest pain

  (With positive exercise test)
- ❑ Systolic failure less than 40 years old.
- ❑ Systolic failure

  (Greater than 40 years old with positive exercise test)
- ❑ Any patient with poor response to Tx

CONSIDER REFERRAL TO CARDIOLOGIST IF:

- ❑ NYHA Class II, III, & IV
- ❑ Patients hospitalized for CHF (DRG127)
- ❑ Patients with adverse factors/co-morbidities
- ❑ **Any patient at provider's** discretion
- ❑ Problem patient
  - Patient missing office visits
  - Patient failed to fill prescriptions
  - Other suspected non-compliance
  - Regimen too complex or too expensive
  - Frequent visits to PCP
  - Having drug side effects
  - Reluctant to take meds chronically
- ❑ Complex socio-economic situation
  - Living alone
  - Co-morbidities
  - Excessive alcohol/substance abuse
  - Dietary indiscretion
  - Lack of education
  - High absentee rate from work/school
- ❑ Hospice appropriate
  - NYHA class IV despite optimal diuretic and vasodilator therapy
  - Ejection fraction is less than or equal to 20% (if test result is available)
  - Resistant symptomatic supraventricular or ventricular arrhythmias
  - H/O cardiac arrest and resuscitation in any setting
  - H/O syncope of any cause
  - Embolic CVA of cardiac origin
  - Concomitant HIV disease

NYHA Functional Classification & Treatment Guidelines[2, 3, 4]

NYHA Class	Definition	Initial Treatment*	Medication [5,6,7]	Follow-Up Guidelines
I	No Limitations: Ordinary physical activity does not cause undo fatigue, dyspnea, or palpitation.	• Obtain lab tests • Obtain X Ray • Obtain Echocardiogram • Medications • Revisit in 2 weeks	ACE INHIBITOR +/-DIURETICS WARFARIN/ASA	@ 3 months (if tests normal), then annually (if patient stable)
II	Slight Limitation of physical activity: Such patients are comfortable at rest, ordinary physical activity results in fatigue, palpitation, dyspnea, or angina.	• Obtain lab tests • Obtain X Ray • Obtain Echocardiogram • Medications • Revisit in 2 weeks	ACE INHIBITOR DIGOXIN +/-DIURETICS WARFARIN/ASA	@ 3 months, then 2 times per year
III	Marked Limitation of physical activity: Although patients are comfortable at rest, less than ordinary activity will lead to symptoms.	• Obtain lab tests • Obtain X Ray • Obtain Echocardiogram within 24 hours • Medications • Revisit in 1 weeks	ACE INHIBITOR DIGOXIN +/-DIURETICS WARFARIN/ASA	@ 2 Weeks, then at 1 month intervals for 3 months, then at 3 month intervals
IV	Inability to carry on any physical activity without discomfort: Symptoms of congestive failure are present even at rest. With any physical activity, increased discomfort is experienced.	• Consider Referral to Cardiologist for possible admission • Consider referral to Hospice for symptomatic care	ACE INHIBITOR DIGOXIN +/-DIURETICS WARFARIN/ASA	• Consider hospital admission for diagnostic work-up, referral to Cardiologist, or follow-up weekly • If still class IV on optimal therapy, consider Hospice referral

[2] All CHF patients should be anticoagulated. Warfarin preferred if LVEF less than or equal to 40%. Aspirin as alternative if Warfarin contraindicated.

[3] If ACE inhibitor not tolerated, use other vasodilators

[4] Use thiazide diuretics with caution in patients with severe CHF

Drug Therapy Selection

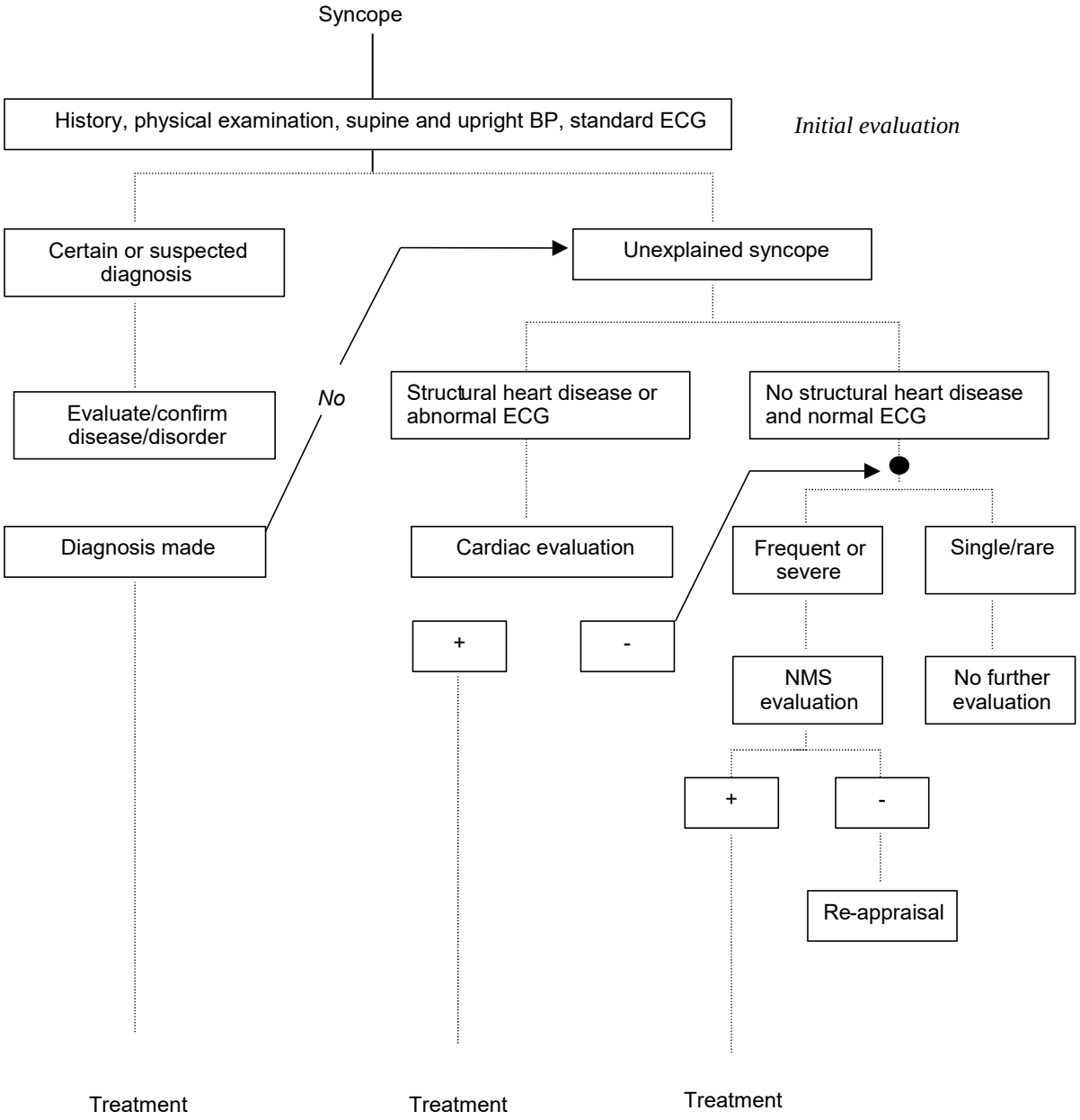
Category	Drug	Starting Dose	Maximum Dose		Common/Serious Side Effects
Diuretics Thiazide	Hydrochlorothiazide	25 mg q.d.	100 mg q.d.		Hypokalemia; Hyponatremia: Hyperglycemia; Hyperuricemia; Metabolic alkalosis
	Metalozone (Zaroxolyn)	5 mg q.d.	20 mg q.d.		
Combination	Triamterene/HCTZ (Dyazide)	1 tablet q.d. (37.5/25 mg))	2 tablet q.d.		Hypokalemia; Metabolic acidosis of more concern
Loop	Furosemide	20–40 mg q.d.	240 mg b.i.d.; Titrate to signs/symptoms of fluid overload		Orthostatic Hypotension; Hypokalemia; Renal insufficiency; Hypomagnesemia; Hyperglycemia; Hyperuricemia; Tinnitus; Dry mouth; Photosensitivity
	Bumetanide	0.5 mg q.d.	10 mg q.d.; (Clinical response)		
ACE Inhibitor			Target Dose/Day	Maximal Dose/Day	Hypotension; Cough; Headache; Taste disturbances; Renal insufficiency; Hyperkalemia; Angioedma
	Enalapril	2.5–5 mg b.i.d.	10 mg b.i.d.	20 mg b.i.d.	
	Lisinopril	10 mg q.d.	20 mg q.d.	40 mg q.d.	
Other Vasodilators (If ACE inhibitor not tolerated)	Hydralazine	10 mg q.i.d.	40 mg q.i.d.		Hypotension; Headaches; Numbness; Tingling; Flushing; Sinus tachycardia; Lupus-like syndrome; Hypotension; Hyperkalemia; Renal insufficiency; Dizziness; Headache; Flushing; Peripheral edema
	Isosorbide Dinitrate	10 mg t.i.d.	40 mg t.i.d.		
	Losartan	25 mg q.d.	100 mg q.d.		
Digoxin	Digoxin	less than 70 y.o. or Scr less than 1.5, then 0.25 mg/d; greater than 70 y.o. or Scr greater than 1.5, then 0.125 mg/d	0.5 mg q.d.		Arrhythmia (ventricular tachycardia; heart block); Headache; Dizziness; Visual disturbances
Anti-coagulants	Warfarin	5 mg p.o. then titrate to INR of 2–3	Dose appropriate to maintain INR of 2–3		Bleeding
	ASA	80–325 mg/day	325 mg/day		Bleeding

NYHA Functional Classification & Guidelines

NYHA Class	Follow-Up Guidelines
I	NEXT VISIT: 3 months (if tests normal), then annually (if patient stable)
II	NEXT VISIT: 3 months, then 2 times per year
III	NEXT VISIT: 2 weeks, then at 1-month intervals for 3 months, then at 3-month intervals
IV	Consider hospital admission for diagnostic work-up, referral to Cardiologist, or follow-up weekly If patient remains Class IV despite optimal therapy, consider hospice referral

Syncope

The flow diagram proposed by the Task Force on Syncope of an approach to the evaluation of syncope



When to Hospitalize a Patient with Syncope

I. FOR DIAGNOSIS

A. Suspected or known significant heart disease

B. Syncope occurring during exercise

C. Syncope causing severe injury

D. Family history of sudden death

E. Other categories that occasionally may need to be admitted:

1. Patients without heart disease but with sudden onset of palpitations shortly before syncope in supine position and patients with frequent recurrent episodes

2. Patients with minimal or mild heart disease when there is high suspicion of cardiac syncope

II. FOR TREATMENT

A. Cardiac arrhythmias as cause of syncope

B. Syncope due to cardiac ischaemia

C. Syncope secondary to the structural cardiac or cardiopulmonary diseases

D. Stroke or focal neurological disorders

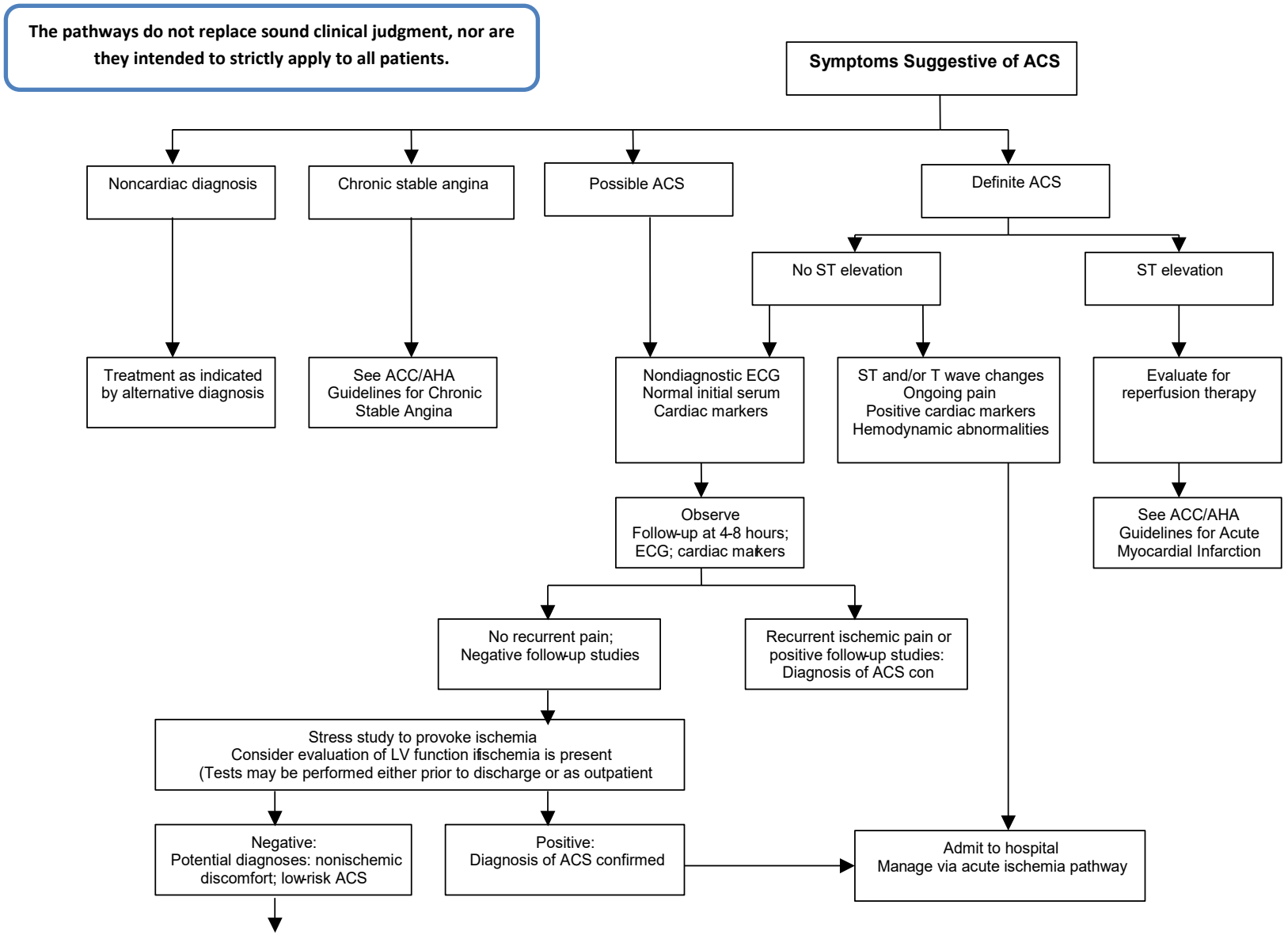
E. Severe orthostatic hypotension

F. Cardioinhibitory neurally-mediated syncope when pacemaker implantation is planned

III. WHEN IS IT SAFE NOT TO HOSPITALIZE?

Patients with isolated or rare syncopal episodes, in whom there is no evidence of structural heart disease and who have a normal baseline ECG, have a high probability of having a neurocardiogenic syncope and a low risk of having cardiac syncope. These patients have a good prognosis in terms of survival irrespective of the results of head-up tilt test. The evaluation of these patients generally can be completed entirely on an ambulatory basis. Patients with neurally-mediated syncope, in the absence of structural heart disease and normal ECG, have a good prognosis in terms of survival, and generally do not need specific treatment apart from counseling and general measures already defined.

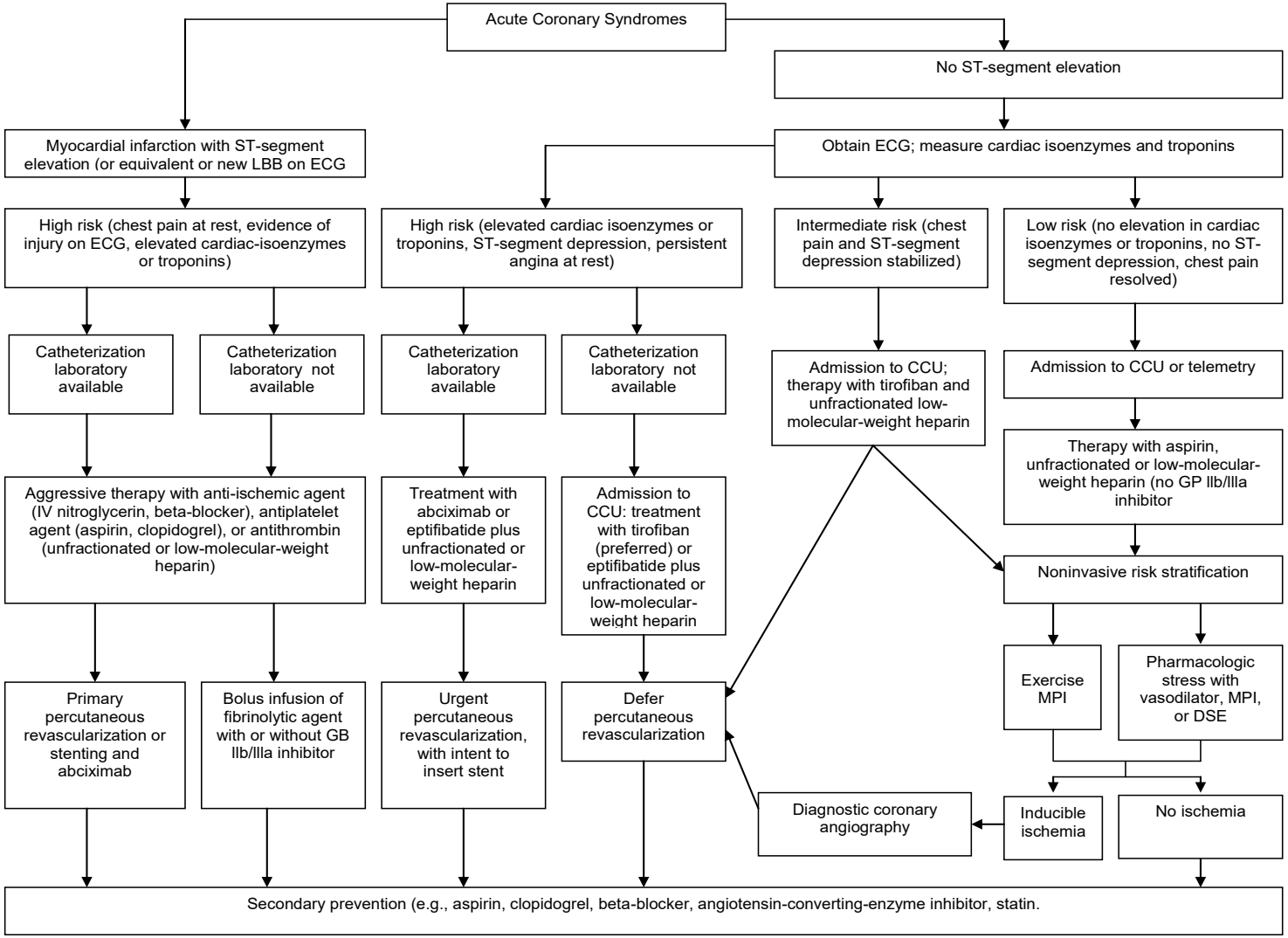
Algorithm for the Evaluation and Management of Patients Suspected of Having Acute Coronary Syndrome (ACS)



Adapted from NEJM 2001; 344;1941

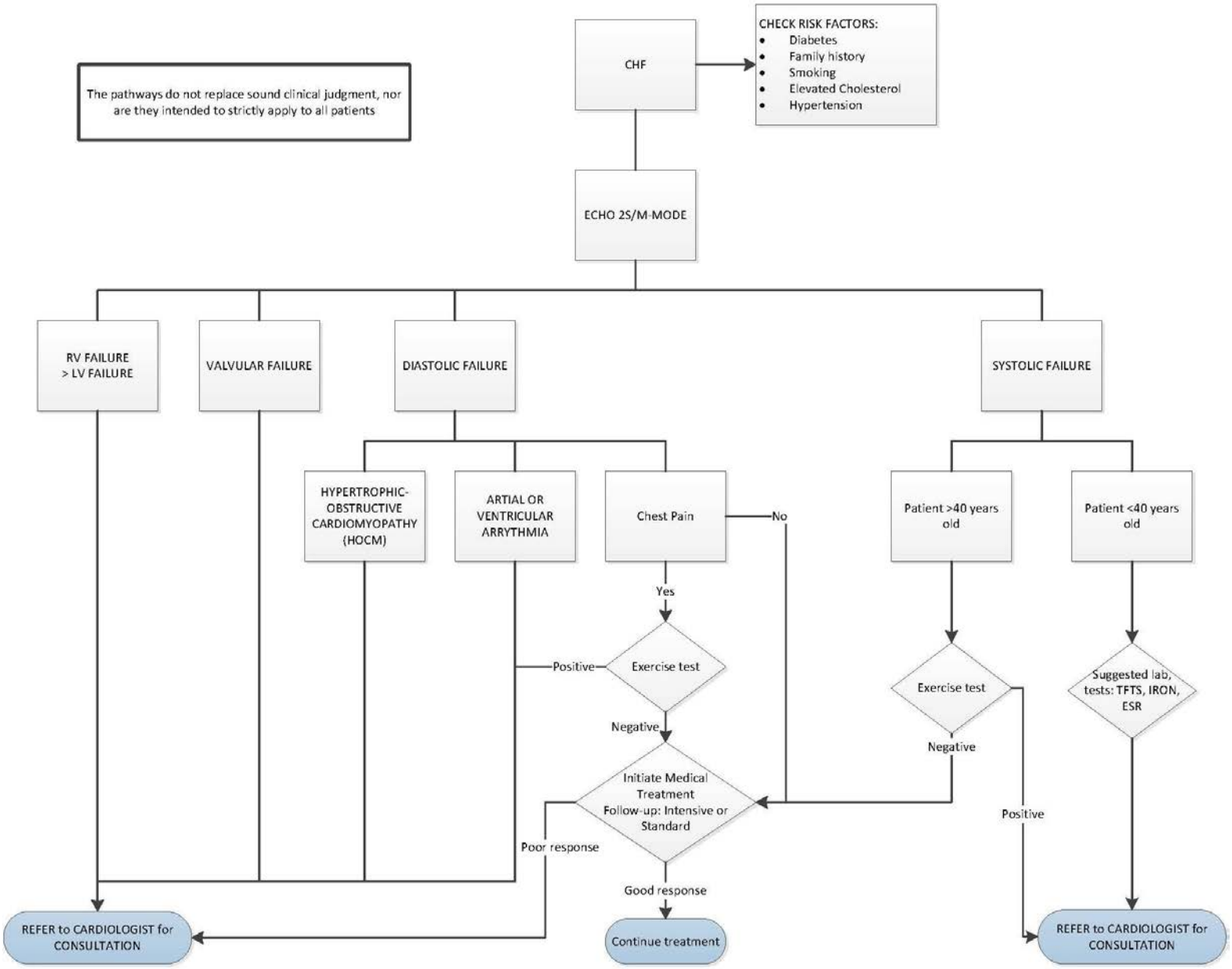
Acute Ischemia Pathway

The pathways do not replace sound clinical judgment, nor are they intended to strictly apply to all patients.



Adapted from NEJM 2001; 344;1941

Congestive Heart Failure: An Approach to Treatment



*Adapted from THE UNIVERSITY OF PENNSYLVANIA HEALTH SYSTEM – MAY 2000

Highlights of Optimal CHF Management

I. HIGHLIGHTS OF OPTIMAL CHF MANAGEMENT*

A. Obtain an echocardiogram to identify cause of heart failure and decide if cardiology referral indicated

B. Stratify according to NYHA classification

C. Explore possibility of sub-clinical depression

D. Refer appropriate patients to CHF nurse care manager

E. Select therapy according to NYHA classification

1. All patients with LVEF less than 40% should receive maximally tolerated doses of ACE INHIBITORS and Beta-Blockers proven to reduce mortality, preferably Coreg.

2. ARBs (angiotensin receptor blockers) are recommended in patients who are intolerant to ACE inhibitors.

3. Aldosterone receptor antagonists (e.g., spironolactone) are recommended in patients with NYHA Class II-IV who have LVEF ≤35%.

4. Diuretics are recommended in patients with fluid retention.

5. All patients to be ANTICOAGULATED (especially if EF less than 40)

   a. Warfarin preferred;

   b. ASA as alternative

6. Refer for cardiology consultation according to guidelines

F. Screen for NSAIDs.

G. Pneumococcal Vaccination:

1. Age less than 65, not severely immunocompromised:

   a. For those who have not received any pneumococcal vaccine or for those whose vaccination history is unknown, a single dose of PPSV23 (Pneumovax) vaccine should be considered.

2. Age 65 and older, not severely immunocompromised:

   b. For those who have not received any pneumococcal vaccine or for those whose vaccination history is unknown, a single dose of PCV13 (Prevnar) vaccine in addition to a single dose of PPSV23 (Pneumovax) should be considered.

   c. Timing of vaccines - Patients should be immunized with PCV13 (Prevnar) vaccine first, then PPSV23 (Pneumovax) vaccine 1 year later.

   d. If the patient has received PPSV23 (Pneumovax) when less than 65, a minimum interval of 5 years between doses should be maintained between the PPSV23 Pneumovax vaccines.

3. Severely immunocompromised patients (e.g. chronic renal failure, malignancy, HIV, organ transplant, congenital immunodeficiency, sickle cell disease):

   e. For those who have not received any pneumococcal vaccine or for those whose vaccination history is unknown, a single dose of PCV13 (Prevnar) vaccine in addition to a single dose of PPSV23 (Pneumovax) should be provided.

   f. Timing of vaccines – Patients should be immunized with PCV13 (Prevnar) first then PPSV23 (Pneumovax) vaccine at least 8 weeks after receiving the PCV13 (Prevnar) vaccine.

g. If the patient has received PPSV23 (Pneumovax) when less than 65, a minimum interval of 5 years between doses should be maintained between the PPSV23 Pneumovax vaccines.

II. REFERENCE

* Yancy C, Jessup M, Bozkurt B, et al. 2013 ACCF/AHA guideline for the management of heart failure: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. *J Am Coll Cardiology* 2013 62(16): 1495-1539.

Deep Vein Thrombosis Guideline

Approach to the Patient with an Acutely Swollen Leg

I. INTRODUCTION

The age-standardized incidence of first-time venous thromboembolism (VTE) is approximately 2.0 per 1000 person-years. Rates were higher in men than women, and increased with age in both sexes. In the Longitudinal Investigation of Thromboembolism Etiology (LITE) study, most of the 191 cases of secondary VTE were associated with more than one underlying condition. These included cancer (48%), hospitalization (52%), surgery (42%), and major trauma (6%). There was no antecedent trauma, surgery, immobilization, or diagnosis of cancer in 48% of cases. When approaching the patient with suspected DVT of the lower extremity, it is important to appreciate that only a minority of patients actually have the disease and will require anticoagulation. Given the potential risks associated with proximal lower extremity DVT that is not treated (e.g., fatal pulmonary emboli) and the potential risk of anticoagulating a patient who does not have a DVT (e.g., fatal bleeding), accurate diagnosis is essential.

II. RISK FACTORS FOR DVT

A. Risk factors for DVT should be sought in all patients. These include:

1. History of immobilization or prolonged hospitalization/bed rest
2. Recent surgery
3. Obesity
4. Prior episode(s) of venous thromboembolism
5. Lower extremity trauma
6. Malignancy
7. Use of oral contraceptives or hormone replacement therapy
8. Pregnancy or postpartum status
9. Stroke

III. HISTORY

A. Classic symptoms of DVT include swelling, pain, and discoloration in the involved extremity. There is not necessarily a correlation between the location of symptoms and the site of thrombosis. Often, pain in the calf is the only complaint in patients with documented iliofemoral DVT.

B. A positive family history is particularly important, since a well-documented history of venous thrombosis in one or more first-degree relatives strongly suggests the presence of a hereditary defect.

C. Women should be carefully questioned regarding use of oral contraceptives or hormone replacement therapy as well as their obstetric history. The presence of recurrent fetal loss suggests the possible presence of an inherited thrombophilia or antiphospholipid antibodies.

D. Questions should include the presence of significant disorders, such as collagen-vascular disease, myeloproliferative disease, atherosclerotic disease, or nephrotic syndrome and about the use of drugs which can induce antiphospholipid antibodies such as hydralazine, procainamide, and phenothiazines.

E. The patient should also be questioned about a past history of cancer, and the results, if any, of regular screening examinations for cancer (e.g., mammography, colonoscopy, pelvic examinations) since recurrent thrombosis in spite of therapeutic anticoagulation with oral

anticoagulants is more frequent in patients with VTE in association with an occult neoplasm or recurrent cancer. Other findings that may suggest an underlying malignancy are constitutional symptoms such as loss of appetite, weight loss, fatigue, pain, hematochezia, hemoptysis, and hematuria.

IV. PHYSICAL EXAMINATION

A. Physical examination may reveal a palpable cord (reflecting a thrombosed vein), calf pain, ipsilateral edema or swelling with a difference in calf diameters, warmth, tenderness, erythema, and/or superficial venous dilation.

B. In the general physical examination, special attention should be directed to the vascular system, extremities (e.g., looking for signs of superficial or deep vein thrombosis), chest, heart, abdominal organs, and skin (e.g., skin necrosis, livedo reticularis). There may be pain and tenderness in the thigh along the course of the major veins ("painful deep vein syndrome"). Tenderness on deep palpation of the calf muscles is suggestive, but not diagnostic. Homan's sign is also unreliable.

C. However, each of the above signs and symptoms is nonspecific and has low accuracy for making the diagnosis of DVT. Accordingly, further diagnostic testing is required to confirm or exclude the diagnosis of DVT.

D. Phlegmasia cerulea dolens: Phlegmasia cerulea dolens is an uncommon form of massive proximal (e.g., iliofemoral) venous thrombosis of the lower extremities associated with a high degree of morbidity, including sudden severe leg pain with swelling, cyanosis, edema, venous gangrene, compartment syndrome, and arterial compromise, often followed by circulatory collapse and shock. Delay in treatment may result in death or loss of the patient's limb. Patients with these finding must be sent to a higher level of care immediately and not kept in the infirmary for their initial anticoagulation.

E. Screening for malignancy: Because venous thromboembolism may be the first manifestation of an underlying malignancy, rectal examination and stool testing for occult blood should be performed and women should undergo a pelvic examination to rule out the presence of a previously unsuspected pelvic mass or malignancy. However, a routine exhaustive search for an occult malignancy is neither warranted nor cost effective.

F. Even in patients with recurrent idiopathic DVT, who represent a high risk group, a cancer, if present, will usually have made its presence known during the interval period between thrombotic events.

V. LABORATORY TESTING

A. The initial laboratory evaluation in patients with venous thrombosis should include a complete blood count and platelet count, coagulation studies (e.g., prothrombin time, activated partial thromboplastin time), renal function tests, and urinalysis.

B. Consideration should be given to obtaining a prostate-specific antigen measurement in men over the age of 50. Any abnormality observed on initial testing should be investigated aggressively.

VI. DIFFERENTIAL DIAGNOSIS

When approaching the patient with suspected DVT of the lower extremity, it is important to appreciate that only a minority of patients (17–32% in two large series) actually has the disease. Several studies have identified common causes of leg pain in patients suspected of having DVT with negative venograms:

A. Muscle strain, tear, or twisting injury to the leg: 40%

B. Leg swelling in a paralyzed limb: 9%

C. Lymphangitis or lymph obstruction: 7%
D. Venous insufficiency: 7%
E. Popliteal (Baker's) cyst: 5%
F. Cellulitis: 3%
G. Knee abnormality: 2%
H. Unknown: 26%

VII. DIAGNOSIS

The diagnostic test of choice is the venous duplex ultrasound with compression. This test has a positive predictive value of 94%.

VIII. PRETEST PROBABILITY

Ultrasonography test for DVT are most useful when the results are combined with an assessment of pretest probability of DVT. The Wells score is the most validated probability scoring system. In one study conducted by Wells, DVT was documented in 3%, 17%, and 75% of patients with low, moderate, or high pretest probabilities, respectively. A review of 15 studies in which the Wells score was tested concluded the following:

A. Patients in the low pretest probability category had a median negative predictive value for DVT of 96% (range: 87–100%), indicating the usefulness of the Wells score for ruling out DVT

B. The median negative predictive value for DVT in patients with a low pretest probability was improved further by the presence of a negative test for D-dimer (median value 99%, range: 96–100%)

C. Positive predictive values for DVT rarely exceeded 75% for patients in the high pretest probability category, indicating that these rules alone were not as useful for identifying patients who did have thrombosis.

IX. PRETEST PROBABILITY OF DEEP VEIN THROMBOSIS (WELLS SCORE)

Clinical feature	Score
Active cancer (treatment ongoing or within the previous 6 months or palliative)	1
Paralysis, paresis, or recent plaster immobilization of the lower extremities	1
Recently bedridden for more than 3 days or major surgery, within 4 weeks	1
Localized tenderness along the distribution of the deep venous system	1
Entire leg swollen	1
Calf swelling by more than 3 cm when compared to the asymptomatic leg (measured below tibial tuberosity)	1
Pitting edema (greater in the symptomatic leg)	1
Collateral superficial veins (nonvaricose)	1
Alternative diagnosis as likely or more likely than that of deep venous thrombosis	-2
Score	
High probability	3 or greater
Moderate probability	1 or 2
Low probability	0 or less
Modification	

This clinical model has been modified to take one other clinical feature into account: a previously documented deep vein thrombosis (DVT) is given the score of 1. Using this modified scoring system, DVT is either likely or unlikely, as follows:	
DVT likely	2 or greater
DVT unlikely	1 or less

Adapted from Wells, PS, Anderson, DR, Bormanis, J, et al, Lancet 1997; 350:1795 and Wells, PS, Anderson, DR, Rodger, M, et al. N Engl J Med 2003; 349:1227.

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C. Positive predictive values for DVT rarely exceeded 75% for patients in the high pretest probability category, indicating that these rules alone were not as useful for identifying patients who did have thrombosis.

X. SCREENING FOR A HYPERCOAGULABLE STATE

Although we can identify patients at increased risk for inherited thrombophilia, there is no clear clinical value to screening for the following reasons:

A. Even if a hypercoagulable workup uncovers abnormalities predisposing to VTE, the strongest risk factor for VTE recurrence is the prior VTE event itself, particularly if idiopathic.

B. Patients with idiopathic VTE, whether or not they have an identifiable inherited thrombophilia, are at high risk for recurrence (as high as 7–8% per year in some studies) after warfarin is discontinued, at least for the first few years after the event. Thus, the presence or absence of an inherited thrombophilia will usually not change the decision regarding length of warfarin therapy. Screening information can be used to identify family members with an inherited thrombophilia, but anticoagulant prophylaxis is rarely recommended in asymptomatic affected family members outside of high risk situations.

XI. TREATMENT OF DVT

A. Rationale: The primary objectives of treatment of DVT are to prevent and/or treat the following complications:

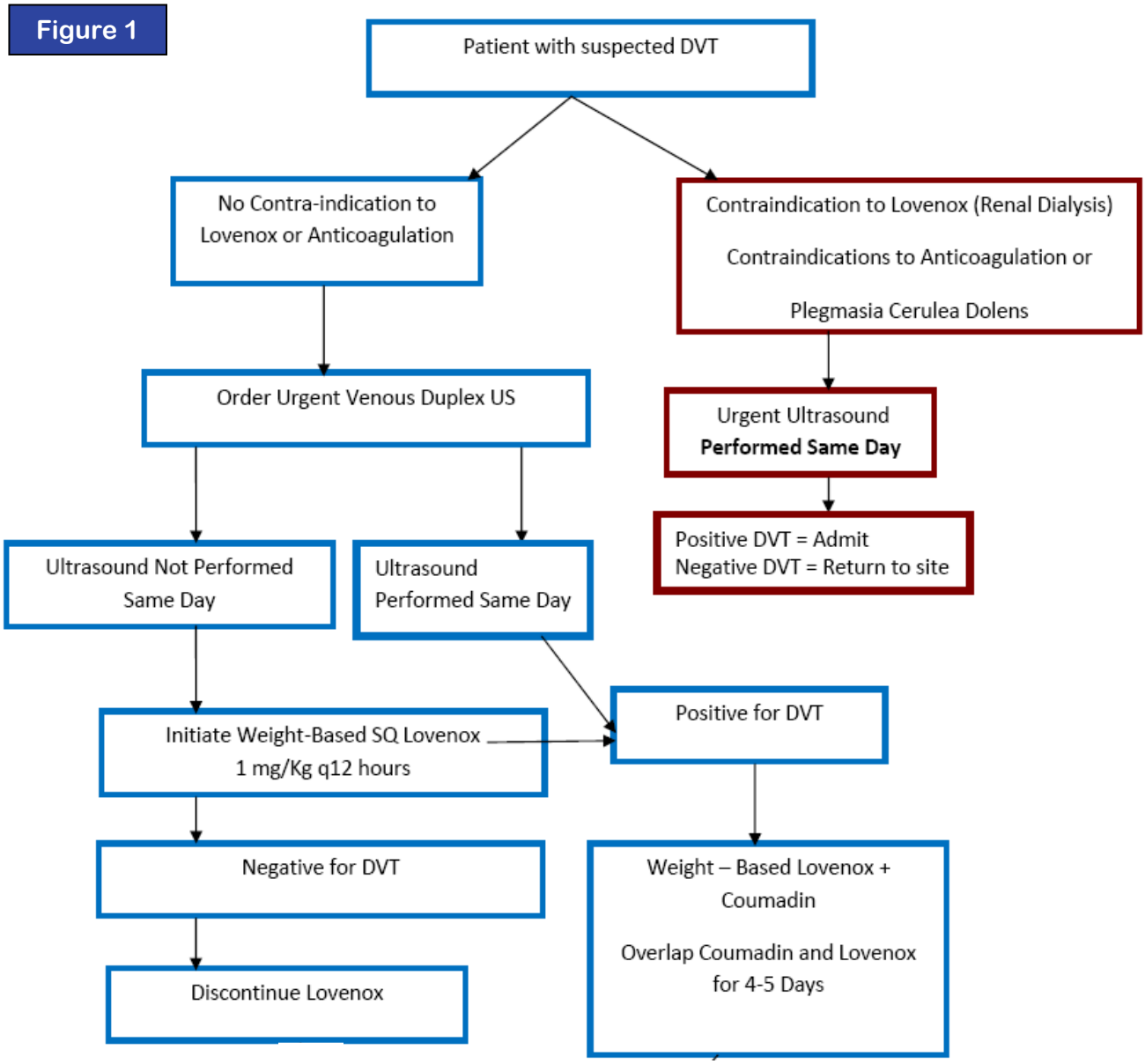
1. Prevent further clot extension
2. Prevention of acute pulmonary embolism
3. Reducing the risk of recurrent thrombosis
4. Treatment of massive iliofemoral thrombosis with acute lower limb ischemia and/or venous gangrene (i.e., phlegmasia cerulea dolens)
5. Limiting the development of late complications, such as the postphlebitic syndrome, chronic venous insufficiency, and chronic thromboembolic pulmonary hypertension.

B. Use of the Suspected DVT Guideline Algorithm:

When presented with a patient complaining of acute unilateral extremity swelling, the provider should first perform a targeted history, family history, and physical examination as described above. A Wells Score calculation should then be performed. If the Wells Score is 0 or less (low), a D-dimer should be performed. If the D-dimer is <500ng/ml by ELISA or negative by the SimpliRED assay, then no ultrasound or further testing is necessary unless other clinical factors increase the clinical suspicion of a DVT (see Figure 1).

Suspected DVT Guideline Algorithm

Figure 1



If the Wells calculation is intermediate or high then further testing with venous duplex Ultrasonography is required.

C. Positive Ultrasonography

Patients with the following clinical features should be sent to the Emergency Room and be admitted if Ultrasonography is positive:

1. Phlegmasia cerulea dolens or marked extremity swelling where neurovascular compromise is considered
2. Renal Failure or a calculated creatinine clearance of <40ml/min (contraindication to LMW heparin)

3. Any absolute contraindication to anticoagulation (active PUD, h/o esophageal varicies, recent hemorrhagic CVA or brain tumor, etc.)

Patients with none of the above clinical features but who have an intermediate or high Wells Score should be scheduled for an urgent venous duplex ultrasound preferably on the day of presentation. If the urgent venous duplex ultrasound cannot be performed until the next day, then LMW heparin (Lovenox) should be started at a dose of 1mg/kg subcutaneously every 12 hours until the venous duplex is performed.

Patients with positive venous duplex ultrasounds who return to the correctional facility should be continued on Lovenox and Coumadin initiated at 5mg by mouth daily. Coumadin therapy should be monitored and adjusted as outlined in Wexford Health's Medical Advisory Committee guideline, Warfarin Drug Monograph, page WM–4. In elderly patients and in those at high risk of bleeding or who are undernourished, debilitated, or have heart failure or liver disease, the starting dose should be reduced. The Coumadin and Lovenox should be overlapped for approximately 4–5 days.

Oral anticoagulation with warfarin should prolong the INR to a target of 2.5.

D. Duration of Treatment

The duration of anticoagulation therapy varies with the clinical setting as well as with patient values and preferences:

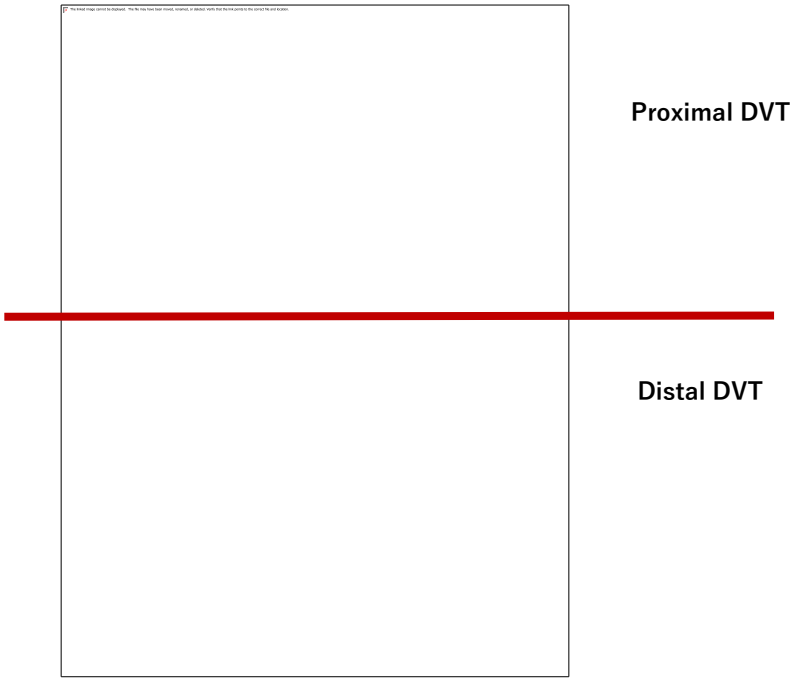
1. Patients with a first thromboembolic event in the context of a reversible or time-limited risk factor (e.g., trauma, surgery) should be treated for at least three months.

2. Patients with a first idiopathic thromboembolic event should be treated for a minimum of three months. Following this, all patients should be evaluated for the risk/benefit ratio of long-term therapy.

Indefinite therapy is preferred in patients with a first unprovoked episode of PROXIMAL DVT who have a greater concern about recurrent VTE and a relatively lower concern about the burdens of long-term anticoagulant therapy (see Figure 2).

In patients with a first isolated unprovoked episode of DISTAL DVT, three months of anticoagulant therapy, rather than indefinite therapy, appears to be sufficient (see Figure 2).

Figure 2



E. General Medical Management

The general medical management of the acute episode of DVT is individualized. Once anticoagulation has been started and the patient's symptoms (i.e., pain, swelling) are under control, early ambulation is advised.

During initial ambulation, and for the first two years following an episode of VTE, use of an elastic compression stocking has been recommended to prevent the postphlebitic syndrome.

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Dental Guidelines

I. PREFACE

A. The development of this technical instruction incorporates input from other Wexford Health departments. The intent is to serve as an effective guide for dental services and to set forth standards for contracted dental services.

B. The enclosed guidelines and standards established herein are subject to ongoing additions, deletions, or changes as the delivery of quality health care is a dynamic process.

C. Additionally, it must be stated that the following procedure guidelines do not supersede any contracted entity policies and procedures, but serve as supplemental information in the absence of client policies for dental services.

II. PURPOSE AND MISSION

A. To provide quality dental care to residents in a cost-effective manner under the direction of state licensed dentists and adhering to the guidelines, if any, set forth by the contracting clients.

B. The primary mission of Dental services shall be the prevention, control, and correction of oral conditions which are detrimental to the health of the residents or impose a hardship in the rehabilitation of the residents.

D-001: Oral Care

I. WEXFORD HEALTH, ACA, AND NCCHC STANDARD

Oral care under the direction and supervision of a dentist licensed in the state will be available to each patient. Care shall be timely and includes immediate access for urgent or painful conditions.

II. WEXFORD HEALTH COMPLIANCE INDICATORS

A. All aspects of the above-mentioned standard should be addressed by site specific written guideline and defined procedures.

B. Oral screening by the dentist or qualified health care professionals trained by the dentist will be performed within seven (7) days (Prisons and Juvenile) or 14 days (Jails) of admission to the correctional system.

C. Instruction in oral hygiene and preventive oral education will be given within one (1) month (Prisons and Jails) or 14 days (Juvenile) of admission.

D. An oral examination will be performed by a dentist within 30 days (Prison), 60 days (Juvenile), or 12 months (Jails) of Admission.

E. Oral treatment, not limited to extractions will be provided according to a treatment plan based upon a system of established priorities for care (Refer to treatment priority classification)

F. Radiographs will be appropriately used in the development of the treatment plan.

G. Consultation through referral to oral health care specialists will be available as needed.

H. Each patient will have access to the preventive benefits of fluorides (in accordance with facility guidelines) and in a form determined by the dentist to be appropriate for the needs of the individual.

I. Where oral care is provided on site, contemporary infection control procedures will be followed.

III. DEFINITIONS

A. Oral care includes instructions in oral hygiene, examination, and treatment of dental problems. Instruction in oral hygiene minimally includes information on plaque control and the proper brushing of teeth.

B. Oral screening includes visual observation of the teeth and gums and notation of any obvious or gross abnormalities requiring immediate referral to a dentist.

C. Oral examination by a dentist includes taking or reviewing the patient's oral history, and extra oral head and neck examination, charting of teeth, examination of the hard and soft tissue of the oral cavity with a mouth mirror, explorer, and adequate illumination, and taking and reading any necessary radiographs.

D. Oral treatment includes the full range of services that in the supervising dentist's judgment are necessary for proper mastication and maintaining the patient's oral and general health status.

E. Oral treatment includes but is not limited to:

1. X-rays
2. Restorations (fillings)
3. Treatment of infections
4. Oral surgery (i.e., extraction of infected and non-restorable teeth)

5. Emergency treatment
6. Post-operative treatment
7. Non-surgical periodontal services
8. Prosthetic devices including dentures and partials and repairs.
9. Limited endodontic therapy (root canal therapy)
10. Oral hygiene instructions, dental health education, and appropriate follow up procedures.

F. Infection Control practices are defined by the American Dental Association and the Center for Disease Control and Prevention as including sterilizing instruments, disinfecting equipment, and properly disposing of hazardous waste.

G. Regional Dental Director is a dentist licensed in the state where the dental services are provided and is responsible for the programmatic/clinical supervision of statewide or regional dental services.

H. Institutional or Site Dental Director is a dentist licensed in the state where the dental services are provided and is responsible for the programmatic/clinical supervision of dental services at any facility (site) dental clinic.

I. Dental Coordinator is the trained and licensed individual responsible for the administrative coordination of a site's dental clinic operations and assisting the dentist with the examination and treatment of the patients.

J. Dental Hygienist is the licensed individual who, along with dentists and dental coordinators, is responsible for providing preventive education in oral hygiene in addition to providing treatment for periodontal problems, and follow-up appointments for periodontal maintenance on the patients.

IV. PRIORITIZING DENTAL CARE

A. Priority of comprehensive dental services should be established by oral examination and implementation of a classification system. The findings from the oral examination which includes a periodontal score should be analyzed to arrive at a generalized categorization or classification.

B. Basic dental care can be categorized as:

1. Elective care
2. Corrective care
3. Interceptive care
4. Urgent care
5. Emergency care

C. Using the above criteria as a starting point, the classification of dental patients should be based upon the following generalized factors:

V. CLASSIFICATION I

Patients presents with incipient or no tactical or radiographically observable caries. The patient's periodontal condition would be classified as code 1 (gingivitis) or code 0 (none). Patients meeting these criteria shall be classified as Type I.

These patients should be scheduled and any therapy begun within twenty-four (24) months of entering the system. However all therapy should be provided within the shortest time frame practicable.

VI. CLASSIFICATION II

Patient presents with tactically determined cavitations due to caries or cavitation observable radiographically and/or may present with code 3 (moderate) periodontal disease in one or more sextants and/or code 2 (early) periodontal diseases in three or more sextants.

Patients meeting these criteria shall be classified as Type II. These patients should be scheduled and therapy begun within twelve (12) months of entering the system.

However all oral surgery, non-surgical periodontal therapy and restorative services should be provided within the shortest time frame practicable.

VII. CLASSIFICATION III

Patient presents with frank observable cavitations due to caries, code 4 (Advanced) periodontal diseases in one or two sextants and/or code 3 (moderate) periodontal disease recorded in three or more sextants and/or conditions to warrant removable prosthodonic therapy to restore masticatory function. It cannot be immediately determined that immediate extraction is the treatment required for the caries and/or periodontal disease. Patients meeting these criteria shall be classified as Type III.

These patients should be scheduled and therapy begun within ninety (90) days of entering the first receiving facility. All oral surgical, non-surgical periodontal therapy, restorative services, and rehabilitative procedures should be accomplished within the shortest timeframe practicable.

VIII. CLASSIFICATION IV

Patient presents with gross observable cavitation due to caries or code 4 (Advanced) periodontal disease recorded in three or more sextants. The caries and/or periodontal condition require the immediate extraction of one or any number of teeth.

Also, the patient may require antibiotic therapy prior to the oral surgery. This urgent condition should be classified as Type IV.

These patients, ideally, should be treated at the initial intake facility if at all practical and possible.

When the immediate extractions have been accomplished at the initial intake facility, the patient can be reclassified as appropriate prior to being assigned to their first facility. If the patient is reassigned prior to completion of the necessary extractions, the receiving facility must schedule and initiate therapy as quickly as possible upon patient entry.

The patient should be kept on an active treatment list after reclassification if necessary to complete treatment. All oral surgical, non-surgical periodontal therapy, restorative services, and rehabilitative procedures should be accomplished within the shortest time frame practicable.

IX. CLASSIFICATION V

Patient presents with obvious active infection, edema (possible developing cellulites), pain, or obvious suspicious oral neoplasm. This is the true emergency patient and should be classified as Type V.

These patients must be initially treated at the initial intake facility. **They may not be reassigned to another facility pending the resolution of the infection or the outcome of the diagnostic biopsy.**

When the oral condition has been stabilized the patient is reclassified as appropriate. It should be obvious that patients with extensive, active dental disease should not be assigned to a facility that does not have a dental clinic, but instead should be assigned to a facility with adequate dental coverage.

D-002: Generalized Procedure Guidelines

I. GENERALIZED PROCEDURE GUIDELINES

The following clinical procedure guidelines offer only the basic recommendations for dental services. Services must be rendered within the limits governed by the facilities (Juvenile, Jails, Adult Prisons) and the limited resources of dental services per client contract.

In general, the following dental guidelines apply:

A. Dental examinations

1. Initial examinations with panoramic x-ray and bitewing x-rays, followed by biennial exams (every two (2) years) and biennial bitewings and panoramic x-ray every five (5) years.

B. Emergency treatment (self-explanatory)

C. Restorative Dentistry

1. Routine restoration of teeth without nerve exposure will be provided. Restoration will be done with fillings of amalgam material for posterior teeth and composite resin material for anterior teeth.

D. Oral Surgery

1. Extraction of teeth which are not restorable due to infection, decay, periodontal disease, or trauma will be provided. Most oral surgery procedures will be performed by the staff dentist. This will include routine extractions, alvedectomies, bone reduction, cyst removal, biopsies, and impactions, within the limits of the individual operator's proficiency. The more difficult cases should be referred to oral surgeons. Collegial review between the Site Dental Director and Regional Dental Director should occur before routine off-site oral surgery is scheduled. Emergency off-site oral surgery should follow written site guidelines, per security and medical protocols.

E. Periodontal treatment

1. Non-surgical treatment of gum disease will be provided. This consists of deep cleaning (sub gingival scaling, root planning, gingival curettage). Teeth with severely advanced periodontal disease will not be treated.

2. Routine dental cleanings shall be provided within the limits of the resources of Dental Services.

F. Endodontic treatment (Root canal)

1. Endodontic therapy shall be limited to front teeth or teeth supporting prosthetics, which have good periodontal support and enough remaining tooth structure to restore. Endodontic therapy will be considered on a case by case basis in consultation with the Dental Director.

G. Removable Prosthetics

1. Full Dentures

a. Residents entering the system with no teeth and no dentures, who will be incarcerated at a facility for longer than six (6) months from the start of making a denture, will be provided a denture (s) if they request the service. Residents who have all their teeth extracted, for clinical reasons, while incarcerated at a facility, and who will be incarcerated for longer than six (6) months from the start of making a denture, will be provided dentures if they request the service. Dentures will not be remade more frequently than every five (5) years and only when clinically necessary.

2. Partial Dentures

   a. Partial dentures will only be provided to residents to restore incising and masticatory function and only if the responsible dentist determines that the patient's health and/or rehabilitation would otherwise be adversely affected.

   b. When such devices are contraindicated for security reasons, the Dentist and Health Services Administrator will work in conjunction with the facility administration to try to obtain alternatives so the oral health needs of the patient are met.

   c. Partial dentures will only be made if the patient will be incarcerated for longer than six (6) months from the start of making the partial denture and the service is requested. Partial dentures will not be made more frequently than every five (5) years and only when clinically necessary.

   d. Partial dentures will only be made after all other dental work is complete and the patient demonstrates good oral hygiene.

H. Fixed Prosthetics

1. Crowns and Bridges

   a. No cast (precious or non-precious metal) or porcelain crowns or bridges will be provided under any circumstances. The cost of fixed prosthetics in terms of provider time and appliance materials precludes their use in the corrections environment.

   b. Residents entering the system with existing crowns or bridges may have them recemented if they come off and if the underlying tooth structure is healthy. Otherwise acrylic crowns or stainless steel crowns will be used for badly broken down teeth.

I. Orthodontics (Braces)

1. No orthodontic treatment shall be provided. Residents entering the system with existing braces will be given the option of removal of their braces by a staff dentist. Exceptions for this guideline will occur with some short time residents at juvenile facilities and jails. In these situations written site guidelines will dictate alternative treatment services.

J. Sports or Night Guards

1. No sports or night mouth guards will be routinely provided to the residents. In unusual cases, occlusal splints may be provided for cases involving extreme bruxism (grinding of teeth) or diagnosed temporal-mandibular joint dysfunction. Collegial review between the site and Regional Dental Directors should occur before any appliance fabrication occurs.

D-003: Dental Sick Call Requests

I. GUIDELINE

Patients seeking dental treatment should use a state and/or corporate approved dental sick call request form to have their requests prioritized so treatment can be scheduled accordingly.

Once a written request is received, the patient's dental chart should be reviewed along with the medical history to determine the priority level of the request. This chart review should be conducted by the staff dentist, dental coordinator (assistant) or, in their absence, by the medical (nursing) staff according to site-specific written protocol.

II. SCHEDULING PROCESS

A. Emergency care receives the top priority. Care for residents with true dental emergencies shall be available at all times, either through the dental department or the medical staff at each facility. Emergency dental care consists of:

1. Relief of severe pain
2. Control of bleeding
3. Treatment of acute infection
4. Treatment of injuries to the teeth supporting structures

B. These true emergency individuals are scheduled before anyone else on a daily clinical basis. Medically compromised individuals in this group may dictate consultation with the medical staff to develop a clinical resolution to the emergency dental problem.

C. Urgent care receives second priority for scheduling and includes any dental scenario that could quickly evolve into an emergency situation if not treated on a timely basis. These individuals too, if medically compromised, may require consultation with the medical staff to develop a clinically acceptable solution to their dental problem.

D. Corrective care or treatment going forward from a pre-diagnosed treatment program should receive third priority scheduling consideration. These dental sick call requests come from individuals who know or have been told of dental treatment needs and send in requests to begin, continue, or finish treatment. These requests must be reviewed and even though the situation is not emergent or urgent, the individual should be placed on a treatment list if he/she has not already been placed on the list from the intake screening at their current facility.

E. Interpretive care must be given a fourth priority when considering the schedule. These appointments usually involve recall checkups and biennial exams and x-rays. These appointments are necessary but should not take precedence over any emergent or urgent requests.

III. SUMMARY

The process for prioritizing dental sick call requests should consider all the preceding information and the final determination of scheduling must be made based upon the professional judgment of the clinical staff.

IV. CONCLUSION

A. Dental clinical situations not covered by the aforementioned guidelines should be resolved by the site dental director and if necessary through the utilization of collegial review and consultation with the regional dental director.

B. Dental treatment for the medically compromised patient must involve consultation with the site medical staff to develop a clinically acceptable protocol for providing dental services.

C. These guidelines do not replace sound clinical judgment; nor are they intended to strictly apply to all patients.

DR-001: Dental Radiation Safe Operation Guidelines

I. OBJECTIVE

The purpose of these guidelines is to assure uniform compliance with the current accepted practices in the use of ionizing radiation. All dental staff using and/or exposing radiographs should adhere to these guidelines as closely as possible. The primary intent of these guidelines is to keep patient radiation exposure to a minimum and to eliminate radiation exposure of patients and staff. These Radiation Safe Operation Guidelines will be reviewed annually to ensure compliance with New Mexico Department of Health regulations.

II. ORDERING X-RAYS

A. All radiographs must be recorded in writing and reviewed by a licensed dentist. The number of films, the date and the signature of the dentist ordering the films must be entered in the patient's record.

B. The patient's medical and dental history should be reviewed, and an oral examination performed before dental radiographs are ordered.

C. Previous radiographs, especially those taken recently, should be evaluated before ordering films which would cover the same area.

D. The ultimate objective in radiographing patients is to keep the dose as low as reasonably achievable. However, patients should not be treated without necessary radiographs.

E. Digital X-rays should be used available.

F. Radiographs should not be taken on patients who cannot cooperate due to mental or physical handicaps. An attempt to do so will usually result in unacceptable films and therefore unnecessary exposure to the patient.

G. Retake radiographs may be ordered if the diagnostic information needed is not available on any of the films covering a particular area. The dentist should make the determination of the need for retakes.

H. X-rays may be taken for diagnostic purposes only. No films may be taken for administrative purposes.

I. Patient's identity should be verified prior to any X-rays being performed. The patient should be asked to identify themselves by stating their full name and ID number.

III. RADIOGRAPHIC EXPOSURE

A. Dental X-ray equipment are in the following areas:

Make, model, serial number	Area location (Room number, building, floor)	Type of unit (intraoral or panorex, portable)
Make, model, serial number	**Area location (Room number, building, floor)**	**Type of unit (intraoral or panorex, portable)**
Make, model, serial number	**Area location (Room number, building, floor)**	**Type of unit (intraoral or panorex, portable)**

B. Radiographic exposures may be made by dental staff members who are licensed by the State of New Mexico Dental Board. Should a dental staff member allow their dental license to expire, they must renew their dental license prior to returning to the facility. X-rays will not be taken by un-licensed dental staff.

C. When taking radiographs, the patient must be protected with a lead apron and a thyroid shield. If patient is pregnant, X-rays will only be taken in emergency situations and 2 lead aprons will be placed over abdomen.

D. All personnel, who must remain in the room, shall be behind a barrier or a minimum of 6 feet from the primary beam at an angle of 90 to 135 degrees to the beam during exposure.

E. Radiation exposure shall follow the guidelines of ALARA (*As Low As Reasonably Achievable*) to minimize patient exposure.

F. Film-holders should be used to position the films. If this is not possible because of anatomical restrictions the patient may use finger pressure to hold the film in place.

G. During each exposure, the operator should stand behind a protective barrier, the patient must be observed at all times during an exposure, either through direct vision or using a specially mounted mirror. If shielding is not available, the operator should stand a least six feet away from, and at an angle of 90 to 135 degrees to the primary beam. Movable shields should be used when available and must be positioned in a designated location. A pregnant operator should follow the above recommendations; in addition, a lead apron may be worn by the operator for extra protection.

H. All dental staff in an area associated with frequent operation of X-ray producing equipment is to wear dosimetry badges to monitor the level radiation exposure OR a clinic area badge is to be placed 6 feet from the cone. The exposure limit (MPD=Maximum Permissible Dose) for radiation workers is 50 mSv per year.

I. In the event of an overexposure being recorded on the quarterly radiation badge reports, the individual would be contacted to:

1. Identify the reported exposure AND

2. Try to determine how and when this overexposure might have occurred.

J. If the exposure exceeded the occupational dose limits for adults a letter would be sent to the New Mexico Department of Health, Bureau of Radiation Protection, indicating the exposure identified in the quarterly radiation badge report. If there were no obvious reasons for the reported overexposure and it was felt that the individual did indeed receive the excess radiation, that individual would not be allowed to continue taking films until their total reported exposure, including the most recent overexposure, again falls below the Maximum Permissible Dose (occupational dose limit).

K. A copy of the New Mexico Environment Department, Radiation Control Bureau Regulations is available at https://www.env.nm.gov/rcb/regulations/

IV. REGULATION AND MONITORING OF X-RAY EQUIPMENT

A. All X-ray equipment should meet state and federal performance standards. The State of New Mexico requires that the X-ray machines be calibrated per New Mexico regulations.

B. Radiographic film is used at this facility.

C. X-Ray processors are used at this facility.

D. New Mexico requires that: “Each registrant (dentist) shall inform individuals working in or requesting any portion of a restricted area of the occurrence of radiation in such portions of the restricted area; shall instruct such individuals in the safety problems associated with the exposure to such radiation and in precaution or procedures to minimize exposure; shall instruct such individuals in the applicable rules for the exposure; shall instruct such individuals in the applicable rules for the protection of personnel from exposure to radiation; and shall advise such individuals of reports of radiation exposure which those individuals may request pursuant to this rule.”

E. The New Mexico Department of Health Notice to Employees must be posted where staff is engaged in activities subject to the Radiation Control Bureau regulations.

F. Transfer, disposal or installation of radiation-generating equipment must be reported as specified by the New Mexico Environment Department regulations.

DR-002: Dental Radiation Exposure to Pregnant Females Guidelines

I. OBJECTIVE

To ensure safe environment and proper procedures are followed for ionizing radiation exposure to pregnant staff during the entire known gestation period.

Scope of guideline: All employees of Mid America Health, Inc. (MAH), PrevMED, Ind (PrevMED), and any professional group serviced by MAH or PrevMED (all jointly designated "Company") are required to follow this guideline.

II. PROCEDURE

A. Employees must notify MAH management immediately upon knowledge of a pregnancy. See the attached form.

B. Once MAH has been notified by an employee that they are pregnant they will be given the option to request an individual monitoring device specifically designed for fetal monitoring. In addition, they will be supplied with a special lead apron designed for use by pregnant employees.

C. Restricting exposure to the fetus does not mean that it is necessary for pregnant employees to avoid work with dental X-ray units or in the area of our dental X-ray unit. This guideline is simply to establish and to inform the employee, and to provide the opportunity for additional protection.

D. No MAH dental unit area has been identified which would be considered likely to result in a dose of ionizing radiation that would be harmful to the fetus. However, the above procedure has been adopted out of caution and protection for MAH staff.

E. All employees will be advised of this guideline upon hire and annually upon review of MAH Dental X-ray procedures.

F. Any questions regarding the safe operation of X-ray generating equipment should be directed to the New Mexico Environment Department at (505) 827-2855. Written inquiries should be sent to PO Box 5469 Santa Fe, NM 87502-5469.

Dental Radiation Guidelines References

1. Kantor, Mel L., et al. Efficacy of dental radiographic practices: options for image receptors, examination selection, and patient selection. JADA 1989; 119:259-266.
2. Guidelines for prescribing dental radiographs. Kodak Publication No. N-80A, 1997.
3. Radiation-use Guidelines for Dental Education Facilities. Journal of Dental Education, Vol. 55, No. 7, 1991; 463-466.
4. Radiation Protection Rules, Ohio Administrative Code, Ohio Department of Health, 2004.
5. Regulatory Guide, Instruction of Individuals, Ohio Administrative Code, Ohio Department of Health, 2001.
6. Goaz and White, Oral Radiology: Principles and Interpretation, second edition, C.V. Mosby, 1987.
7. Brooks SL: A study of selection criteria for intraoral dental radiography, Oral Surg Oral Med Oral Pathol 62:234, August,1986

Dermatology Guidelines

Dermatology Guidelines

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Acne	Consider: Patient education that improvement is often delayed may be considered an important aspect of care. Improvement in acne is dependent upon both the resolution of existing lesions and the prevention of new lesion formation. In general, at least two to three months of consistent adherence to a regimen is necessary to assess treatment efficacy, and the initial response may consist of a noticeable reduction (rather than complete clearance) of active acne lesions. The selection of therapy should be individualized and based upon consideration of the extent of disease, adverse effects, treatment availability and the response to previous treatments. Adjustments to the regimen may be needed to identify the most effective regimen and responses to specific treatments vary from patient to patient. Changes to the treatment regimen to optimize tolerability and efficacy are often needed. Medications that may be considered include but not limited to: Benzoyl peroxide, topical antibiotics, oral antibiotics and topical retinoids.	At the discretion of the clinician depending on the clinical scenario
Acne Keloidalis Nuchae Acne keloidalis nuchae (AKN) is a chronic inflammatory condition that leads to scarring of the hair follicles, development of keloid-like papules and plaques, and scarring alopecia on the nape of the neck and occipital scalp. AKN occurs mostly in darker skinned races with curly or kinky hair. The natural course of disease starts with the early formation of inflamed papules with marked erythema. Secondary infection can lead to	Consider: Education of the patient concerning the condition. To minimize exacerbations, it may be advised to encourage patients to: 1. Avoid picking, rubbing, or scratching the affected area 2. Discontinue close shaving, trimming, or razor or clipper edging of the posterior hairline 3. Avoid irritation from tight-fitting hats, helmets, or high-collared shirts	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
pustules and abscess formation in some cases. Over time, continued inflammation leads to pronounced fibrosis and keloid formation with coalescence of the papules into large plaques and nodules. Later stages of presentation include chronic scarring and/or scarring alopecia without active inflammation.	The selection of therapy should be individualized and based upon consideration of the extent of disease, adverse effects, onsite treatment availability and the clinical response to previous treatments. Medical management may include topical corticosteroids, intralesional injection topical or oral antibiotics and retinoids.	
Alopecia Areata Alopecia areata is a chronic, relapsing, immune-mediated inflammatory disorder affecting hair follicles resulting in nonscarring hair loss. The severity of the disorder ranges from small patches of alopecia on any hair-bearing area to the complete loss of scalp, eyebrow, eyelash, and body hair. Although up to 50 percent of patients who present with patchy alopecia areata experience spontaneous hair regrowth within one year, most will relapse months or years after remission	Consider: Education of the patient. The treatment of alopecia areata may be considered as cosmetic. As such, the selection of therapy, or the decision to initiate therapy, should be individualized and based upon consideration of the extent of disease, adverse effects, onsite treatment availability and the response to previous treatments.	At the discretion of the clinician depending on the clinical scenario
Atopic Dermatitis (Eczema)	Consider: Patient education - The goals of treatment are to reduce symptoms (pruritus and dermatitis), prevent exacerbations, and minimize therapeutic risks. Skin care techniques that may help include decreasing the frequency of showering, cautious use of soaps, moisturizing soaps and avoiding scratching. Standard treatment modalities for the management of these patients are centered around the use of topical anti-inflammatory preparations and moisturization of the skin The selection of therapy should be individualized and based upon consideration of the extent of disease, adverse effects, treatment	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	availability and the response to previous treatments. Medications to consider: Mild topical steroids such as 1% Hydrocortisone Cream or Triamcinolone Cream 0.1% b.i.d. may be helpful but treatment varies according to the severity.	
Condylomata Acuminata (Anogenital Warts)	Consider: Evaluation and education of the patient. The selection of therapy should be individualized and based upon consideration of the extent of disease, adverse effects, treatment availability, availability of a clinician to apply and the response to previous treatments. 1. Imiquimod 5% cream: Apply a thin layer 3 times per week (on alternate days) prior to bedtime; leave on skin for 6 to 10 hours, then remove with mild soap and water. Continue until there is total clearance of the genital/perianal warts or for a typical maximum duration of therapy of 16 weeks. 2. Trichloroacetic acid (TCA) 80% Topical: Applied by a health care provider and allowed to dry to a white frost on wart tissue before patient sits or stands. Therapy may be repeated weekly if necessary. As a general guidance, Health care provider should use caution to avoid applying excessive amounts or exposing surrounding tissue to solution. 3. Electrosurgery (hyfrecation): Warts can be destroyed with electrocautery. After the injection of a local anesthetic, warts are desiccated and are either left to fall off or curetted.	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Epidermal Inclusion Cyst Epidermoid cysts, also called epidermal cysts, epidermal inclusion cysts, or "sebaceous cysts," are the most common cutaneous cysts. They can occur anywhere on the body and typically present as asymptomatic, skin-colored dermal nodules often with a clinically visible central punctum. The size ranges from a few millimeters to several centimeters in diameter.	Consider: Treatment of stable, uninfected epidermoid cysts is not typically necessary. Inflamed, ruptured cysts that are not infected may resolve spontaneously without therapy, although they tend to recur. The plan of care is dependent on the clinical situation, but the clinician may want to consider just ongoing observation and periodic measuring.	At the discretion of the clinician depending on the clinical scenario
Keloids and/or Hypertrophic Scars Keloids and hypertrophic scars represent an excessive tissue response to dermal injury. Keloids are fibrous growths that extend beyond the original area of injury to involve the adjacent normal skin. Hypertrophic scars may have a similar clinical appearance, but in contrast with keloids, remain confined within the boundaries of the wound area and tend to regress spontaneously over time.	Consider: The treatment of keloids may be considered as cosmetic depending on the clinical situation and history. As such any treatment plan will need to be individualized. The clinician may want to discuss with the patient his/her needs, concerns, and expectations. Patients with keloids should be informed that there is a high recurrence risk associated with all treatment options.	At the discretion of the clinician depending on the clinical scenario
Onychomycosis	Consider: The treatment of toenail fungus may be considered as cosmetic depending on the clinical situation and history. As such, the selection of therapy should be individualized and based upon consideration of the extent of disease, adverse effects, treatment availability and the response to previous treatments.	At the discretion of the clinician depending on the clinical scenario
Pseudofolliculitis Barbae Pseudofolliculitis barbae (PFB) (Pseudofolliculitis of the beard), often colloquially referred to as "razor bumps," "shave bumps," or "ingrown hairs," is a common cutaneous condition that develops as a result of the removal of facial	Consider: Patient education about the condition. Approach to therapy: Because the clinical manifestations of pseudofolliculitis are a consequence of the entry of hair into the interfollicular skin, the primary approach to therapy consists of measures to prevent this	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
hair. Usually in Afro-American men or men with tightly curly hair. PFB most frequently occurs in association with shaving and results from an inflammatory response to the cutaneous entrapment of recently cut, short hairs. PFB typically presents with firm papules and pustules in the beard area. Post-inflammatory hyperpigmentation, secondary bacterial infection, scarring, and keloid formation are potential complications.	occurrence. The approach to an individual patient management primarily is guided by the clinical presentation and response to prior therapies. Typically, the most effective and safe intervention for the treatment of PFB is the permanent discontinuation of shaving that has induced the condition. Patients who are able to do this usually notice significant clinical improvement within a few months. Treatments may include: 1. Shave/Clipping pass – shaving is not recommended with this condition. 2. 1% hydrocortisone cream to reduce inflammation of papular lesions. 3. Benzoyl peroxide daily prn 4. Cleocin Gel and/or Erythromycin Topical	
Psoriasis Psoriasis is a common chronic skin disorder **that is** characterized by erythematous papules and/or plaques with a silver scale, although other presentations **can** occur. Many cases are not severe enough to directly affect general health and are generally treated in the outpatient setting.	Consider: The selection of therapy should be individualized and based upon consideration of the extent of disease, adverse effects, treatment availability and the response to previous treatments. Medications: 1. Medium-potency steroids that may include Triamcinolone 0.1% Cream is a typical starting point for mild disease. 2. High-potency steroid creams that may include Triamcinolone 0.5% Cream or 0.1% Ointment b.i.d. is a typical starting point for moderate disease, it is suggested to not exceed 60 g/week. 3. Methotrexate is an established therapy that continues to play a	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	role in the management of moderate to severe plaque psoriasis.	
Scabies	Consider: The selection of therapy should be individualized and based upon consideration of the extent of disease, adverse effects, onsite treatment availability and the response to previous treatments. Typically, treat with weight-based Ivermectin per protocol (refer to Wexford's Infection Control guideline, *IC-013, Ectoparasite Control – Scabies/Lice,* Infection Control Guideline manual); Repeat weight-based Ivermectin in 14 days.	At the discretion of the clinician depending on the clinical scenario
Seborrheic Keratosis Seborrheic keratoses present as well-demarcated, round or oval benign lesions with a dull, verrucous surface and a typical stuck-on appearance. They are generally asymptomatic, but in some patients, there may be chronic irritation due to friction trauma The number of seborrheic keratoses can vary from an isolated lesion to literally hundreds.	Consider: Onsite diagnosis of seborrheic keratosis is usually based on the clinical appearance of "stuck on," warty, well-circumscribed, often scaly hyperpigmented lesions located most commonly on the trunk, face, and upper extremities. Treatment or removal of these benign skin lesions is not generally indicated. Onsite biopsy may be considered if diagnosis is in question.	At the discretion of the clinician depending on the clinical scenario
Tinea Capitis Tinea capitis is a fungal infection of the scalp that most often presents with pruritic, scaling areas of hair loss. Dermatophyte fungi are the major causes of tinea capitis. The infection is often contracted from another human or an animal through direct contact.	Consider: Evaluation and education of the patient. Oral antifungal therapy is the primary treatment for tinea capitis. Patients usually respond well to treatment. The optimal treatment regimens for adults remain unclear. Typical oral antifungal doses for adults: 1. Terbinafine 250 mg per day for 4–6 weeks 2. Itraconazole 5 mg/kg per day (maximum 400 mg per day) for 4–6 weeks	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	3. Fluconazole a. Daily dosing: 6 mg/kg per day (maximum daily dose is 400 mg) for 4–6 weeks b. Weekly dosing: 8 mg/kg once weekly for 8–12 weeks 4. Concomitant treatment with 1% or 2.5% selenium sulfide shampoo may be used for the first two weeks because it may reduce transmission.	
Tinea Corporis Tinea corporis – a fungal infection of body surfaces other than the feet, groin, face, scalp hair, or beard hair	Consider: Treatment choices often depends typically on the extent of the condition and consists of topical or systemic antifungal drugs. Dermatophyte infections usually respond well to a course of appropriate treatment. Common reasons for failure to respond to antifungal therapy include inadequate administration of treatment (e.g., stopping treatment as visible scale resolves) or an incorrect diagnosis.	At the discretion of the clinician depending on the clinical scenario
Tinea Pedis (Athlete's Foot Fungus)	Consider: The selection of therapy should be individualized and based upon consideration of the extent of disease, adverse effects, treatment availability and the response to previous treatments. Daily washes with soap and water, dry feet well, treat with antifungal cream.	At the discretion of the clinician depending on the clinical scenario
Tinea Versicolor Tinea versicolor (i.e., pityriasis versicolor) is a common superficial fungal infection. Patients with this disorder often present with hypopigmented, hyperpigmented, or erythematous macules on the trunk and proximal upper extremities. Unlike other disorders utilizing the term tinea (e.g., tinea	Consider: The selection of therapy should be individualized and based upon consideration of the extent of disease, adverse effects, treatment availability and the response to previous treatments. Patient education — Prior to treatment, patients should be advised that changes in cutaneous pigment often persist after successful treatment. Restoration of	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
pedis, tinea capitis), tinea versicolor is not a dermatophyte infection. The causative organisms are saprophytic, lipid-dependent yeasts.	normal pigmentation may take months after the completion of successful therapy. Recurrence is very common especially in warmer, more humid climates which may impact a clinical decision to initiate treatment or not initiate treatment. Treatments may include: 1. DHS 2% zinc shampoo (8 oz. bottle) applied for five minutes per day for two weeks. 2. Selenium 2.5% lotion (4 oz. bottle) applied for 10 minutes for seven days. 3. Oral therapy is generally reserved for patients with tinea versicolor that is refractory to topical therapy or widespread disease that makes the application of topical drugs difficult. • Fluconazole 300 mg per week for 2–4 weeks • Itraconazole 200 mg daily for seven days	
Warts, Non-Anogenital (Common, plantar and flat warts)	Consider: The selection of therapy should be individualized and based upon consideration of the extent of disease, adverse effects, treatment availability and the clinical response to previous treatments. 1. Patient education: The option to defer treatment should be discussed with patients. Although most warts in immunocompetent patients eventually resolve without treatment, warts may spread or persist and resolution is unpredictable. 2. Many wart therapies require prolonged treatment or multiple	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	office visits and have inconsistent efficacy. Clinicians should communicate expectations for the treatment course as well as the possibility of treatment failure and recurrence. Medications to consider: 1. Salicylic Acid topical applied twice daily up to 12 weeks as a typical first line therapy. Cover daily with Band-Aid until removed. 2. Trichloroacetic acid (TCA) 80% solution once weekly applications have been used for warts on the palms and soles.	

Durable Medical Equipment Guidelines

Ankle-Foot Orthotics

I. GUIDELINE

The purpose of this guideline is to provide clinical guidelines to determine the need for therapeutic ankle-foot orthotic devices and instruction for issuance.

II. DEFINITION

Ankle-Foot Orthotic: A rigid or semi-rigid device that is used for the purpose of supporting a weak or deformed body part, or for restricting or eliminating motion in a diseased or injured part of the body. An orthotic can be either prefabricated or custom-fabricated. Are for ambulatory individuals with weakness or deformity of the foot and ankle who require stabilization for medical reasons and have the potential to benefit functionally (i.e., AFO, foot drop splints).

III. GENERAL GUIDELINES

Prefabricated devices should be trialed prior to requesting a custom made device (i.e., off the shelf prefabricated foot drop splint, verses a custom made AFO). Patients should display willingness and ability to comply with treatment regimen.

IV. CLINICAL CRITERIA

A. Ankle flexion contracture: a condition in which there is shortening of the muscles and/or tendons that plantar-flex the ankle with the resulting inability to bring the ankle to zero degrees by passive range of motion. (Zero degrees ankle position is when the foot is perpendicular to the lower leg.)

B. Plantar flexion contracture (i.e., a non-fixed contracture) when reasonable expectation of the ability to correct or prevent the contracture in those who may become ambulatory; and contracture is interfering or expected to interfere significantly with the patient's functional abilities; and used as a component of a therapy program that includes passive stretching of the involved muscles and/or tendons.

C. Foot drop: a condition in which there is weakness and/or lack of use of the muscles that dorsiflex the ankle, but there is the ability to bring the ankle to zero degrees by passive range of motion.

V. ACTION

When the orthotic or prosthesis is issued, the patient will sign a form approved by the facility (see Wexford Health's receipt for Accountable Items" Form #037) with the understanding that repair/replacement is contingent on assessment of the prosthesis. If the prosthesis loss or damage is related to neglect or misuse by the patient, replacement will be contingent on findings of the case and decision of the Regional Medical Director. This form must be signed by a witness, stamped and dated, and filed under miscellaneous portion of the medical health record.

M-012: Knee Orthotics

I. GUIDELINE

The purpose of this guideline is to provide clinical guidelines to determine the need for therapeutic knee orthotic device and instruction for issuance.

II. DEFINITION

Knee Orthotic: A rigid or semi-rigid device that is used for the purpose of supporting a weak or deformed body part, or for restricting or eliminating motion in a diseased or injured part of the body. Knee orthotics are designed to allow protected and controlled motion of injured knees that have been treated operatively or non-operatively, assist or provide stability for unstable knees during activities of daily living and may be either prefabricated (off-the-shelf) or custom-made.

III. GENERAL GUIDELINES

Prefabricated devices should be trialed prior to requesting a custom made device. Patients should display willingness and ability to comply with treatment regimen.

IV. CLINICAL CRITERIA

A. **Prefabricated** functional or rehabilitative knee braces are considered **medically necessary** for patients with:

1. Documented anterior or posterior cruciate ligament (ACL or PCL) tears, or functional instability episodes due to cruciate ligament insufficiency who elect non-surgical treatment.
2. Grade II or III medial collateral or lateral collateral ligament sprain for support for ambulation. These need to be hinged braces where one can control the range of motion.
3. Posterior cruciate and/or posterior lateral reconstruction, including those undergoing reconstruction after knee dislocation.
4. In the post op recovery phase anterior cruciate ligament (ACL) repair.
5. Major ligaments and bony reconstruction above the knee such as patella or quadriceps tendon repair, medial and lateral collateral ligament repair.
6. Major fractures requiring fairly early post-op motion such as patella fracture or a tibial plateau fracture.

B. **Custom-made** unloader knee braces or prefabricated functional rehabilitative braces are considered **medically necessary** in members with osteoarthritis and are:

1. Candidates for high tibial osteotomy or total knee arthroplasty (replacement) that may elect non-surgical treatment.
2. Predicting the success of high tibial osteotomy versus total knee arthroplasty.
3. Severe patello-femoral arthrosis in conjunction with medial or lateral compartment arthrosis.

V. ACTION

When the orthotic or prosthesis is issued, the patient will sign a form approved by the facility (see Wexford Health's Receipt for Accountable Items," form #037) with the understanding that repair/replacement is contingent on assessment of the prosthesis. If the prosthesis loss or damage is related to neglect or misuse by the patient, replacement will be contingent on findings of the case

and decision of the Regional Medical Director. This form must be signed by a witness, stamped and dated, and filed under miscellaneous portion of the medical health record.

M-013: Prosthesis

I. GUIDELINE

The purpose of this guideline is to provide general guidelines for issuance or repair of prosthetic devices.

II. DEFINITION

An artificial device used to replace a missing body part, such as a limb.

III. GENERAL GUIDELINES

A. In general, a physician prescribes an artificial limb or prosthesis when a patient has lost a limb and a functional level of one or greater is expected.

1. **Functional Levels:** Throughout this guideline "Functional Levels" are used to guide the appropriateness of lower limb prosthesis. Provided below are definitions of these levels. Please note that within the functional classification hierarchy, bilateral amputees often cannot be strictly bound by functional level classifications.
2. **Level 0:** Does not have the ability or potential to ambulate or transfer safely with or without assistance and prosthesis does not enhance their quality of life or mobility.
3. **Level 1:** Has the ability or potential to use prosthesis for transfers or ambulation on level surfaces at fixed cadence. Typical of the limited and unlimited ambulator.
4. **Level 2:** Has the ability or potential for ambulation with the ability to traverse low-level environmental barriers such as curbs, stairs or uneven surfaces. Typical of the limited ambulator.
5. **Level 3:** Has the ability or potential for ambulation with variable cadence. Typical of the ambulator who has the ability to traverse most environmental barriers and may have vocational, therapeutic, or exercise activity that demands prosthetic utilization beyond simple locomotion.
6. **Level 4:** Has the ability or potential for prosthetic ambulation that exceeds basic ambulation skills, exhibiting high impact, stress, or energy levels. Typical of the prosthetic demands of the child, active adult, or athlete.

B. Amputee patients, who did not attempt to acquire prosthesis for greater than one year prior to incarceration, shall not be considered candidates for issuance of prosthesis unless there is a change in clinical indications and or rehabilitative goals. The case is to be reviewed with the Regional Medical Director. The patient must clearly display ability, initiative and willingness to participate in a prosthetic limb-training regimen.

C. A patient must show compliance with a weight reduction program prior to requesting replacement prosthesis socket when the socket is needed due weight gain stump enlargement.

D. Wexford Health will furnish an ocular conformer for enucleated patients. Issuance of prosthetic eyes is considered cosmetic and not medically necessary.

IV. ACTION

When the orthotic or prosthesis is issued, the patient will sign a form approved by the facility (see Wexford Health's Receipt for Accountable Items" form #037) with the understanding that repair/replacement is contingent on assessment of the prosthesis. If the prosthesis loss or damage is related to neglect or misuse by the patient, replacement will be contingent on findings of the case and decision of the Regional Medical Director. This form must be signed by a witness, stamped and dated, and filed under miscellaneous portion of the medical health record.

Endocrine/Metabolic Disorders

Pharmacological Management of Type 1 and Type 2 Diabetes Mellitus Guidelines

I. GUIDELINE/PURPOSE

These guideline recommendations summarize the Wexford Health guidelines for patients being treated for **Type 1 and Type 2 Diabetes Mellitus**.

These recommendations are provided only as assistance for clinicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's clinician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of development, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations.

II. CLASSIFICATION OF DIABETES

A. **Type 1 Diabetes Mellitus**

1. Type 1 diabetes is characterized as a disease of absolute insulin deficiency which is a result of autoimmune destruction of pancreatic beta cells.
2. Approximately 5 to 10% of patients with diabetes have type 1 diabetes mellitus.
3. Patients with undiagnosed type 1 diabetes may present with diabetic ketoacidosis (DKA) or may have a more gradual presentation with symptoms of hyperglycemia which may include polyuria (increased urination), polydipsia (increased thirst) and polyphagia (increased appetite).
4. Type 1 diabetes mellitus is typically characterized by the following:
    a. Diagnosis as a child or adolescent (although it can occur at any age)
    b. Lean body type or BMI less than 25 kg/m2
    c. Normal insulin sensitivity (insulin requirements typically do not exceed 0.7 units of insulin/kg body weight over 24 hours)
    d. Displays evidence of anti-beta cell autoimmunity
    e. May be more prone to ketosis or DKA than type 2 diabetics

B. **Type 2 Diabetes Mellitus**

1. Type 2 diabetes mellitus is characterized by hyperglycemia often associated with progressive loss of insulin secretion from the beta cells along with superimposed insulin resistance which results in a relative insulin deficiency.
2. Type 2 diabetes mellitus is the more common form of diabetes mellitus, with approximately 90% of patients diagnosed with type 2 diabetes.
3. Obesity, age and physical inactivity are often associated with type 2 diabetes.
4. Type 2 diabetes mellitus is typically characterized by the following:
    a. Diagnosis more likely to be an adult.
    b. Patient is overweight or obese (i.e., BMI ≥ 25 kg/m2, and often far exceeding that BMI).
    c. High likelihood to have a family history of diabetes

d. If treating with insulin, patient may require large doses to control blood sugar due to insulin resistance. Insulin resistance is often associated with abdominal obesity, hypertension, lipid abnormalities, atherosclerosis, and hyperuricemia.

e. No evidence of anti-beta cell specific antibodies.

f. Less likely to have a history of diabetic ketoacidosis (DKA), but may have a history of hyperosmolar coma.

g. More likely to have symptoms of "metabolic syndrome" such as hypertension or hyperlipidemia.

III. DIAGNOSTIC CRITERIA FOR PRE-DIABETES AND DIABETES MELLITUS

A. **Patients should be evaluated for diabetes if they display any of the following:**

1. Symptoms of hyperglycemia
2. Symptoms that may be the result of complications of diabetes
3. Clinical presentations in which diabetes is considered in the differential diagnosis
4. Significantly elevated glucose level on blood testing

B. **ADA Diagnostic Criteria**

1. The ADA diagnostic criteria for diabetes and pre-diabetes in non-pregnant adults is shown in Table 1.

2. **Pre-Diabetes**

a. Pre-diabetes is terminology that encompasses both impaired **glucose tolerance (IGT)** and **impaired fasting glucose (IFG**) or hyperglycemia that does not meet the diagnostic criteria for diabetes.

b. Both IGT and IFG as well as a an A1C range of 5.7-6.4% are associated with a high risk for diabetes and cardiovascular disease.

TABLE 1. ADA DIAGNOSTIC CRITERIA FOR DIABETES AND PRE-DIABETES (IN NON-PREGNANT ADULTS)

NORMAL
1. A1C < 5.7%. *or* 2. Fasting plasma glucose <100 mg/dl. *or* 3. Oral glucose tolerance test (**OGTT**) 2-hr plasma glucose <140 mg/dl.
PRE-DIABETES
1. A1C range of 5.7–6.4%. *or* 2. Impaired fasting glucose (**IFG**) = fasting plasma glucose of 100–125 mg/dl. *or* 3. Impaired glucose tolerance (**IGT**) = OGTT 2-hr plasma glucose of 140–199 mg/dl.
DIABETES
1. A1C ≥6.5%. *or* 2. Fasting plasma glucose ≥126 mg/dl. *or* 3. OGTT 2-hr plasma glucose ≥200 mg/dl. *or* 4. Symptoms of diabetes and a casual plasma glucose ≥200 mg/dl.
NOTES ON METHODS OF TESTING: 1. **A1C:** The test should be performed in a laboratory using a method that is certified by the National Glycohemoglobin Standardization Program (**NGSP**) and standardized to the Diabetes Control and Complications trial (**DCCT**) assay. 2. **Fasting plasma glucose:** "Fasting" is defined as no caloric intake for at least eight hours. 3. **OGTT:** The test should be performed using a glucose load containing the equivalent of 75-g anhydrous glucose dissolved in water. 4. **Casual plasma glucose:** "Casual" is defined as any time of day, without regard to the time since the last meal. The classic symptoms of diabetes include polyuria, polydipsia, and unexplained weight loss.

IV. DIABETES SCREENING

A. Diabetes Screening Recommendations

1. Routine universal screening is recommended in all patients for type 2 diabetes at age 45.

2. Routine screening for type 2 diabetes should be considered when clinically indicated, based on risk factors for diabetes.

    a. Screening can be prioritized for patients who are considered overweight (BMI ≥ 25 kg/m2, or ≥ 23 kg/m2 in Asian Americans) with additional risk factors which include: hypertension, hyperlipidemia, first-degree relative, sedentary lifestyle, high-risk ethnic or racial group, history of gestational diabetes mellitus, polycystic ovary syndrome, history of vascular disease, or other conditions know to be associated with insulin resistance.

3. **Screening Intervals**

    a. Testing may be repeated every three years when fasting plasma/serum glucose is ≤ 100 mg/dl of A1C is ≤ 5.7%

    b. Follow-up screening for patients with pre-diabetes should occur annually.

        i. Patients with IFG or IGT are at an increased likelihood for developing diabetes within 5 years and annual screening is recommended for these patients.

V. INITIAL TREATMENT PLAN

A. Treatment Plan Development

1. The treating clinician should develop and review the initial diabetic treatment plan with the patient.
2. Involvement of the patient in the development of the treatment plan is pivotal to its success and should include adequate training to empower the patient to prevent, recognize, and treat hyperglycemia and hypoglycemia.
3. The following are recommended components of a treatment plan:
    a. Education on diabetes drug treatment; self-monitoring; recognizing and treating severe hypoglycemic and hyperglycemic episodes; and identifying the signs of diabetic complications such as diseases of the eyes, kidneys, and nervous system.
    b. A discussion of potential treatment options and addressing patient concerns that may improve adherence and outcomes.
    c. Instruction on the patient's specific drug treatment regimen and methods for monitoring glucose.
    d. Necessary lifestyle modifications such as improving food selection, increasing physical exercise, and stopping smoking.
    e. Importance of annual eye exams (funduscopic) by an ocular professional.
    f. Need for regular self-examination of the feet.
    g. Need for regular self-examination of the skin, including insulin injection sites.
    h. Importance of regular dental examinations and treatment.
    i. Need for regular screenings: fasting blood glucose, A1C, lipid levels, and kidney monitoring (typically a BMP or CMP).
    j. Consideration of daily aspirin therapy to prevent cardiovascular events in some patients at higher risk.
    k. Importance of annual influenza vaccinations.

VI. TREATMENT OF TYPE 2 DIABETES

A. Treatment Goals

1. Based on the results of multiple randomized trials and correctional considerations, a reasonable A1C target for patients with diabetes is <7.0–7.5%.
2. **It is recognized, however, that glycemic goals should be individualized, as very stringent goals may not be appropriate or practical for some patients.**
    a. Glycemic targets are generally set somewhat higher (e.g., A1C <8%) for older patients and those with comorbidities or a limited life expectancy and little likelihood of benefit from intensive therapy.
3. Clinical judgment, based on the potential benefits and risks of a more intensified regimen, should be applied for every patient.

B. **Wexford Preferred Treatment Regimens for Type 2 Diabetes**

1. Selection of antihyperglycemic agents in the treatment of Type 2 DM should be based on their effectiveness in lowering A1C levels, safety profiles and tolerability.

TABLE 2. SUMMARY OF WEXFORD FORMULARY ANTIDIABETIC AGENTS FOR TYPE 2 DIABETES

INTERVENTIONS*	EXPECTED TOTAL DECREASE IN A1C (%)**	ADVANTAGES	DISADVANTAGES
STEP 1: LIFESTYLE INTERVENTION AND METFORMIN			
Lifestyle	1–2	Low cost, additional health benefits.	Fails as monotherapy for most patients in the first year.
Metformin	1–2	Weight-neutral, no hypoglycemia, inexpensive, self-carry.	GI side effects, contraindicated in renal impairment, rare lactic acidosis.
STEPS 2 AND 3: ADDITIONAL MEDICATION			
Insulin	≥2.5	No dose limit, inexpensive formulations available.	Hypoglycemia, weight gain; requires pill line.
Sulfonylureas (i.e., Glipizide)	1–1.5	Inexpensive.	Hypoglycemia, weight gain, decreased efficacy over time.

C. **Lifestyle Interventions**

1. For the vast majority of patients, a lifestyle intervention program to increase activity levels, improve dietary choices, and promote weight loss (as indicated) should be included as part of diabetes management.

   a. Being overweight and lack of exercise are the most important modifiable risk factors for type 2 diabetes.

   b. Weight management and increasing exercise have been shown to have a beneficial effect on controlling glycemia in both type 1 and type 2 diabetes.

2. **Nutrition**

   a. **Nutrition Counseling and Education**

      i. Nutrition counseling for patients with diabetes is considered an important component of diabetes self-management.

      ii. Nutrition education, conducted individually or potentially in group settings, should help patients understand how their food choices, carbohydrates in particular, directly affect diabetes control.

      iii. Patients should also strive for day-to- day consistency in the times that they eat and in the amount of carbohydrates they consume.

3. **Physical activity**

   a. Regular exercise can significantly improve glycemic control and contribute to weight reduction.

   b. All patients with diabetes should be counseled on the benefits of increased physical activity, as well as the degree of exercise best suited to them.

c. Sedentary patients may need be medically evaluated prior to undertaking aerobic physical activity that goes beyond the intensity of brisk walking.

D. **Metformin**

1. Metformin, a biguanide, reduces hepatic glucose production in the presence of insulin and reduces hyperglycemia.

2. Metformin reduces A1C levels by 1–2%.

3. In contrast to sulfonylureas, metformin is associated with weight loss or no weight gain, is risk-neutral for hypoglycemia, and may reduce cardiovascular risk.

4. **Recommendations**

a. Unless contraindicated, metformin in combination with lifestyle changes is recommended as initial treatment for most type 2 diabetes.

b. Metformin can also be used in combination with insulin and sulfonylureas.

c. Pre-Diabetes: Metformin therapy should also be considered for patients with pre-diabetes, particularly those with BMI>35 kg/m2.

d. **Metformin ER (Glucophage XR)** is an extended-release product and allows for dosing to be once daily as compared to twice daily dosing regimens associated with metformin immediate release (IR).

i. Metformin ER has been associated with less gastrointestinal side effects than metformin immediate release products.

ii. However, the **maximum daily dose of Metformin ER is 2000 mg/day** as compared to the maximum daily dose of Metformin IR which is 2550 mg/day.

iii. **In patients who are doing well with immediate-release metformin, continued use of the IR product is usually recommended as there is little additional benefit documented with ER tablets.**

5. **Precautions**

a. **Metformin should be discontinued during acute illnesses where dehydration is a significant risk or where respiratory acidosis is possible,** since metformin use in these situations may result in life-threatening lactic acidosis.

b. **Metformin is not recommended for individuals with unstable or severe renal dysfunction (eGFR <30 mL/min) or for initiation of therapy when eGFR is 30 to 45 mL/min**.

c. **Metformin should be withheld 48 hours before and after surgery or IV contrast radiograph studies;** the patient should be well-hydrated both before and after these procedures.

i. Discontinue metformin at the time of or before iodinated contrast imaging procedures in patients with an eGFR between 30 to 60 mL/minute/1.73 m2, in patients with a history of hepatic disease, alcoholism, or heart failure, and/or in patients who will receive intra-arterial iodinated contrast.

ii. Re-evaluating an eGFR 48 hours should be considered following the imaging procedure; metformin may be reinitiated once renal function is stable.

iii. **Metformin can cause vitamin B12 deficiency** with an associated anemia and neuropathy**.**

iv. Patients who discontinue metformin are often switched to agents with increased risk for hypoglycemia, making continuation of metformin therapy advantageous when possible.

v. Metformin-associated lactic acidosis is rare, and clinicians may choose to continue metformin therapy for patients with diabetes who are well-controlled, but have creatinine levels above the threshold, closely monitoring renal function as described in Table 3 below.

TABLE 3. METFORMIN IN STABLE RENAL DYSFUNCTION

eGFR (mL/min)	Maximum Daily Dose	Suggested Monitoring
>60	2550 mg	Monitor renal function at least annually.
45 to 59	2000 mg	Monitor renal function at every 3 to 6 months.
30 to 44	1000 mg	Monitor renal function every 3 months. Do NOT initiate metformin therapy, although metformin may be continued in patients already taking it.
<30	Do NOT use.	N/A
Adapted from: PL Detail-Document, Clinical Use of Metformin in Special Populations. Pharmacist's Letter/Prescriber's Letter. March 2015.		

E. **Insulin**

1. Insulin has often been used to treat insulin-resistant type 2 diabetes, and it is the most effective drug to decrease glycemia.

2. In adequate doses, insulin can decrease any level of elevated A1C to meet a therapeutic goal.

3. Initial therapy is aimed at increasing basal insulin supply.

4. Patients may require pre-meal, regular insulin, as well.

5. Insulin therapy has beneficial effects on triglyceride and HDL cholesterol levels, but is associated with weight gain of about 2–4 kg that may have an adverse effect on cardiovascular risk.

6. Insulin therapy is also associated with hypoglycemia.

F. **Sulfonylureas**

1. Sulfonylureas stimulate insulin secretion and require endogenous insulin production. The various sulfonylureas have equivalent efficacy, reducing A1C by 1–1.5%.

   a. Second-generation sulfonylureas such as glipizide, glyburide, and glimepiride have more favorable side effect profiles and fewer drug interactions than first-generation sulfonylureas such as chlorpropamide, tolazamide, and tolbutamide.

2. In patients for whom metformin is contraindicated, sulfonylureas can be prescribed as monotherapy, or they can be combined with other oral agents.

3. The **combination of insulin and sulfonylureas may increase the risk of hypoglycemia**, and caution is advised if these therapies are used concurrently.

4. Hypoglycemia (particularly in the elderly and patients with renal insufficiency) and weight gain are the two most common adverse effects of sulfonylurea therapy.

5. All sulfonylureas are metabolized by the liver and excreted in the urine; therefore, they should be used with caution in patients who suffer from either renal or hepatic insufficiency.

6. Glipizide has less renal toxicity than the other sulfonylureas and can be used in patients with renal insufficiency if the creatinine clearance is >10 mL/min.

7. Sulfonylureas have a relatively high secondary failure rate (5–10% per year), most likely due to the gradual decline of endogenous insulin production over time.

8. **Clinical Precaution for Sulfonylureas**

   a. Hypoglycemia caused by sulfonylureas can be prolonged or recurrent, due to the drugs' long duration of action.

   b. Symptomatic hypoglycemia that cannot be managed with frequent feedings over a 24-hour period should be treated in a hospital setting.

   c. The combination of insulin and sulfonylureas may increase risk of hypoglycemia.

G. **Alternative Medications in the Treatment of Type 2 Diabetes**

1. Both oral and injectable medications are available as alternative medications for treatment of type 2 diabetes, however **their use should only be considered under special circumstances.**

2. **Thiazolidinediones**

   a. Thiazolidinediones (TZDs) increase the insulin sensitivity of target cells without increasing pancreatic insulin secretion, and may lower the A1C by up to 1.3%.

3. **Clinical Precaution for TZDS**

   a. **TZDs may precipitate heart failure and peripheral edema**. Initiation of TZDs in New York Heart Association Class III or IV heart failure is contraindicated, and TZDs are not recommended for use with any degree of symptomatic heart failure.

   b. Increased risks of myocardial infarction and death have been associated with rosiglitazone.

   c. Due to potential for **drug-induced liver injury**, serum liver function tests should be obtained at baseline.

      i. It is suggested to monitor liver function studies (hepatic panel or CMP) approximately every two months for one year, and then periodically thereafter.

4. **Dipeptidyl Peptidase 4 (DDP-4) Inhibitors**

   a. The DPP-4 inhibitors reduce the breakdown of endogenous GLP-1, resulting in increased glucose-dependent insulin secretion and decreased glucagon secretion.

   b. These oral agents are better tolerated than the GLP-1 agonists, but they only reduce the A1C by about 0.7%.

5. **Glucagon-Like Peptide 1 (GLP-1) Agonists**

   a. The GLP-1 agonists activate receptors that enhance glucose-dependent insulin secretion, slow gastric emptying, promote satiety, and decrease hepatic glucose production.

   b. These injectable medications have a glucose-dependent mechanism of action and can decrease the A1C up to 1.5% or more.

      i. Benefits of GLP-1 agonists include weight reduction, reduced postprandial glucose levels and no risk of hypoglycemia.

      ii. Disadvantages:

         1) Necessity of pill line administration, high cost, and gastrointestinal side effects.

6. **Sodium-Glucose Cotransporter-2 (SGLT-2) Inhibitors**

   a. The SGLT-2 inhibitors block glucose reabsorption in the kidney, increasing the amount of glucose excreted in the urine.

   b. These oral agents can reduce the A1C up to 1% and can be used in combination with other oral therapies.

      i. Benefits of SGLT-2 inhibitors are weight loss, blood pressure lowering, no risk of hypoglycemia, and efficacy at all stages of type 2 diabetes.

      ii. Disadvantages:

         1) Cost is a disadvantage for these therapies, and side effects include genitourinary infections, frequent urination, dizziness and hypotension.

         2) Euglycemic ketoacidosis is also possible on these medications.

VII. WEXFORD TREATMENT ALGORITHM FOR TYPE 2 DIABETES MELLITUS

A. **Goals (Recommended)**

1. Initiation of medication is generally recommended when the A1C is >7.0–7.5%, or above the individualized goal.

2. In order to achieve glycemic goals as soon as possible, medications should be adjusted as titration allows (i.e., adjustment may occur as often as every 3 days for insulin and every week for metformin).

3. Until glycemic goals are achieved, the patient should generally be seen at least monthly to adjust medications, based on plasma/serum glucose data, and to counsel the patient on diet and exercise.

4. The A1C should generally be obtained every three months until the patient has reached the individualized goal. (There is no benefit in ordering the A1C at less than three-month intervals.)

5. An A1C above the individualized goal (usually 7–7.5%) typically suggests the need for further intensification of diet, exercise, and medication management or improvement in medication compliance.

6. Insulin therapy, in addition to lifestyle changes, may be necessary initially in cases of uncontrolled diabetes, which may present as plasma/serum glucose levels >250 mg/dl,

random glucose levels consistently >300 mg/dl, A1C >10%, or the presence of ketonuria or symptomatic diabetes with polyuria, polydipsia, and weight loss.

B. **Step 1: Lifestyle Modification and Metformin**

1. It is generally recommended that drug treatment be initiated along with lifestyle intervention at the time of type 2 diabetes diagnosis but individual circumstances vary.

2. Presuming there are no contraindications, **metformin is the initial drug of choice for the following reasons**: effective glycemic control, absence of weight gain, absence of hypoglycemia, low level of side effects, and high level of acceptance.

3. An eGFR should be obtained prior to initiating metformin.

   a. Metformin is contraindicated in patients with eGFR <30 mL/min, and should not be initiated in patients with eGFR <45 mL/min.

   b. If metformin is contraindicated, then insulin, glipizide, or glimepiride may be used as the initial therapy.

4. **Titration of metformin** is advised to minimize gastrointestinal side effects.

TABLE 4. TITRATION OF METFORMIN

1. Begin with low-dose metformin (500 mg) once or twice daily with meals (breakfast and/or dinner).
2. After 5–7 days (if GI side effects have not occurred), advance dose to 850 or 1,000 mg before breakfast and dinner.
3. If GI side effects appear as doses are increased, decrease to previous lower dose and try to advance dose at a later time.
4. Generally, clinically significant responses are not seen at doses <1,500 mg daily. Modest improvements in effectiveness can be achieved with doses up to a maximum daily dose of 2550 mg (administered 850 mg, three times a day or other combination). GI side effects are dose-related and may limit therapy.

Adapted from: Nathan DM, Buse JB, Davidson MB, et al. Management of hyperglycemia in type 2 diabetes: a consensus algorithm for the initiation and adjustment of therapy. *Diabetes Care* 2006;29(8):1969.

C. **Step 2: Adding a Sulfonylurea or Insulin**

1. If lifestyle interventions plus a maximally tolerated dose of metformin (with good compliance) fail to achieve or sustain glycemic goals within two to three months, then generally another medication should be added.

2. Addition of insulin or a sulfonylurea is generally recommended. The A1C level will determine, in part, which agent should be selected next.

3. Insulin should be considered for patients with A1C >8.5%, or who have symptoms of hyperglycemia.

4. Insulin is considered a fundamental tool for treating type 2 diabetes; initiation of insulin should not be delayed in patients who fail to meet glycemic goals.

D. **Step 3: Add or Adjust Insulin Therapy**

1. If lifestyle interventions plus metformin and a second medication fail to achieve glycemic goals, the next step is to start or intensify insulin therapy.

2. Usually, there is no benefit to prescribing three oral agents.

3. If plasma/serum glucose and A1C goals are not met in a compliant patient on two oral agents, e.g., metformin and glipizide, the most effective next step is to add NPH insulin.

4. Intensification of insulin therapy usually consists of additional injections, often including regular insulin prior to selected meals to reduce postprandial glucose excursions.

5. In general, once insulin has been started, sulfonylureas are discontinued due to concern for sustained, severe hypoglycemia.

E. **Additional Observations**

1. The majority of patients with type 2 diabetes will require multiple medications over time.

   a. This is because patients with type 2 diabetes have both insulin resistance at the tissue level and declining pancreatic insulin production.

2. The first-line oral agents utilized within Wexford are metformin, glipizide, and glimepiride.

   a. If these oral agents are contraindicated or not tolerated, the use of other oral antihyperglycemic agents should be considered on a case-by-case basis.

3. Drug selection should be based on glucose-lowering effectiveness, mechanism of action, side effect profile, and other factors that may reduce diabetes complications, e.g., weight loss or improvement in lipid profile.

4. When adding antihyperglycemic medications, the synergy of particular combinations and other interactions should be considered.

   a. As a rule, antihyperglycemic drugs with different mechanisms of action will have the greatest synergy.

F. **Appendices**

1. *Appendix 1: Treatment Algorithm for Type 2 Diabetes*

2. *Appendix 2: Initiation and Adjustment of Insulin Regimens in Type 2 Diabetes*

VIII. TREATMENT OF TYPE 1 DIABETES MELLITUS

A. **Treatment**

1. Patients with type 1 diabetes generally present with acute diabetes symptoms, as well as significantly elevated blood glucose levels.

   a. Given the acute onset of symptoms, type 1 diabetes is usually detected soon after symptoms develop.

   b. Treatment goals for type 1 diabetes are the same as those for type 2 (*see Appendix 3*).

2. Insulin therapy is the cornerstone of medication management, and oral antihyperglycemic agents are <u>not</u> indicated in patients with type 1 diabetes.

3. Furthermore, it has been clearly demonstrated that intensive insulin therapy results in improved glycemic control and reduction in diabetes- related complications (including nephropathy, retinopathy, neuropathy, and cardiovascular morbidity and mortality.

B. **Insulin**

1. Commonly prescribed insulin within a correctional setting includes **short-acting insulin which is Regular (human) insulin and intermediate-acting insulin which is NPH (human) insulin.**

2. LONG-ACTING INSULINS (insulin glargine and insulin detemir) are frequently utilized in the community (i.e., outside the correctional setting) in place of intermediate-acting insulin (NPH).

   a. Insulin glargine (Lantus, Semglee) has virtually no peak and can often be administered once daily.

   b. A disadvantage of insulin glargine is that it cannot be mixed with other insulins and thus requires a separate injection.

   c. **Studies comparing glargine and detemir with NPH have shown that the two longer-acting agents have no superiority over NPH in terms of glycemic control;**

      i. A1C values are no lower with long-acting insulins than they are with NPH insulin.

   d. It is important to note that evening doses of NPH insulin should be given at bedtime or as close to bedtime as feasible.

3. RAPID-ACTING INSULINS are often utilized in the community in place of short-acting (regular) insulin.

   a. **In general, rapid-acting insulin are not typically utilized in the correctional setting.**

   b. If used, rapid acting insulins must be carefully timed to avoid the risk of hypoglycemia.

TABLE 5. ONSET AND PEAK OF COMMONLY USED INSULIN PREPARATIONS

INSULIN OR INSULIN ANALOGUE	ACTION PROFILE	
	Onset	*Peak*
ULTRA-RAPID-ACTING		
Insulin lispro (Humalog)	10–20 min	30 min–90 min
Insulin aspart (Novolog)	10–20 min	30 min–90 min
SHORT-ACTING		
Regular (human) Humulin R/Novolin R	30 min–1 hour	2–4 hours
INTERMEDIATE-ACTING		
NPH (human) Humulin N/Novolin N	1–3 hours	4–10 hours (~8 hours)
LONG-ACTING		
Insulin glargine (Lantus, Semglee)	1–3 hours	No peak, ~ 24hr duration
Insulin detemir (Levemir)	1–3 hours	9 hours–unknown
Source: McCulloch, DK. Insulin therapy in type 2 diabetes mellitus. In: *UpToDate*, Nathan DM (Ed), UpToDate, Waltham, MA.		

C. **Insulin Therapy**

1. **Conventional Insulin Therapy** involves single daily injections, or two injections per day—usually twice-daily administration of a combination of short-acting (regular) and intermediate-acting (NPH) insulins.

   a. Conventional insulin therapy is typically utilized in correctional facilities.

2. **Intensive Insulin Therapy** describes treatment with three or more insulin injections per day, including basal and pre-meal.

   a. Intensive insulin therapy aims to provide a more physiologic profile of insulin.

   b. **Although research findings strongly support the use of intensive insulin therapy, there are associated drawbacks**:

      i. Greater effort is required on the part of the patient to coordinate diet, activity, insulin administration, and glucose monitoring.

      ii. Greater effort is required to assure that insulin and mealtimes are coordinated.

      iii. There is up to a **three-fold increase in the incidence of hypoglycemia** (a significant concern for correctional facilities).

      iv. Weight gain is more likely, sometimes limiting patient compliance.

3. **Sliding Scale Insulin Therapy** refers to the use of varying doses of regular insulin in response to hyperglycemia**.**

   a. **Sliding scale insulin therapy is generally not a recommended strategy for long-term management of patients with diabetes**.

   b. See *Appendix 4* for information on replacing sliding scale insulin therapy for patients in long-term care situations.

D. **Design of Multiple-Dose Insulin Regimen for New Type 1 Patients**

1. Patients who are newly diagnosed with type 1 diabetes ordinarily can be started on a total daily dose of 0.2 to 0.4 units of insulin per kg per day; most will eventually require 0.6 to 0.7 units per kg per day.

2. Initially, the total daily dose should be composed as follows:

   a. **NPH insulin**: Approximately half the total dose should be NPH insulin, administered twice daily.

      i. In general, two-thirds of the total NPH dose should be given in the morning and one-third at bedtime (or as close to bedtime as feasible).

   b. **REGULAR insulin**: The other half of the total daily insulin dose should usually consist of pre-meal, regular insulin.

      i. The dosing of pre-meal insulin is based upon the usual meal size and calorie count.

      ii. Nutritional consistency is critical for maintaining adequate glycemic control.

      iii. When NPH insulin is utilized as part of the regimen, a pre-lunch bolus of regular insulin is generally not necessary.

3. **Clinical Precaution for Multiple-Dose Insulin Regimens**

   a. A disadvantage of insulin glargine (Lantus) is that it cannot be mixed with any other insulins.

   b. **Fixed-dose insulin combinations (e.g., 70/30 insulin preparations) are generally not suggested for insulin-dependent patients who need to achieve target A1C levels**.

      i. Fixed-dose insulin formulations are typically not flexible enough to match changes in caloric intake with appropriate doses of short-acting and long-acting insulin.

   c. For patients with type 1 diabetes, and any patient with type 2 diabetes who require short- acting insulin, a process must be in place to ensure that patients have access to glucose monitoring on an as-needed basis in order to achieve optimal control and to avoid hypoglycemia.

   d. **Rapid-acting insulin should be avoided in most circumstances; the benefit versus risk of using these agents within the correctional environment needs to be carefully assessed and appropriately justified on a case-by-case basis.**

      i. Anything that keeps the patient from eating within 20–30 minutes after a rapid-acting insulin injection is very likely to induce symptomatic hypoglycemia.

IX. UTILIZATION OF INSULIN

A. **Insulin Administration**

1. Patients who require insulin should be educated on the appropriate and safe administration of insulin:

2. **Administration**

   a. Directly observed self-administration of insulin is recommended whenever feasible.

   b. Insulin should be administered subcutaneously at a 45poli-to-90 degree angle at a clean injection site, using clean hands.

   c. Absorption is fastest from injections into the abdominal wall (>2 inches from the umbilicus), making this site preferable for pre-meal (regular) insulin therapy.

   d. Injections into the leg or buttock result in slower absorption and are thereby appropriate for the evening dose of intermediate-acting (NPH) insulin.

   e. Rotating injection sites is recommended to prevent lipodystrophy.

3. **Procedure For Mixing Regular and NPH Insulin**

   a. Regular insulin should be drawn up first, followed by the NPH (being careful not to inject the regular insulin into the NPH vial).

   b. Administering the mixture of regular/NPH insulin within 15 minutes of drawing them up is advised.

4. **Infection Control Issues**

   a. Insulin syringes should be used only once; they should never be used on more than one patient or reused in the same patient.

   b. Infection control procedures should be established to prevent the recapping of insulin needles following injection, or the handling of contaminated syringes by other patients or health care providers.

   c. Used insulin syringes should be promptly disposed of in puncture-resistant containers.

   d. Measures should be taken to avoid contamination of insulin solution when using multi-dose vials.

5. INSULIN PUMPS are rarely necessary for patients with type 2 diabetes.

   a. Newly incarcerated patients with type 1 diabetes who are already on insulin pumps should usually be maintained on the pump.

B. **Insulin and Food Intake in the Correctional Setting**

1. The correctional environment poses known challenges for coordinating insulin administration with food intake, particularly for patients on short-acting (regular) insulin.

   a. The consequences of insulin/food mismatch are, at best, suboptimal control of hyperglycemia; at worst, the result of insulin/food mismatch is frequent and potentially severe hypoglycemic episodes.

b. Because of the many factors in a correctional environment that can interfere with the optimal timing of insulin and food, the insulin regimen should be as "forgiving" as possible.

c. The shorter the onset and peak of the insulin, the more critical it is to coordinate food intake with insulin administration.

d. *Consequently, rapid-acting insulin is generally not utilized within the correctional facility.*

2. **Timing of Short-Acting (Regular) Insulin**

a. Short-acting insulin is typically administered two-to- three times per day; ideally, it should be administered prior to a meal to allow some absorption of insulin prior to the rise in blood glucose that occurs during a meal.

b. However, if the timing of meals is uncertain, regular insulin can be administered immediately after eating (rather than before).

c. Although the patients will have a short period of postprandial hyperglycemia, this approach causes fewer long-term consequences and good diabetic control can still be achieved.

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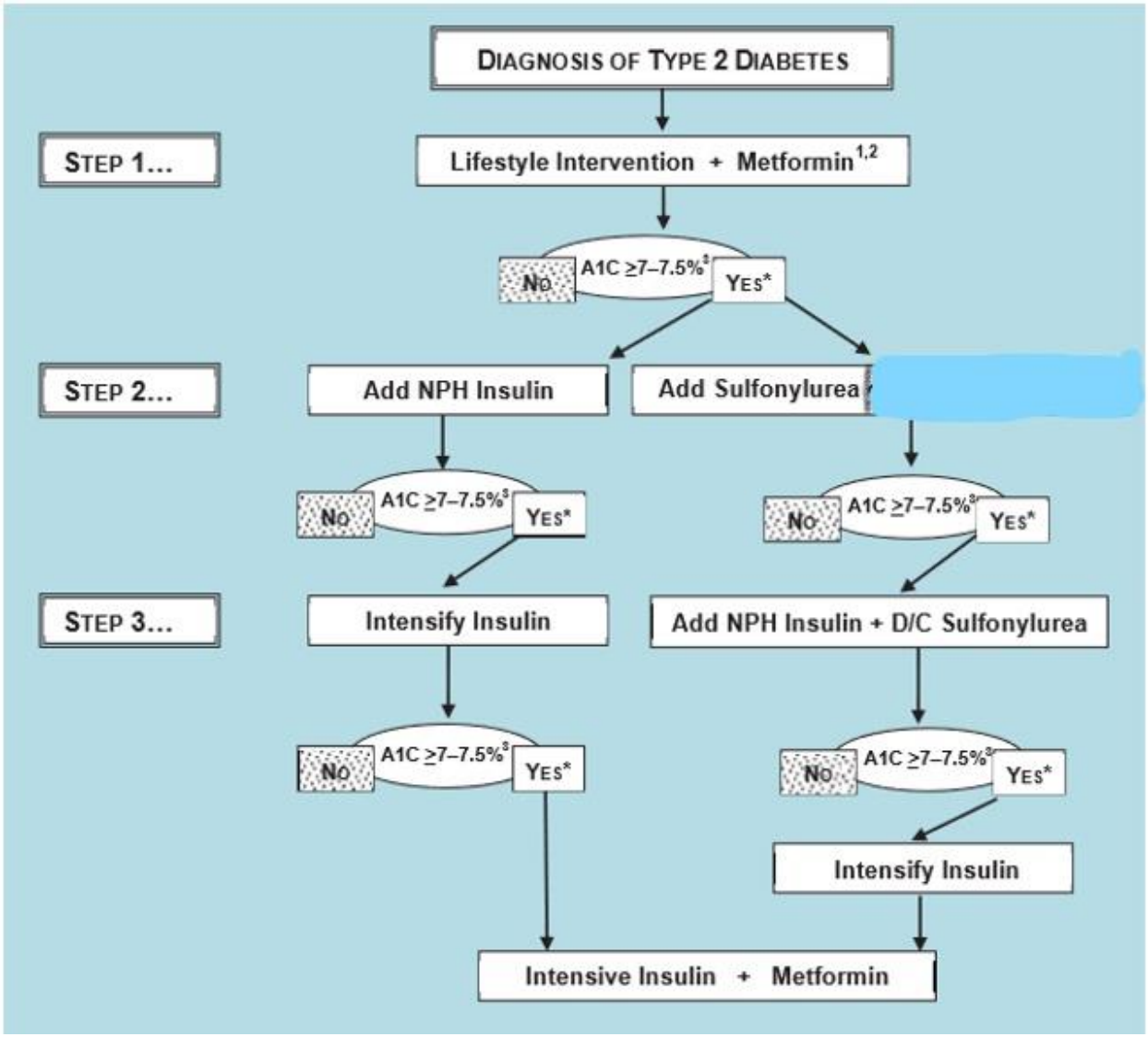
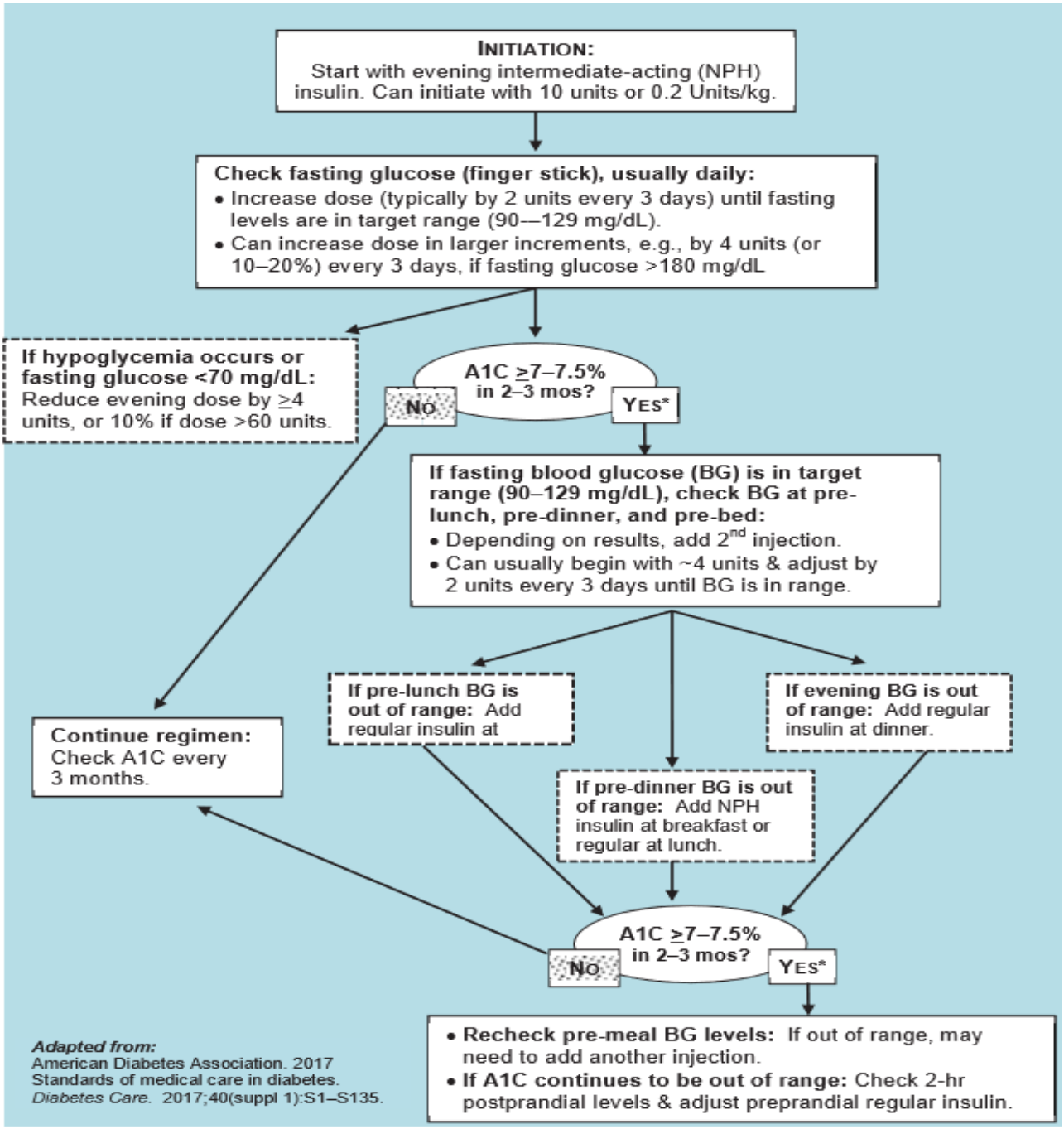
XI. APPENDIX 1: TREATMENT ALGORITHM FOR TYPE 2 DIABETES



1. **EXCEPTION:** Generally**,** insulin should be utilized if severely uncontrolled DM, i.e., plasma/serum glucose >250 mg/dL, random glucose consistently >300 mg/dL, A1C >10%, ketonuria, or symptomatic diabetes with polyuria, polydipsia, & weight loss.
2. Use metformin unless contraindicated, i.e., if eGFR<45 ml/min; if age >80 (unless renal sufficiency established); or chronic liver failure. A sulfonylurea can often substitute for metformin if it is contraindicated.
3. Or other individualized A1C goal.
4. * Check A1C typically every 3 months until <7.0–7.5%, or at other individualized treatment goal; then, every 6 months.

XII. APPENDIX 2: INITIATION AND ADJUSTMENT OF INSULIN REGIMENS IN TYPE 2 DIABETES



XIII. APPENDIX 3. TREATMENT GOALS FOR NON-PREGNANT PATIENTS WITH DIABETES

GLYCEMIC CONTROL	
A1C[1]	<7.0–7.5%
Pre-prandial capillary plasma glucose[2]	90–130 mg/dl
Peak post-prandial capillary plasma glucose[2,3]	<180 mg/dl

Key concepts in setting glycemic goals:

- A1C is the primary target for glycemic control.
- Goals should be individualized.
- Certain patient populations, i.e., pregnant women and the elderly, require special considerations.
- Less intensive glycemic goals may be indicated in patients with severe or frequent hypoglycemia.
- Postprandial glucose may be targeted if A1C goals are not met despite reaching pre-prandial glucose goals.

BLOOD PRESSURE	
Blood pressure goal	<140 / <90 mmHg

LIPIDS[4]	
Age <40 years	
No risk factors	None
ASCVD risk factor(s)*	Moderate or high-intensity statin
ASCVD	High-intensity statin
Age 40–75 years	
No risk factors	Moderate-intensity statin
ASCVD risk factors*	High-intensity statin
ASCVD	High-intensity statin
Age >75 years	
None	Moderate-intensity statin
ASCVD risk factors*	Moderate or high-intensity statin
ASCVD	High-intensity statin

* ASCVD (atherosclerotic cardiovascular disease) risk factors include LDL cholesterol ≥100 mg/dL, high blood pressure, smoking, overweight and obesity, and family history of premature ASCVD.

[1] The ADA's *Standards of Medical Care in Diabetes – 2017* sets the A1C diagnostic cut point as 6.5%. Based on the results of multiple randomized trials and correctional considerations, the BOP recommends A1C <7.0–7.5% as a reasonable treatment goal for most patients with diabetes. Less stringent goals may be appropriate for some patients.

[2] Many glucometers automatically convert capillary blood glucose values to plasma glucose values. Check the glucometer. Glucometers that do not automatically convert values report blood glucose values that may be 10–15% lower than plasma glucose values.

[3] Postprandial glucose measurements should be made 1–2 hours after the beginning of the meal.

[4] As per 2013 ACC/*AHA Blood Cholesterol Guideline.*

Adapted from: American Diabetes Association. 2017 Standards of medical care in diabetes. *Diabetes Care*. 2017;40(suppl 1): S1–S135.

XIV. APPENDIX 4: STRATEGIES TO REPLACE SLIDING SCALE INSULIN (SSI)

CURRENT REGIMEN	SUGGESTED STEPS FOR REPLACING SSI REGIMEN
SLIDING SCALE INSULIN (SSI) THERAPY refers to the use of varying doses of regular insulin in response to hyperglycemia. Sliding scale insulin therapy is generally not a recommended strategy for long-term management of patients with diabetes.	
SSI is the sole insulin treatment.	• Review average daily insulin requirement over prior 5–7 days. • Give 50–75% of the average daily insulin requirement as basal insulin. • Stop SSI. • Use noninsulin agents or fixed-dose mealtime insulin for postprandial hyperglycemia. • Consider giving basal insulin in the morning to impact postprandial hyperglycemia and reduce risk of early morning/nocturnal hypoglycemia.
SSI is being used in addition to scheduled basal insulin.	• Add 50–75% of the average insulin requirement used as SSI to the existing dose of basal insulin. • Use noninsulin agents or fixed-dose mealtime insulin for postprandial hyperglycemia.
SSI is being used in addition to basal and scheduled meal time insulin (i.e., correction dose insulin).	• If a correction dose is required frequently, add the average correction dose before a meal to the scheduled mealtime insulin dose at the *preceding* meal. *For example:* If glucose is consistently elevated before lunch, requiring 2–3 unit corrections, the scheduled breakfast dose of insulin could be increased by the average correction dose (2 units). *Similarly,* if glucose values are elevated before breakfast, requiring correction doses, the scheduled basal insulin dose could be increased by the average correction dose used.
SSI is used in the short-term due to irregular dietary intake or acute illness (<14 days).	• Short-term use may be needed for acute illness and irregular dietary intake. • Stop SSI and return to previous regimen as health and glucose stabilize.
SSI is used for wide fluctuations in glucose levels in patients with cognitive decline and/or irregular dietary intake on a chronic basis.	• Use scheduled basal and mealtime insulin based on individual needs, with the goal of avoiding hypoglycemia. • May use simple scale such as “Give 4 units of mealtime insulin if glucose>300 mg/dL.” • Keep patients hydrated, especially if glucose levels are very high (e.g., >300 mg/dL).
Adapted from: 2017 Standards of medical care in diabetes. *Diabetes Care*. 2017;40(suppl 1): S1–S135..	

XV. APPENDIX 5: ORAL MEDICATIONS FOR TREATMENT OF TYPE 2 DIABETES

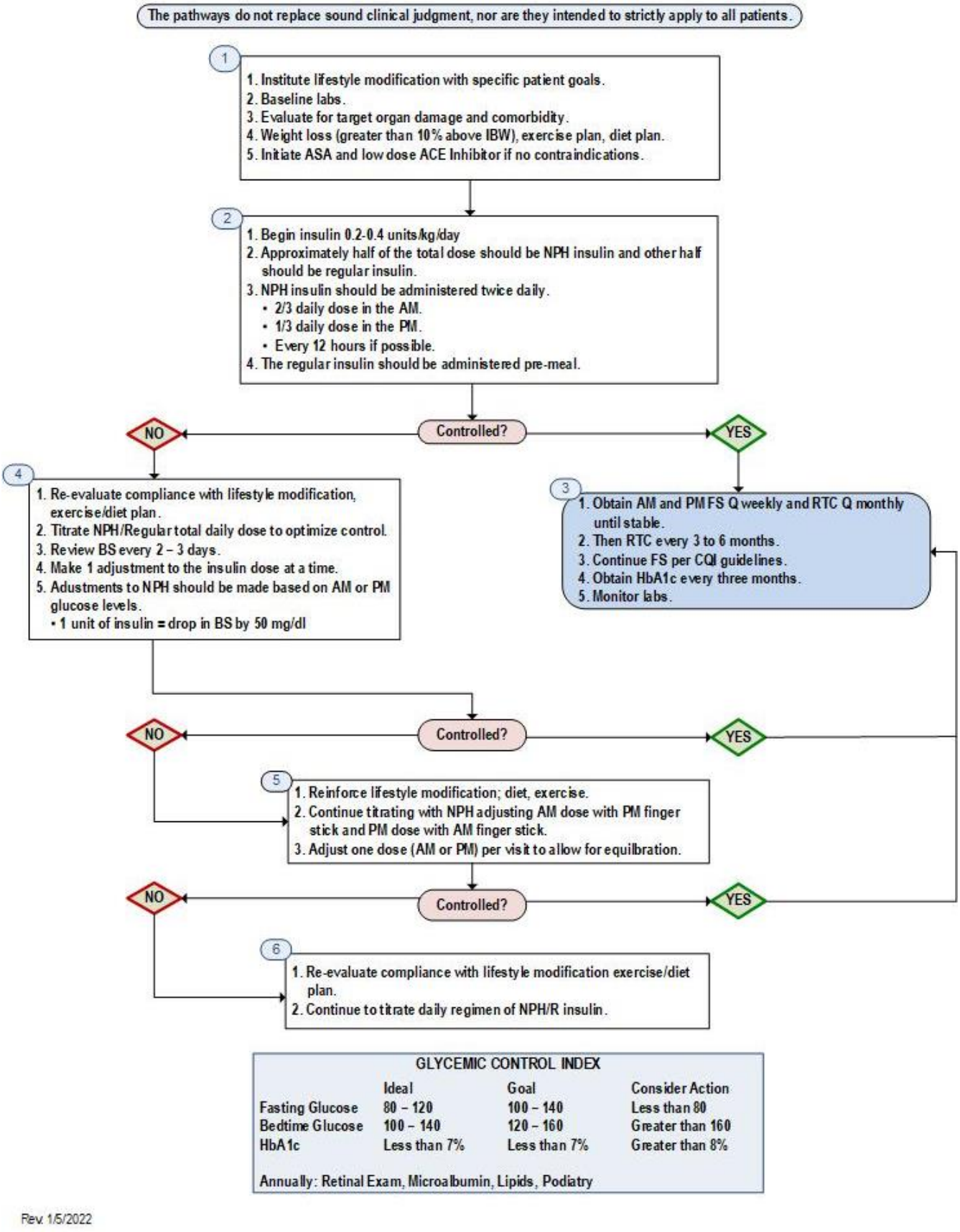
ORAL AGENTS FOR TREATMENT OF TYPE 2 DIABETES — DOSING AND SIDE EFFECTS					
Agent	**Initial Dose & Treatment**	**Maximum Dose**	**Initial Elderly Dose**	**Side Effects**	**Drug Interaction**
BIGUANIDES					
➔ ***Caution is advised for use of metformin therapy in patients with stable mild to moderate renal impairment.*** ***Contraindications to metformin therapy:*** *elevated creatinine (>1.7mg/dL), or a creatinine clearance <30mL/min in the elderly; history of renal insufficiency, hepatic dysfunction, or serious cardiovascular or pulmonary compromise.*					
Metformin (Glucophage)	• 500 mg with a meal. • Based on patient's tolerance to metformin & glycemic response, increase dosage by 500 mg/day at weekly intervals, adding a dose to another meal. • TID dosing not required for efficacy, but may decrease GI complaints. • Doses <1500 mg/day unlikely to achieve therapeutic effect as monotherapy. • Doses >2000 mg/day have little added benefit.	2550 mg/day (850 mg TID) ***OR*** 2500 mg/day OR Metformin ER 2000 mg/day	500 mg	Nausea and diarrhea, which usually subside over 1 week; to alleviate, may limit rate of dose increase. Hypoglycemia only if metformin is given with sulfonylurea or insulin.	Alcohol; cimetidine; amiloride; digoxin; morphine; procainamide; quinidine; ranitidine; triamterene; trimethoprim; vancomycin; furosemide; calcium channel blocking agents, especially nifedipine. ➔ *Withhold 48 hours prior to and following surgery or IV contrast x-ray studies.*
SULFONYLUREAS (SUs) —SECOND GENERATION					
Glimepiride (Amaryl)	• 1–2 mg daily with breakfast or first main meal. • Increase at 1–2 mg increments every 1–2 weeks, as needed. ➔ *Use glimepiride only if creatinine clearance is ≥30 mL/min.*	8 mg once daily	0.5–1 mg	Hypoglycemia & weight gain.	Alcohol; coumadin; azole antifungals; asparaginase; corticosteroids; thiazide diuretics; lithium; beta blockers; cimetidine; ranitidine; cyclosporine; quinolones; MAO inhibitors; chloramphenicol; octreotide; pentamidine.
Glipizide, short-acting (Glucotrol)	• 5 mg/day, 30 min before breakfast. • Increase dose by 2.5–5 mg weekly, as needed. ➔ *Use glipizide only if creatinine clearance is ≥10 mL/min.*	40 mg/day Give BID when dose reaches 15 mg.	2.5 - 5 mg	Hypoglycemia & weight gain.	Same as glimepiride above.
Glipizide, extended release (Glucotrol XL)	• 5 mg/day at breakfast. • Increase dose by 2.5 –5 mg at 3-month intervals, based on A1C. ➔ *Use glipizide only if creatinine clearance is ≥10 mL/min.*	20 mg/day	2.5 mg	Hypoglycemia & weight gain.	Same as glimepiride above.

ORAL AGENTS FOR TREATMENT OF TYPE 2 DIABETES — DOSING AND SIDE EFFECTS					
Agent	**Initial Dose & Treatment**	**Maximum Dose**	**Initial Elderly Dose**	**Side Effects**	**Drug Interaction**
Glyburide (DiaBeta, Micronase)	• 2.5–5 mg/day. • Increase dose by 2.5–5 mg no more often than every 7 days. → *Use glyburide only if creatinine clearance is ≥50 mL/min.*	20 mg/day	1.25–2.5 mg	Hypoglycemia & weight gain.	Same as glimepiride above.
Glyburide, micro-crystalline (Glynase)	• 1.5–3 mg/day. • Increase dose by ≤1.5 mg weekly, if needed. → *Use glyburide only if creatinine clearance is ≥50 mL/min.*	12 mg/day	1.25 mg	Hypoglycemia & weight gain.	Same as glimepiride above.
GLITAZONES (THIAZOLIDINEDIONES OR TZDS)					
Pioglitazone (Actos)	• 15–30 mg once daily. • Increase to 45 mg once daily monotherapy or 30 mg once daily as combo therapy.	45 mg/day in monotherapy 30 mg/day in combo therapy	15 mg	Edema, weight gain. → *Decreases oral contraceptive efficacy.*	Erythromycin; calcium channel blocker; corticosteroids; cyclosporine; HMB-CoA reductase inhibitors; triazolam; trimetrexate; ketoconazole; itraconazole
Rosiglitazone (Avandia)	• 4 mg once daily or 2 mg BID. • Increase to 8 mg once daily or 4 mg BID in 12 weeks, as needed.	8 mg/day	2 mg	Edema; fluid retention may cause or exacerbate CHF; weight gain; possible increased risk of MI; increased LDL-C.	Same as pioglitazone above.
ALPHA-GLUCOSIDASE INHIBITORS					
Acarbose (Precose)	• 25 mg TID with first bite of meals; lower dose may be needed if gastrointestinal distress is noted. • Increase dose to 50 mg TID with meals after 4–8 weeks.	100 mg TID with meals ***OR*** 50 mg TID with meals (in patients ≤60 kg)	25 mg	Diarrhea (33%), abdominal pain (12%), flatulence (77%). → *Serum transaminase elevations may occur at doses >50 mg TID.*	Absorbents; intestinal agents such as activated charcoal; digestive enzyme preparations containing carbohydrate-splitting enzymes such as amylase or pancreatin
Miglitol (Glyset)	• 25 mg TID at the start of each meal.	100 mg TID		Flatulence, diarrhea, abdominal pain.	Digoxin, propranolol, ranitidine, GI enzymes
GLINIDES					
Nateglinide (Starlix)	• 120 mg TID, 1 to 30 minutes before meals. • Patients close to A1C goal may be started at 60 mg TID.	120 mg TID	60 mg	Hypoglycemia & weight gain	Beta-adrenergic blocking agents; drugs metabolized by the cytochrome p450 system; erythromycin; ketoconazole; miconazole; sulfonamides; MAO inhibitors; NSAIDS; anticoagulants (warfarin derivatives).

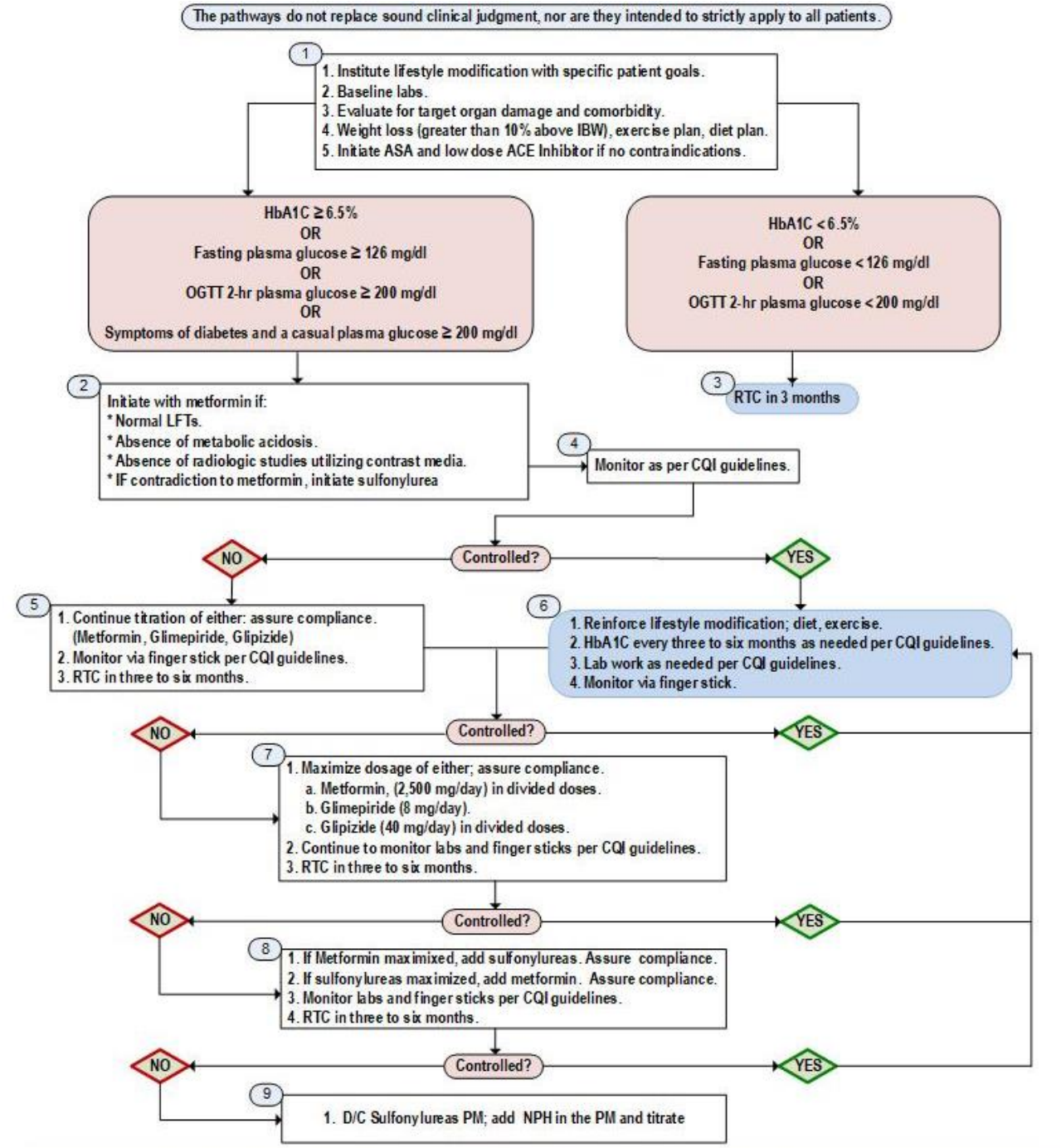
ORAL AGENTS FOR TREATMENT OF TYPE 2 DIABETES — DOSING AND SIDE EFFECTS					
Agent	**Initial Dose & Treatment**	**Maximum Dose**	**Initial Elderly Dose**	**Side Effects**	**Drug Interaction**
Repaglinide (Prandin)	• 0.5 mg with each meal if A1C <8%. • 1–2 mg with each meal if A1C ≥8%. • Increase by 1 mg weekly, as needed. → *Contraindicated in moderate-to-severe hepatic dysfunction.*	4 mg with meals (max 16 mg per day)	0.5 mg	Hypoglycemia & weight gain.	Same as nateglinide above.
DIPEPTIDYL PEPTIDASE 4 (DPP-4) INHIBITORS					
Alogliptin (Nesina)	• 25 mg daily. • If CrCl is 30 to 60 mL/min, initial dose is 12.5 mg daily. • If CrCl <30 mL/min, initial dose is 6.25 mg daily.	25 mg daily	25 mg daily	Arthralgia, nasopharyngitis, headache, upper respiratory infection.	MAO-Inhibitors, SSRIs, quinolone antibiotics, salicylates. → *May require dose reduction of concomitant insulin therapy. Concomitant SU use is not recommended; reduce SU dose if used.*
Linagliptin (Tradjenta)	• 5 mg once daily.	5 mg daily	5 mg daily	Same as alogliptin above.	CYP3A4 inducers, MAO-Inhibitors, SSRIs, quinolone antibiotics, salicylates. → *May require dose reduction of concomitant insulin therapy. Concomitant SU use is not recommended; reduce SU dose if used.*
Saxagliptin (Onglyza)	• 2.5 to 5 mg once daily. • If CrCl <50 mL/min, 2.5 mg once daily.	5 mg daily Max dose with strong CYP3A4/5 inhibitors is 2.5 mg daily.	2.5 mg	Same as alogliptin above.	Same as linagliptin **a**bove (drug interactions and cautions in yellow). Potential for additional drug interactions.
Sitagliptin (Januvia)	• 100 mg once daily. • If CrCl is 30-49 mL/min, dose is 50 mg daily. • If CrCl <30 mL/min, dose is 25 mg daily.	100 mg	100 mg	Same as alogliptin above.	Same as linagliptin **a**bove (drug interactions and cautions in yellow).

ORAL AGENTS FOR TREATMENT OF TYPE 2 DIABETES — DOSING AND SIDE EFFECTS					
Agent	**Initial Dose & Treatment**	**Maximum Dose**	**Initial Elderly Dose**	**Side Effects**	**Drug Interaction**
SODIUM-GLUCOSE COTRANSPORTER 2 (SGLT-2) INHIBITORS					
Canaglifozin (Invokana)	• 100 mg once daily. • Increase to 300 mg once daily. • If CrCl<45-60 mL/min, max dose is 100 mg daily. ➔ *Do not use if CrCl <45 mL/min.*	300 mg daily	100 mg daily	Genitourinary infections, polyuria, hypotension, increased fracture risk. ➔ *Ketoacidosis and serious UTI resulting in hospitalization is possible.*	Carbamazepine, efavirenz, fosphenytoin, MAO-Inhibitors, phenobarbital, phenytoin, primidone, rifampin, ritonavir, quinolone antibiotics. ➔ *Increased risk of hypotension and hyperkalemia with concomitant anti-HTN therapies.*
Dapagliflozin (Farxiga)	• 5 mg once daily. • May increase to 10 mg once daily. ➔ *Do not use if CrCl <60 mL/min.*	10 mg daily	5 mg daily	Same as canaglifozin above.	MAO-Inhibitors, SSRIs, salicylates, quinolone antibiotics.
Ertugliflozin (Steglatro)	• 5 mg once daily. • May increase to 15 mg once daily ➔ *Do not use if CrCl <45 mL/min.*	15 mg daily	5 mg daily	Same as canaglifozin above.	Same as dapagliflozin above.
Empagliflozin (Jardiance)	• 10 mg once daily, • May increase to 25 mg daily. ➔ *Do not use if CrCl <45 mL/min.*	25 mg daily	10 mg daily	Same as canaglifozin above.	Same as dapagliflozin above.
Adapted from: Federal Bureau of Prisons (2017). Management of Diabetes. http://www.bop.gov/resources/health_care_mngmt.jsp					

Type I Diabetes Mellitus Flow Chart



Type II Diabetes Mellitus Flow Chart



GLYCEMIC CONTROL INDEX

	Ideal	Goal	Consider Action
Fasting Glucose	80 – 120	100 – 140	Less than 80
Bedtime Glucose	100 – 140	120 – 160	Greater than 160
HbA1c	Less than 7%	Less than 7%	Greater than 8%

SULFONYLUREAS

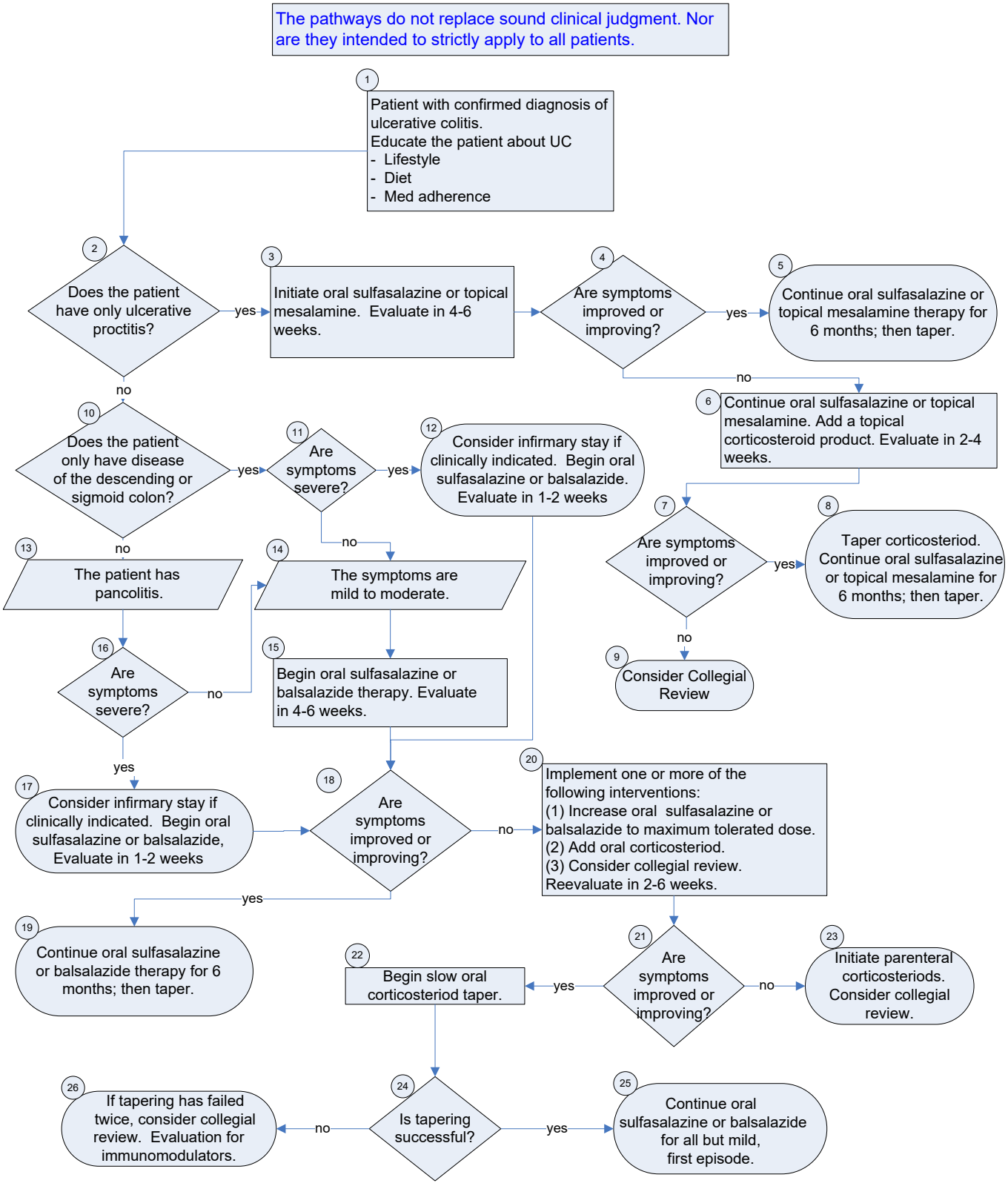
Glimepiride (Amaryl):	Glipizide:
1. Initially 1mg – 2 mg with breakfast	1. Initially 5 mg w/ breakfast
2. Maintenance dose: 2mg – 8 mg daily	2. Maintenance dose: 10 – 40 mg in divided doses

*American Diabetes Association. 2017 Standards of medical care in diabetes. *Diabetes Care*. 2017;40(suppl 1):S1–S135. Available at: http://care.diabetesjournals.org/content/40/Supplement_1

Rev. 1/5/2022

Gastroenterology

Management of Ulcerative Colitis



Adapted from the American College of Gastroenterology.

Clinical pathways do not replace sound clinical judgment, nor are they intended to strictly apply to all patients.
Each state/region may have individual variances, and a copy of those variances should be attached to this guideline.

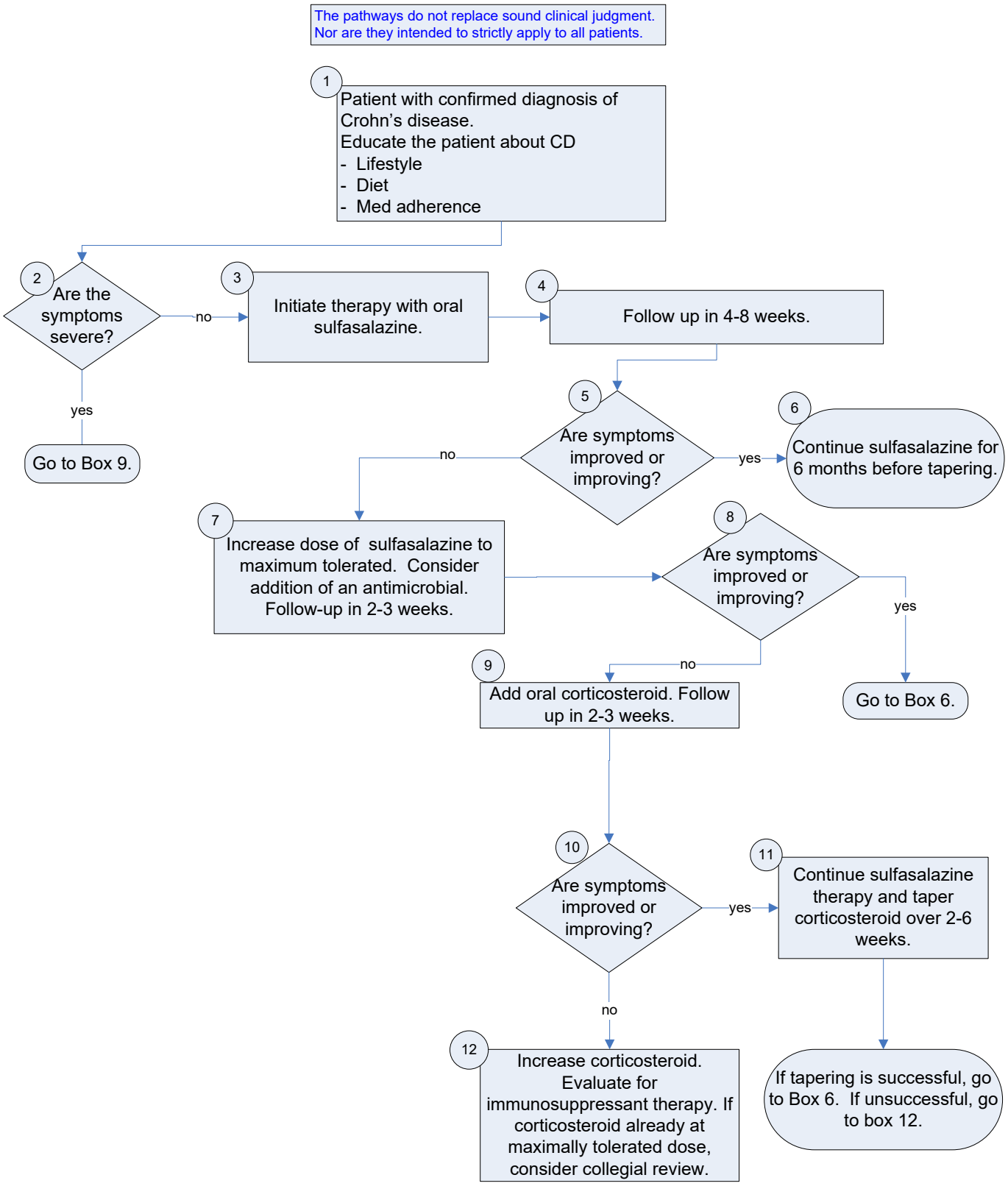
Medications Used to Treat Ulcerative Colitis

	ACTIVE DOSE	MAINTENANCE DOSE	SIDE EFFECTS*	24 hr. Therapy Cost $
SULFASALAZINE				
(Azulfidine) Tablets and enteric-coated tablets: 500 mg	4–6 g/day	Not effective	Nausea, vomiting, dyspepsia, anorexia, diarrhea, rash, yellow-orange urine and skin, photosensitivity	$
BALSALAZIDE				
(Colazal) Tablets 750 mg	6.75 g/day	3-6.75 g/day	Headache, abdominal pain, nausea, vomiting, diarrhea, arthralgia	$
MESALAMINE (5-ASA)				
(Asacol®) Delayed-release tabs 400 mg non-formulary	4.8 g/day	2.4 g/day	Tablets are noted with the most side effects. Abdominal pain or discomfort, belching, nausea, flatulence, headache, fever, pharyngitis, rash, flu syndrome	$$
(Pentasa®) Controlled-release caps 250 mg non-formulary	2–4 g/day	1.5–4 g/day		$$
(Canasa®) Suppository 500 mg non-formulary	500 mg/day	1 g/day		$$
(Rowasa® enema) Suspension 4 g/60 mL	2–4 g q. hs	2–4 g/day		$$$
OLSALAZINE (5-ASA)			Headache, diarrhea, pain or cramps, nausea, dyspepsia, arthralgia	
(Dipentum®) 250 mg capsule non-formulary	1.5–3 g/day	2–4 g/day		$$$
CORTICOSTEROIDS	**ACTIVE DOSE**	**MAINTENANCE DOSE**	**SIDE EFFECTS***	**COST $**
Prednisone	0.5 mg/kg/day	Not effective	Edema, insomnia, immuno-suppression, electrolyte disturbances, adrenal suppression	$
Hydrocortisone enema or foam non-formulary	1 daily at bedtime			$$
IMMUNOMODULATORS	**ACTIVE DOSE**	**MAINTENANCE DOSE**	**SIDE EFFECTS***	**COST $**
(Imuran®) Azathioprine 50 mg	1.5–2.5 mg/kg/day	1–1.5 mg/kg/day	Risk of infection, immuno - suppression, bond marrow suppression, hepatitis, pancreatitis	$
(Purinethol®) 6-Mercaptopurine non-formulary	1–2 mg/kg/day	1–1.5 mg/kg/day		$

**** Not all side effects listed are seen with different dosage forms. The listed side effects occur with a greater than 3% incidence.***

Adapted from the American College of Gastroenterology.

Management of Crohn's Disease


The pathways do not replace sound clinical judgment.
Nor are they intended to strictly apply to all patients.
1
Patient with confirmed diagnosis of Crohn's disease.
Educate the patient about CD
- Lifestyle
- Diet
- Med adherence
2
Are the symptoms severe?
no
3
Initiate therapy with oral sulfasalazine.
4
Follow up in 4-8 weeks.
yes
Go to Box 9.
5
Are symptoms improved or improving?
yes
6
Continue sulfasalazine for 6 months before tapering.
no
7
Increase dose of sulfasalazine to maximum tolerated. Consider addition of an antimicrobial. Follow-up in 2-3 weeks.
8
Are symptoms improved or improving?
yes
Go to Box 6.
no
9
Add oral corticosteroid. Follow up in 2-3 weeks.
10
Are symptoms improved or improving?
yes
11
Continue sulfasalazine therapy and taper corticosteroid over 2-6 weeks.
no
12
Increase corticosteroid. Evaluate for immunosuppressant therapy. If corticosteroid already at maximally tolerated dose, consider collegial review.
If tapering is successful, go to Box 6. If unsuccessful, go to box 12.

Medications Used to Treat Crohn's Disease

According to American College of Gastroenterology Guideline, mesalamine products have limited role in treatment of* ***Crohn's Disease*

	ACTIVE DOSE	MAINTENANCE DOSE	SIDE EFFECTS*	24 hr. Therapy Cost $
SULFASALAZINE			Nausea, vomiting, dyspepsia, anorexia, diarrhea, rash, yellow-orange urine and skin, photosensitivity	
(Azulfidine) Tablets and enteric-coated tablets: 500 mg	3–4 g/day	4 g/day		$
MESALAMINE (5-ASA)*				
(Asacol®) Delayed-release tabs 400 mg non-formulary	2.4 g/day	2.4 g/day	Tablets are noted with the most side effects. Abdominal pain or discomfort, belching, nausea, flatulence, headache, fever, pharyngitis, rash, flu syndrome	$$
(Pentasa®) Controlled-release caps 250 mg non-formulary	4 g/day	4 g/day		$$
(Canasa®) Suppository 500 mg-non-formulary	1 g/day	1 g/day		$$
(Rowasa® enema) Suspension 4 g/60 mL non-formulary	4 g q. hs	4 g/day		$$$
OLSALAZINE (5-ASA)			Headache, diarrhea, pain or cramps, nausea, dyspepsia, arthralgia	
(Dipentum®) 250 mg capsule non-formulary	1 g/day	1 g/day		$$$
CORTICOSTEROIDS	**ACTIVE DOSE**	**MAINTENANCE DOSE**	**SIDE EFFECTS***	**COST $**
Prednisone	0.5–1 mg/kg/day	Not effective	Edema, insomnia, immuno-suppression, electrolyte disturbances, adrenal suppression	$
Hydrocortisone enema or foam non-formulary	1 daily at bedtime			$$
IMMOMODULATORS	**ACTIVE DOSE**	**MAINTENANCE DOSE**	**SIDE EFFECTS***	**COST $**
(Imuran®) Azathioprine 50 mg	2–2.5 mg/kg/day	1–2 mg/kg/day	Risk of infection, immuno - suppression, bond marrow suppression, hepatitis, pancreatitis Peripheral neuropathy, nausea, leukopenia, questionable cancer	$
(Purinethol®) 6-Mercaptopurine-non-formulary	1–2 mg/kg/day	1–1.5 mg/kg/day		$
(Flagyl®) Metronidazole 250 mg	up to 10 mg/kg/day	Up to 250mg p.o. QID		$

** Not all side effects listed are seen with different dosage forms. The listed side effects occur with a greater than 3% incidence.*

Management of Gastroesophageal Reflux Disease (GERD)

Including Proton Pump Inhibitor (PPI) Taper

Management of Gastroesophageal Reflux Disease (GERD) Including Proton Pump Inhibitor (PPI) Taper

I. PURPOSE

The purpose of this document is to summarize current medical literature guidelines and recommendations concerning GERD management. References are listed in the appropriate section and include major gastroenterology organizations, FDA approval guidelines and medication package insert information.

II. BACKGROUND

Gastroesophageal Reflux Disease (GERD) is a commonly encountered diagnosis in clinical practice, affecting about 10–20% of people in Western countries on a weekly basis. A systematic review found that ≈ 38% of the general population complained of dyspepsia. Treatment for GERD is discussed below and generally involves proton pump inhibitors (PPIs). Patients taking PPIs for extended periods of time have been shown to be more susceptible to adverse events including hip, wrist, and spine fractures, C.Dif infections, pneumonia, hypomagnesemia, and vitamin B12 deficiency. Literature has documented overutilization of PPIs and lack of symptom re-evaluation in the ambulatory care setting. Thus, it is prudent to routinely evaluate the clinical need for PPIs in patients and attempt to discontinue PPIs in patients who may not require long-term therapy. Because abrupt PPI discontinuation can lead to gastric acid rebound, a slow taper is the preferred discontinuation method, as it can take three (3) months for gastric acid to return to pre-drug baseline levels.

III. DEFINITIONS

A. GERD: Symptoms or mucosal damage produced by abnormal reflux of gastric contents into the esophagus.

This definition has been revised over the years in the medical literature. Symptoms with or without esophageal mucosal injury both constitute the current GERD definition. GERD is further subdivided into two additional subcategories:

B. ERD: Erosive Reflux Disease

C. NERD: Non-erosive Reflux Disease

The symptoms of heartburn and regurgitation (below) are the most reliable for making a presumptive diagnosis based on history alone; however, symptom sensitivity has limitations. Studies have shown that the sensitivity of heartburn and regurgitation for the presence of EGD confirmed erosive esophagitis to be 30–76% and the specificity to be from 62–96%.

IV. SYMPTOMS AND RISK FACTORS

A. Symptoms highly specific for GERD:

1. Heartburn
2. Retrosternal burning/discomfort
3. Acid regurgitation
4. Belching
5. Symptoms often aggravated by recumbency or bending over
6. Symptoms often relieved by antacids

B. Alarm Signs and Symptoms that suggest complicated disease:

1. Dysphagia (difficulty swallowing)
2. Odynophagia (painful swallowing)
3. Bleeding
4. Weight loss
5. Anemia

C. Risk factors for Barrett's esophagus:

1. Twice as common in men than women
2. Tends to occur in middle-aged Caucasian men who have had heartburn for many (typically >10) years
3. Patients older than age 50 with significant heartburn or that which required regular use of medications to control heartburn for several years

V. GERD: PATIENT APPROACH (SEE ALGORITHM)

A. Patients presenting with uncomplicated GERD symptoms should have their current medications reviewed for those known to decrease lower esophageal LES/tone.

B. Medications that can decrease LES tone:

1. Nitrates
2. OCPs
3. Calcium channel blockers
4. Benzodiazepines
5. Tricyclic antidepressants

C. Changes to alternate medications maybe considered.

D. Medications that increase stomach acid and effect stomach lining, such as steroids and NSAIDs should be reviewed for necessity and length of treatment.

E. Lifestyle Modification:

1. Patients that present with symptoms highly specific for GERD without alarm symptoms should first be counseled on lifestyle modification. Numerous studies have indicated that lifestyle modification in uncomplicated GERD patients have shown to control symptoms. Patients should be educated about factors that may precipitate reflux.
2. Weight loss is recommended for GERD patients who are overweight or have had recent weight gain. Weight gain even in subjects with a normal BMI has been associated with new onset GERD symptoms. Multiple studies have demonstrated reduction in GERD symptoms with weight loss.
3. Head of bed elevation and avoidance of meals 2–3 h before bedtime for patients with nocturnal GERD.
4. Elimination of foods that can decrease LES tone: Includes chocolate, caffeine, alcohol, acidic foods such as oranges and tomatoes and/or spicy foods, citrus products, fatty foods, mint flavoring.

VI. GERD TREATMENT: PATIENT DIRECTED THERAPY

Antacids are options for patient-directed therapy for heartburn and regurgitation. These agents are useful in treatment of milder forms of GERD. Antacids have been shown to be more effective than placebo in the relief of symptoms induced by a heartburn promoting meal. These medications can

be used pre-meal or in the post prandial period and can be taken regularly for a trial period of 14 days. Success rates for these medications are increased with lifestyle modification (above). When symptoms persist despite continuous use or alarm symptoms or signs develop, the patient should be advised to seek medical attention.

VII. GERD TREATMENT: ACID SUPPRESSION

A. The proton pump is part of a cellular mechanism that maintains the acidic environment of the stomach. The pH balance of the bloodstream and other tissues is about 7.4; the stomach functions at a pH of around 2.0—many thousands of times more acidic. Other cells in the body would die at that level of acid, yet the proton pump and stomach lining support this acidity to facilitate digestion. Proton pump inhibitor drugs (PPIs) shut down this important physiological process. Acid suppression is the mainstay of therapy for GERD. PPIs provide the most rapid symptomatic relief and heal esophagitis in the highest percentage of patients. Although less effective than PPIs, histamine 2-receptor antagonists (H2RA) may be effective in some patients with less severe GERD.

B. Studies show that 70–80% of patients with erosive reflux disease (ERD) and 60% of patients with non-erosive reflux disease (NERD) demonstrate complete healing and relief after a standard eight (8) week course of PPI therapy. Partial relief of GERD symptoms after a standard eight (8) week course of PPI therapy has been found in 30–40% of patients and did not differ in patients taking PPI once or twice daily. PPIs should be taken first thing in the morning, 30–60 minutes before a meal to assure maximal efficacy.

C. The FDA has approved PPI use for **maximum of eight (8) weeks** for the following conditions:

1. Symptomatic GERD
2. Healing erosive esophagitis
3. Duodenal ulcers
4. Gastric Ulcers
5. H. Pylori eradication (as part of combination therapy)
6. Treatment of NSAID-induced gastric ulcers

D. The risks associated with prolonged PPI use are well documented and include:

1. Profound increases in the prevalence and distribution of chronic atrophic gastritis in patents with H Pylori infection
2. Reversible (on stopping chronic PPI) gastric endocrine cellular hyperplasia
3. Parietal cell hyperplasia and hypertrophy resulting from hypergastrinemia associated with hypochlorhydria induced by a PPI. This provides the physiological basis for rebound hyperchlorhyria transiently associated with cessation of therapy with a PPI
4. Malabsorption (due to increased gut pH) of nutrients: B12, Calcium, Iron Deficiencies
5. Risk of gastrointestinal bacterial overgrowth (secondary to more alkaline stomach pH)
6. Risk factor for Clostridium difficile infection
7. Risk factor for community acquired pneumonia
8. Increase fracture risk: for chronic PPI use of one (1) year or longer, or at high doses for shorter duration (Males = Females)
9. Hypomagnesemia: Seen in some patients; monitor those with known arrhythmia
10. Spontaneous Bacterial Peritonitis in Cirrhotic patients

E. The FDA has published a statement regarding the potential risks of chronic PPI use:

"The clinical risk/ benefit of any medical intervention or therapy always should be evaluated for each patient and appropriate use of therapy should be directed accordingly. Because PPIs are overprescribed in many patients, in particular for continued long-term use, the clinical effects always should be reviewed and attempts should be justified to stop any therapy that may not be needed."

VIII. PPI USE

A. An 8-week course of PPIs is the therapy of choice for both symptom relief and healing of erosive esophagitis, with success rates of 70–80% with ERD and 60% with NERD. There are no major differences in efficacy between the different PPIs. PPI therapy should be initiated at once a day dosing 30–60 minutes before the first meal of the day. Following this initial 8-week course, patients should be re-seen to evaluate symptom control, compliance, lifestyle and dietary modifications and presence alarm signs/symptoms. Providers need to be educated on the standard success rates of the 8-week PPI course and the physiological basis for rebound symptoms that come with abrupt PPI cessation. There are many studies that report "dependence issues" with PPIs and when a PPI is started, physicians typically have difficulty stopping it.

B. The following recommendations on weaning a patient's PPI are as follows:

1. Skip a PPI dose every 3rd day substituting H2RA once daily for 14 days
2. Then skip a PPI dose every other day with H2RA substitution for 14 days
3. Then eliminate the PPI and switch to an H2RA for PRN use for the next 30–60 days
4. Then use antacids or H2RAs on a PRN basis for patient directed therapy (above)

C. The FDA has approved PPI use for longer than eight (8) weeks for the following conditions:

1. Maintenance of refractory erosive esophagitis
2. Hypersecretory conditions (i.e., Zollinger—Ellison Syndrome)
3. Maintenance of unhealing duodenal ulcers
4. Biopsy proven Barrett's esophagus
5. Prevention of NSAID-induced gastric ulcers (up to 12 week maximum)

IX. REFERENCES

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4. What are the effects of medical therapy of parietal cells? What are the consequences when medical treatment is stopped? Tougas, Riddell, Driman. OLESO Knowledge/ Vol 6 Barrett's Esophagus/ Articles/ vol 2/art007.html
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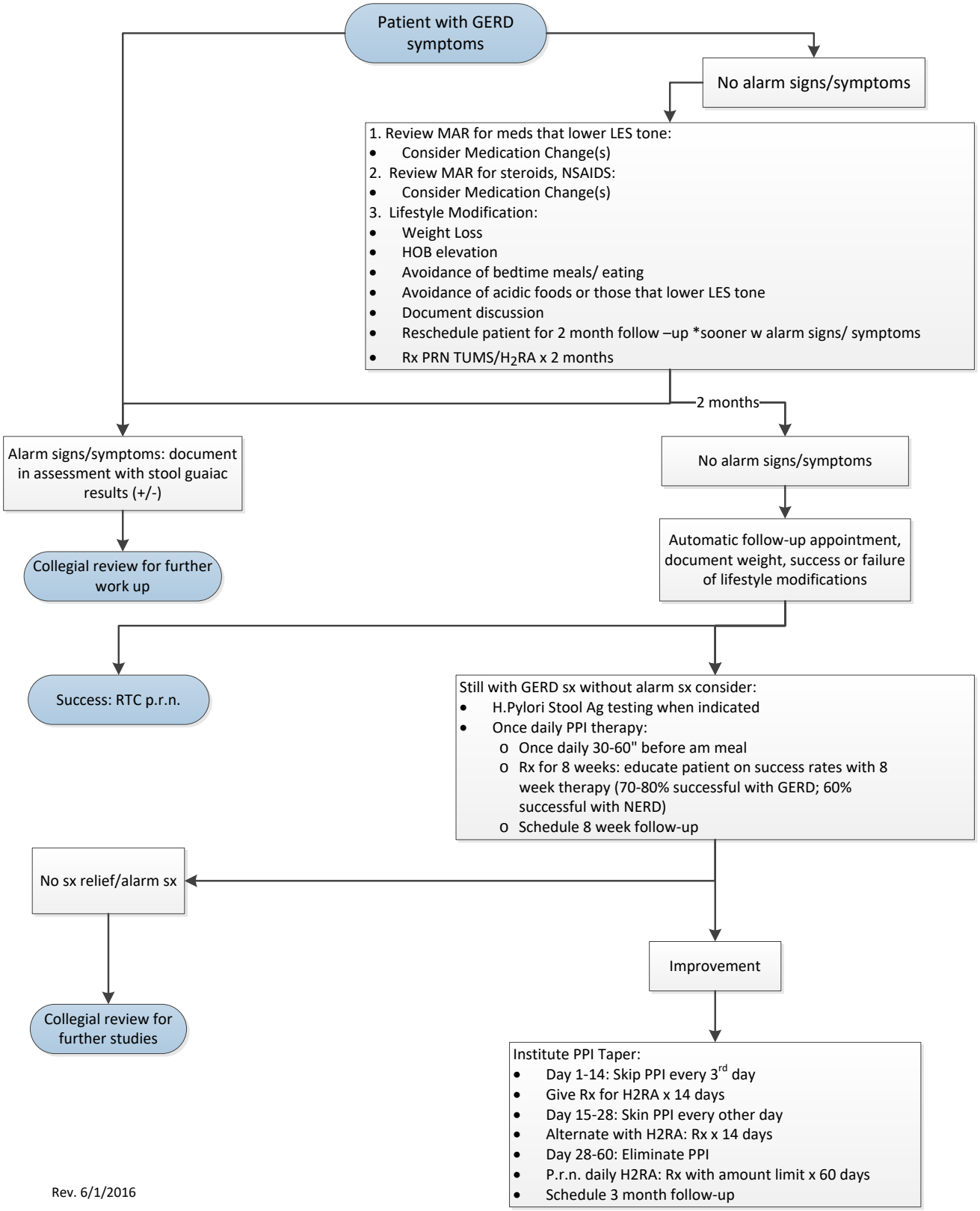
GERD: Patient Algorithm and PPI Taper



Rev. 6/1/2016

Adapted from the American College of Gastroenterology.

Clinical pathways do not replace sound clinical judgment, nor are they intended to strictly apply to all patients.

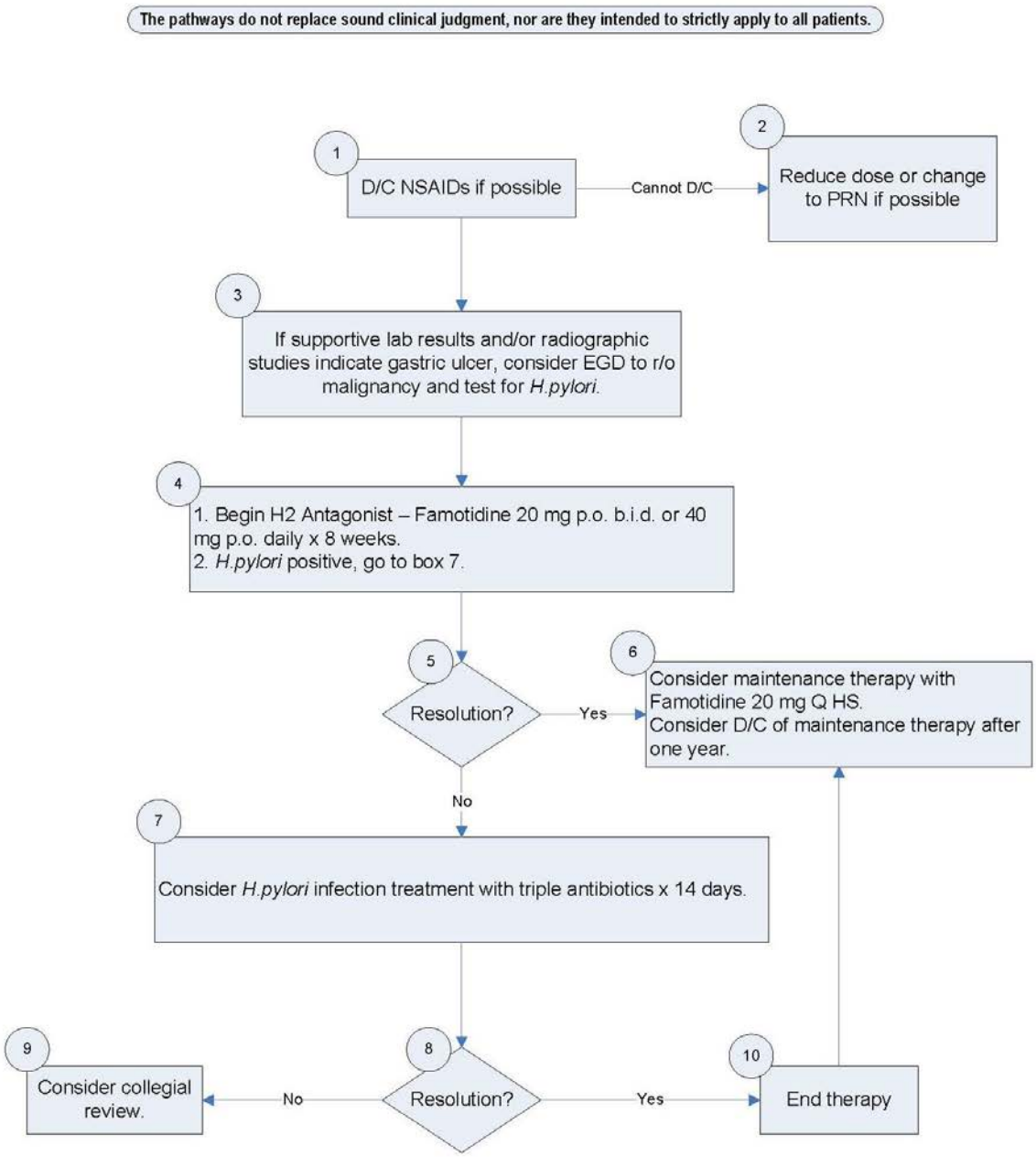
Each state/region may have individual variances, and a copy of those variances should be attached to this guideline.

Medications Use to Treat Uncomplicated Gastroesophageal Reflux Disease/Dyspepsia

	ACTIVE DOSE	MAINTENANCE DOSE	SIDE EFFECTS*	24 hr. Therapy Cost $
HISTAMINE 2 RECEPTOR ANTAGONISTS (H2-blockers)				
Ranitidine	600 mg/24 hrs.	300 mg/24 hrs.	Dizziness, sedation, headache, rash, nausea/vomiting, constipation, diarrhea	$$
Famotidine	40 mg /24 hrs.	40 mg/24 hrs.		$
PROTON PUMP INHIBITORS				
Prilosec OTC	40 mg/q.d.	20/q.d.	Headache, dizziness, rash, diarrhea, nausea/vomiting, abdominal pain, taste perversion	$
PROKINETIC AGENTS				
Metoclopramide	40 mg/24 hours	5 mg q.i.d.	Restlessness, drowsiness, diarrhea, weakness, rash, nausea, depression, insomnia	$
ANTACIDS				
Maalox	45 ml/Q3–6 hrs.	15–45 ml/Q3–6 hrs.	Constipation, stomach cramps, impaction, nausea, vomiting, discolored feces	$
Tums	2 T q. 2 hrs.	2 T q.i.d.	Flatulence, headache	$

Adapted from the American College of Gastroenterology.

Management of Suspected of Recurrent Gastric or Duodenal Ulcer



*Adapted from UTMB Utilization Guidelines
Rev. 4/27/2016

Medications Used to Treat Suspected or Recurrent Gastric or Duodenal Ulcer

	ACTIVE DOSE	MAINTENANCE DOSE	SIDE EFFECTS*	24 hr. Therapy Cost $
Ranitidine (Zantac®)	600 mg/day	150 mg/day	Headache, diarrhea, nausea, elevated liver enzymes, blurred vision, vertigo, malaise, thrombocytopenia	$$
Famotidine (Pepcid) duodenal ulcer only	20 mg/day	20 mg/day		$
Triple Therapy	Dose/Frequency	Duration		
Omeprazole (Prilosec)	20 mg BID	10–14 days		$
Amoxicillin	1 gm BID	10–14 days		$
Clarithromycin (Biaxin)	500 mg BID	10–14 days		$$
Metronidazole (Flagyl)-use if PCN ALLERGY only	500 mg BID	10–14 days		$

** Not all side effects listed are seen with different dosage forms. The listed side effects occur with a greater than 3% incidence.*[1,2]

[1] *Chey WD, Wong BCY, et al. "American College of Gastroenterology Guideline on the Management of Helicobacter pylori Infection", Am J Gastroenterol 2007; 102: 1808-25.*

[2] *Crowe SE. "Treatment regimens for Helicobacter pylori", www.uptodate.com*

General Surgery

General Surgery Guidelines

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Gallstone Disease (Complicated) The term gallstone disease refers to gallstones that cause symptoms. The term complicated gallstone disease refers to gallstone-related complications which include **acute cholecystitis, cholangitis, gallstone pancreatitis and gallstone ileus.**	Consider: Evaluation of the patient. The selection of work-up/therapy should be individualized and based upon consideration of the presentation, the patient's known history and examination, availability of a clinician to evaluate, capabilities of the facility for patient monitoring, and the availability of laboratory studies.	At the discretion of the clinician depending on the clinical scenario. Consider: RUQ ultrasound Consider Emergency Room (ER) evaluation if signs/symptoms of peritonitis, febrile, jaundiced, abnormal laboratory studies, non-resolving biliary colic or clinically unstable.
Gallstones (Incidental Finding) Most individuals with gallstones are asymptomatic. In such individuals, gallstones are detected incidentally on abdominal imaging. The majority of patients found to have incidental gallstones will remain asymptomatic. Patients who develop symptoms typically report biliary colic. It is unusual for a previously asymptomatic patient to present with complications of gallstone disease without first having had episodes of biliary colic.	Consider: Patient education about the findings recognizing the majority of patients with gallstones are asymptomatic and will remain so throughout their lives. Of those with incidental (asymptomatic) gallstones, it is estimated that approximately 15 to 25 percent will become symptomatic after 10 to 15 years of follow-up.	Referral is not typically needed for asymptomatic patient so it is at the discretion of the clinician depending on the clinical scenario.
Gallstone Disease (Uncomplicated) The term gallstone disease refers to gallstones that cause symptoms. The term uncomplicated gallstone disease refers to **biliary colic in the absence of gallstone-related complications.**	Consider: Evaluation of the patient and potential urgent laboratory studies (CBC, CMP, amylase and lipase). The selection of work-up/therapy should be individualized and based upon consideration of the presentation, the patient's known history and examination, availability of a clinician to evaluate, capabilities of the facility for patient monitoring, and the availability of laboratory studies. Uncomplicated gallstone disease should be suspected in a patient with biliary colic, a normal physical examination, and	At the discretion of the clinician depending on the clinical scenario. Consider RUQ ultrasound.

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	normal laboratory tests (CBC, LFTs, amylase and lipase). Such patients should generally undergo a RUQ ultrasound study to determine if there are gallbladder stones or sludge (unless the diagnosis of stones or sludge is already known). Consider: Low-fat diet, pain medication, possible intravenous fluids, infirmary or observation housing. Patient education about gallstones, regular exercise, potential weight loss, and avoiding triggers.	
GI Bleeding (Occult) Consider GI malignancy, ulcer, fissures, bowel or vascular disease; **For guaiac + stools**, after avoidance from red meat and Vitamin C	Consider: Determine etiology through history and examination, consider checking a CBC. The selection of a treatment plan should be individualized and based upon the patient's known history and examination, laboratory studies, etc.	At the discretion of the clinician depending on the clinical scenario. Upper endoscopy and/or colonoscopy may be indicated depending on clinical situation, generally in consultation with specialist.
GI Bleeding (Overt) (Tarry stools, melena, hematemesis, coffee-ground emesis) **Stool or emesis guaiac** is positive	Consider: The selection of a treatment plan should be individualized and based upon consideration of the extent of disease, the patient's known history and examination, hemodynamic stability, treatment availability, availability of a clinician to evaluate, capabilities of the facility, availability of STAT laboratory studies.	At the discretion of the clinician depending on the clinical scenario but generally will need referral urgently or emergently depending on the presentation.
Hemorrhoids **Symptoms:** pain, protrusion; or blood on stool with bowel movement. **Rectal Exam:** soft varicosity with masses.	Consider: Evaluation and education of the patient. The selection of therapy should be individualized and based upon consideration of the extent of disease, the patient's known history and examination, treatment availability, and the response to previous treatments. **General**: Numerous medications, many over-the-counter, are available to treat hemorrhoids. Available Formulary Medications:	At the discretion of the clinician depending on the clinical scenario. Consider: Patients with hemorrhoids and one of the following conditions should generally be considered for possible colonoscopy regardless of age: • Anemia • Bleeding that is atypical of hemorrhoids

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	• Hydrocortisone 1% Rectal Cream (Anusol-HC) • Hemorrhoidal suppositories (Preparation H) • Nupercainal (Dibucaine 1%) local anesthetic ointment **Thrombosed:** Consider lancing, follow with treatment above. Advise or prescribe increase fiber and increased water intake.	• A concomitant change in bowel patterns • A personal history of colorectal polyps • A family history of inflammatory bowel disease or colorectal cancer in a first-degree relative • Other suspected pathologic pelvic changes that could contribute to the patient's symptoms.
Hernia (Abdominal Wall and/or Inguinal)	Consider: See Wexford's Guideline "The Repair of Abdominal Wall/Inguinal Hernias."	See Wexford's Guideline "The Repair of Abdominal Wall/Inguinal Hernias."
Ingestion of Foreign Body	Consider: If clinically stable, consider monitoring the patient with serial KUB x-rays. Most items will pass uneventfully thru the intestine if seen initially the stomach/intestines.	At the discretion of the clinician depending on the clinical scenario and the items reportedly swallowed. Consider Emergency Room (ER) evaluation if signs of peritonitis, obstruction, perforation, or clinically unstable. Consider: Urgent surgical referral if failure to progress or high-risk objects (large, sharp) or high-risk patient (intrinsic bowel disease, adhesions).

The Repair of Abdominal Wall/Inguinal Hernias

An abdominal hernia is a protrusion of abdominal contents through the abdominal wall and/or muscle fascia that normally contains it. Abdominal wall hernias are very common. Hernias may be congenital or acquired.

I. THE TWO MAIN ETIOLOGICAL FACTORS FOR ACQUIRED HERNIAS ARE:

A. Increased intra-abdominal pressure (e.g., straining, lifting or obesity)

B. Abdominal weakness (e.g., advancing age or malnutrition)

II. IN GENERAL, HERNIAS MAY BE CLASSIFIED AS:

A. Reducible

B. Incarcerated

C. Strangulated

Reducible hernias, in which the herniated contents may be returned to the abdominal cavity either spontaneously or manually, generally pose no medical risk to the patient. Incarcerated hernias contain viable abdominal contents that cannot be easily returned to the abdominal cavity, usually due to the presence of a narrow opening ("neck") relative to the size of the protrusion. Incarcerated hernias are at risk for strangulation and require urgent surgical surveillance. Strangulated hernias contain abdominal contents whose venous return has been compromised and thus represent a surgical emergency.

III. COMPLICATIONS OF HERNIA REPAIR INCLUDE:

A. Infection

B. Urinary retention

C. Scrotal hematoma

D. Damage to the ileoinguinal nerve

E. Ischemic orchitis

IV. RECURRENT HERNIA

A. Recurrence of hernias after surgical repair may occur and varies with herniorrhaphy technique and the presence of recognized risk factors:

1. Longstanding large hernia (poor tissue quality)
2. Overly rapid return to daily activity after repair
3. Incomplete surgical dissection and
4. Comorbid conditions, such as obesity, corticosteroid use, poorly-controlled diabetes mellitus and COPD.

Each subsequent operation for recurrent hernia is more technically difficult and carries an increasing rate of failure. An operation to repair a recurrent hernia has a 1 in 5 chance of failing, and additional operations approach a 50% failure rate.

In summary, herniorrhaphy is not a benign surgical procedure, and the risk factors listed above are often compounded in the correctional setting.

B. Based upon the current medical literature regarding the natural history of abdominal hernias, their repair and recurrence, it is Wexford Health's position that:

1. Patients with stable abdominal wall hernias are not, in general, candidates for herniorrhaphy and will be monitored and treated with appropriate non-surgical therapy.
2. Patients with incarcerated hernias are usually candidates for herniorrhaphy and should be considered for early surgical evaluation.
3. Patients with strangulated abdominal wall hernias are candidates for herniorrhaphy and should be referred urgently for surgical evaluation.
4. Hernias which do not impact on a patient's ADLs in this setting would not be in consideration for repair.

Decisions regarding patient suitability for consideration of abdominal wall herniorrhaphy must be made on a case-by-case basis. These recommendations are intended only as a guide for the site physician and are not intended to replace hands-on clinical judgment.

Hematology Guidelines

Hematology Guidelines

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Anemia See following sub-categories: • Microcytic • Normocytic • Macrocytic	This MCV-based approach addresses anemia in healthy outpatients, which is often an incidental finding or may be identified when a CBC is performed to evaluate mild symptoms such as fatigue. This approach is not appropriate for individuals who are acutely ill with fever, bleeding, neurologic symptoms, or any severe cytopenia (hemoglobin <7 to 8 g/dL; platelet count <50,000/microL, absolute neutrophil count [ANC] <1000/microL). It may be helpful to consider the history, CBC, MCV, and reticulocyte count (if available) simultaneously.	See sub-categories: • Microcytic • Normocytic • Macrocytic
Anemia: Microcytic (MCV <80 fL) Common Causes: • Iron-Deficiency • Thalassemia • Anemia of Chronic Disease (Less Likely) • Anemia of Acute Inflammation (Less Likely)	1. Consider establishing etiology if unknown 2. Consider the patient's known medical history 3. Labs to consider: Reticulocyte count, serum iron, transferrin/TIBC, ferritin 4. Additional labs to consider depending on the clinical scenario: hemoglobin electrophoresis, if considering potential GI source consider obtaining stool occult blood testing x 3 / FIT testing 5. Females: Consider questioning patient about menses. Consider performing pelvic exam 6. Treatment is dependent on potential cause: Consider Ferrous Sulfate 325 mg b.i.d. for one month; if CBC improves, continue to treat for approximately 6 months.	At the discretion of the clinician depending on the clinical scenario. Consider colonoscopy, upper endoscopy Females: Consider pelvic ultrasound
Anemia: Normocytic (MCV 80-100fL) Common Causes: • Iron Deficiency	1. Consider establishing etiology if unknown 2. Consider the patient's known medical history	At the discretion of the clinician depending on the clinical scenario. Consider possible hematology consultation if severe or does

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
• Vitamin B12 Deficiency • Folate Deficiency • Anemia of Chronic Disease • Anemia of Acute Inflammation • Medication-Induced • Infection • Chronic Liver Disease • Chronic Alcohol Use • Hemolysis • Hypothyroidism • Other Potential Causes	3. Review medications 4. Labs to consider: Reticulocyte count, peripheral smear, CMP 5. Additional labs to consider: Additional or subsequent testing should be based on the clinical scenario 6. Consider underlying disease 7. Treatment: Consider addressing co-morbid or underlying condition	not correlate with co-morbid condition.
Anemia: Macrocytic (MCV >100fL) Common Causes: • Vitamin B12 Deficiency • Folate Deficiency • Copper Deficiency • Anemia of Chronic Disease • Anemia of Acute Inflammation • Medication-Induced • Chronic Liver Disease • Chronic Alcohol Use • Myelodysplastic Syndrome • Hypothyroidism • Other Potential Causes	1. Consider establish etiology if unknown 2. Consider the patient's known medical history 3. Review medications. 4. Labs to consider labs: Reticulocyte count, CMP, Vitamin B-12, folate, TSH 5. Additional labs to consider: Additional or subsequent testing should be based on the clinical scenario 6. Treatment: Consider addressing underlying cause or underlying condition	At the discretion of the clinician depending on the clinical scenario. Consider possible hematology consultation if severe or does not correlate with co-morbid condition.
Lymphocytosis The normal range (i.e., two standard deviations above and below the mean) for the white blood cell (WBC) count in adults is 4400 to 11,000 cells/microL in most clinical laboratories. Lymphocytes generally constitute 8 to 33 percent of WBCs in peripheral blood.	Consider: Urgency of evaluation — The urgency of evaluation of lymphocytosis is guided by the patient's clinical condition, the degree and rate of rise of lymphocytosis (if known), and worrisome findings (e.g., leukemic blasts) on the blood smear. If the cause of lymphocytosis is not known, an absolute lymphocyte count (ALC) >50,000 cells/microL may require	At the discretion of the clinician depending on the clinical scenario. Consider possible hematology consultation depending on the clinical situation or if the lab results do not correlate with known condition.

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
• **Absolute lymphocyte count** – The absolute lymphocyte count (ALC) is used to quantitate lymphocytes in peripheral blood (rather than the percentage of lymphocytes in the WBC differential count). • **ALC is calculated as follows**: ALC (cells/microL) = WBC (cells/microL) x percent lymphocytes ÷ 100 • **Normal values for ALC** generally correspond to 1000 to 4000 lymphocytes/microL, but may vary in different laboratories. • **Lymphocytosis** corresponds to ALC >4000 cells/microL for adults. Common Causes: • Infectious Causes • Drug Hypersensitivity Reactions • Asplenia • Other	prompt evaluation and hematology consultation to make an initial assessment about the urgency of further testing. Lab testing to consider: The abnormal CBC and differential count should be repeated to exclude laboratory error. Additional lab testing to consider: CMP, ESR, and CRP Further testing should be based on the clinical presentation and the patient's history and examination Treatment to consider: In general, reactive lymphocytosis can be expected to persist while the underlying inflammatory and/or infectious process is active. Lymphocytosis caused by an acute condition (e.g., infection) should resolve within one to two months; a longer duration of lymphocytosis might raise concerns regarding an underlying malignant process.	
Lymphocytopenia **(See above)** **Lymphocytopenia** corresponds to ALC <1000 cells/microL for adults. Lymphocytopenia may be caused by many conditions. Examples include viral infections, such as HIV, influenza, coronaviruses (e.g., SARS, COVID-19), hepatitis, measles; bacterial, mycobacterial, fungal, and parasitic infections; protein-energy undernutrition; systemic diseases; congenital immunodeficiency disorders, such as common variable immunodeficiency; and chemotherapy or immunosuppressive therapy, including glucocorticoids.	Determine etiology. HIV testing. Review medications. Prevention of opportunistic infections as appropriate.	At the discretion of the clinician depending on the clinical scenario. Consider hematology consultation if persistent. Consider hospitalization if febrile.

Diagnosis	Onsite Care to Consider	Offsite Care to Consider

Neutropenia
• Neutropenia refers to a decrease in circulating neutrophils, which for adults corresponds to <1500 cells/microL in most clinical laboratories.
• Neutropenia can be categorized as:
  • Mild – ANC ≥1000 and <1500 cells/microL
  • Moderate – ANC ≥500 and <1000 cells/microL
  • Severe – ANC <500 cells/microL
• The causes of neutropenia vary and include:
• Benign ethnic neutropenia – Benign ethnic neutropenia (BEN) is an inherited cause of mild/moderate neutropenia in individuals of African descent and certain other ethnic groups that is not associated with increased infections.
• Familial neutropenia
• Congenital neutropenia
• Infection – Neutropenia can be seen with viral (e.g., hepatitis, HIV, Epstein-Barr virus [EBV]), bacterial, parasitic, and rickettsial infections.
• Medications – Predictable, dose-dependent effects of cytotoxic or immunosuppressive agents are the most common reason for medication-associated neutropenia.
• Other medications have been associated with severe idiosyncratic isolated neutropenia, which typically occurs within three months of starting a new drug.
	Consider: Confirmation that the neutropenia is real through confirmation and peripheral smear review.
	
	Additional lab testing that may be considered include ESR, CRP, CMP, HIV, HCV AB, HBsAG, vitamin B12, folate, and copper levels.
	
	The selection of evaluation and/or treatment should be individualized and based upon consideration of the patient's history and exam, metabolic abnormalities, extent of disease, patient's risk of complications from the known or unknown disease, and treatment and/or clinician availability, and the response to any previous treatments.
		At the discretion of the clinician depending on the clinical scenario.
		
		Consider: The urgency of evaluation of neutropenia is guided by the patient's clinical condition, severity of neutropenia, and the presence of worrisome findings on the blood smear. Management of infections and other emergency conditions should not be delayed by evaluation of the cause of neutropenia.

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
• Nutritional – Deficiencies of dietary vitamins and minerals (e.g., vitamin B12, folate, copper) typically cause neutropenia in association with other cytopenias • Hematologic malignancies • Rheumatologic disorders – Rheumatoid arthritis, systemic lupus erythematosus, and other rheumatologic disorders may be associated with neutropenia • Autoimmune neutropenia • Aplastic anemia – Neutropenia may be the initial or predominant manifestation, but aplastic anemia is typically manifest as pancytopenia • Chronic idiopathic neutropenia		
Pancytopenia Pancytopenia refers to decreases in all peripheral blood lineages • Red blood cells – Hemoglobin <12 g/dL for non-pregnant women and <13 g/dL for men • Absolute neutrophil count (ANC) <1800/microL • Platelets – Platelet count <150,000/microL While there are numerous possible causes of pancytopenia, the differential diagnosis should narrow following an initial history and physical examination, screening laboratory studies, and examination of the peripheral blood smear. Initial testing should also identify urgent/emergent situations and determine the need for (and urgency of) hematology or emergency room referral.	Consider: Potential explanations for pancytopenia should emerge from the initial history, physical examination, screening laboratory studies, and review of a peripheral blood smear. Additional studies or referrals will depend on the working or known diagnoses. The selection of evaluation and/or treatment should be individualized and based upon consideration of the patient's history and exam, metabolic abnormalities, extent of disease, patient's risk of complications from the known or unknown disease, and treatment and/or clinician availability, and the response to any previous treatments.	At the discretion of the clinician depending on the clinical scenario. Consider hematology consultation if persistent depending on the clinical scenario. Consider hospitalization if febrile.

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Thrombocytopenia Degrees of thrombocytopenia can be further subdivided into: • Mild (platelet count 100,000 to 150,000/microL) • Moderate (50,000 to 99,000/microL) • Severe (<50,000/microL) These numbers, however, must be interpreted in the context of the underlying disease, and higher or lower values may be expected for certain conditions.	Consider: Confirmation that the thrombocytopenia is real (e.g., not a laboratory error or an in vitro artifact) is done by repeating the CBC and reviewing the peripheral blood smear (or requesting review), especially if the platelet count does not make sense within the context of the clinical picture. Potential explanations for thrombocytopenia may emerge from the initial history, physical examination, screening laboratory studies, and review of a peripheral blood smear. Examination generally should include attention to the skin (e.g., petechiae, purpura, ecchymosis), liver, spleen, and lymph nodes. Additional studies may include testing for HIV, HCV Ab, HBsAG. Potential referrals will depend on the working or known diagnoses. The selection of evaluation and/or treatment should be individualized and based upon consideration of the patient's history and exam, metabolic abnormalities, extent of disease, patient's risk of complications from the known or unknown disease, and treatment and/or clinician availability, and the response to any previous treatments.	At the discretion of the clinician depending on the clinical scenario. Consider hematology consult or emergency room, depending on the clinical scenario.
Thrombocytosis Platelet >450,000/microL **Reactive processes** account for most cases of thrombocytosis in all age groups and clinical settings. Common causes of reactive thrombocytosis include: • Anemia/Blood loss – Iron deficiency, blood loss, hemolysis • Infection – Viral, bacterial, mycobacterial, and fungal causes	Consider: Confirmation that the thrombocytosis is real through repeat testing and peripheral smear review. Additional lab testing that may be considered include ESR, CRP, iron studies, ferritin The selection of evaluation and/or treatment should be individualized and based upon consideration of the patient's history and exam, metabolic abnormalities, extent of disease, patient's risk of complications from the known or unknown disease, and treatment and/or	At the discretion of the clinician depending on the clinical scenario. Consider hematology consult, depending on the clinical scenario.

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
• Non-infectious inflammation – Malignancy, rheumatologic conditions, trauma, reactions to medications • Post-splenectomy – Post-splenectomy or functional asplenia (e.g., sickle cell disease) Non-reactive causes include the potential of malignancy.	clinician availability, and the response to any previous treatments. Consider reducing the risk of thrombosis in select patients. Consider: Potential treatment of the underlying condition if reactive.	

Hyperbaric Oxygen Therapy (HBO) Treatment Guidelines

Hyperbaric Oxygen Therapy (HBO) Treatment Guidelines

I. DEFINITION OF TREATMENT:

Hyperbaric oxygen (HBO) is a treatment, in which a patient breathes 100% oxygen intermittently while inside a treatment chamber at a pressure higher than sea level pressure (i.e., >1 atmosphere). In certain circumstances, it represents the primary treatment modality, while in others it is an adjunct to surgical or pharmacologic interventions.

Treatment can be carried out in either a mono - or multiplace chamber. The former accommodates a single patient; the entire chamber is pressurized with 100% oxygen, and the patient breathes the ambient chamber oxygen directly. The latter holds two or more people and the chamber is pressurized with compressed air while the patients breathe 100% oxygen via masks, head hoods, or endotracheal tubes. According to the UHMS definition and the determination of The Centers for Medicare and Medicaid Services (CMS) and other third party carriers, breathing 100% oxygen at 1 atmosphere of pressure or exposing isolated parts of the body to 100% oxygen does not constitute HBO_2 therapy. The patient must receive the oxygen by inhalation within a pressurized chamber. Current information indicates that pressurization should be to 1.4 atm abs or higher.

II. COVERED CONDITIONS:

The guideline of covered conditions has been developed utilizing the guidelines of CMS (Center for Medicare and Medicaid Services) and the Undersea and Hyperbaric Medical Society.

A. Acute carbon monoxide intoxication

B. Air or gas embolism

C. Decompression illness

D. Gas gangrene (Clostridial myositis and myonecrosis)

E. Crush injuries and other acute traumatic ischemias when combined with other standard therapeutic measures

F. Progressive soft tissue necrotizing infections (necrotizing fasciitis)

G. Acute peripheral arterial insufficiency

H. Preservation of compromised skin grafts and flaps

I. Chronic refractory osteomyelitis unresponsive to conventional medical and surgical treatment over a prolonged period of time

J. Osteoradionecrosis as an adjunct to conventional therapy

K. Cyanide poisoning

L. Acute thermal burn injury consisting of deep second or third degree burns

M. Actinomycosis as an adjunct when treatment utilizing conventional medical and surgical treatment has failed

N. Idiopathic acute sensoneural hearing loss

O. Diabetic wounds of the lower extremity which meet all over these criteria:

   1. Are due to type I or II diabetes

   2. Have a wound classification of Wegner grade III or higher

   3. Have failed an adequate course of wound care utilizing standard measures over a prolonged time frame.

III. CONDITIONS THAT ARE NOT COVERED:

Those conditions which are **NOT** covered include, but are not limited to:

A. Chronic cutaneous, decubitus, or venous ulcers
B. Chronic peripheral vascular insufficiency
C. Myocardial infarction
D. Cardiogenic shock
E. Sickle cell anemia
F. Acute or chronic cerebral vascular insufficiency
G. Organ transplantation
H. Pulmonary emphysema
I. Multiple sclerosis
J. Acute cerebral edema
K. Arthritic disease
L. Anemia

Infectious Diseases

Hepatitis B Guidelines

I. PURPOSE:

The purpose of this guideline is to provide the most clinically up to date recommendations for the medical management of correctional patients with Hepatitis B.

II. REFERENCES:

A. Chronic Hepatitis B: Update 2009. American Association for the Study of Liver Diseases. Hepatology, September 2009, pages 661–662 and pages 1–36.

B. Stepwise Approach for Detecting, Evaluating, and Treating Chronic Hepatitis B Virus Infection. Federal Bureau of Prisons Clinical Practice Guidelines. January 2011. http://www.bop.gov/news/medresources.jsp.

III. PREVALENCE OF CHRONIC HBV IN CORRECTIONS:

In 2008 it was estimated that 1.0-3.7% of the total US custody population in federal and state prisons had serologic markers of chronic HBV infection. Based on this estimate the prevalence of chronic HBV is 2–6 times higher among prison residents than in the non-incarcerated community.

IV. HBV TRANSMISSION

In the US, which is considered a low-prevalence area, injection drug use and sexual intercourse with an infected partner account for 50–80% of all new cases of HBV infection. Perinatal transmission from mother to child and household contact with a person infected with HBV are the primary modes of transmission from high-prevalence areas such as: Asia, the South Pacific, sub-Saharan Africa, and certain populations in the Arctic, South America, and the Middle East. Other less common modes of transmission include chronic hemodialysis, certain occupational exposures, blood transfusion and organ transplant (rare). Tattooing with shared, contaminated needles or needle-like devices is another potential mode of HBV transmission, especially if these tattoos are performed in jails and prisons. INDA with shared straws or other paraphernalia is also a potential mode of transmission. HBV is viable for at least seven days on environmental surfaces and can be transmitted by sharing contaminated household items such as razors and toothbrushes.

V. NATURAL HISTORY OF CHRONIC HBV

The majority of adults acutely infected with HBV eventually clear HBsAg from the blood and develop antibodies to HBsAg (HBsAB +) that confer long-term protection/ immunity from re-infection. Only a small subset of adults acutely infected with HBV develop chronic HBV infection (HBsAg positive for > 6 months). The risk of chronic HBV infection is much greater for persons from parts of the world where HBV is endemic and acquired perinatally. Immunosuppressed individuals also are more likely to develop chronic HBV infection. Once established, chronic HBV resolves spontaneously with clearance of HBsAg and development of HBsAb+ in less than 1-2% of patients per year.

VI. CHRONIC HBV INFECTION COURSE

The course of chronic HBV is varied and unpredictable and may result in one of three main presentations: chronic HBV, inactive HBsAg carrier state or resolved infection. Chronic HBV is associated with active hepatic necroinflammation and progressive fibrosis. The diagnostic criteria are listed below.

VII. DIAGNOSTIC CRITERIA FOR CHRONIC HEPATITIS B INFECTION

A. Chronic Hepatitis B:

Need the following criteria

1. HBsAg positive > 6 months
2. Serum HBV DNA > 20, 000 IU/ mL
3. Persistent or intermittent elevation in AST/ ALT
4. Liver biopsy (when performed) showing chronic hepatitis with moderate or severe necroinflammation

B. Inactive HBsAg carrier state:

1. HBsAg positive > 6 months
2. HBeAg-, anti-HBe+
3. Serum HBV DNA < 20, 000 IU/ mL
4. Persistently normal AST/ ALT
5. Liver biopsy (when performed) confirms absence of significant hepatitis

C. Resolved Hepatitis B:

1. Previous known history of acute or chronic Hepatitis B or the presence of HBcAb+, HBsAb +
2. HBsAg –
3. Undetectable serum HBV DNA
4. Normal ALT levels

VIII. SEROLOGIC MARKERS IN THE DIAGNOSIS OF HBV INFECTION:

An array of HBV serologic markers are useful in characterizing various phases of HBV infection. Table 1 below summarizes the interpretation of serologic markers for HBV. Antigens are also extremely important in understanding chronic Hepatitis B infection and its prognosis. The Hepatitis B e Antigen (HBeAg) is a protein associated with viral replication. In acute HBV infection, loss of HBeAg occurs early, before the loss of HBsAg. Persistence of HBeAg in chronic HBV is associated with higher levels of HBV DNA and liver inflammation, and a greater risk for cirrhosis and hepatocellular carcinoma (HCC).

IX. HBV GENOTYPES:

Eight genotypes of HBV have been identified labeled A through H. The prevalence of HBV genotypes varies depending on the geographical location. All known HBV genotypes have been found in the US. Recent data suggest the HBV genotypes may play an important role in the progression of HBV-related liver disease as well as response to interferon therapy. Studies of nucleoside analogue (NA) therapies have not shown any relation between HBV genotypes and response. Therefore, checking HBV genotypes in clinical practice is not currently recommended.

X. LIVER BIOPSY:

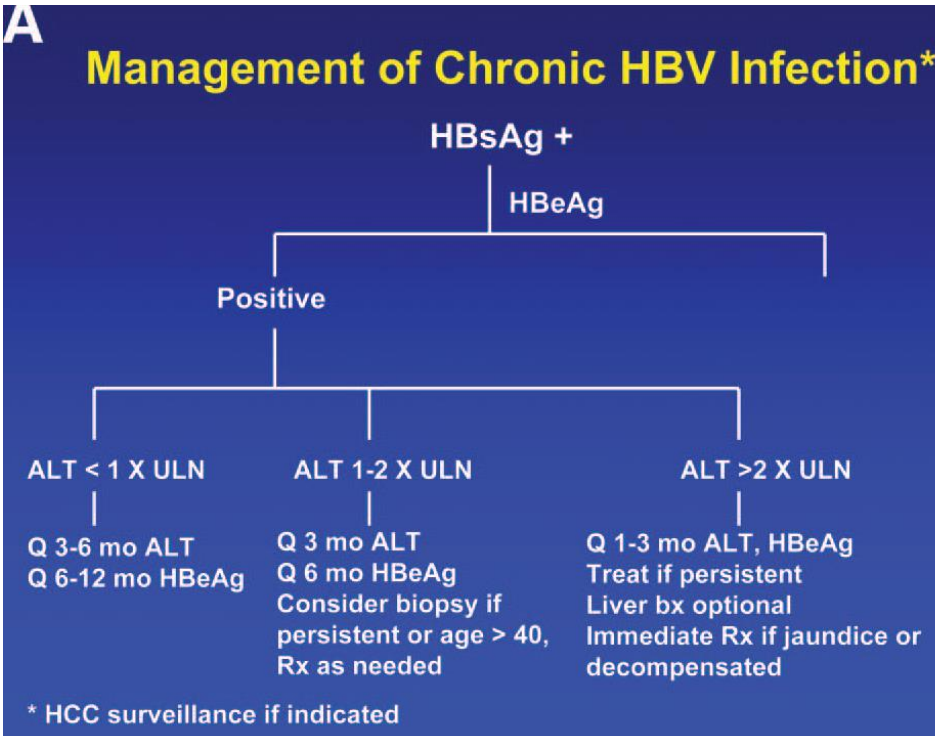
The purpose of a liver biopsy is to assess the degree of liver damage and to rule out other causes of liver disease. Liver biopsy is most useful in persons who do not meet clear cut guidelines for treatment listed below. Because HBV infected patients with elevated ALT values may have abnormal histology and can be at increased risk of mortality from liver disease especially those above age 40. Thus, decisions on liver biopsy should be made through the course of a collegial discussion that takes into consideration age, LFT elevation, HBeAg status, HBV DNA levels and other clinical features suggestive of chronic liver disease and portal hypertension.

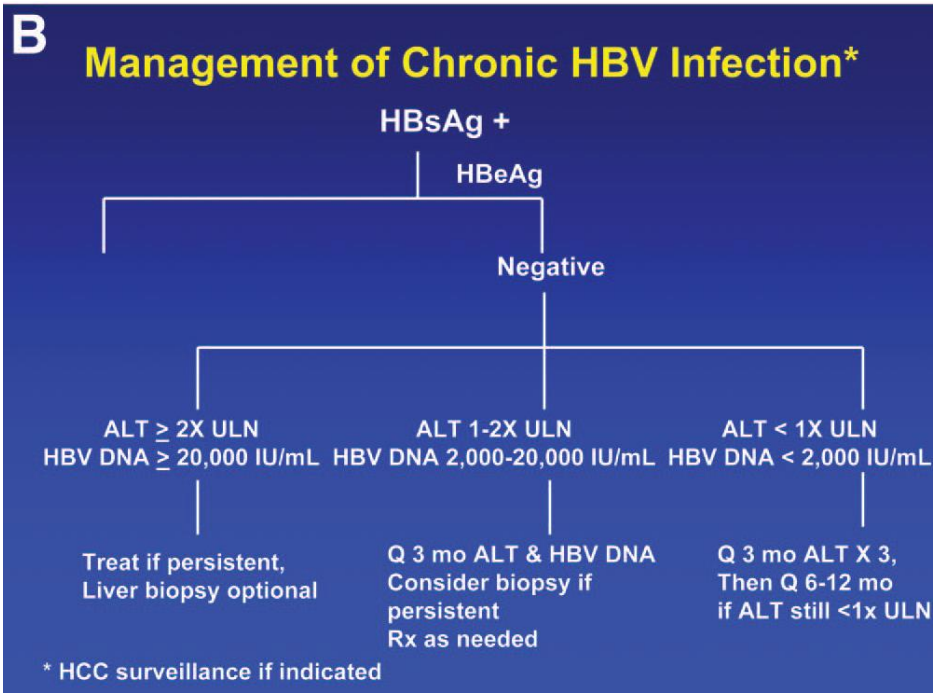
XI. MANAGEMENT OF CHRONIC HBV INFECTION: (SEE FIGURE 1):

Patients who meet criteria for chronic HBV infection (defined above) should be tested for HBeAg. Depending on a patient's HBeAg status, management of chronic HBV infection differs. See Figure 1A and B.

XII. PERIODIC SCREENING FOR HCC:

Per the AASLD, surveillance of HBV patients at high risk for HCC is recommended. Guidelines recommend AFP and ultrasound every 6–12 months for either patients with Chronic HBV and HBV carriers at high risk for HCC: Patients in these groups, for which AFP and U/S were recommended include: Asian men over 40 years of age, Asian women over 50 years of age, persons with cirrhosis,, persons with a family history of HCC, Africans (from sub Saharan Africa) over 20 years of age, or any carrier with persistent or intermittent ALT elevation and/ or high HBV DNA level > 20,000 IU/ mL or over the age of 40.





1 IU = 5.82 copies

Table 1. Interpretation of HBV Serologic Markers[1]

HBsAg	Total Anti-HBc	IgM Anti-HBc	Anti-HBs	Interpretation
–	–	–	–	Susceptible (never infected)
+	–	–	–	Acute infection, early incubation[2]
+	+	+	–	Acute infection[3]
–	+	+	–	Acute resolving infection[3]
–	+	–	+	Past infection (recovered & immune)
+	+	–	–	Chronic infection
–	+	–	–	Multiple interpretations[4]
–	–	–	+ ≥ 10 mIU/ml	Immune from vaccination

Abbreviations:

HBsAg	hepatitis B surface antigen
Total anti-HBc	total antibody to hepatitis B core antigen
IgM anti-HBc	immunoglubulin M antibody to hepatitis B core antigen
Anti-HBs	antibody to hepatitis B surface antigen

[1] Adapted from CDC. Interpretation of Hepatitis B Serologic Test Results. Available at: http://www.cdc.gov/hepatitis/HBV/PDFs/SerologicChartv8.pdf. Accessed November 2010.

[2] Note: Transient HBsAg positivity (lasting < 21 days) might be detected in some patients during vaccination.

[3] IgM usually wanes after 5 months post-infection, but may persist longer.

[4] Multiple interpretations: May be recovering from acute HBV infection; may be distantly immune and the test not sensitive enough to detect low level of anti-HBs in serum; may be susceptible with a false positive anti-HBc; or may be undetectable level of HBsAg present in the serum and the person is actually a carrier. Most persons positive for anti-HBc alone are unlikely to be infectious, except in certain exposures involving very large amounts of blood.

XIII. TREATMENT OF CHRONIC HEPATITIS B:

Patients identified as having chronic HBV (defined above) and those specified for treatment in the Figure 1 parts A and B should begin Nucleoside Analog (NA) treatment. The NA recommended by Wexford Health is Lamivudine (trade name Epivir) 150 mg p.o. QD. Literature concerning viral resistance for Lamivudine shows that up to 30% of virologic breakthrough observed in clinical trials is related to medication noncompliance. Thus, this medication must be given direct observed therapy (DOT) to insure compliance within the correctional setting to limit the development of viral resistance. Patients are started on Epivir 150 mg p.o. QD, DOT. In six months they are evaluated with labs drawn to include: HBsAg, HBeAg, anti-HBe, LFTs, HBV DNA. Nucleoside analog dose reduction is necessary for patients with renal insufficiency. The endpoint of treatment for HBeAg positive patients is HBeAg seroconversion. Treatment may be discontinued in patients who have confirmed HBeAg seroconversion (HBeAg loss and anti-HBe detection on 2 occasions, 1–3 months apart). The durability of response after cessation of treatment is expected to be 70–90%. Viral relapse and exacerbations of hepatitis may occur after discontinuation of lamivudine therapy, including patients who have developed HBeAg seroconversion, and may be delayed up to 1 year after cessation of treatment. Thus, all patients should be closely monitored after treatment is discontinued (every 1–3 months for the first 6 months, and every 3–6 months thereafter). Reinstitution of lamivudine treatment is usually effective in patients who have not developed resistance. Alternative treatment may be considered in patients who do not respond to lamivudine (i.e., Tenofovir - trade name Viread - 300 mg per day). This decision will be made during a collegial discussion

Hepatitis C Virus Treatment Guideline

Updated: November 30, 2016

NOTE: If there is a conflict between this guideline and the Administrative Directive or Institutional Directive, then the respective Administrative Directive or Institutional Directive language is controlling to resolve such conflict.

I. PURPOSE AND OVERVIEW

The purpose of this guideline is to provide the most clinically up to date recommendations for the medical management of correctional patients with Hepatitis C. In light of the rapidly changing HCV treatment landscape, Wexford Health will continue to monitor the AASLD/ IDSA/ IAS-USA websites (www.hcvguidelines.org) as well as the latest Federal Bureau of Prisons (FBOP) Clinical Practice Guidelines and provide revised guidance as necessary. See the References section for a complete citation.

II. PREVALENCE OF HCV IN CORRECTIONS

Twelve to thirty-five percent (12%–35%) of the incarcerated population in the US has chronic HCV infection. Comparatively, the prevalence of HIV in the US incarcerated population is 2%–5%. The prevalence of HCV in the US non-incarcerated population is 1.3%. Therefore, there is a substantially higher patient population with HCV in the correctional system.

III. HCV TRANSMISSION

Hepatitis C Virus is primarily transmitted by blood borne routes of infection: IVDA with shared needles, INDA with shared straws or spoons, tattoos with shared needles, blood transfusion prior to 1992, clotting factor transfusion prior to 1987. Sexual transmission occurs but at much lower transmission rates. Vertical transmission occurs in 5%. HCV is not transmitted by breast feeding, kissing, sharing a cup with someone, or by casual contact (i.e., shaking hands with someone, hugging someone or sharing a cell with someone).

IV. HCV NATURAL HISTORY

The natural history of HCV is such that 50%–80% of HCV infections become chronic. Progression of chronic HCV infection to fibrosis and cirrhosis may take years in some patients and decades in others – or, in some cases, may not occur at all. Most complications from HCV infection occur in people with cirrhosis. Cirrhosis is a condition of chronic liver disease marked by inflammation, degeneration of hepatocytes, and replacement with fibrotic scar tissue.

A. Patients with advanced hepatic fibrosis (primarily stage 3) have a 10% per year rate of progressing to cirrhosis (stage 4).

B. Those with cirrhosis have a 4% per year rate of developing decompensated cirrhosis, and a 3% per year rate of developing hepatocellular carcinoma.

C. Screening method: The preferred screening test for HCV infection is an immunoassay that measures the presence of antibodies to HCV antigens, referred to as the HCV Antibody (Ab) or anti-HCV.

V. INITIAL EVALUATION OF ANTI-HCV POSITIVE RESIDENTS: BASELINE WORK-UP FOR HCV CHRONIC CLINIC

A. Enroll in Hepatitis C Chronic Clinic.

B. Consider further education on the prevalence, transmission routes, and natural history of Hepatitis C Virus infection.

C. Baseline history and physical examination.

D. Labs including: CBC, plt, PT/INR, HIV screen, Hepatitis B Surface Antigen (HBsAg), Hepatitis B core Antibody total (HBcAb total), Hepatitis A Antibody total (HAV-Ab total), Hepatitis B Surface Antibody (HBsAb).

E. Unless the patient has potential exclusionary criteria for HCV treatment as listed under section IX, lab for Quantitative HCV RNA viral load testing should be ordered to determine if the patient has active or resolved HCV infection. This is a non-preferred viral lab test that requires approval prior to being drawn.

F. Unless otherwise clinically indicated, testing for other causes of liver disease – i.e., antinuclear antibody (ANA), ferritin, iron saturation, ceruloplasmin – are not routinely ordered in the evaluation of a patient with a positive HCV Ab test.

G. APRI Calculation (see below).

VI. CALCULATION OF THE AST TO PLATELET RATIO INDEX (APRI) TO ASSESS THE DEGREE OF FIBROSIS

A. The APRI score, a calculation based on results from two blood tests (the AST and the platelet count), is a non-invasive test that assesses liver fibrosis.

B. The formula for calculating the APRI score: AST/ ALT ULN (= 40) x 100/ platelet count (10^9).

1. An APRI score of ≥ 1.0 may be used to predict the presence of cirrhosis. At this cutoff, the APRI score has a sensitivity of 48%, but a specificity of 94%, for predicting cirrhosis. Patients with an APRI score ≥ 1.0 should have an abdominal ultrasound performed to identify other findings consistent with or suggestive of cirrhosis.

2. Patients with an APRI score of < 0.7 have a low likelihood of having significant liver fibrosis.

3. Patients with an APRI score between 0.7–1.0 may or may not have significant liver fibrosis. For these patients other labs should be reviewed. If any of the following labs are positive, the patient should be considered for an abdominal ultrasound to identify other findings consistent with or suggestive of cirrhosis:

   a. Platelet count < 170,000

   b. INR > 1.0

   c. Albumin < 3.7

4. An APRI score is not necessary for diagnosing cirrhosis if cirrhosis has already been diagnosed by other means.

VII. PRIORITY CRITERIA FOR HCV TREATMENT

A. Determination of whether priority criteria for HCV treatment are met is an important part of the initial evaluation and ongoing management of residents with chronic HCV infection. Although all patients with chronic HCV may benefit from treatment, certain cases are at higher risk for complications or disease progression and require more urgent consideration for treatment. The AASLD as well as the FBOP guidelines have established priority criteria to ensure that those with the greatest need are identified and treated first. Per the referenced most current guidelines:

1. The treatment recommendations per the AASLD and IDSA guidelines state that "Immediate treatment is assigned the highest priority for those patients with advanced fibrosis (Metavir F3), those with compensated cirrhosis (Metavir F4), liver transplant recipients, and patients with severe extrahepatic Hepatitis C (type 2 or 3 mixed cryoglobulinemia with end-organ manifestations (i.e., vasculitis), proteinuria, nephrotic syndrome, or membranoproliferative glomerulonephritis.)"

   http://www.hcvguidelines.org/full-report/when-and-whom-initiate-hcv-therapy

2. Highest priority for treatment (in addition to conditions specified above):
   a. HIV co-infection
   b. Chronic HBV co-infection

VIII. POTENTIAL EXCLUSION CRITERIA FOR HEPATITIS C TREATMENT

A. Patient Refusal.

B. Inadequate Length of Stay (LOS): Typical LOS criteria require residents to have 12 months left on sentence to provide adequate time for work-up, initiation and completion of HCV treatment. As treatment course length is rapidly changing with the advent of new medications, this requirement is not static and patients will be reviewed on a case by case basis.

C. Contraindications to, or significant drug interactions with, any component of the treatment regimen.

D. Patients with GFR < 30.

E. Patients with decompensated cirrhosis (*exceptions can and will be made on a case by case basis; these patients should be submitted for treatment evaluation and recommendations detailed to the providers).

F. Pregnancy: especially for any regimen that would require ribavirin or interferon.

G. Patients that cannot demonstrate a willingness and ability to adhere to a rigorous treatment regimen and to abstain from high-risk activities while incarcerated.

IX. PATIENTS THAT ARE NOT TREATMENT CANDIDATES

A. The patient should be educated that although they may not meet treatment criteria at this time, they are not excluded from meeting criteria for treatment in the future.

B. The reason for the non-candidacy should be clearly documented in the HCV Chronic Clinic Progress Note.

C. The patient should continue to be followed in HCV chronic clinic every six (6) months with labs (as above).

D. All patients should be re-reviewed at each HCV chronic clinic. Should the reason for their non-candidacy change (i.e., their APRI score increases or they previously refused treatment but now consent to treatment, etc.) they should be re-submitted for evaluation (specified below).

X. POTENTIAL CANDIDATES FOR HCV TREATMENT

A. To begin the submission for HCV treatment consideration, the site medical provider will fill out the Wexford Health *Initial Hepatitis Worksheet*, in full, and fax or email attach it to the Chronic Disease and Case Management Director: dpaul@wexfordhealth.com or fax: 412-539-0422.

B. The Chronic Disease and Case Management Director will then correspond (either via fax, email or phone) with the site medical provider regarding the next step in management.

C. As most correctional systems do not have an EMR, results (lab result copy or radiology study reports) must be sent to the Chronic Disease and Case Management Director's attention as soon as they are received (in paper form) at the site.

D. Patients that have been fully worked up but do not meet priority treatment criteria will not be approved for HCV treatment at this time. This designation will be made by the Chronic Disease and Case Management Director and will be detailed in an electronic progress note that will be emailed to the site and should be printed and placed into the patient's chart.

Recommendations for follow-up and re-submission for treatment consideration are always incorporated into these recommendations.

XI. REFERENCES

7. Evaluation and Management of Chronic HCV Infection. Federal Bureau of Prisons Clinical Practice Guidelines. July 2015. http://www.bop.gov/news/medresources.jsp.
8. Recommendations for Testing, Managing and Treating Hepatitis C. American Association for the Study of Liver Diseases (AASLD) / IAS – USA. August 7, 2015. http://www.hcvguidelines.org

XII. ATTACHMENTS

Initial Hepatitis Work Sheet
Facts About Hepatitis B and C

Initial Hepatitis Work Sheet

Wexford Health SOURCES INCORPORATED

Initial Hepatitis Work Sheet

Name: _____ Date: _____ Time: _____

ID Number: _____ Institution: _____ DOB/Age: _____ / _____

Nursing Assessment:

Allergies: _____ MSR/Outdate: _____

Sex: ☐ Male ☐ Female **Race:** ☐ Caucasian ☐ African American ☐ Hispanic ☐ Asian

Intravenous Drug Use:

Yes ☐ No ☐ Date Started: _____ Dated Ended: _____ Drugs: _____

Alcohol Consumption:

Yes ☐ No ☐ Date Started: _____ Dated Ended: _____ Avg. Drinks Per Day: _____

Tattooing: Yes ☐ No ☐ **Hemodialysis:** Yes ☐ No ☐

Multiple Sex Partners: Yes ☐ No ☐ **Blood Tx prior to 1992:** Yes ☐ No ☐

Partner with known Hep B/C: Yes ☐ No ☐ Date: _____ Other: _____

Previous Dx of Hep B/C: Yes ☐ No ☐ **Episode Jaundice:** Yes ☐ No ☐

Date of Dx: _____ **Vaccines: Hep A/B:** Yes ☐ No ☐

Previous Dx of HIV: Yes ☐ No ☐ Date Started: _____ Date Completed: _____

Date of Dx: _____

Medications:

1 _____ 2 _____ 3 _____ 4 _____

5 _____ 6 _____ 7 _____ 8 _____

Provider Assessment:

VS: Weight: _____ T: _____ BP: _____ P: _____ R: _____

Comorbidities:

H/O: ☐ None ☐ Coronary Heart Dz ☐ Cerebrovascular Disease ☐ COPD ☐ Renal Insufficiency ☐ Diabetes

☐ Thyroid Disease ☐ Esophageal Varices ☐ Ascities ☐ Upper or Lower GI Bleed ☐ Active PUD ☐ Coagulopathy ☐ Jaundice/Hyperbilirubinemia

☐ Thrombocytopenia ☐ Anemia ☐ HIV ☐ Connective Tissue Disease ☐ Solid Organ Transplant ☐ Seizure disorder

☐ Depression or other Mental Health Disorder ☐ Hypertension ☐ Other: _____

***Stability Status of each Comorbid Illness (should correlate with medications/ cormorbidities listed):**

1. _____
2. _____
3. _____
4. _____

***Example: List HbA1c% if Diabetic, last TSH if thyroid d.o., list mental health med doses and duration on those doses or changes in doses if mental health disorder, CD4 count/ HIV VL if HIV coinfected, etc.**

Lab Studies: Hgb/Hct _____ / _____ Plts _____ WBC _____ ANC _____ Date: _____ PT/INR _____ Date: _____

N/A+ _____ K+ _____ Cl- _____ CO2- _____ BUN/Cr _____ / _____ Date: _____

ALT _____ AST _____ Alk Phos _____ Tot Bili/Direct _____ / _____ Albumin _____ Date: _____

Hep A IgG: ☐ Pos ☐ Neg **Hep Bs Ag:** ☐ Pos ☐ Neg **Hep Bs Ab** ☐ Pos ☐ Neg **Hep C Ab:** ☐ Pos ☐ Neg **HIV Ab:** ☐ Pos ☐ Neg

APRI = AST/ULN AST x 100/Platelet Count (10^9/L) = _____

Previous HCV Genotype/ HCV Viral load testing Date: _____ Date: _____

☐ Previous Liver Biopsy Date: _____ Result: _____ ****Include hard copy of liver biopsy pathology report with this form****

Instructions for Completed Form:

Send completed form to Dr. Dina Paul via email: dpaul@wexfordhealth.com

OR virtual fax: 412-539-0422

Date/Time form sent to Dr. Paul: _____

Provider Name (Print) **Provider Signature** **Date**

Rev. 6/8/2015

Facts About Hepatitis B and C

Updated: November 30, 2016

I. WHAT IS HEPATITIS AND WHAT ARE THE DIFFERENT FORMS?

"Hepatitis" means an inflammation of the liver. The liver is an important organ in the body that processes nutrients, filters the blood, and fights off infections. When the liver is inflamed or damaged, its function can be affected. Heavy alcohol use, illicit drug use, some medications and certain medical conditions can cause hepatitis. Hepatitis (liver inflammation) can often be caused by a virus. In the United States, the most common types of viral hepatitis are caused by Hepatitis A, Hepatitis B, and Hepatitis C. Hepatitis A is spread through contaminated food or water. Hepatitis B and C are primarily spread through contact with human blood. Sexual transmission of Hepatitis B and C can also occur, but is more common with Hepatitis B infection. There are vaccines used to prevent the infection of Hepatitis A and Hepatitis B. There is no vaccine for the prevention of Hepatitis C.

II. HOW DO YOU KNOW IF YOU HAVE HEPATITIS B OR C?

The majority of people infected with Hepatitis B or C do not have any symptoms at the time of infection. Many people with Hepatitis B or C do not know they are infected. In order to know if you have been infected with Hepatitis B or C, a specific blood test for each of these viruses is necessary.

III. HOW DO YOU "CATCH" HEPATITIS B OR C?

Both Hepatitis B and C are primarily spread through contact with human blood. Up to 40% of people with Hepatitis B or C never learn how they were infected. You are considered at high risk for Hepatitis B or C infection if you:

- Had a blood transfusion before 1992
- Had a blood product transfusion (i.e., plasma or clotting factor) before 1987
- Injected drugs using with shared needles
- Snorted drugs with shared spoons or straws
- Had tattoos or body piercing performed with shared needles or implements
- Had sex with someone with Hepatitis B or C
- Were born to a Hepatitis B or C infected mother (at the time of delivery)

IV. THE WAYS HEPATITIS B OR C ARE NOT TRANSMITTED

Hepatitis B and C cannot be transmitted by:

- Kissing someone
- Shaking hands with someone
- Breast feeding
- Hugging someone
- Sharing a cell with someone

V. ARE HEPATITIS B AND C COMMON?

Both Hepatitis B and C are common. In the U.S. there are about 1.2 million people with Hepatitis B and over 4 million people with Hepatitis C. The prevalence of Hepatitis C in the U.S. non-incarcerated population is 2%-5%. The prevalence of Hepatitis C in the U.S. incarcerated population is 12%-35%.

VI. WHAT HAPPENS TO PEOPLE WITH CHRONIC HEPATITIS C?

Most people (50%-80%) that are infected with Hepatitis C become chronically infected. Chronic infection means that the Hepatitis C virus continues to live in the bloodstream of the infected person. The majority of persons with chronic Hepatitis C infection (80%) will not have significant liver damage long term. About one third of persons with chronic Hepatitis C will not even have liver lab abnormalities over the course of their lifetime. Progression of chronic Hepatitis C infection to significant liver damage may take years in some patients and decades in others - or, in some cases, may not occur at all. To know which patients with chronic Hepatitis C are at higher risk of developing significant liver damage, laboratory studies (labs) must be followed regularly.

VII. WHY IS THERE A NEED FOR TREATMENT?

As stated, the majority of persons with chronic Hepatitis C infection will not have significant liver damage long term. But the minority (< 20%) may develop significant liver damage over the course of years to decades. Identifying those persons with chronic Hepatitis C who have significant liver damage or those whose labs are trending toward significant liver damage is important, as these individuals may benefit from treatment of their Hepatitis C. Following patients' lab values over time is the way to determine if their liver function is stable and normal or abnormal and to figure out their need for treatment.

VIII. HOW CAN I PROTECT MYSELF FROM GETTING HEPATITIS B OR C?

Avoid having your blood mix with anyone else's blood. This means not sharing needles, straws, spoons or any implement that punctures the skin (including tattoo needles or devices). Use a condom for sexual intercourse. Do not share personal items such as razors, toothbrushes, or nail clippers as these items may contain traces of blood.

Infectious Disease: HIV Guidelines

I. ANTIRETROVIRAL THERAPY

Recommendations for Initiating Antiretroviral Therapy in Treatment–Naïve Patients
Panel's Recommendations
• Antiretroviral therapy (ART) is recommended for all HIV-infected individuals, regardless of CD4 T lymphocyte cell count, to reduce the morbidity and mortality associated with HIV infection. • ART is also recommended for HIV-infected individuals to prevent HIV transmission. • When initiating ART, it is important to educate patients regarding the benefits and considerations regarding ART, and to address strategies to optimize adherence. On a case-by-case basis, ART may be deferred because of clinical and/or psychosocial factors, but therapy should be initiated as soon as possible.

II. GUIDELINES FOR PRIMARY PROPHYLAXIS*

Opportunistic Infection	CD4 Threshold	Recommended Drug	Alternative
Pneumocystis carinii pneumonia	CD4 less than 200	TMP/SMZ DS	Dapsone
Tuberculosis	All CD4 counts if TST greater than 5 mm	Isoniazid (exclude active disease)	Rifampin and PZA
Mycobacterium avium complex	CD4 less than 50	Azithromycin	Rifabutin
Toxoplasmosis	CD4 less than100	TMP/SMZ DS	Dapsone + pyrimethamine + leukovorin

**When CD4 counts exceed these thresholds for 3–6 months, prophylaxis may be discontinued.*

III. GUIDELINES FOR VACCINATIONS

Agent	Indication
Hepatitis B	Anti-HBc neg
Hepatitis A	Consider
S. Pneumonia	CD4 greater than 200
Influenza	Annually, in season

MRSA Control Guidelines

I. INTRODUCTION

In recent years, a growing problem has emerged in the United States of skin infections resistant to the typical antibiotics. The infection is called "MRSA" for "methacillin-resistant staphylococcus aureus." Fortunately, most of the infections can be treated with alternative antibiotics or other remedies, but these treatments can be expensive and complicated. The best solution is early detection and good prevention.

II. IMPLICATIONS FOR CORRECTIONAL FACILITIES

Because the infection can spread person-to-person, institutional settings such as jails and prisons which have dense populations are common environments for the condition. The Centers for Disease Control and Prevention began recognizing and reporting on this phenomenon in 1999, and is now widespread. Commonly mistaken for "spider bites" or other soft tissue infections, most of these lesions are actually MRSA. Adequate control of the infection requires a multidisciplinary effort.

III. PROCEDURE

A. Intake Screening

To reduce the risk of residents entering any facility with untreated or contagious skin infections:

1. All residents should receive information about the skin infection during the initial institution orientation.
2. All residents should be questioned upon entry about the presence of open sores or "spider bites" during the health screening process.
3. All residents should receive a visual skin inspection by screening staff upon entry.
4. Sending institutions should be requested to notify receiving institutions in advance if sending a patient with a current MRSA infection.
5. All residents should be showered if possible and receive clean linen upon entry.
6. Any patient with positive findings should be referred to the clinician on the same day.
7. All suspicious wounds should be cultured.

B. Management

Persons with wound infections will be placed on appropriate antibiotics depending on the culture results.

C. Interim Guidelines for Empiric Oral Antimicrobial Treatment of Outpatients with Suspected MRSA Skin and Soft Tissue Infections (SSTI)[1]

Selection of empiric therapy should be guided by local S. aureus susceptibility and modified based on results of culture and susceptibility testing. The duration of therapy for most SSTI is 7–10 days, but may vary depending on severity of infection and clinical response. NOTE: Before treating, clinicians should consult complete drug prescribing information in the manufacturer's package insert or the PDR.

[1] *Management of Methicillin-Resistant Staphylococcus aureus (MRSA) Infections, Federal Bureau of Prisons – Clinical Practice Guidelines, August 2005*

Antimicrobial	Adult Dose	Pediatric Dose
Trimethoprim-sulfamethoxazole (TMP- SMX) DS	I tablet (160 mg TMP/800 mg SMX) p.o. b.i.d.	Base dose on TMP: 8–12 mg IMP (& 40–60 mg SMX) per kg/day in 2 doses; not to exceed adult dose
Minocycline or doxycycline	100 mg p.o. b.i.d.	*Not recommended for pediatric use – suggest consultation with infectious disease specialist before use*
Clindamycin	300-450mg p.o. q.i.d.	10–20mg/kg/day in 3–4 doses; not to exceed adult dose

NOTE: If Group A streptococcal infection is suspected, oral therapy should include an agent active against this organism (β-lactam, macrolide, clindamycin). Tetracyc lines and trimethoprim-sulfamethoxazole, although active against many MRSA, are not recommended treatments for suspected GAS infections.

NOTE: Outpatient use of quinolones or macrolides. Fluoroquinolones (e.g., ciprofloxacin, levofloxacin, moxifloxacin, gatifloxacin) and macrolides (e.g., erythromycin, clarithromycin, azithromycin) are NOT recommended for treatment of MRSA because of high resistance rates. If fluoroquinolones are being considered, consult with infectious disease specialist before use.

NOTE: Outpatient use of Linezolid in SSTI. Linezolid is costly and has great potential for inappropriate use, inducing antimicrobial resistance, and toxicity Although it is 100% bioavailable and effective in SSTI, it is not recommended for empiric treatment or routine use because of these concerns It is strongly recommended that linezolid only be used after consultation with an infectious disease specialist to determine if alternative antimicrobials would be more appropriate.

If considering clindamycin, isolates resistant to erythromycin and sensitive to clindamycin should be evaluated for inducible clindamycin resistance (MLSB phenotype) using the "D test." Consult with your reference laboratory to determine if "D testing" is routine or must be specifically requested. If inducible resistance is present, an alternative agent to clindamycin should be considered.

1. Patients with potentially contagious infections such as wounds with uncontained drainage, weeping cellulitis, or multiple sites should be assigned to isolation in single-cell housing to reduce the risk of transmission.
    a. Provide liquid antibacterial soap regimen
    b. Daily linen exchanges, if possible
    c. Facility provides cleaning supplies each shift for patient to clean room
    d. Isolation continues until culture is negative (number of cultures to be determined by Medical Director)
2. If possible, residents with MRSA should be restricted from transferring to another facility (a "medical hold") until the infection is resolved.

D. **Evaluation and Treatment**[2]

1. Initial Assessment

[2] *Management of Methicillin-Resistant Staphylococcus aureus (MRSA) Infections, Federal Bureau of Prisons – Clinical Practice Guidelines, August 2005*

a. Conduct targeted history and physical: check for fluctuance, crepims and cellulitis

b. Assess risk factors for MRSA infection, including recent hospitalization

c. Assess risk factors for systemic infection, e.g., recent injection drug use, prior endocarditis

d. Diagnostic tests:

i. If signs of systemic infection (lymphangitis, fever, tachycardia) —> blood cultures

ii. If wound drainage available → wound cultures

iii. If MRSA pneumonia suspected → chest x-ray and sputum cultures

2. Conservative Treatment

For uncomplicated infections, without systemic S/S. use conservative treatment prior to antibiotics.

a. Warm soaks and compresses: Soak infected area or apply warm compresses for 20 minutes, 2 to 3 times per day until infection clears. Perform on a case by case basis, consulting with the infection control officer regarding how to safely implement.

i. Incision and drainage (I & D): In conjunction with the use of warm soaks or compresses, drain accessible fluid collections, particularly loculated soft tissue infections. Frequently reassess to determine if repeated drainage is warranted.

ii. Foreign devices: When possible, remove catheters I foreign devices related to the infection.

3. Empiric Therapy for Suspected S. aureus Infection

a. If systemic infection/sepsis possible → admit as inpatient and consider empiric IV vancomycin If mild to moderate illness (e.g., significant cellulitis associated with abscess, fever, lymphangitis) and cultures unobtainable or nondiagnostic → consider empiric antibiotic therapy:

i. If no MRSA risk factors and no other MESA infections in population → empiric treatment with first generation cephalosporin, or amoxicillin/clavulanate, or erythromycin.

ii. If MRSA outbreak or MRSA risk factors → treat with TMP-SMX or clindamycin.

4. Targeted Antibiotic Therapy

If cultures and antibiotic sensitivities are available → target antibiotic therapy accordingly

a. Highly resistant MRSA isolates and serious infections → usually require IV vancomycin.

b. If susceptible → consider treatment with TMP-SMX or clindamycin.

c. Can consider other antibiotics based on susceptibility results.

Monitor closely since in vitro sensitivities may not correlate with clinical response.

Persistent or recurrent disease may indicate nonadherence, new infection, or resistance.

5. Decolonization

   In context of significant MRSA outbreak → can consider decolonization of nares with 2% mupirocin b.i.d. for five (5) days. Consult first with corporate office given benefit is unproven.

6. Treatment Follow-up

   a. Re-evaluate one (1) week after completion of antibiotic treatment and examine for recurrent lesions.

      For uncontained draining lesions → document clinical improvement and two (2) consecutive negative wound cultures 72 hours apart before discontinuing containment, periodic follow-up as clinically warranted.

E. **Prevention/Infection Control**

1. Hand hygiene and personal protective equipment (PPE) Hands should be routinely washed with soap and running water before eating, after using the lavatory, when visibly dirty, and when there has been contact with blood or other body fluids, mucous membranes or broken skin, Hands should be washed with soap and running water for at least 20 seconds.

   Patients and staff should have access to sufficient opportunities and necessary supplies for good personal hygiene. The availability of these supplies should be regularly assessed and remedied as necessary, PPE is indicated if health care personnel, correctional officers, or other residents are likely to have contact with blood/body fluids, e.g., gloves to protect hands from contact; mask or face/eyewear and gowns as needed to protect from sprays and splashes.

2. Environmental cleaning and disinfection. Environmental contamination is a less likely reservoir of infection than person-to-person contact; therefore environmental sanitation cannot substitute for personal hygiene. However, MRSA can exist on environmental surfaces, in particular those commonly touched by the hands of residents, corrections officers, and health care staff. Cleaning protocols and schedules should be established for all areas of each facility. Correctional workers should conduct sanitation inspections of living and bathroom areas, and any lapses in sanitation should be corrected. It is important to read the disinfectant instruction label to make sure it is used safely and appropriately. Most disinfectant products require cleaning of visibly soiled surfaces prior to applying the disinfectant. Also, routine use of disinfectants is not without risk. Many of the active ingredients in disinfectant products can burn or irritate the skin and eyes, and in some cases can cause respiratory irritation.

3. Laundry. The availability of supplies for environmental cleaning should be regularly assessed and remedied as necessary. All washable (non-porous) surfaces of bathrooms and living areas that are commonly touched should be disinfected routinely (e.g., daily, and when visibly soiled). Routine disinfection should be performed with a bleach solution, (see Appendix 2 for guidance on use of bleach) or an Environmental Protection Agency (EPA)-registered disinfectant according to manufacturer's instructions. A list of appropriate disinfectants is located on the EPA Website at http://www.epa.gov/oppad001/chemregindex.htm

   Equipment with damaged surfaces that cannot be cleaned should be repaired or discarded. Persons using exercise equipment should also use barriers to bare skin, such as a towel or clean shirt. The Federal Bureau of Prisons recommends that recreational equipment, such as weight benches, should be routinely wiped clean after each use with a clean towel

   Laundry contamination with MRSA is also less likely to be a reservoir of infection than person-to-person contact; therefore laundering procedures cannot substitute for personal hygiene. When laundry is washed at cool water temperatures (<720 Fahrenheit

or 22.20 Centigrade), a detergent formulated for cold water should be used. The disinfectant capability of chlorine bleach is well established; and its use is the most effective means of reducing the bacterial count in laundered items at any temperature. The relative antimicrobial effectiveness of oxygenated (color safe) bleaches has not been established and oxygenated bleach is not current approved for disinfecting and sanitizing by the EPA. Drying laundry on "hot" settings will help eliminate bacteria.

Soiled linen can be a source of microbial contamination, which may infrequently cause infections. The risk of disease transmission from soiled linen is minimal. All soiled linen should be handled and laundered in the same manner regardless of the individual's specific diagnosis. Appendix 3 contains infection control guidance regarding the management of linen and laundry.

4. Patients with MRSA infections. Educational information should be provided to residents with MRSA infections. The decision to allow residents to change their own bandages should be made on a case-by-case basis. Patients who are allowed to change their own bandages will need access to gloves, soap and water, bandages, and plastic trash bags, and should receive instruction on the proper procedure for changing a bandage in order to minimize the possibility of cross contamination.

   Health care staff should examine residents diagnosed with skin and soft tissue infections to determine the risk of spread to others. Patients with uncontrolled drainage should be restricted from recreation and common areas. Separate toilet facilities are preferred and are a priority for residents with draining peri-rectal and thigh lesions, Patients with uncontained drainage should not shower at the same time as the general population. They should be issued two towels and instructed to use one to sit on as a barrier when using the bench in the dressing area. Toilet, shower and dressing areas should be cleaned and disinfected before the general population uses the facility again. These precautions may be discontinued 24 hours after the wound has resolved (drainage can be contained with a simple dressing or drainage has stopped), even if antibiotic therapy is incomplete.

   Single cell housing is not typically required for persons with non-draining MRSA skin infections, or draining infection that is contained by a simple dressing. Single cell housing should be considered for mentally ill, cognitively impaired, and uncooperative residents. Terminal cleaning of the cell should be done before assigning the cell to another patient. For residents with contained drainage, the health care provider will need to determine if activity restriction is warranted on a case-by-case basis.

   Regardless of where the MRSA-infected patient is housed, sanitation measures should be strictly enforced. Patients should change into clean clothing any time clothing has been soiled with wound drainage. Linens should be changed frequently and when visibly soiled.

   Towels and washcloths should be changed daily. Patients with skin infections should generally shower daily, provided this does not interfere with wound healing.

   Hand hygiene should be re-emphasized for staff working with a patient diagnosed with MRSA infection. Hands should be routinely washed with soap and running water for 20 seconds. Clean, non-sterile gloves should be worn when contact with wound drainage is anticipated, and hand washing should be performed before and after every contact with an infected patient, even if gloves are worn. Staff who might have contact with patients with grossly draining wounds should wear clean, non-sterile gowns during contact and immediately discard the gown before contact with any other persons or surfaces. Security devices (e.g., handcuffs, and other reusable restraints) should be routinely (e.g., daily) disinfected, and also disinfected after use if a patient is known to have skin or soft tissue infection, or if visibly soiled.

   During transfers, interruptions in care for MRSA infection should be minimized. If patients with MRSA infection must be transferred, the receiving institution's health care

personnel should be made aware of the pending arrival of infected patients and their health status.

At the time of transfer, the wound should be dressed with a clean bandage that contains wound drainage. Transfer officers should follow the precautions described above with regards to hand washing, gloves if touching wounds or drainage, disposal of dressings, and disinfection of equipment and exposed surfaces. Cleaning and disinfection of transport vehicles should be performed on a routine basis.

If drainage from a wound is not adequately contained, escort officers should be notified of the patient's condition and education on appropriate infection control measures should be reinforced. If appropriate because of inadequately contained wound drainage, seats should be covered with a disposable, impermeable sheet, and cleaning/disinfection of exposed surfaces should take place after transport is completed.

Patients with MRSA skin infections who are scheduled for release should be offered enough antibiotics to complete treatment, counseled on basic infection control measures to prevent transmission to household members and other anticipated close contacts, and advised regarding obtaining follow-up medical services. In addition, draining infections should be adequately bandaged to contain drainage prior to release.

F. **Education/Increased Awareness**

Key educational points are summarized below:

1. For patients:
    a. Practice good hand hygiene. Hands should be routinely washed with soap and running water before eating, after using the lavatory, when hands are visibly dirty, and when there has been contact with blood or other body fluids, mucous membranes, or broken skin.
    b. Maintain good personal hygiene through regular showers and by keeping your living space clean, including regular laundering of sheets and pillowcases.
    c. When hand washing, use soap and water for at least 20 seconds.
    d. Take care of your skin and any cuts or scratches. If you notice any lumps, bumps or lesions, never try to open them yourself. Always follow up with the health care staff for evaluation as soon as possible.
    e. Do not share personal items such as towels, razors and toothbrushes.
    f. Cover damaged skin (cuts, scrapes and scratches) and draining wounds with bandages.
    g. Carefully dispose of bandages containing pus or blood.
    h. Shower regularly with soap and warm water (very hot water may dry the skin and make it more prone to cracks and other damage).
    i. Use a barrier (a clean towel or clothing) between your skin and equipment that is shared with others, like exercise equipment in the gym.
2. For corrections officers and staff:
    a. Practice good hand hygiene. Encourage patients to practice proper hand washing as well.
    b. Encourage patients to take regular showers with soap and warm water.
    c. Discourage sharing of personal items such as towels, razors and toothbrushes.
    d. Be observant. Encourage patients with skin lesions to follow up with the health care staff as soon as possible.

e. Use personal protective equipment (PPE) whenever you expect to have contact with a patient's blood or body fluids.

f. Read the disinfectant instruction label to make sure it is used safely and appropriately. Most disinfectant products require proper cleaning of surfaces prior to applying the disinfectant.

g. House individuals with draining wounds separate from other patients, to the hill extent possible.

h. Follow your agency's infection control guidelines.

3. Other ways to reduce transmission:

a. Launder sheets, towels, uniforms and underclothing with hot water and detergent and dry on a hot setting or use a detergent which has the same effect.

b. Wear gloves when handling dirty laundry at the facility.

c. Regularly clean sinks, showers and toilets.

d. Use contact precautions (e.g., gown and gloves) for wound care. This includes the use of personal protective equipment (e.g., gloves +1- gown) whenever contact may occur with a patient's blood or body fluids.

e. Cover draining wounds and damaged skin (sores, cuts, scratches and scrapes) with bandages.

f. Carefully dispose of bandages containing pus or blood.

G. **Surveillance**

1. Cases should be tracked by the institution's Infectious Disease nurse.

2. Reports regarding the number of cases should be reported at least monthly to the central office of the correctional system, Medical Director of the facility, and to the local health department.

3. A cluster of MRSA is two or more, epidemiologically related (e.g., a housing unit supervised by a single correctional post), culture-positive cases of MRSA infection. Clusters of cases as defined above should be brought to the attention of the institution's Medical Director and/or Regional Medical Director, immediately. The Medical Director will determine if the cases must be reported to the local health department.

H. **Outbreak**

1. Two or more cases define an outbreak. When this occurs, an immediate investigation should begin to determine the extent of the outbreak.

2. Isolation and containment of individuals or housing areas suspected in an outbreak is to be considered.

3. The medical director shall notify the institution's director of any outbreak.

I. **Resources**

Further information about MRSA can be found on the Website links listed below:

1. Management of Methicillin-Resistant Staphylococcus aureus (MRSA) Infections (Federal Bureau of Prisons) http://www.bop.gov//news/PDFs/rnrsa.pdf

2. Video on MRSA Awareness (Federal Bureau of Prisons) http://www.bop.gov//news/medresources.jsp

3. MRSA Fact Sheet (Illinois Department of Public Health)

http://www. idph.state.il.us/public/hb/hbmrsa.htm

4. Methicillin-Resistant Staphylococcus aureus Infections in Correctional Facilities

Morbidity and Mortality Weekly Report; February 7, 2003 http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5205a4.htm

Morbidity and Mortality Weekly Report; October 17, 2003

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5241a4.htm

Appendix 1: Linen and Laundry Services

I. INFECTION CONTROL GUIDANCE FOR STAFF

A. All soiled linen is considered potentially infectious.

B. Hand washing should be performed after having contact with all soiled linen.

C. Protective barrier apparel should be used as follows:

1. Gloves should be worn for actual or potential contact with soiled linen contaminated with blood or body substances.

2. Gowns should be worn for the management of soiled linen if contamination of the worker's clothing is likely to occur.

3. Masks should be worn if there is potential for exposure to aerosolized blood or body substances. This may occur if soiled linen is extensively agitated.

D. Handle soiled linen as little as possible and with a minimum of agitation to prevent gross microbial contamination of the air and of persons handling the linen.

E. All soiled linen should be bagged at the location where it was used.

F. Place all linen in leak-proof laundry bags. Double bagging of soiled linen is not required when leak-proof laundry bags are used.

G. Caution must be exercised to help prevent laundry bags from being overfilled.

H. Loose linen should never be thrown directly into laundry chutes.

Appendix 2: MRSA Q&A (Corrections Professionals)

I. WHAT IS MRSA?

MRSA stands for "**M**ethicillin-**R**esistant ***S****taphylococcus* ***a****ureus*." MRSA is a type of Staphylococcus aureus ("staph") bacteria that is resistant to some antibiotics.

Many people think that MRSA routinely causes unusually severe disease. Although some people become ill with serious infections such as pneumonia, bloodstream infections, or bone infections, these types of illness are rare in healthy people who get MRSA skin infections. With prompt, proper medical care, MRSA can be treated successfully.

II. WHAT ARE THE SYMPTOMS OF A STAPH/MRSA INFECTION?

Pimples, rashes, pus-filled boils, especially when warm, painful, red or swollen, can mean that a person has a staph or MRSA skin infection. Occasionally, staph, including MRSA, also can cause more serious problems such as surgical wound infections, bloodstream infections and pneumonia. The only way to tell the difference between MRSA and other staph infections is with lab tests.

III. HOW IS MRSA DIAGNOSED?

A health care professional will take a sample on a sterile swab (like a Q-tip) from the infected area. The sample will be sent to a laboratory to see if the infection is caused by staph. If the infection is caused by staph, additional tests will be needed to determine if the staph is MRSA. Blood and other body fluids also can be tested for staph.

IV. HOW ARE MRSA SKIN INFECTIONS TREATED?

Incision and drainage is the primary treatment for abscesses (collections of pus) and should be performed whenever possible. Sometimes treatment requires the use of antibiotics. If antibiotics are needed, it is important to use the medication as directed unless a doctor says to stop. If the infection has not improved within a few days after seeing a doctor, it is important to contact the doctor again. MRSA infections also require good wound and skin care: keeping the area clean and dry, washing hands after caring for the area, and carefully disposing of any bandages.

V. IS MRSA A PROBLEM IN CORRECTIONAL FACILITIES?

MRSA is not necessarily a problem in all correctional facilities. Many people, including patients and corrections officers, carry staph (including MRSA) in their nose or on their skin, do not know they are carrying it, and do not get skin infections.

However, some conditions can lead to MRSA/staph infections in prisons and jails (see below) and in other settings where people have a lot of direct contact and skin damage can occur, like sports teams.

VI. WHAT KINDS OF CONDITIONS CAN LEAD TO A MRSA/STAPH INFECTION?

A. **Direct skin-to-skin contact:** To get a MRSA or other staph infection, you must get bacteria on your skin or in your nose. Staph, including MRSA, are spread by direct skin-to-skin contact. In correctional facilities, this can occur when one person shakes hands with another, tackles or wrestles with another person, gets "patted down" without gloves, or has some other direct contact with the skin of another person. This happens in any situation where there is direct contact, not just in jails or prisons.

B. **Poor hand hygiene**: The best way to prevent skin infections, and many other infections, is to wash hands frequently. MRSA and other staph can be removed from the hands by washing with soap and water or by using a hand sanitizer.

C. **Lack of attention to cuts and scrapes**: MRSA and other staph need to get into the skin before an infection occurs, often through a scrape, scratch, or wound. MRSA also can enter the body when non-sterile equipment is used in body piercing and tattooing.

D. **Contact with personal items contaminated with drainage from infected scrapes, cuts, and other wounds**: These items include contaminated bandages, towels, bars of soap, topical preparations[3], athletic or gym equipment, and uniforms or other clothing.

Note: Risk of transmission is low from environmental surfaces that are not contaminated by skin wounds or frequent direct skin contact. (Additional information about environmental cleaning and disinfection is provided in MRSA Infections: Information for Jails and Prisons.)

People with MRSA and other staph skin infections - especially boils or wounds that are swollen and have pus - can most easily spread staph to others. Skin infections should be taken seriously and treated appropriately.

VII. WHAT ABOUT FAMILY AND FRIENDS OUTSIDE THE PRISON OR JAIL?

It is normal to be concerned about spreading MRSA and other staph to family and friends outside the jail or prison. However, your family and friends do not have a greater chance of getting MRSA or other staph infections from you just because you work in a correctional facility. There are many ways to reduce the risk of spreading MRSA and other staph, starting with frequent hand washing. (See additional prevention steps below.)

Keep in mind that many people, inside and outside correctional facilities, carry staph on their skin and do not have an infection. These people are "colonized" with staph. In some places, such as hospitals and nursing homes, MRSA and other staph infections are relatively common. In other words, there are many ways that people are exposed to MRSA and other staph.

VIII. HOW CAN MRSA BE PREVENTED AND CONTROLLED IN CORRECTIONAL FACILITIES?

As with other infectious diseases, basic infection control practices should be followed.

A. Practice good hand hygiene. Wash your hands and encourage patients and their visitors to practice proper hand washing as well.

B. Be observant. Encourage patients with skin lesions to follow up with health care staff as soon as possible. See a doctor if you are concerned about having a skin infection.

C. Cover draining wounds and damaged skin (sores, cuts, scratches and scrapes) with bandages. Carefully dispose of bandages containing pus.

D. Use contact precautions (e.g., gown and gloves) for wound care.

E. Take care of your skin (avoid dry skin, cuts and scrapes, and keep cuts and scrapes clean and covered) and encourage patients to do the same.

F. Encourage patients to take regular showers with soap and warm water.

G. Do not share personal items such as towels, razors and toothbrushes. Encourage patients not to share personal items.

H. Use appropriate personal protective equipment (PPE) (for example, gloves) whenever you expect to have contact with a patient's blood or body fluids.

I. Follow your agency's infection control guideline.

[3] *Ointments, balms, Lotions, deodorants, antibiotic creams*

IX. WHAT ARE OTHER MEANS FOR REDUCING MRSA TRANSMISSION?

A. Launder sheets, towels, uniforms and underclothing with hot water and detergent and dry on a hot setting, or use a detergent which has the same effect.

B. Wear gloves when handling dirty laundry at the facility.

C. Regularly clean sinks, showers and toilets.

D. Common sense approaches to keeping surfaces clean will reduce the levels of all bacteria, as well as many respiratory viruses, on environmental surfaces. In addition, targeted, appropriate use of surface disinfectants is recommended when MRSA transmission is a concern.

Appendix 3: MRSA Q&A (Patients)

I. WHAT IS MRSA?

MRSA stands for "**M**ethicillin-**R**esistant ***S****taphylococcus* ***A****ureus*." MRSA is a type of Staphylococcus aureus ("staph") bacteria that is resistant to some antibiotics.

Many people think that MRSA routinely causes unusually severe disease. Although some people become ill with serious infections such as pneumonia, bloodstream infections, or bone infections, these types of illness are rare in healthy people who get MRSA skin infections. With prompt, proper medical care, MRSA can be treated successfully.

II. WHAT ARE THE SYMPTOMS OF AN INFECTION CAUSED BY MRSA?

Pimples, rashes, pus-filled boils, especially when warm, painful, red or swollen, can mean that a person has a staph or MRSA skin infection. Occasionally, staph, including MRSA, also can cause more serious problems such as surgical wound infections, bloodstream infections and pneumonia. The only way to tell the difference between MRSA and other staph infections is with lab tests.

Ask to see the health care staff if you think you have a skin infection. They will decide what tests and treatment are necessary, if any.

III. HOW ARE MRSA INFECTIONS TREATED?

Incision and drainage is the primary treatment for abscesses (collections of pus) and should be performed whenever possible. Sometimes treatment requires the use of antibiotics. If antibiotics are needed, it is important to use the medication as directed unless a doctor says to stop. If the infection has not improved within a few days after seeing a doctor, it is important to contact the doctor again. MRSA infections also require good wound and skin care: keeping the area clean and dry, washing hands after caring for the area, and carefully disposing of any bandages.

IV. IS MRSA A PROBLEM IN CORRECTIONAL FACILITIES?

MRSA is not necessarily a problem in all correctional facilities. Many people, including patients and corrections officers, carry staph (including MRSA) in their nose or on their skin, do not know they are carrying it, and do not get skin infections.

However, some conditions can lead to MRSA/staph infections in prisons and jails (see below) and in other settings where people have a lot of direct contact and skin damage can occur, like sports teams.

V. WHAT CAN LEAD TO A MRSA/STAPH INFECTION IN A PRISON OR JAIL?

A. **Direct contact**: *To get a MRSA or other staph infection, you first must get the bacteria on your skin.* Staph, including MRSA, are spread by direct skin-to-skin contact. In correctional facilities, there may be regular, frequent direct contact among patients and correctional officers. For example, when one person shakes hands with another, tackles or wrestles with another person, gets "patted down" without gloves, or has some other direct contact with the skin of another person, staph can be passed from one person to another. This happens in any situation where there is direct contact, not just in jails or prisons.

   Staph also can spread by contact with items that have been used by people with staph on their skin, like towels or athletic equipment shared in the gym.

B. **Lack of hand washing**: The best way to prevent skin infections, and many other infections, is to wash your hands frequently. MRSA and other staph can be removed from your hands by washing with soap and water. Daily showering is helpful to remove bacteria from the skin. Wearing shower shoes can protect your feet from bacteria and fungi as well.

C. **Cuts and scrapes**: To cause infection, MRSA and other staph need to get into the skin. This can happen through a scrape, scratch or wound. MRSA also can enter the body when non-sterile equipment is used in body piercing and tattooing.

D. **Contact with personal items contaminated with drainage from infected scrapes, cuts and other wounds**. These items include contaminated bandages, towels, soaps, topical preparations*[4], athletic or gym equipment, and uniforms or other clothing.

People with MRSA and other staph skin infections—especially boils or wounds that are swollen and have pus—are most likely to spread staph to others. Skin infections should be taken seriously. If you have a skin infection, ask to see the health care staff.

VI. WHAT ABOUT FAMILY AND FRIENDS OUTSIDE THE PRISON OR JAIL?

It is normal to be concerned about spreading MRSA and other staph to family and friends outside the jail or prison. There are many ways to reduce the risk of spreading MRSA and other staph, starting with frequent hand washing. See additional prevention steps below.

VII. HOW CAN MRSA BE PREVENTED AND CONTROLLED IN CORRECTIONAL FACILITIES?

A. Practice good hand hygiene. Wash your hands often with soap and water for at least 20 seconds.

B. Take care of your skin and any cuts or scratches. If you notice any lumps, bumps or lesions, never try to open them yourself. Always ask the health care staff to look at it as soon as possible)

C. Avoid getting dry skin. Dry skin can crack and make an infection more likely. Do not share personal items such as towels, razors and toothbrushes.

D. Cover damaged skin (cuts, scrapes and scratches) and draining wounds with bandages.

E. Carefully dispose of bandages containing pus or blood.

F. Shower regularly with soap and warm water.

G. Use a barrier (clean towel or clothing) between your skin and equipment that is shared with others, like exercise equipment in the gym.

H. Request to see the health care staff if you think you have a skin infection.

The best way to prevent MRSA infections, and many other infections, is to wash your hands frequently.

[4] Ointments, balms, lotions, deodorants, antibiotic creams

Appendix 4: MRSA Reporting Template

Patients – MRSA SSTI							Staff
Month/Year	Total Wounds	Wounds Cultured	MRSA + Culture	% MRSA + Cultures	MRSA identified ≤10 days after adm.	MRSA identified ≥11 days after adm.	MRSA + Culture
					Acquired Prior to Custody*	Acquired While in Custody*	
January							
February							
March							
April							
May							
June							
July							
August							
September							
October							
November							
December							
TOTAL							
Average							

**Definition is for surveillance purposes only.*

HIV Prophylactic Post Exposure Medications

I. BACKGROUND

Percutaneous exposures continue to occur for healthcare workers. The average risk of acquisition of HIV through percutaneous exposure to HIV-infected blood is approximately 0.3%. The risk is increased by:

A. Deep injury to the exposed health care worker

B. Visible blood on the device

C. Large bore hollow needle

D. Exposure of the device to the source patient's vein or artery

E. High viral titer in known or suspected HIV-positive source patient

II. PROCEDURE

A. The following medications and dosages should be used for HIV prophylactic post exposures:

1. Basic Regimen:

Zidovudine (Retrovir, AZT, ZDV) 300 mg b.i.d. +
Lamivudine (Epivir, 3TC) 150 mg b.i.d.+
Lopinavir/Ritonavir (Kaletra) 400/100 mg b.i.d.

B. At least two doses of the basic regimen must be on hand at all times. The medication must +be kept in a secure location where the medical staff can access it immediately.

C. The medication is to be used for all staff including state correctional employees.

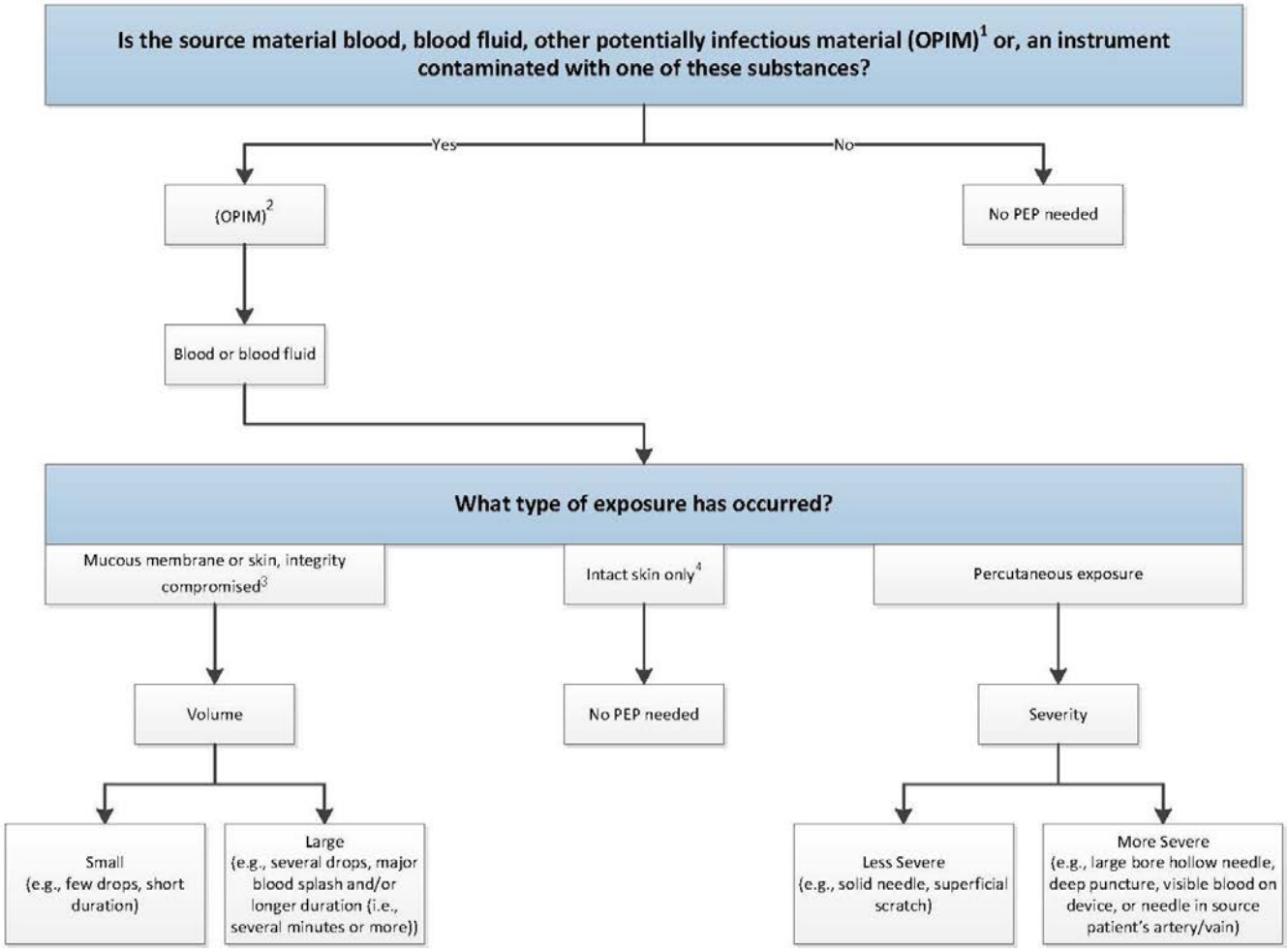
D. The physician on duty must determine whether the injury is a significant exposure and which dosage/regimen is appropriate.

E. PEP should be initiated as soon as possible (i.e., within a few hours rather than days) but, if appropriate for the exposure, PEP should be started even when the interval since exposure exceeds 36 hours.

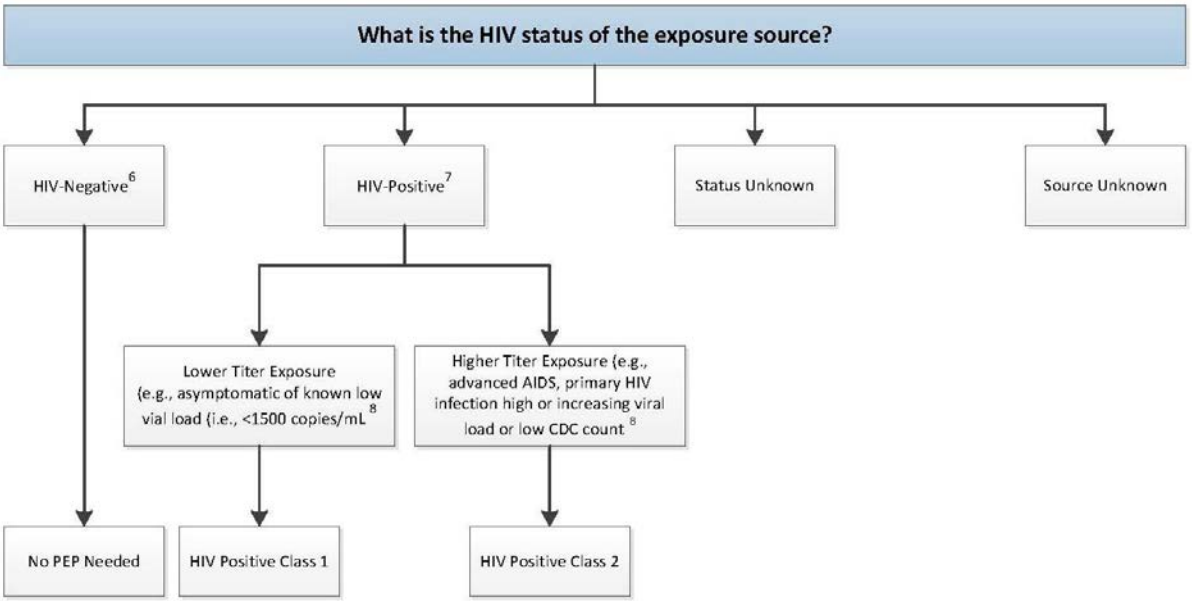
F. Other considerations (when choosing antiretroviral agents) include pregnancy in the healthcare worker and exposure to virus known or suspected to be resistant to the antiretroviral drugs.

G. Finally, access to clinicians who can provide post-exposure care should be available during all working hours, including nights and weekends.

III. STEP 1: EVALUATION OF EXPOSURE



IV. STEP 2: DETERMINE THE HIV STATUS OF THE SOURCE



1 Semen or vaginal secretions; cerebrospinal, synovial, pleural, peritoneal, pericardial, or amniotic fluids.
2 Exposures to OPIM must be evaluated on a case-by-case basis. In general, these body substances are considered a low risk for transmission in healthcare settings. Any unprotected contact to concentrated HIV in a research laboratory or production facility is considered an occupational exposure that requires clinical evaluation to determine the need for PEP.
3 Skin integrity is considered compromised if there is evidence of chapped skin, dermatitis, abrasion, or open wound.
4 Contact with intact skin is not normally considered a risk for HIV transmission. However, if the exposure was to blood, and the circumstance suggests a higher volume exposure (e.g., an extensive area of skin was exposed or there was prolonged contact with blood), the risk for HIV transmission should be considered.
5 The combination of these severity factors (e.g., large-bore hollow needle and deep puncture) contributes to an elevated risk for transmission if the source person is HIV-positive.
6 A source is considered negative for HIV infection if there is laboratory documentation of a negative HIV antibody, HIV polymerase chain reaction (PCR), or HIV p24 antigen test result from a specimen collected at or near the time of exposure and there is not clinical evidence of recent retroviral-like illness.
7 A source is considered infected with HIV (HIV positive) if there has been a positive laboratory result for HIV antibody, HIV PCR, or HIV p24 antigen or physician-diagnosed AIDS.
8 Examples are used as surrogates to estimate the HIV tier in an exposure source for purposes of considering PEP regimens and do not reflect all clinical situations that may be observed. Although a high HIV titer in an exposure source has been associated with an increased risk for transmission, the possibility of transmission from a source with a low HIV titer\ also must be considered.

V. STEP 3: DETERMINE THE POST-EXPOSURE PROPHYLAXIS (PEP) RECOMMENDATIONS

Exposure Type	HIV Positive Class I	HIV Positive Class 2
Percutaneous—Less Severe	Recommend basic regimen	Recommend expanded regimen
Percutaneous—More Severe	Recommend expanded regimen	Recommend expanded regimen
Mucous Membrane/Non-intact Skin—Small Volume	Consider basic regimen	Recommend basic regimen
Mucous Membrane/Non-intact Skin—Large Volume	Recommend basic regimen	Recommend expanded regimen

[1] *Source of unknown HIV status: PEP generally not warranted, consider basic regimen for source with HIV risk factors. Unknown source: PEP generally not warranted; consider basic regimen where exposure to HIV-infected person likely*

VI. REFERENCE

A. Adapted from Updated US Public Health Service Guidelines for the Management of Occupational Exposures to Human Immunodeficiency Virus and Recommendations for Post exposure Prophylaxis. www.jstor.org/stable/10. 1086/672271.

Sexually Transmitted Diseases Treatment Recommendations

DX	Recommendation	Alternative Regimen
Primary and Secondary Syphilis Early Latent Syphilis (less than 1 year duration)	Benzathine penicillin 2.4 million units IM in a single injection	1. Doxycycline 100 mg p.o. b.i.d. for 14 days
Latent Syphilis (greater than 1 year duration or unknown)	Benzathine penicillin 2.4 million units IM for three doses at 1-week intervals	1. Doxycycline 100 mg p.o. b.i.d. for 28 days
Neurosyphilis	Aqueous crystalline penicillin G 18–24 million units per day, administered as 3–4 million units IV every 4 hours or continuous infusion, for 10–14 days	Procaine penicillin 2.4 million units IM once daily plus Probenicid 500 mg orally four times a day, both for 10–14 days
Syphilis during pregnancy	Penicillin regimen appropriate for stage of syphilis	Penicillin allergic pregnant patients should be desensitized to penicillin
Gonorrhea	Ceftriaxone 250 mg IM in a single dose +Azithromycin 1 g PO as a single dose	1. Ciprofloxacin 500 mg orally in a single dose OR 2. Levofloxacin 250 mg orally in a single dose AND Azithromycin 1g PO as a single dose Plus, treat for Chlamydia infection if it has not been ruled out
Chlamydia	1. Doxycycline 100 mg orally twice daily for 7 days OR 1. Azithromycin 1 g orally in a single dose	
Chlamydia during pregnancy	1. Amoxicillin 500 mg orally three times daily for 7 days	1. Azithromycin 1 g orally in a single dose
Genital herpes (HSV), first clinical episode	1. Acyclovir 400 mg three times daily for 7–10 days OR 2. Acyclovir 200 mg orally five times daily	
Genital herpes (HSV), recurrence	Episodic therapy: 1. Acyclovir 400 mg three times daily for 5 days	Suppressive therapy: 1. Acyclovir 400 mg orally twice daily, indefinitely

Infirmary Services Manual

Infirmary Services

I. PURPOSE

The purpose of this Infirmary Services Manual is to establish procedures for providing infirmary services. A separately defined medical area/infirmary shall be maintained that provides organized bed care and services for patients admitted for 24 hours or more and is operated for the expressed or implied purpose of providing nursing care and observation for persons who do not require a higher level of inpatient care.

II. GUIDELINE

The inpatient unit shall be available to provide limited medical and nursing services for patients with health care problems in an inpatient setting. Inpatient services may include medical care, isolation, observation, first aid, nursing care and post-operative care. Patients may also be assigned to the inpatient unit for sheltered housing. In-patient care is not used as a substitute to hospital level care (ICU, medical/surgical acute care), or a licensed nursing care facility. It is generally recommended that all patients discharged from acute inpatient facilities be placed in the infirmary for observation, unless such a patient is deemed stable for the general population. Clinical issues are the responsibility of the Site Medical Director or designee and operational issues are the responsibility of the Health Services Administrator and the Director of Nursing.

III. SPECIFICATIONS

Inpatient units will be able to provide the following:

A. Twenty-four hour nursing coverage. A supervising RN is on site at least once every 24 hours.

B. 24-hour on-call physician coverage.

C. The frequency of physician rounds will be determined by site specific guideline based on the categories of care provided but all sites will meet a minimum of physician rounds and resulting documentation of patient condition three (3) times/week.

D. All patients will be housed in cells within sight or hearing of health staff. This may be accomplished by a call button system. (The use of non-medical staff to alert health staff does not constitute compliance.)

E. All patients discharged from a hospital admission (not an Emergency Room visit unless specified by the ER provider) will be admitted as acute status until they are seen by the provider and released from such status.

F. There will be an inpatient medical record for each person on the unit.

G. Admission and discharge from the unit occur only on the order of a physician or other provider (NP's, PA's, dentists) where permitted by their scope of practice. This will be specified in the site specific guideline.

H. Inpatient unit care (correlates to infirmary care).

I. Infirmary care will be directed by the physician designee or Regional Medical Director in his/her absence.

J. Nursing services will be provided under the direction of a registered nurse.

K. A manual of nursing care procedures is available and is consistent with the states nurse practice act and licensing requirements.

IV. PROCEDURE

A. Definitions:

1. Infirmary Admission: In the inpatient unit, all patient care is under the supervision of the Medical Director or designee. Examples include, but are not limited to, medical conditions which require continuous monitoring by physicians and nurses, patients recovering from surgery, patients receiving long-term IV antibiotics, etc.
2. Observation Admission: An observation admission is a stay of less than 24 hours for the purpose of monitoring a patient. Examples include, but are not limited to, observation and assessment, dressing changes, diagnostic testing preps, preparing a patient for surgery, etc.
3. Shelter Housing/Maintenance Care: This is care for patients who by virtue of a physical condition are not candidates for general population. Their need for this type of housing is primarily for support, supervision, and safety.
4. Discharge Status: This applies to a patient who has been discharged from the inpatient unit by a physician but is awaiting transport to his/her regular housing unit by security.

B. General standards for infirmary admissions:

1. All hospital discharges will first be sent to infirmary unless the infirmary physician.
2. Security must ensure that the on-site medical director or the on-call physician has accepted all hospital discharges. No discharge will be accepted without a hospital discharge summary. The discharge summary shall include at a minimum:
   a. Admitting and discharge diagnoses
   b. Condition
   c. Summary of hospital course
   d. Procedures performed
   e. Diet
   f. Discharge medications
   g. Special care requirements
   h. Needed follow-up appointments
3. Each placement of a patient in the infirmary shall be considered an acute infirmary admission, unless identified as a 23-hour observation admission.
4. The accepting physician (site physician or on-call physician) should make every effort to ensure that physician to physician communication has occurred. If the communication was not initiated by the discharging hospital, or did not occur and/or a written discharge summary was not received by the accepting infirmary physician, the Regional Medical Director and Chief Medical Officer should be notified so that the appropriate medical and administrative leadership at the discharging hospital can be notified.
5. Mental health infirmary admissions may or may not involve the assignment of suicide observation status (SOS) (suicide precautions), depending upon whether the patient is determined to be at risk for serious self-injury. Patients without risk for serious self-injury, but who nevertheless present with acute symptoms of mental impairment (e.g., disorientation, delusions hallucinations, disorganized speech), may be admitted for observation without suicide precautions. The admitting clinician must order the frequency of the observations and any other restrictions.

6. Each medical infirmary admission shall provide a medical plan of care developed by the clinician for each patient (reflected in the orders and/or SOAPE note). This plan shall include directions to health care staff regarding their roles in the care and supervision of the patient. The Site Medical Director will provide general supervision for all personnel authorized to admit patients to the infirmary.

C. Documentation:

1. A nursing assessment will be completed and documented within two (2) hours of admission.

2. A mental health assessment will be completed and documented for mental health infirmary admissions. Mental health or medical nursing assessments will be completed each shift unless otherwise ordered by the clinician. Patients admitted for mental health reasons who have acute or exacerbated chronic medical problems or patients admitted for medical concerns who exhibit mental health impairment shall be assessed according to physician consent.

3. A patient admitted to the infirmary shall have a separate and complete inpatient record which shall contain, at the minimum:

   a. Chief complaint

   b. History of present illness

   c. Admitting orders that include the admitting diagnosis, medication, diet, activity restrictions, diagnostic tests required and other follow-up

   d. Past history and review of systems

   e. Vital signs (on admission and at least every shift thereafter unless otherwise ordered by the physician)

   f. Initial impression

   g. Medical care plan (as per paragraph II.C above)

   h. Nursing and clinician progress notes/shift assessments

   i. Mental health nursing progress notes/shift assessments; and

   j. Discharge summary

4. A nursing assessment is required on each shift for infirmary and observation medical and mental health patients. This may be accomplished by use of a nursing assessment shift flow sheet. Additional information related to the assessment will be documented on the back of the nursing form. All documentation shall be placed in chronological order.

5. A physician admitting note will be conducted on all infirmary admissions within 24 hours of the patient's arrival in the infirmary for any medical reason. The physician admitting note will document at least the following: a complete patient medical, social and family history, clinical chart review, review of systems, admitting diagnosis, activity restrictions, assessment and differential diagnosis, laboratory and diagnostic studies required, physician orders for medications, diet, and plan of care.

6. Physician progress notes will be written following all physician rounds, a minimum of three (3) times/week and with any noted change in patient condition. All infirmary patients must be within sight or sound of staff.

7. Provided at the physician's discretion, patients will be given information on Advance Directives and given the choice of completing the Advance Directive form according to the guideline on advance directives.

D. Infirmary Medications:

1. When a patient is admitted to the infirmary, he/she is to bring all keep-on-person (KOP) medications with her/him. When these medications are for medical conditions unrelated to the admitting medical/mental health condition, e.g., chronic clinic meds, the medications may be continued from the patient's own supply when so indicated by a physician's order. Patient medications that are to be used during the inpatient stay will be kept in a designated area in the nursing unit of the infirmary in the Pyxis unit (if available) or in patient specific blister packs.

2. Within 48 hours of discharge from the infirmary, a discharge summary shall be completed by the physician or clinical associate. The discharge summary shall include the course of treatment in the infirmary, final diagnosis, medications, and follow up care. In addition, the summary shall be signed and dated by the clinician completing the report. A copy of this summary is placed in the patient outpatient record.

E. Infirmary Admission:

1. PHYSICIAN

a. Gives a written or verbal order for admission

b. Gives written or verbal orders regarding patient care

c. Completes a clinical chart review and admission note within 24 hours excluding weekends.

d. Makes rounds per site-specific guideline but a minimum of three (3) times/week and other times as needed for change in patient condition. Physician progress notes will be written following all rounds and other patient contact.

e. Reviews most recent nursing notes

f. Writes a note specifying changes in treatment/plan of care in the in-patient unit progress notes

g. Writes new orders on the order sheet; signs off on verbal orders

Reviews, initials and dates all diagnostic results. Progress notes are written to explain any abnormally lab and diagnostic results along with a plan of care to address or further investigate abnormal results.

2. NURSING

a. Ensures that the physician orders are processed and carried out

b. Completes a nursing admission assessment within 2 hours of admission

c. Performs and documents a head-to-toe assessment:

i. Every shift

ii. As ordered by the physician

d. Makes rounds with the physician as appropriate

e. Notifies the physician of any significant change in the patient's condition and documents the contact in SOAPE format

f. Takes vital signs (temperature, pulse, respirations, BP, pain scale) at least once per shift and/or more frequently if instructed by physician or as indicated by the nurse's nursing assessments.

g. Uses the graphics flow sheet to document vital signs, weight, I/O, ADL's

h. Ensures that treatment orders, medications, etc., are administered as prescribed and are documented

i. Documents that activities of daily living are being met

j. Documents patient teaching and education

k. Gives verbal and written reports with the oncoming shift before leaving the unit

l. Notifies the on-call physician of abnormal study results (e.g., x-ray, lab, EKG,) if no physician present.

F. 23-hour Observation Status:

1. 23-hour observation status does not require an infirmary record. This is considered outpatient status. All information (e.g., physician orders, progress notes) will be documented in the patient's regular chart. If the patient remains in the infirmary more than 23 hours, an admission order must be obtained and an infirmary record initiated. All information documented prior to the actual admission time shall remain in the outpatient record.

2. 23-hour medical observation status: The on-call physician must be notified of this action within a reasonable period of time.

a. PHYSICIAN

i. Gives a written or verbal order for admission

ii. Gives written or verbal orders regarding patient care

iii. Writes a completed admit note within twenty-four (24) hours of admission

iv. Completes a clinical chart review within twenty-four (24) hours excluding weekends of admission and writes an admission note.

v. Writes a note specifying changes in treatment/plan of care in the infirmary progress notes

vi. Writes new orders on the order sheet; signs off on verbal orders

vii. Reviews, initials and dates all diagnostic results

viii. If approaching maximum hours allowed for observation, makes decision whether to admit, discharge, etc.

ix. Progress notes are written per guideline if observation status exceeds 24 hours.

b. NURSING

i. Ensures that the physician's orders are processed and carried out

ii. Completes a nursing admission assessment within 2 hours of admission

iii. Performs a head-to-toe assessment at least once daily and documents; other shifts do a focused note in SOAPE format

iv. Makes daily rounds with the physician as appropriate

v. Notifies the physician of any significant change in the patient's condition and documents the contact in SOAPE format

vi. Takes vital signs (temperature, pulse, respirations, BP, pain scale) daily and/or more frequently if instructed by physician or as indicated by the nurse's nursing assessments

vii. Uses the graphics flow sheet to document vital signs, weight, I/O, ADL's

viii. Ensures that treatment orders, medications, etc., are administered as prescribed and are documented

ix. Documents that activities of daily living are being met

x. Documents patient teaching and education daily

xi. Gives a report and does walking rounds with the oncoming shift before leaving the unit

xii. 23-hour mental health observation status: Nursing staff may place a patient in the infirmary or an isolation management room (IMR) if the assessment identifies the presence of psychotic symptoms or risk of serious self-injury or other types of symptoms that may reflect possible mental impairment; however, the on-call psychiatrist must be notified immediately.

(1) Physician orders must be obtained as to the level of observation required (minimally q. 15 minutes) and what articles the patient is allowed to have (e.g., clothing). These are to be recorded in the outpatient record.

(2) Mental health staff shall be notified of this admission and the patient shall be assessed by mental health staff on the morning of the next workday. Documentation of necessary follow-up will be made by mental health staff after an evaluation and such documentation will be entered in the medical record. Any change in the patient's condition prior to the evaluation must be reported to the physician.

(3) Appropriate documentation must be initiated if any observation frequency (e.g., every 15 minutes) is ordered by the physician. The form will be filed under miscellaneous in the outpatient record.

(4) A patient who requires SOS precautions (not just observations) due to assessed risk for serious self-injury shall not be placed on 23-hour observation status. Any SOS level of precaution requires an MHTC or infirmary admission.

c. PSYCHIATRIST

i. Gives a written or verbal order for admission

ii. Gives written or verbal orders regarding patient care

iii. Writes a completed admit note within twenty-four (24) hours of admission excluding weekends.

iv. Completes a clinical chart review within twenty-four (24) hours of admission and writes progress note

v. Makes rounds on designated patients

vi. Writes a note specifying changes in treatment/plan of care in the infirmary progress notes

vii. Writes new orders on the order sheet; signs off on verbal orders

viii. Reviews, initials and dates all diagnostic results. Progress notes are written to explain any abnormally lab and diagnostic results along with a plan of care to address or further investigate abnormal results.

ix. If approaching maximum hours allowed for observation, makes decision whether to admit, discharge, etc.

x. Progress notes are written if observation status exceeds 24 hours.

d. MENTAL HEALTH NURSING

i. Ensures that the physician's orders are processed and carried out

ii. Completes a nursing admission assessment within two (2) hours of admission

iii. Performs a head-to-toe assessment at least once daily and documents; other shifts do a focused note in SOAPE format

iv. Makes rounds with the physician as appropriate

v. Notifies the physician of any significant change in the patient's condition and documents the contact in SOAPE format

vi. Documents patient teaching and education daily

vii. Gives a report and does walking rounds with the oncoming shift before leaving the unit

viii. Rewrites a 1:1 watch form every four (4) hours

G. Sheltered Housing/Maintenance Care

1. PHYSICIAN

a. Gives a written or verbal order for admission

b. Gives written or verbal orders regarding patient care

c. Writes a completed admit note within twenty-four (24) hours excluding weekends of admission

d. Completes a clinical chart review and writes progress notes if being admitted from other than the in-patient unit

e. If being admitted from the in-patient unit, a progress note is written including the reason for transfer

f. Changes in treatment/plan of care are to be noted in the infirmary progress notes with orders written on the order sheet

g. Reviews, initials, and dates all diagnostic results. Progress notes are written to explain any abnormally lab and diagnostic results along with a plan of care to address or further investigate abnormal results.

h. Conducts rounds as indicated by the patient's needs, with minimally an assessment and completion of a progress note every week

i. Every 90 days writes an order for continued sheltered housing/care, to indicate why alternative housing could not be considered

2. NURSING

a. If patient is coming from in-patient unit for admission, makes a note in chart about the reason for the admission

b. If the patient is coming from other sites, completes a nursing admission assessment within two (2) hours of admission

c. Performs and documents a head-to-toe assessment:

i. Biweekly

ii. As ordered by the physician

d. Takes vital signs, weekly or more frequently if ordered, and records them on graphic flow sheet

e. Completes SOAPE charting as indicated by patient's condition/needs, or at least biweekly

f. Completes graphic sheet daily for activities of daily living

g. Writes and follows care plan

H. Discharged but not immediately transferred to regular housing unit:

1. PHYSICIAN

a. Makes rounds weekly or more frequently, as indicated by patient's condition/needs

b. Writes progress note if change in condition

c. Writes orders as appropriate for condition

2. NURSING

a. Maintains medical record chart until physically transported from the unit

b. Performs and documents a head-to-toe assessment:

i. Biweekly

ii. As ordered by the physician

c. Completes SOAPE charting as indicated by the patient's condition/needs, or at least biweekly.

I. Discharge procedure:

1. PHYSICIAN

a. Writes an order for discharge indicating that the patient is to be discharged from the in-patient unit back to the regular housing assignment

b. Updates chrono form

c. Completes a discharge summary that will include:

i. Clinical course in the in-patient unit

ii. Current active medical problems

iii. Medications

iv. Pending appointments

v. Specific discharge instruction

d. In the event that the security staff does not transfer the patient on the same day as discharge, the summary is to be kept in the front of the medical jacket as well as in the infirmary section of the medical record. Physician will update summary if condition changes before transfer. Progress notes will be written by the physician daily until patient is moved out of the infirmary or changed to housing status at which time progress notes will be written at a minimum of three (3) times per week.

2. NURSING

a. Once the order for discharge has been written:

i. Notes discharge order

ii. Takes off any orders on discharge summary which may need attention before transfer occurs

iii. Breaks down chart according to protocol

iv. Enters discharge into In-Patient Log

v. Changes to Discharge Care standards and charting if transfer of patient is not immediate

vi. Notes chrono

vii. Gives a copy of the chrono to the Unit Manager and the original to Medical Records

b. Makes an entry in the progress note indicating: Patient instructions given

c. Notifies the following of the discharge:

i. Correctional unit manager via memo

ii. In-patient unit charge nurse verbally

d. Copy of chrono to the following:

i. Medical Records (original)

ii. Classification/Case Worker

iii. To chart

e. When the patient is physically leaving the in-patient unit:

i. Places all MARs and patient specific medications inside of the medical transport bag

ii. Places discharge summary in top of section 2

iii. Completes medical record receipt and places completed medical chart with all volumes and x-rays into transport bag

iv. Locks transport bag and has transport officer sign the medical records receipt

v. Keeps a copy of the medical record receipt

vi. Enters discharge into the log

vii. Notifies security to have room cleaned

viii. Deletes the patient's name from the nursing report, diet list, and Kardex

Appendix 1: Recommendations for Who Can Be Housed in an Infirmary

A. Pneumonia
B. Medical observation
C. Non-displaced fracture, or stabilized displaced fracture with no neuro-vascular compromise (until evaluated by physician)
D. Cellulitis
E. Dehydration (hemodynamically stable)
F. Urolithiasis
G. 1st and 2nd degree Burns <20% of body
H. Osteomyelitis
I. Hypertension without acute symptoms, i.e., severe headache, altered mental status
J. COPD with acute exacerbation, but oxygen saturation >85%
K. URI
L. Moderate CHF
M. Administration of I.V. antibiotics
N. Moderate gastroenteritis
O. Diabetes stabilization without associated mental changes (hyperglycemia with mild dehydration)
P. Wound care (including debridement of some wounds)
Q. Chronic chest pain management – non-cardiac or cardiac with normal EKG and negative Troponin
R. Mild to moderate trauma (case-specific)
S. Pyelonephritis
T. Inflammatory Bowel's Disease (uncomplicated by severe fluid loss or bleeding) only if accompanied by bleeding or fluid loss
U. Opportunistic infections secondary to AIDS (uncomplicated)
V. 24-hour observation after ER visit and hospital discharge
W. Rule out TB (negative airflow rooms)
X. Lumbar puncture, depending on physician skill level
Y. Paracentesis, depending on physician skill level
Z. Hospice care (must have signed DNR)

Appendix 2: Recommendations for Who Should NOT Be Housed in an Infirmary

A. Syncope, depending on symptoms
B. Severe lower and upper GI Bleeding
C. Frank hemoptysis, depending on vital signs, blood volume and X-Ray capability
D. Frank hemetemesis, depending on vital signs and blood volume
E. Frank hematochezia, depending on vital signs and blood volume
F. Lacerated tendons
G. Obvious open fracture
H. Penetrating Injuries, unless determined to be in a non-vital area
I. New onset arrhythmia
J. DKA: BS >500 associated with mental changes
K. Semi-coma/coma
L. Myocardial Infarction
M. Abdominal-peritoneal symptoms, due to inflammation or possible ruptured viscus or signs of rebound tenderness or abdominal rigidity
N. Acute blood loss and hemodynamically unstable
O. Temp. >105 and <94 (lower temp taken rectally)
P. Severe abnormal electrolytes: K+ <2.5 or >6.0; Na+ <120, depending on other symptoms, i.e., abnormal EKG or altered mental status
Q. Acute altered mental state in non-mental health patient
R. Respiratory emergency (resp. >30 and <8; oxygen saturation <90%; using accessory respiratory muscles)
S. Status epilepticus
T. Pulmonary edema
U. Unstable angina
V. Anaphylactic shock

Influenza Outbreak Guidelines in Corrections

Influenza Virus Management during a Confirmed Outbreak Correctional Institutions

I. INTRODUCTION

This guideline serves to standardize the approach to an influenza outbreak in correctional facilities. Recommendations on the appropriate use of influenza vaccines and diagnostic testing will not be addressed here. The above references were used to summarize up-to-date information on the current recommendations for an influenza outbreak, including isolation procedures and antiviral use.

II. INFLUENZA VIRUS TRANSMISSION

Influenza viruses are thought to spread from person to person primarily through large-particle respiratory droplet transmission (i.e., when an infected person coughs or sneezes near a susceptible person). This type of transmission requires close contact between source and recipient persons, because droplets generally travel only short distances (approximately ≤6 feet) through the air. Airborne transmission over longer distances (i.e., from one patient's room to another) has not been documented and is not thought to occur. Indirect contact transmission via hand transfer of influenza virus from virus-contaminated surfaces or objects to mucosal surfaces of the face (i.e., nose and mouth) or airborne transmission via small particle aerosols in the vicinity of the infectious person also might occur; however, this relative contribution of the different modes of influenza transmission is unclear. The typical incubation period for influenza is 1–4 days (average=2 days). The serial interval time (the time between onsets among epidemiologically related cases) for influenza among household contacts is estimated to be 3–4 days. Adults can shed influenza virus from the day before symptoms begin through 5–10 after the illness onset. However, the amount of virus shed, and the presumed infectivity, decreases rapidly by 3–5 days after illness onset, with shedding completed in most persons by 5–7 days after illness onset. Prolonged viral replication has been reported in adults with severe disease, including those with comorbidities or those patients receiving corticosteroid therapy. Severely immunocompromised persons can shed virus for weeks or months.

III. DEFINITIONS:

A. Influenza like Illness: Abbreviated ILI. Defined in patients with fever (100°F (38°C) plus either cough or sore throat – in the absence of a known cause other than influenza.

B. Exposure: Defined as having been in a setting where there was a high likelihood of contact with respiratory droplets and/or body fluids of a person with ILI.

C. Close Contact: Typically does not include activities such as walking by an infected person or sitting across from a symptomatic patient in a waiting room or office.

IV. CLINICAL SIGNS AND SYMPTOMS OF UNCOMPLICATED SEASONAL INFLUENZA INFECTION

Clinical findings include a toxic appearance in the initial stages, hot and moist skin, a flushed face, and injected eyes. Influenza-like illness (ILI) is defined in patients with fever (100◦F (38◦C)) plus either cough or sore throat - in the absence of a known cause other than influenza.

Range of Symptoms	Percentage Frequency
Fever	≈100%
Cough	≈85%
Malaise	≈80%
Chills	≈70%
Headache	≈65%
Anorexia	≈60%
Rhinorrhea	≈60%
Myalgia	≈53%
Sore throat	≈50%
Tender cervical LAD	≈10%
GI symptoms	<10%

V. PATIENTS AT HIGH RISK FOR THE COMPLICATIONS OF INFLUENZA

Influenza virus infection has been associated with worsening of certain clinical conditions. Individuals in the following risk groups have a higher risk of developing complications to seasonal influenza:

A. Pregnant women or post-partum women within two (2) weeks of delivery

B. Adults 65 years of age or older

C. Persons with Chronic Pulmonary disorders, including Asthma

D. Persons with Cardiovascular disorders, except hypertension

E. Persons with Renal disorders

F. Persons with Hepatic disorders

G. Persons with Hematological disorders (including sickle cell anemia)

H. Persons with neurologic disorders (including cerebral palsy, epilepsy, stroke, intellectual disability, mod-severe developmental delay, muscular dystrophy, spinal cord injury)

I. Persons with serious mental health disorders

J. Persons with Neuromuscular disorders

K. Persons with Diabetes mellitus

L. Persons with immunosuppression, including that caused by medications or HIV+

M. Morbid obesity (BMI ≥40)

Term	Definition
Isolation	Confining individuals who are sick with influenza either to single rooms or by cohorting them with other influenza patients.
Quarantine	Confining asymptomatic persons who are contacts of influenza cases, while they are in the incubation period (until 4 days after exposure ended). The purpose is to assure that patients who are known to have been exposed to the flu virus are kept separate from other patients to assess whether they develop flu symptoms.

VI. MANAGEMENT AND CONFINEMENT OF SUSPECT AND CONFIRMED CASES

A. Patients with confirmed influenza infections or those with ILI should be placed in isolation.

B. Immediately place a face mask on all individuals who are identified as having ILI symptoms. They should be isolated or cohorted with other sick patients.

C. Rooms where patients with ILI are either housed alone or cohorted should be designated "Influenza Isolation Units." In general, no special air handling is needed. Depending on how ill the patients are, bunk beds may or may not be suitable. Ideally the unit should have a bathroom attached. If not, patients will have to wear a face mask to go to the bathroom outside the room. The door to this unit should remain closed with signage indicating that it is an Influenza Isolation Unit and listing recommended personal protective equipment (PPE).

D. Within the Influenza Isolation Unit, Standard Precautions should be followed. This includes either respirator or face mask for the patient (depending on guidance from the Medical Director). Healthcare personnel caring for patients should wear gloves for direct patient contact or contact with potentially contaminated areas in the patient's environment, eye protection (goggles or face shield) if splash or spray of body fluids is anticipated, and face masks. Gowns are recommended by the CDC if health care providers are within 6 feet of the patient. Hand hygiene is recommended before donning and after removing gloves.

E. Identify close contacts to flu cases and quarantine them in a separate unit.

F. The duration of quarantine during an influenza outbreak in a facility is four (4) days.

G. As feasible, beds/cots of quarantined patients should be placed at least 3–6 feet apart. These patients should be restricted from being transferred, having visits, or mixing with the general population.

H. A face mask is recommended for staff who are in direct, close contact (within 6 feet) of quarantined patients.

I. Once multiple flu cases occur within multiple housing units, a decision may be made to abandon contact investigation and the subsequent quarantine of contacts. Lock-down should be considered on a case-by case basis.

J. Actively monitor the number, severity, and location of cases of ILI.

K. Separate patients with ILI from others by placing them in individual cells when possible

L. Consider separating cell mates of sick patients for 48 hours for observation

M. Provide care of patients with ILI, including scheduled temperature checks and access to increased p.o. fluids. Also provide tissue, a plastic bag for the proper disposal of used tissues, and alcohol-based hand sanitizers

N. Restrict movements of patients with ILI within the facility and restrict patients from leaving, transferring from or to another facility during the seven (7) days after the onset of symptoms or until 24 hours after symptoms resolve, whichever is longer, unless necessary for medical care, infection control, or lack of isolation space.

O. If multiple patients become ill with confirmed influenza virus infection, they should be housed in a designated area of the institution specifically for sick persons (i.e., infirmary or other). Designate staff to care for these individuals only, and do not have these patients circulating in other parts of the institution. Limit movement of designated staff between different parts of the institution to decrease the risk of staff spreading influenza to other parts of the facility.

P. Linens, eating utensils, and dishes belonging to those who are sick do not need to be cleaned separately, but they should not be shared without thorough washing. Linens (such as bed sheets and towels) should be washed by using laundry soap and tumbled dry on a hot setting. Individuals should wash their hands with soap and water or an alcohol-based hand sanitizer immediately after handling dirty laundry.

Q. Assess and treat as appropriate soon-to-be released patients with ILI or other flu symptoms and make direct linkages to community resources to ensure proper isolation and access to medical care.

R. The facility health care providers should identify and address the special health needs of persons at high risk for complications following infection with seasonal influenza.

VII. ANTIVIRAL POST-EXPOSURE PROPHYLAXIS RECOMMENDATIONS

Antiviral post-exposure prophylaxis involves providing medication to prevent development of influenza. Because use of antiviral medications for prophylaxis may contribute to the development of antiviral resistant influenza strains, antiviral prophylaxis should be provided under a limited number of circumstances, as detailed below.

VIII. INFLUENZA POST-EXPOSURE CHEMOPROPHYLAXIS EFFECTIVENESS

Post-exposure chemoprophylaxis with a neuraminidase inhibitor (oseltamivir = Tamiflu®) generally should be reserved for those who have had recent close contact with a person with confirmed influenza. Persons who receive an antiviral medication for chemoprophylaxis might still acquire influenza virus infection and be potentially able to transmit influenza virus, even if clinical illness is prevented.

IX. INFLUENZA POST-EXPOSURE CHEMOPROPHYLAXIS INDICATIONS

A. Chemoprophylaxis with antiviral medications is not a substitute for influenza vaccination when influenza vaccine is available. Adverse events associated with antiviral medications are generally mild and self-limited but might result in morbidity resulting from medication side effects that outweigh the potential benefit of antiviral chemoprophylaxis. In addition, indiscriminate use of chemoprophylaxis might promote resistance to antiviral medications or reduce antiviral medication availability for treatment of persons at higher risk for influenza complications or who are severely ill. Patients receiving post-exposure antiviral chemoprophylaxis should be informed that chemoprophylaxis lowers but does not eliminate the risk for influenza, that susceptibility to influenza returns once the antiviral medication is stopped, and that influenza vaccination is recommended if available. Patients receiving chemoprophylaxis should be educated to seek medical evaluation as soon as they develop a febrile respiratory illness suggestive of influenza because influenza virus can still occur while a patient is on chemoprophylaxis and might indicate infection with a virus resistant to the antiviral medication used. Two guiding principles must be used when considering post-exposure chemoprophylaxis:

1. For the purposes of assessing possible exposure, *the infectious period*—the time period when an exposure may have occurred - is one day before ILI symptoms occur until 24 hours after fever ends.

2. Antiviral prophylaxis generally is not recommended if more than 48 hours have elapsed since the last contact with an infectious person. Prophylaxis is not indicated when contact occurred before or after, but not during, the ill person's *infectious period.*

B. Current guidelines recommend the following persons for post-exposure chemoprophylaxis:

1. Close contacts of a person with confirmed influenza infection or ILI that are at high risk for influenza complications (listed above) but have not been vaccinated against the influenza virus strains circulating at the time of exposure.

2. Unvaccinated healthcare workers who have occupational exposures and who did not use adequate personal protective equipment at the time of exposure

3. Antiviral agents should not be used for post-exposure prophylaxis in healthy patients.

4. Antiviral prophylaxis generally is not recommended if more than 48 hours have elapsed since the last contact with an infectious person. Prophylaxis is not indicated when contact occurred before or after the ill person's infectious period (defined above).

X. TREATMENT OF UNCOMPLICATED INFLUENZA INFECTION

Oseltamivir (Tamiflu®) is indicated for the treatment of uncomplicated acute illness due to influenza infection if the patient has been symptomatic for ≤2 days. Dose is 75 mg capsules p.o. b.i.d. x 5 days. If CrCl <30 mL/min, dose is decreased to 75 mg p.o. q.d. x 5 days.

XI. POST-EXPOSURE CHEMOPROPHYLAXIS

A. Oseltamivir (Tamiflu®) is indicated for post-exposure chemoprophylaxis as listed above. Oseltamivir should be initiated after close contact with an infected individual. Dose is 75 mg p.o. q.d. x 10 days.

B. Live attenuated influenza vaccine should not be administered within two (2) weeks before Oseltamivir or 48 hours after an Oseltamivir course (due to the Oseltamivir decreasing the efficacy of the influenza vaccine).

XII. REFERENCES

A. Antiviral Agents for the Treatment and Chemoprophylaxis of Influenza. Recommendations of the Advisory Committee on Immunization Practices (ACIP). Centers for Disease Control and Prevention. MMWR. Vol. 60/No. 1. January 21, 2011.

B. Seasonal Influenza in Adults and Children—Diagnosis Treatment, Chemoprophylaxis, and Institutional Outbreak management: Clinical Practice Guidelines of the Infectious Diseases Society of America (IDSA). CID 1009: 48 (15 April). 1003-1032.

C. Federal Bureau of Prisons Clinical Practice Guidelines on Pandemic Influenza Plan Modules 1-4. October 2012.

Medication Consent Forms (English and Spanish)

MEDICATION: BENADRYL (Diphenhydramine HCL)

PURPOSE: This medication can be used to treat side effects of certain medications.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Sleepiness, blurred vision, constipation, nausea, dry mouth, difficulty urinating, headaches, nervousness, increased thirst.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Forgetfulness, confusion, balance problems.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available, and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments alone.

APPROXIMATE LENGTH OF CARE: The medication usually acts within **1-2 hours**, and significant benefit may require regular and long term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff, orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Abrupt withdrawal or discontinuation of medication may cause medical problems. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form I am agreeing to let the Department of Corrections treat me with a psychotropic drug. Departmental staff have given me, and explained information about the nature of this treatment and the reasons I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____ **Race/Sex**_____
Date of Birth_____
Institution_____

WEXFORD HEALTH SOURCES, INC.

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: BENADRYL (Diphenhydramine HCL)

PROPÓSITO: Esta medicación puede usarse para tratar efectos secundarios de ciertas medicaciones.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Somnolencia, visión borrosa, estreñimiento, náuseas, sequedad en la boca, dificultad al orinar, dolores de cabeza, nerviosismo, aumento de la sed.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Olvido o falta de memoria, confusión, problemas con el equilibrio.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos por sí solos.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de **1-2 horas**, y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. La interrupción abrupta o el retiro de la medicación podría causar problemas médicos. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: COGENTIN (Benztropine Mesylate)

PURPOSE: This medication can be used to treat side effects of certain medications.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Blurred vision, constipation, nausea, dry mouth, difficulty urinating, headaches, nervousness, increased thirst, increased sensitivity to light, drowsiness, decreased sweating.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Muscle weakness, forgetfulness, confusion, vomiting, rash, dizziness.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available, and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments alone.

APPROXIMATE LENGTH OF CARE: The medication usually acts within **1 day**, and significant benefit may require regular and long-term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by telling the doctor or any other health care staff. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Abrupt withdrawal or discontinuation of medication may cause medical problems. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form I am agreeing to let the Department of Corrections treat me with a psychotropic drug. Departmental staff have given me, and explained information about the nature of this treatment and the reasons I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

WEXFORD HEALTH SOURCES, INC.

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: COGENTIN (Benztropine Mesylate)

PROPÓSITO: Esta medicación puede usarse para tratar efectos secundarios de ciertas medicaciones.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Visión borrosa, estreñimiento, náuseas, sequedad en la boca, dificultad al orinar, dolores de cabeza, nerviosismo, sed incrementada, sensibilidad incrementada a la luz, somnolencia, disminución en los sudores.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Debilidad muscular, pérdida de memoria, confusión, vómitos, sarpullido, mareos.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos por sí solos.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de **1 día**, y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. La interrupción abrupta o el retiro de la medicación podría causar problemas médicos. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: EFFEXOR (Venlafaxine HCL), EFFEXOR XR (Venlafaxine HCL Extended Release Capsules)

PURPOSE: This medication is used to treat symptoms associated with depressive disorders.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Sleepiness, insomnia, blurred vision, constipation, nausea, dry mouth, difficulty urinating, lightheadedness when getting up, sexual dysfunction, nervousness, weight loss.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Thyroid problems, changes in blood pressure, slurred speech, balance problems, vomiting, bleeding/irritated gums, increased risk of suicide.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available, and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments alone. Alternative treatments may include other medications, activity therapies, and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within **2 – 3 weeks**, and significant benefit may require regular and long-term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Abrupt withdrawal or discontinuation of medication may cause medical problems. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form I am agreeing to let the Department of Corrections treat me with a psychotropic drug. Departmental staff have given me, and explained information about the nature of this treatment and the reasons I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

WEXFORD HEALTH SOURCES, INC.

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: EFFEXOR (Venlafaxine HCL), EFFEXOR XR (Venlafaxine HCL Cápsulas de Liberación Extendida)

PROPÓSITO: Esta medicación es usada para tratar síntomas asociados con trastornos depresivos.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Somnolencia, insomnio, visión borrosa, estreñimiento, náuseas, sequedad en la boca, dificultad al orinar, mareos al ponerse de pie, disfunción sexual, nerviosismo, pérdida de peso.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Problemas de la tiroides, cambios en la presión arterial, pronunciar mal al hablar, problemas de equilibrio, vómitos, encías que pierden sangre/irritadas, incremento en el riesgo de suicidio.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos por sí solos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales, y terapias verbales tales como la terapia socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de **2-3 semanas**, y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse de que la medicación no esté causando ningún problema fisiológico grave.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente o por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. La interrupción abrupta o el retiro de la medicación podría causar problemas médicos. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

INFORMED CONSENT FOR ANTIPSYCHOTIC MEDICATION – FORM A

MEDICATION: _____

PURPOSE: This medication is used to treat serious emotional and mental conditions.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO:

_____
_____
_____

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO:

_____
_____

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments. Alternative treatments may include other medications, activity therapies**,** and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within a few days (though some may take several weeks or months), and significant benefit may require regular and long-term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Avoid long periods of time in sunlight without use of sunscreen; avoid exposure to sunlamps. Avoid too much exercise, extreme heat, or other activities that are likely to dehydrate you unless you are able to get enough water. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form, I am agreeing to let Department of Corrections staff treat me with an antipsychotic drug. Departmental staff have given me, and explained, information about the nature of this treatment and the reason I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA-FORMULARIO A MEDICACIÓN: _____

PROPÓSITO: Esta medicación es usada para tratar graves afecciones emocionales y mentales.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES:

_____

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES:

_____

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales [de actividades] y terapias verbales tales como asistencia socio-psicológica o terapia conductista [del comportamiento].

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de unos pocos días (aunque algunos pudieran llevar varias semanas o meses), y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. Evite largos períodos de tiempo al sol sin el uso de protector solar [*sunscreen*], evite exponerse a lámparas solares. Evite hacer mucho ejercicio, el calor extremo, u otras actividades que tengan probabilidad de deshidratarlo, al menos que pueda obtener suficiente agua. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

Informed Consent for Psychotropic Medication – FORM B

MEDICATION: _____

PURPOSE: This medication is used to treat serious emotional and mental conditions.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO:

_____

_____

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO:

_____

_____

_____

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available, and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments alone. Alternative treatments may include other medications, activity therapies, and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within _____, and significant benefit may require regular and long term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff, orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Abrupt withdrawal or discontinuation of medication may cause medical problems. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form I am agreeing to let the Department of Corrections treat me with a psychotropic drug. Departmental staff have given me, and explained information about the nature of this treatment and the reasons I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff has given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA – FORMULARIO B

MEDICACIÓN: _____

PROPÓSITO: Esta medicación es usada para tratar afecciones emocionales y mentales graves.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES:

_____

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES:

_____

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos por sí solos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales y terapias verbales tales como asistencia socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de _____, y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente o por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. La interrupción abrupta o el retiro de la medicación podría causar problemas médicos. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____

Institución _____

MEDICATION: GEODON (Ziprasidone)

PURPOSE: This medication is used to treat symptoms associated with disorders of thoughts, perceptions, behavior, and/or affect.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Sleepiness, muscle stiffness, abnormal involuntary movements (some of which may be persistent and are called Tardive Dyskinesia), difficulty urinating, lowered blood pressure (which may be experienced as light-headedness), blurred vision, dry mouth, constipation, and/or weight gain.

OTHER POTENTIAL, SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Increased risk of seizures, dizziness, neuroleptic malignant syndrome, reduced urine output, increased glucose, cholesterol, and triglycerides, EKG changes.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments. Alternative treatments may include other medications, activity therapies**,** and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within a few days (though some may take several weeks or months), and significant benefit may require regular and long-term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Avoid too much exercise, extreme heat, or other activities that are likely to dehydrate you unless you are able to get enough water. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form, I am agreeing to let Department of Corrections staff treat me with a psychotropic drug. Departmental staff have given me, and explained, information about the nature of this treatment and the reason I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID No_____ **Race/Sex**_____
Date of Birth_____
Institution_____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: GEODON (Ziprasidone)

PROPÓSITO: Esta medicación es usada para tratar los síntomas asociados con trastornos de los pensamientos, percepciones, el comportamiento y/o el afecto

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Somnolencia, endurecimiento muscular, movimientos involuntarios anómalos (algunos de los cuales pudieran ser persistentes y son llamados Disquinesia Tardiva), dificultad al orinar, presión arterial reducida (lo cual pudiera experimentarse como mareos), visión borrosa, sequedad bucal, estreñimiento, y/o aumento de peso.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Incremento en el riesgo de ataques, mareos, síndrome maligno neuroléptico, reducción en la producción de orina, incremento en la glucosa, colesterol y triglicéridos, cambios en los electrocardiogramas (ECG).

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales, y terapias verbales tales como la socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de unos pocos días (aunque algunos pudieran llevar varias semanas o meses), y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación, en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente y por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros fármacos de venta libre; evite conducir un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. Evite hacer mucho ejercicio, el calor extremo, u otras actividades que tengan la probabilidad de deshidratarlo, al menos que pueda conseguir suficiente agua. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: HALDOL (Haloperidol), HALDOL DECANOATE (Haloperidol Decanoate)

PURPOSE: This medication is used to treat symptoms associated with disorders of thoughts, perceptions, and/or behavior.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Sleepiness, muscle stiffness, abnormal involuntary movements (some of which may be persistent and are called Tardive Dyskinesia), difficulty urinating, lowered blood pressure (which may be experienced as light-headedness), blurred vision, dry mouth, constipation, and/or weight gain.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Increased risk of seizures, problems with blood cells, lower ability to fight infection, reduced urine output, neuroleptic malignant syndrome.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments. Alternative treatments may include other medications, activity therapies**,** and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within a few days (though some may take several weeks or months), and significant benefit may require regular and long-term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Avoid long periods of time in sunlight without use of sunscreen; avoid exposure to sunlamps. Avoid too much exercise, extreme heat, or other activities that are likely to dehydrate you unless you are able to get enough water. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form, I am agreeing to let Department of Corrections staff treat me with a psychotropic drug. Departmental staff have given me, and explained, information about the nature of this treatment and the reason I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth _____
Institution _____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: HALDOL (Haloperidol), HALDOL DECANOATE (Decanoato de Haloperidol)

PROPÓSITO: Esta medicación es usada para tratar los síntomas asociados con los trastornos de pensamientos, percepciones, y/o el comportamiento.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Somnolencia, endurecimiento muscular, movimientos involuntarios anómalos (algunos de los cuales pudieran ser persistentes y son llamados Disquinesia Tardiva), dificultad al orinar, presión arterial reducida (lo cual pudiera experimentarse como mareos), visión borrosa, sequedad bucal, estreñimiento, y/ó aumento de peso.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Riesgo incrementado de temblores, problemas con los glóbulos de la sangre, menor capacidad para combatir infecciones, producción reducida de orina, síndrome neuroléptico maligno.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables que otros tratamientos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales y terapias verbales tales como la socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de unos pocos días (aunque algunos pudieran llevar varias semanas o meses), y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente y por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. Evite largos períodos de tiempo al sol sin el uso de protector solar [*sunscreen*], evite exponerse a lámparas solares. Evite hacer mucho ejercicio, el calor extremo, u otras actividades que tengan probabilidad de deshidratarlo, al menos que pueda obtener suficiente agua. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: LITHIUM

PURPOSE: This medication is used to treat symptoms associated with disorders of mood.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Sleepiness, blurred vision, diarrhea, dehydration, nausea, hand tremors, increased thirst and urination, and weight gain.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Muscle weakness, thyroid problems, forgetfulness, confusion, agitation, rash, acne, and anxiety.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available, and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments alone. Alternative treatments may include other medications, activity therapies, and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within **1-2 weeks**, and significant benefit may require regular and long term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Abrupt withdrawal or discontinuation of medication may cause medical problems. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form I am agreeing to let the Department of Corrections treat me with a psychotropic drug. Departmental staff have given me, and explained information about the nature of this treatment and the reasons I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

Medicación: LITIO [LITHIUM]

PROPÓSITO: Esta medicación es usada para tratar síntomas asociados con los trastornos del estado de ánimo.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Somnolencia, visión borrosa, diarrea, deshidratación, náuseas, temblores en las manos, aumento en la sed y en orinar, y aumento de peso.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Debilidad muscular, problemas de la tiroides, pérdida de memoria, confusión, agitación, sarpullido, acné y ansiedad.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos por sí solos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales, y terapias verbales tales como socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de **1-2 semanas**, y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurar que la medicación no esté causando ningún problema psicológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente y por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. La interrupción abrupta o el retiro de la medicación podría causar problemas médicos. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: PAXIL (Paroxetine HCL)

PURPOSE: This medication is used to treat symptoms associated with depressive disorders.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Blurred vision, constipation, diarrhea, nausea, dry mouth, difficulty urinating, headaches, sexual dysfunction, lethargy, increased appetite, dizziness, weight gain.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Changes in blood pressure, changes in heart rate, balance problems, increased risk of suicide, seizures, sweating, skin rash, and ringing in the ears.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available, and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments alone. Alternative treatments may include other medications, activity therapies, and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within **2 – 3 weeks**, and significant benefit may require regular and long term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff, orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Abrupt withdrawal or discontinuation of medication may cause medical problems. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form I am agreeing to let the Department of Corrections treat me with a psychotropic drug. Departmental staff have given me, and explained information about the nature of this treatment and the reasons I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

Medicación: PAXIL (Paroxetine HCL)

PROPÓSITO: Esta medicación es usada para tratar los síntomas asociados con trastornos depresivos.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Visión borrosa, estreñimiento, diarrea, náuseas, sequedad en la boca, dificultad al orinar, dolores de cabeza, disfunción sexual, letargo, aumento en el apetito, mareos, aumento de peso.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Cambios en la presión arterial, cambios en el ritmo cardíaco, problemas de equilibrio, incremento en el riesgo de suicidio, ataques, sudores, sarpullido en la piel, y zumbido en los oídos.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales y terapias verbales tales como la socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de **2-3 semanas,** y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente y por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. La interrupción abrupta o el retiro de la medicación podría causar problemas médicos. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: PROLIXIN (Fluphenazine HCL), PROLIXIN DECANOATE (Fluphenazine Decanoate)

PURPOSE: This medication is used to treat serious symptoms associated with disorders of thoughts, perceptions, and/or behavior.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Sleepiness, muscle stiffness, abnormal involuntary movements (some of which may be persistent and are called Tardive Dyskinesia), difficulty urinating, lowered blood pressure (which may be experienced as light-headedness), blurred vision, dry mouth, constipation, and/or weight gain.

OTHER POTENTIAL, SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Increased risk of seizures, reduced urinary output and neuroleptic malignant syndrome.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments. Alternative treatments may include other medications, activity therapies**,** and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within a few days (though some may take several weeks or months), and significant benefit may require regular and long-term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Avoid long periods of time in sunlight without use of sunscreen; avoid exposure to sunlamps. Avoid too much exercise, extreme heat, or other activities that are likely to dehydrate you unless you are able to get enough water. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after**.**

I understand that by signing this form, I am agreeing to let Department of Corrections staff treat me with a psychotropic drug. Departmental staff have given me, and explained, information about the nature of this treatment and the reason I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: PROLIXIN (Fluphenazine HCL), PROLIXIN DECANOATE (Decanoato de Flufenazina)

PROPÓSITO: Esta medicación es usada para tratar síntomas graves asociados con trastornos de los pensamientos, percepciones, y/ó comportamiento.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Somnolencia, rigidez muscular, movimientos involuntarios anómalos (algunos de los cuales pudieran ser persistentes y son llamados Disquinesia Tardiva), dificultad al orinar, presión arterial reducida (lo cual pudiera experimentarse como mareos), visión borrosa, sequedad bucal, estreñimiento, y/ó aumento de peso.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Incremento en el riesgo de temblores, producción reducida de orina y síndrome maligno neuroléptico.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales y terapias verbales tales como la socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de unos pocos días (aunque algunos pudieran llevar varias semanas o meses), y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente y por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. Evite largos períodos de tiempo al sol sin el uso de protector solar [*sunscreen*], evite exponerse a lámparas solares. Evite hacer mucho ejercicio, el calor extremo, u otras actividades que tengan probabilidad de deshidratarlo, al menos que pueda obtener suficiente agua. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: PROZAC (Fluoxetine HCL)

PURPOSE: This medication is used to treat symptoms associated with depressive disorders.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Insomnia, constipation, diarrhea, headaches, nervousness, anxiety, tremor, dry mouth.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Change in appetite, abnormal sweating, seizures, skin rash, increased risk of suicide, change in blood pressure, change in heart rate.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available, and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments alone. Alternative treatments may include other medications, activity therapies, and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within **2 – 3 weeks,** and significant benefit may require regular and long-term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Abrupt withdrawal or discontinuation of medication may cause medical problems. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form I am agreeing to let the Department of Corrections treat me with a psychotropic drug. Departmental staff have given me, and explained information about the nature of this treatment and the reasons I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: PROZAC (Fluoxetine HCL)

PROPÓSITO: Esta medicación es usada para tratar síntomas asociados con trastornos depresivos.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Insomnio, estreñimiento, diarrea, dolores de cabeza, nerviosismo, ansiedad, temblor, sequedad en la boca.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS EN POTENCIA INCLUYEN, PERO SIN LIMITACIONES: Cambio en el apetito, sudores anómalos, ataques, sarpullido en la piel, riesgo incrementado de suicidio, cambio en la presión arterial, cambio en el ritmo cardíaco.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales y terapias verbales tales como la socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de **2–3 semanas.** y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente y por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. La interrupción abrupta o el retiro de la medicación podría causar problemas médicos. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: REMERON (Mirtazapine)

PURPOSE: This medication is used to treat symptoms associated with depressive disorders.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Agitation, anxiety, insomnia, seizures, blurred vision, dry mouth, constipation, lightheadedness when getting up, headaches, nausea, vomiting, increased appetite, weight gain.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Balance problems, liver and kidney abnormalities, problems with blood cells leading to lowered ability to fight infection, increased risk of suicide.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available, and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments alone. Alternative treatments may include other medications, activity therapies, and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within **2 – 3 weeks**, and significant benefit may require regular and long term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Abrupt withdrawal or discontinuation of medication may cause medical problems. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form I am agreeing to let the Department of Corrections treat me with a psychotropic drug. Departmental staff have given me, and explained information about the nature of this treatment and the reason I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

MEDICATION: RISPERDAL (Risperidone)

PURPOSE: This medication is used to treat symptoms associated with disorders of thoughts, perceptions, behavior and/or affect.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Sleepiness, muscle stiffness, abnormal involuntary movements (some of which may be persistent and are called Tardive Dyskinesia), difficulty urinating, lowered blood pressure (which may be experienced as light-headedness), blurred vision, dry mouth, constipation, weight gain, nasal irritation.

OTHER POTENTIAL, SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Increased risk of seizures, problems with blood cells leading to lower ability to fight infection, increased prolactin levels, and neuroleptic malignant syndrome and increased levels of glucose, cholesterol, and triglycerides..

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments. Alternative treatments may include other medications, activity therapies**,** and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within a few days (though some may take several weeks or months), and significant benefit may require regular and long-term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Avoid too much exercise, extreme heat, or other activities that are likely to dehydrate you unless you are able to get enough water. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form, I am agreeing to let Department of Corrections staff treat me with a psychotropic drug. Departmental staff have given me, and explained, information about the nature of this treatment and the reason I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: RISPERDAL (Risperidone)

PROPÓSITO: Esta medicación es usada para tratar los síntomas asociados con los trastornos de los pensamientos, percepciones, comportamiento y/ó afecto.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Somnolencia, rigidez muscular, movimientos involuntarios anómalos (algunos de los cuales pudieran ser persistentes y son llamdos Disquinesia Tardiva), dificultad al orinar, presión arterial reducida (lo cual pudiera experimentarse como mareos), visión borrosa, sequedad bucal, estreñimiento, aumento de peso, irritación nasal.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Incremento en el riesgo de temblores, problemas con los glóbulos sanguíneos lo cual conduce hacia una capacidad más baja para combatir infecciones, niveles incrementados de prolactina, y síndrome neuroléptico maligno.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales y terapias verbales tales como la socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de unos pocos días (aunque algunos pudieran llevar varias semanas o meses), y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio, de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente y por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros fármacos de venta libre; evite conducir un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. Evite hacer mucho ejercicio, el calor extremo, u otras actividades que la probabilidad de deshidratarlo, al menos que pueda conseguir suficiente agua. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: SEROQUEL (Quetiapine Fumarate)

PURPOSE: These medications are used to treat symptoms associated with disorders of thoughts, perceptions, behavior, and/or affect.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Sleepiness, muscle stiffness, abnormal involuntary movements (some of which may be persistent and are called Tardive Dyskinesia), difficulty urinating, lowered blood pressure (which may be experienced as light-headedness), blurred vision, dry mouth, constipation, and/or weight gain.

OTHER POTENTIAL, SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Increased risk of seizures, dizziness, neuroleptic malignant syndrome, increased glucose, cholesterol, and triglycerides, cataracts.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments. Alternative treatments may include other medications, activity therapies**,** and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within a few days (though some may take several weeks or months), and significant benefit may require regular and long-term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems. The doctor will review the medication and its effect on a regular basis.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by telling the doctor or any other health care staff. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Avoid too much exercise, extreme heat, or other activities that are likely to dehydrate you unless you are able to get enough water. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form, I am agreeing to let Department of Corrections staff treat me with a psychotropic drug. Departmental staff have given me, and explained, information about the nature of this treatment and the reason I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: SEROQUEL (Quetiapine Fumarate)

PROPÓSITO: Estas medicaciones son usadas para tratar los síntomas asociados con trastornos de los pensamientos, percepciones, comportamiento, y/o afecto.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Somnolencia, rigidez muscular, movimientos involuntarios anómalos (algunos de los cuales pudieran ser persistentes y son llamados Disquinesia Tardiva), dificultad al orinar, presión arterial reducida (lo cual pudiera experimentarse como mareos), visión borrosa, sequedad bucal, estreñimiento, y/o aumento de peso.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS EN POTENCIA INCLUYEN, PERO SIN LIMITACIONES: Incremento en el riesgo de ataques, mareos, síndrome neuroléptico maligno, incremento en la glucosa, colesterol, y triglicéridos, cataratas.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales y terapias verbales tales como la socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de unos pocos días (aunque algunos pudieran llevar varias semanas o meses), y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros fármacos de venta libre; evite conducir un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. Evite hacer mucho ejercicio, el calor extremo, u otras actividades que tengan la probabilidad de deshidratarlo, al menos que pueda conseguir suficiente agua. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____
Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: TEGRETOL (Carbamazepine)

PURPOSE: This medication is used to treat symptoms associated with disorders of mood.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Sleepiness, blurred vision, nausea, difficulty urinating, sexual dysfunction, nervousness, changes in appetite, upset stomach.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Balance problems, vomiting, rash, problems with blood cells leading to lowered ability to fight infection, yellowing of the skin and eyes, and swelling of the legs.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available, and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments alone. Alternative treatments may include other medications, activity therapies, and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within **1 week,** and significant benefit may require regular and long-term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Abrupt withdrawal or discontinuation of medication may cause medical problems.

I understand that by signing this form I am agreeing to let the Department of Corrections treat me with a psychotropic drug. Departmental staff have given me, and explained information about the nature of this treatment and the reasons I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: TEGRETOL (Carbamazepine)

PROPÓSITO: Esta medicación es usada para tratar los síntomas asociados con los trastornos del estado de ánimo.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Somnolencia, visión borrosa, náuseas, dificultad al orinar, disfunción sexual, nerviosismo, cambios en el apetito, malestar estomacal.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Problemas de equilibrio, vómitos, sarpullido, problemas con los glóbulos sanguíneos que llevan hacia la disminución de la capacidad para combatir infecciones, amarillamiento de la piel y los ojos, e hinchazón de las piernas.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales y terapias verbales tales como la socio-psicológica o terapia del comportamiento.

LA DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de **1 semana,** y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente y por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. La interrupción abrupta o el retiro de la medicación podría causar problemas médicos.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: THORAZINE (Chlorpromazine HCL)

PURPOSE: This medication is used to treat symptoms associated with disorders of thoughts, perceptions, and/or behavior.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Sleepiness, muscle stiffness, abnormal involuntary movements (some of which may be persistent and are called Tardive Dyskinesia), difficulty urinating, lowered blood pressure (which may be experienced as light-headedness), blurred vision, dry mouth, constipation, sensitivity to sunlight, and/or weight gain.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Increased risk of seizures, problems with blood cells leading to lower ability to fight infection, dizziness, and neuroleptic malignant syndrome.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments. Alternative treatments may include other medications, activity therapies**,** and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within a few days (though some may take several weeks or months), and significant benefit may require regular and long-term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Avoid long periods of time in sunlight without use of sunscreen; avoid exposure to sunlamps. Avoid too much exercise, extreme heat, or other activities that are likely to dehydrate you unless you are able to get enough water. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form, I am agreeing to let Department of Corrections staff treat me with a psychotropic drug. Departmental staff have given me, and explained, information about the nature of this treatment and the reason I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____ **Race/Sex**_____
Date of Birth_____
Institution_____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: THORAZINE (Chlorpromazine HCL)

PROPÓSITO: Esta medicación es usada para tratar síntomas asociados con los trastornos de los pensamientos, percepciones, y/ó comportamiento.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Somnolencia, rigidez muscular, movimientos involuntarios anómalos (algunos de los cuales pudieran ser persistentes y son llamados Disquinesia Tardiva), dificultad al orinar, presión arterial reducida (lo cual pudiera experimentarse como mareos), visión borrosa, sequedad bucal, estreñimiento, sensibilidad a la luz solar, y/ó aumento de peso.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Incremento en el riesgo de ataques, problemas con los glóbulos sanguíneos lo cual lleva a disminuir la capacidad de combatir infecciones, mareos, y síndrome neuroléptico maligno.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales y terapias verbales tales como la socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de unos pocos días (aunque algunos pudieran llevar varias semanas o meses), y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente y por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. Evite largos períodos de tiempo al sol sin el uso de protector solar [*sunscreen*], evite exponerse a lámparas solares. Evite hacer mucho ejercicio, el calor extremo, u otras actividades que tengan probabilidad de deshidratarlo, al menos que pueda obtener suficiente agua. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: TRILAFON (Perphenazine)

PURPOSE: This medication is used to treat symptoms associated with disorders of thoughts, perceptions, and/or behavior.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Sleepiness, muscle stiffness, abnormal involuntary movements (some of which may be persistent and are called Tardive Dyskinesia), difficulty urinating, lowered blood pressure (which may be experienced as light-headedness), blurred vision, dry mouth, constipation, and/or weight gain.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Increased risk of seizures, reduced urine output, and neuroleptic malignant syndrome.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments. Alternative treatments may include other medications, activity therapies**,** and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within a few days (though some may take several weeks or months), and significant benefit may require regular and long-term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Avoid long periods of time in sunlight without use of sunscreen; avoid exposure to sunlamps. Avoid too much exercise, extreme heat, or other activities that are likely to dehydrate you unless you are able to get enough water. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form, I am agreeing to let Department of Corrections staff treat me with a psychotropic drug. Departmental staff have given me, and explained, information about the nature of this treatment and the reason I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____

Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: TRILAFON (Perphenazine)

PROPÓSITO: Esta medicación es usada para tratar síntomas asociados con trastornos de pensamientos, percepciones y/o comportamiento.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Somnolencia, rigidez muscular, movimientos involuntarios anómalos (algunos de los cuales pudieran ser persistentes y son llamados Disquinesia Tardiva), dificultad para orinar, presión arterial baja (lo cual pudiera experimentarse como mareos), visión borrosa, sequedad bucal, estreñimiento, y/o aumento de peso.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Incremento en el riesgo de ataques, producción de orina reducida, y síndrome neuroléptico maligno.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales, y terapias verbales tales como la socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de unos pocos días (aunque algunos pudieran llevar varias semanas o meses), y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente y por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. Evite largos períodos de tiempo al sol sin el uso de protector solar [*sunscreen*], evite exponerse a lámparas solares. Evite hacer mucho ejercicio, el calor extremo, u otras actividades que tengan la probabilidad de deshidratarlo, al menos que pueda obtener suficiente agua. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: VALPROIC ACID

PURPOSE: This medication is used to treat symptoms associated with disorders of mood.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Sleepiness, diarrhea, nausea, headaches, nervousness, cramps, indigestion, lethargy.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Confusion, vomiting, rash, problems with blood cells leading to lowered ability to fight infection, yellow skin/eyes, swelling of the face, hair loss, pancreatitis, swelling of the legs, blurred vision, liver abnormalities.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available, and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments alone. Alternative treatments may include other medications, activity therapies, and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within **1 week,** and significant benefit may require regular and long-term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Abrupt withdrawal or discontinuation of medication may cause medical problems.

I understand that by signing this form I am agreeing to let the Department of Corrections treat me with a psychotropic drug. Departmental staff have given me, and explained information about the nature of this treatment and the reasons I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: ÁCIDO VALPROICO

PROPÓSITO: Esta medicación es usada para tratar síntomas asociados con los trastornos del estado de ánimo.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Somnolencia, diarrea, náuseas, dolores de cabeza, nerviosismo, calambres, indigestión, letargo.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Confusión, vómitos, sarpullido, problemas con los globules sanguíneos que conducen hacia una capacidad disminuida para combatir las infecciones, amarillamiento de la piel/ojos, hinchazón de la cara, pérdida del cabello, pancreatitis, hinchazón de las piernas, visión borrosa, anomalías hepáticas.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales, y terapias verbales tales como la socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de **1 semana,** y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente y por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros fármacos de venta libre; evite conducir un vehículo y otras actividades que requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. El retiro abrupto o la discontinuación de la medicación pudiera causar problemas médicos.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: VISTARIL (Hydroxyzine Pamoate)

PURPOSE: This medication is used to treat symptoms associated with disorders of anxiety.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Sleepiness, constipation, nausea, dry mouth, lightheadedness when standing, headaches, hand tremors.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Rash.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available, and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments alone. Alternative treatments may include other medications, activity therapies, and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within **1-2 hours**, and significant benefit may require regular and long term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff, orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Abrupt withdrawal or discontinuation of medication may cause medical problems. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form I am agreeing to let the Department of Corrections treat me with a psychotropic drug. Departmental staff have given me, and explained information about the nature of this treatment and the reasons I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: VISTARIL (Hydroxyzine Pamoate)

PROPÓSITO: Esta medicación se usa para tratar los síntomas asociados con los trastornos de ansiedad.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Somnolencia, estreñimiento, náuseas, sequedad bucal, mareos al estar de pie, dolores de cabeza, temblores en las manos.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Sarpullido.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos por sí solos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales, y terapias verbales tales como la socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro de **1-2 horas,** y un beneficio significativo pudiera requerir el uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente y por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. La interrupción abrupta o el retiro de la medicación podría causar problemas médicos. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: WELLBUTRIN (Bupropion HCL), WELLBUTRIN SR (Bupropion HCL Extended Release Tablets)

PURPOSE: This medication is used to treat symptoms associated with depressive disorders.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Agitation, anxiety, insomnia, seizures, blurred vision, dry mouth, constipation, lightheadedness when getting up, headaches, nausea, vomiting, increased appetite, weight gain.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Balance problems, liver and kidney abnormalities, increased risk of suicide.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available, and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments alone. Alternative treatments may include other medications, activity therapies, and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within **2 – 3 weeks**, and significant benefit may require regular and long term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Abrupt withdrawal or discontinuation of medication may cause medical problems. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form I am agreeing to let the Department of Corrections treat me with a psychotropic drug. Departmental staff have given me, and explained information about the nature of this treatment and the reasons I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature:_____

Name/Title Stamp

Patient Name_____
ID#_____ **Race/Sex**_____
Date of Birth_____
Institution_____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: WELLBUTRIN (Bupropion HCL), WELLBUTRIN SR (Bupropion HCL Tabletas de Liberación Extendida)

PROPÓSITO: Esta medicación es usada para tratar síntomas asociados con trastornos depresivos.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Agitación, ansiedad, insomnio, ataques, visión borrosa, sequedad en la boca, estreñimiento, mareos al ponerse de pie, dolores de cabeza, náuseas, vómitos, aumento del apetito, aumento de peso.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Problemas de equilibrio, anomalías hepáticas y renales, riesgo incrementado de suicidio.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales y terapias verbales tales como la socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de **2–3 semanas,** y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente y por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. La interrupción abrupta o el retiro de la medicación podría causar problemas médicos. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarias posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

MEDICATION: ZOLOFT (Sertraline HCL)

PURPOSE: This medication is used to treat symptoms associated with depressive disorders.

COMMON SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Sleepiness, insomnia, constipation, diarrhea, nausea, dry mouth, difficulty urinating, sexual dysfunction, headaches, nervousness, dizziness, drowsiness, indigestion.

OTHER POTENTIAL SIGNIFICANT SIDE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO: Changes in blood pressure, vomiting, fatigue, increased risk of suicide.

ALTERNATIVE TREATMENT: It has been determined, at this time, that this category of medication is the most effective therapy available, and that this class of medication will relieve undesirable symptoms better and more quickly than other treatments alone. Alternative treatments may include other medication, activity therapies, and talk therapies such as counseling or behavior therapy.

APPROXIMATE LENGTH OF CARE: The medication usually acts within **2 – 3 Weeks**, and significant benefit may require regular and long-term usage. The doctor may adjust the dosage during treatment, in most cases, to the minimum dosage that meets the needs of the patient. The doctor may order laboratory tests from time to time to ensure that the medication is not causing any serious physiological problems.

NOTIFICATION: You should understand that you can decide to stop taking this medication at any time by notifying the doctor or any other health care staff orally or in writing. If you decide to stop taking the medication, it will not affect your ability to receive other health care. Notify your physician if there is a possibility that you are pregnant.

RISK AND HAZARDS: Avoid alcohol and other nonprescription drugs; avoid driving a vehicle and other activities that require alertness until adjusted to side effects. Abrupt withdrawal or discontinuation of medication may cause medical problems. Antacids containing aluminum or magnesium should not be taken 1 hour before taking this medication and never right after.

I understand that by signing this form I am agreeing to let the Department of Corrections treat me with a psychotropic drug. Departmental staff have given me, and explained information about the nature of this treatment and the reasons I am being treated. I have also been informed about alternative treatments, the risks and hazards associated with this treatment, the possible side effects that I may experience from this treatment, and the length of time that I may be taking this drug. Departmental staff have given me a chance to ask questions about my treatment and have answered all my questions. I understand that I can discuss any other questions I might have about my treatment with the doctor and that a signed copy of this form will be given to me.

Time/Date:_____ Patient Signature:_____

Time/Date:_____ Prescribing Practitioner Signature: _____
Name/Title Stamp

Patient Name_____
ID#_____**Race/Sex**_____
Date of Birth_____
Institution_____

CONSENTIMIENTO INFORMADO PARA MEDICACIÓN PSICOTRÓPICA

Medicación: ZOLOFT (Sertraline HCL)

PROPÓSITO: Esta medicación es usada para tratar síntomas asociados con trastornos depresivos.

LOS EFECTOS SECUNDARIOS COMUNES INCLUYEN, PERO SIN LIMITACIONES: Somnolencia, insomnio, estreñimiento, diarrea, náuseas, sequedad bucal, dificultad al orinar, disfunción sexual, dolores de cabeza, nerviosismo, mareos, adormecimiento, indigestión.

OTROS EFECTOS SECUNDARIOS SIGNIFICATIVOS POTENCIALES INCLUYEN, PERO SIN LIMITACIONES: Cambios en la presión arterial, vómitos, fatiga, riesgo incrementado de suicidio.

TRATAMIENTO ALTERNATIVO: Se ha determinado, en estos momentos, que esta categoría de medicación es la terapia disponible más eficaz y que esta clase de medicación aliviará mejor y más rápidamente los síntomas indeseables, que otros tratamientos. Los tratamientos alternativos pudieran incluir otras medicaciones, terapias ocupacionales y terapias verbales tales como la socio-psicológica o terapia del comportamiento.

DURACIÓN APROXIMADA DE LA ATENCIÓN MÉDICA: La medicación usualmente actúa dentro del lapso de tiempo de **2–3 semanas,** y para lograr un beneficio significativo podría requerir un uso regular y a largo plazo. El doctor pudiera ajustar la dosificación durante el tratamiento, en la mayoría de los casos, a la dosificación mínima que colme las necesidades del recluso. El doctor pudiera ordenar análisis de laboratorio de vez en cuando, para asegurarse que la medicación no este causando ningún problema fisiológico serio.

NOTIFICACIÓN: Usted debería entender que puede decidir dejar de tomar esta medicación en cualquier momento, notificándole al doctor o a cualquier otro miembro del personal de atención médica, verbalmente y por escrito. Si usted decide dejar de tomar la medicación, ello no afectará su capacidad para recibir otra atención médica. Notifíquele a su médico si existe una posibilidad de que usted esté embarazada.

RIESGOS Y PELIGROS: Evite el alcohol y otros medicamentos de venta libre; evite manejar un vehículo y otras actividades que le requieran estar alerta, hasta que se haya ajustado a los efectos secundarios. La interrupción abrupta o el retiro de la medicación podría causar problemas médicos. Los antiácidos que contengan aluminio o magnesio no deberían ser tomados 1 hora antes de tomar esta medicación y nunca inmediatamente después.

Yo entiendo que al firmar este formulario me estoy poniendo de acuerdo en permitirle al personal del Departamento Correccional que me traten con un fármaco psicotrópico. El personal departamental me ha dado y explicado información acerca de la naturaleza de este tratamiento y de la razón por la cual estoy siendo tratado. También me han informado acerca de tratamientos alternativos, los riesgos y los peligros relacionados con este tratamiento, los efectos secundarios posibles que yo pudiera experimentar por causa de este tratamiento y la cantidad de tiempo que estaré tomando este fármaco. El personal departamental me ha dado una oportunidad de hacer preguntas acerca de mi tratamiento y han contestado a todas mis preguntas. Yo entiendo que puedo hablar con el doctor acerca de otras preguntas que yo pudiera tener acerca de mi tratamiento y entiendo que me darán una copia firmada de este formulario.

Hora/Fecha: _____ Firma del Recluso: _____

Hora/Fecha: _____ Firma del Médico que Receta: _____

Nombre/Título Sello

Nombre del Recluso _____
ID Nº _____ **Raza/Sexo** _____
Fecha de Nacimiento: _____
Institución _____

Neurology Guidelines

Neurology Guidelines

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Bell's Palsy	Consider: If onset within 3 days of onset consider a short course of prednisone 60-80mg a day for one week with no taper. For severe palsy may consider co-administration of oral valacyclovir at a dose of 1000 mg three times daily for one week or acyclovir at a dose of 400 mg five times daily for 10 days, along with prednisone. Eye care as needed.	Consider: At the discretion of the clinician depending on the clinical scenario recognizing that offsite imaging is not typically needed, however, consider head imaging (CT Scan) for compelling symptoms or history/exam not consistent with Bell's Palsy
Dementia	Consider: Dementia is a disorder that is characterized by a decline in cognition involving one or more cognitive domains (learning and memory, language, executive function, complex attention, perceptual-motor, social cognition). The deficits must represent a decline from previous level of function and be severe enough to interfere with daily function and independence. The most common form of dementia in older adults is Alzheimer disease (AD), accounting for 60 to 80 percent of cases. The work-up and treatment will therefore need to be individualized based on presumptive cause and the patient. General guidance is to review medications, perform labs that may include: CBC, TSH, B-12 level, CMP, RPR. The treatment plan will need to be individualized based on the potential cause or causes of dementia identified.	Consider: At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Headache	Consider: Headache is among the most common medical complaints. An overview of the approach to the patient with a chief complaint of headache will need to be individualized depending on the patient's clinical history, physical exam and medication therapies tried. As such, a treatment plan will need to be individualized to the specific type of headache identified or cause of headache identified but treatment may include, rest, behavioral therapies, non-opioid analgesic medications, avoidance of pain-producing activities, headache-specific medications, ongoing review of medications.	Consider: Emergency referral for altered mental status, ataxia, sudden extreme onset and/or high suspicion. Consider: Head imaging for abnormal neurological exam or compelling symptoms or history.
Mild Cognitive Impairment (MCI)	Consider: Mild cognitive impairment (MCI) is an intermediate clinical state between normal cognition and dementia. While specific subtle changes in cognition can occur in normal aging, MCI can also be a precursor to dementia. At the same time, MCI may also represent a reversible condition in the setting of depression, as a complication of certain medications, or during the recovery from an acute illness. The work-up and treatment will therefore need to be individualized based on presumptive cause and the patient.	Consider: At the discretion of the clinician depending on the clinical scenario
Seizures (Acute)	Consider for the acute management: Protect patient, maintain airway, administer oxygen, diazepam or lorazepam, check glucose. Consider for care after the acute seizure episode: Care, work-up and treatment will need to be individualized based on the patient's history, presentation, presumptive cause, response to	Consider for acute seizure: At the discretion of the clinician depending on the clinical scenario, typically status epilepticus requires ER evaluation. Consider for new onset seizure: neurology consult, urgent CT head and EEG. Consider for complex cases and potential pseudo-seizures:

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	treatment, compliance with anti-epileptic medications, lab studies including for known seizure patients, consider blood levels of medications.	Neurology consult, and/or psychiatric consultation
Seizures (Chronic)	Consider for chronic management: Classify seizure type, monitor for anti-epileptic drug toxicity and depending on the medication periodically follow levels, "low bunk" housing and decreased risk work assignments. Anti-epileptic medication generally not necessary if isolated alcohol or drug-related seizure. Taper off medication if seizure-free greater than two years.	Consider: At the discretion of the clinician depending on the clinical scenario
Stroke	Consider: Primary prevention including modify risk factors, manage chronic illnesses. Recognizing the multi-factorial causes associated with stroke the care/treatment will need to be individualized follow-up treatment may include aspirin daily (if not acute bleed), exercise program, healthy diet, weight loss (if appropriate), discourage smoking, manage blood pressure, and aggressive lipid management if ischemic stroke.	Consider for acute symptoms: ER evaluation ASAP Consider for follow-up care: At the discretion of the clinician depending on the clinical scenario but generally following stroke, assess rehabilitation potential, consider physical therapy, occupational therapy, and/or speech therapy.

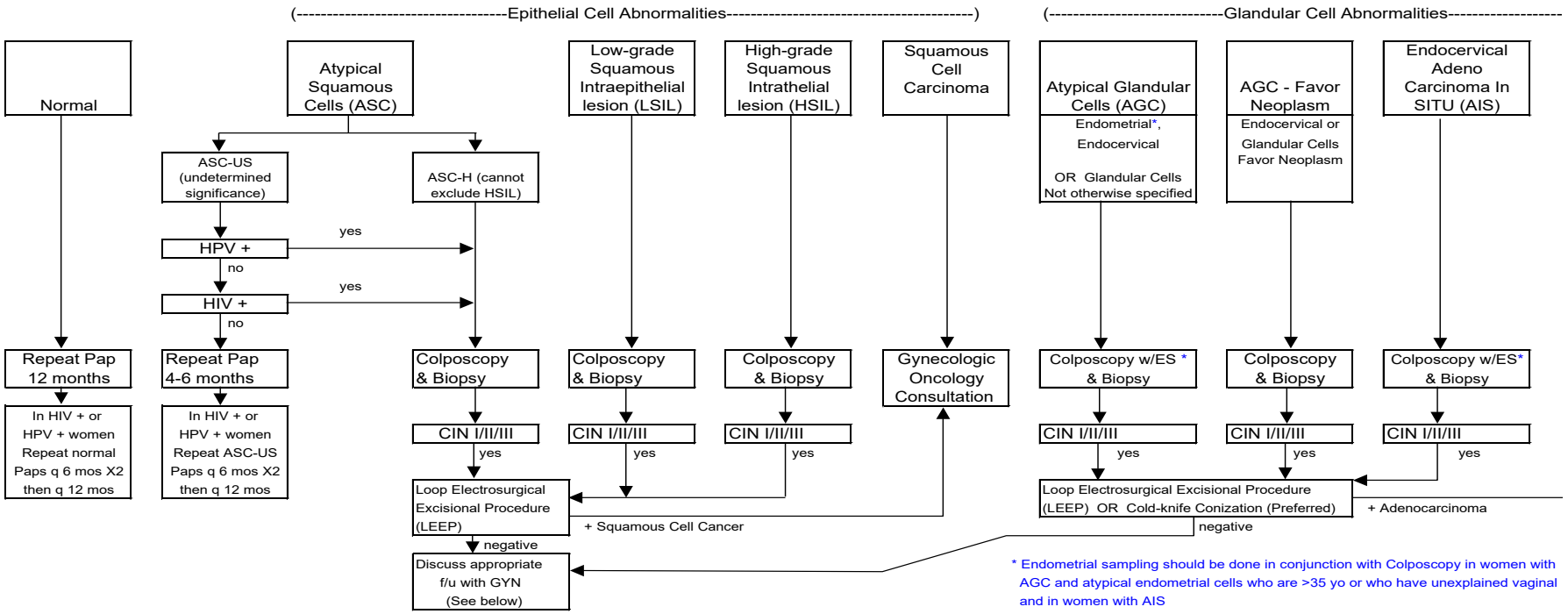
Obstetrics/Gynecology

Management of Cervical Cytology Interpretation

Wexford Health Sources - Management of Cervical Cytology Interpretation

(Based on the 2001 Bethesda System Terminology)

PAP SMEAR - CYTOLOGY RESULTS



Correlation of Findings: Any discrepancies between cytological assessment and histopathologic findings should prompt a cyto-histological correlation between the Cytologist and Pathologist in order to determine the specimen adequacy and to reach a conclusion as to which specimen should prevail to guide clinical decision making for next steps.

Diagnosis:		
	HPV alone	Observation and treatment of visible warts
	ASC-H with negative Colpo	Observation. Repeat PAP/Cytology and HPV testing at 6 & 12 months with repeat colposcopy if ASC-US or greater
	LSIL with negative Colpo	Observation. Repeat PAP/Cytology at 6 & 12 months with repeat colposcopy if ASC-US or greater
	HSIL with negative Colpo	Cyto-Histo Correlation. If HSIL upheld, given high risk, proceed with diagnostic excisional procedure in non-pregnant patients
	CIN I	Observation. Discuss in Collegial Review for possible oblative therapy versus Cone Biopsy or LEEP
	CIN II & III	Collegial Review - Cone Biopsy or LEEP, Appropriate follow-up based on findings
	Microinvasive Cancer < 3mm	Collegial Review - Cone Biopsy or LEEP, Appropriate cancer follow-up based on findings
	Invasive Cancer > 3mm	Collegial Review - Consideration of radical hysterectomy and/or radiation therapy as per GYN Oncologist

Management of Cervical Cytology Interpretation

I. CLINICAL NOTES & STATISTICS

A. Women with cervical cytology results interpreted as ASC have a 5–17% chance of having CIN II or III confirmed with cervical biopsy.

B. Women with cervical cytology results interpreted as ASC-H have a 24–94% of having CIN II or III confirmed with cervical biopsy although the risk for invasive cervical cancer remains low at 0.1–0.2%.

C. Immunosuppressed women with ASC are at increased risk of CIN II or III.

D. Post-menopausal women with ASC are at decreased risk of CIN II or III.

E. Between 31–60% of all women with ASC will have high risk types of HPV infection identified.

F. Reflex HPV testing, where a sample for HPV DNA testing is co-collected at the time of the cytology collection and then is processed only in the event of ASC-US results can minimize the need for repeat gynecological examinations.

G. 40–60% of women can be spared colposcopy when HPV testing is done with the initial PAP smear or following ASC-US results.

H. All immunocompromised women with ASC-US on cytology should be referred for colposcopy irrespective of CD4 cell count, HIV viral load, or antiretroviral therapy.

I. Approximately 15–30% of women with LSIL on cervical cytology will have CIN II or III on subsequent cervical biopsy.

J. Approximately 70–75% of women with HSIL on cervical cytology will have CIN II or III on subsequent cervical biopsy and 1–2% will have invasive cervical cancer.

K. The AGC category is associated with substantially greater risk for cervical neoplasia than the ASC or LSIL categories

L. Women with cervical cytology results interpreted as AGC have a 9–54% chance of having CIN confirmed with cervical biopsy.

M. Women with cervical cytology results interpreted as AGC have a 0–8% chance of having adenocarcinoma in SITU confirmed with cervical biopsy.

N. Women with cervical cytology results interpreted as AGC have a 1–9% chance of having invasive carcinoma confirmed with cervical biopsy.

O. The cytological interpretation of AIS is associated with a very high risk or AIS (48–69%) or invasive cervical adenocarcinoma (38%).

II. SPECIAL CONSDERATIONS:

A. Post-menopausal women with cervical cytology noted as ASC-US (with evidence of atrophy and no contra-indications to estrogen therapy) can be treated with intravaginal estrogen and cytology can be repeated one (1) week after completion of therapy. If cytology is then negative, repeat cytology in 6 months and if negative again, resume annual pap smears. If cytology following estrogen therapy still shows ASC-US or higher, move to colposcopy.

B. Post-menopausal women with cervical cytology notes as LSIL (with evidence of atrophy and no contra-indications to estrogen therapy) can be treated with intravaginal estrogen and cytology can be repeated one (1) week after completion of therapy. If cytology is then negative, repeat cytology in 6 months and if negative again, resume annual pap smears. If cytology following estrogen therapy still shows ASC-US, LSIL or higher, move to colposcopy.

C. Adolescents with LSIL can be managed more conservatively with observation, HPV DNA testing, and a repeat cytology six (6) months following the index PAP. If either the HPV testing

is positive or the repeat cytology in six (6) months shows ASC, LSIL or higher then colposcopy should be performed.

Ophthalmology Guidelines

Ophthalmology Guidelines

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Cataracts	Consider: See Wexford's guideline, "The Management of Cataracts."	See Wexford's guideline, "The Management of Cataracts."
Chalazion A chalazion typically presents as a painless localized eyelid swelling. Examination of the inner eyelid reveals a non-tender, rubbery nodule. Chalazia and hordeola can have a similar appearance; however, chalazia tend to be painless and are less erythematous and angry-appearing.	Consider: Patient education - Small chalazia often resolve without intervention over days to weeks. For larger lesions, draining can be facilitated by using warm compresses placed on the eye for about 15 minutes four times per day with a gentle massage. Antibiotics are not typically indicated since a chalazion is a granulomatous condition.	At the discretion of the clinician depending on the clinical scenario.
Conjunctivitis, Bacterial Patients with bacterial conjunctivitis typically complain of redness and discharge in one eye, although it can also be bilateral. The purulent discharge continues throughout the day and is thick and globular. The discharge differs from that of viral or allergic conjunctivitis, which is mostly watery during the day, with a scant, stringy component that is mucus rather than pus.	Consider: Therapy should be directed at the likely etiology of conjunctivitis suggested by the history and physical examination. Examination: If the eye is matted shut, consider using a warm washcloth to soften the debris/bond before opening. Patient education: Both bacterial and viral conjunctivitis are both highly contagious and spread by direct contact with secretions or contact with contaminated objects. Infected individuals should not share handkerchiefs, tissues, towels, cosmetics, linens, or eating utensils. Patients should be instructed to wash hands frequently with soap and water especially after contact with the eyes. Medications to consider: There are multiple antibiotic drops that may be used. Ciprofloxacin, ofloxacin and erythromycin ophthalmic are on formulary. • Erythromycin 5 mg/gram ophthalmic ointment 0.5 inch	At the discretion of the clinician depending on the clinical scenario.

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	(1.25 cm) 4 times daily for 5 to 7 days. • Ofloxacin 0.3% ophthalmic drops (preferred agent in contact lens wearer) 1 to 2 drops 4 times daily for 5 to 7 days. • Ciprofloxacin 0.3% ophthalmic drops (preferred agent in contact lens wearer)1 to 2 drops 4 times daily for 5 to 7 days.	
Conjunctivitis, Viral Viral conjunctivitis typically presents as conjunctival injection with watery or mucoserous discharge and a burning, sandy, or gritty feeling in one eye. The second eye usually becomes involved within 24 to 48 hours, although unilateral signs and symptoms do not rule out a viral process. The conjunctivitis may be part of a viral prodrome followed by adenopathy, fever, pharyngitis, and upper respiratory tract infection, or the eye infection may be the only manifestation of the disease.	Consider: Therapy should be directed at the likely etiology of conjunctivitis suggested by the history and physical examination. Patient education: Both bacterial and viral conjunctivitis are both highly contagious and spread by direct contact with secretions or contact with contaminated objects. Infected individuals should not share handkerchiefs, tissues, towels, cosmetics, linens, or eating utensils. Patients should be instructed to wash hands frequently with soap and water especially after contact with the eyes.	At the discretion of the clinician depending on the clinical scenario.
Corneal Abrasion	Consider: See Wexford's guideline, "The Management of Corneal Abrasions."	See Wexford's guideline, "The Management of Corneal Abrasions."
Corneal Foreign Body	Consider: See Wexford's guideline, "The Management of Corneal Abrasions and Corneal Foreign Bodies."	Consider: See Wexford's guideline, "The Management of Corneal Abrasions and Corneal Foreign Bodies."
Glaucoma	Consider: See Wexford's guideline, "The Management of Glaucoma."	See Wexford's guideline, "The Management of Glaucoma."
Hordeolum (Stye) A hordeolum (stye) is an abscess of the eyelid that presents as a	Consider: Patient education - Hordeola can be managed with warm, moist compresses placed on the affected areas frequently (e.g.,	At the discretion of the clinician depending on the clinical scenario.

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
localized painful and erythematous swelling. Chalazia and hordeola can have a similar appearance; however, chalazia tend to be painless and are less erythematous and angry-appearing. Most hordeola resolve spontaneously and do not require specific intervention.	for 5 to 10 minutes three to five times per day) in order to facilitate drainage. Massage and gentle wiping of the affected eyelid after the warm compress can also aid in drainage. There is little evidence that treatment with topical antibiotics promotes healing but may be considered in select patients.	
Iritis Iritis is the Inflammation of the anterior uveal tract. It is called iritis or anterior uveitis; when the adjacent ciliary body is also inflamed, the process is called iridocyclitis. Classic symptoms include redness, photophobia and pain often described as dull ache; however, with chronic forms of the disease, these symptoms may be completely absent. The cardinal sign of iritis is ciliary flush: injection that gives the appearance of a red ring around the iris. Typically, there is no discharge and only minimal tearing. The diagnosis is presumptive until presence of inflammatory cells or exudative "flare" is confirmed by slit lamp examination. Iritis can be caused by any one of many infections, inflammatory, and infiltrative processes. These include tuberculosis, sarcoidosis, syphilis, toxoplasma, and reactive arthritis. Many cases are idiopathic.	Consider: The selection of therapy, or the decision to initiate therapy, should be individualized and based upon the patient's history and examination, consideration of the extent of the condition and symptoms, potential adverse effects of the treatment and the response to previous treatments. Ophthalmic steroid drops should be used with caution in a patient with a red eye. An urgent evaluation of the patient with an ocular professional or a provider to ocular professional telephonic consultation is generally advised prior to starting ocular steroids.	Involvement of an ocular professional in an urgent manner is the general approach to an acute case but it is at the discretion of the clinician depending on the patient's unique clinical history and scenario.
Milia Milia are pinpoint, multiple, firm, white lesions that usually occur on	Consider: Patient education about the condition.	At the discretion of the clinician depending on the clinical scenario.

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
both the upper and lower eyelids and face. Milia are common lesions and they may occur at all ages. Milia are caused by the plugging of hair follicles (pilosebaceous units) by keratin.	Since milia are benign lesions, treatment is generally not necessary. To prevent clogged hair follicles, patients should be advised to regularly wash the face while avoiding heavy facial creams.	
Post-Enucleation Ocular Conformer	Consider: Wexford Health will consider the need for ocular conformer for enucleated patients on a case-by-case basis. Issuance of a prosthetic eye is typically considered cosmetic and not typically medically necessary.	At the discretion of the clinician depending on the clinical scenario.
Pterygium A pterygium (also called surfer's eye) is a fleshy overgrowth of the conjunctiva that typically starts medially and grows laterally and may affect one or both eyes. Risk factors include excessive exposure to sunlight in people who spend time outdoors, work outdoors and have chronic eye irritation.	Consider: Patient education on the condition. Patients with a small pterygium can be treated symptomatically for redness and irritation with artificial tears or other ocular lubricants. The management of patients with larger lesions that impair visual acuity or eye movement usually involves surgical excision of the pterygium. The decision to perform surgical excision also varies based on the rate of documented growth and degree of induced astigmatism. Surgery should be avoided for cosmetic reasons alone, as pterygium may recur, often times with irritative symptoms.	Ophthalmology evaluation may be warranted if the pterygium is greater than 2.5 mm onto cornea and affecting visual acuity but is at the discretion of the clinician depending on the unique clinical scenario.
Xanthelasma Xanthelasma are soft, yellow plaques that usually appear symmetrically on the medial aspects of the eyelids. They occur most often in middle-aged and older adults, tend to be painless, and build gradually over time. Larger xanthelasma may cause discomfort.	Consider: Patient education about the condition. Consider obtaining a lipid panel if not already performed. Xanthelasma lesions themselves generally do not require treatment. Lipid-lowering drug therapy may induce regression of xanthelasma in	At the discretion of the clinician depending on the clinical scenario.

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Dyslipidemia is present in approximately 50% of adult patients with xanthelasma.	some patients, but the effect is not consistent.	

The Management of Cataracts

I. CATARACTS

A cataract may be defined as any opacity of the ocular lens that may or may not be associated with visual problems and manifests as an obstruction of the red orange reflex on funduscopy. Cataracts are one of the leading causes of blindness. Cataracts may be congenital or acquired.

A. The following is a list of the most common risk factors for the development of acquired cataract:

1. Diabetes mellitus and high glucose levels
2. Regular corticosteroid use
3. Advancing age (multifactorial)
4. Female sex
5. African-American race
6. Over-exposure to ultraviolet radiation
7. Excessive consumption of alcohol
8. Smoking

B. Not all cataracts are symptomatic. The symptoms of cataract involve diminished or altered vision:

1. Blurred vision, double vision, ghost images, the impression of a "film" over the eyes
2. Glare
3. The need for frequent changes of eyeglass prescriptions, which may not improve vision

C. Based upon the current medical literature regarding generally accepted indications for cataract removal, including subjective symptomatology, objective reproducible clinical findings and the presence of co-existing conditions, it is Wexford Health's position that:

1. Consideration of cataract surgery is indicated when maximally corrected bilateral Snellen visual acuity is 20/60 or worse and such surgery offers a reasonable likelihood of improvement in visual function
2. Consideration of cataract surgery is indicated when the lens opacity inhibits optimal management of posterior segment ocular disease or the lens causes inflammation, angle closure, or medically unmanageable open-angle glaucoma
3. Cataract extractions will be performed on one eye only as per the ophthalmologist's recommendation for optimizing visual acuity and when the above criteria are met
4. Evaluation by ophthalmologist for consideration of cataract surgery is indicated when presence of hypermature (morgagnian) cataract is present.
5. Bilateral cataract extraction will be considered if needed to manage posterior segment ocular disease
6. Consideration of surgery for visually impairing cataract is **not indicated** if:
   a. The patient does not desire surgery
   b. Maximally corrected bilateral Snellen visual acuity is 20/50 or better
   c. Surgery will not likely improve visual function
   d. The patient is able to satisfactorily carry out his or her activities of daily living with or without changes in eyeglasses, lighting, or other non-operative means

e. The patient cannot safely undergo surgery because of co-existing medical or ocular conditions

f. Appropriate postoperative care cannot be arranged.

Note: Activities of daily living refer to those functions or activities, which are performed by individuals without assistance, thus allowing for personal independence in everyday living. They include eating, bathing, dressing, toileting, transferring, and continence.

Decisions regarding patient suitability for consideration of cataract surgery must be made on a case-by-case basis. These recommendations are intended only as a guide for the site physician and are not intended to replace clinical judgment.

The Management of Corneal Abrasions

I. CORNEAL ABRASIONS

Corneal abrasion is often used to refer to any defect in the corneal surface epithelium. Corneal abrasions can be classified as traumatic, including foreign body related and contact lens related, or spontaneous. Spontaneous defects in the corneal epithelium may occur with no immediate antecedent injury or foreign body. Eyes that have suffered a previous traumatic abrasion or eyes that have an underlying defect in the corneal epithelium are prone to this problem.

II. DIAGNOSIS

Any patient who complains of severe eye pain with photophobia and/or foreign body sensation preventing opening of the eye generally can be presumed to have a corneal epithelial defect. The provider must then first rule out penetrating trauma, and second an infectious infiltrate, especially herpes simplex virus infection.

III. INDICATIONS FOR CONSULTATION OR REFERRAL TO AN OCULAR PROFESSIONAL

A. Patients with isolated corneal abrasions and the following findings should undergo urgent evaluation by an ocular professional:

1. Corneal infiltrate, white spot, or opacity suggestion ulceration
2. Foreign body that cannot be removed
3. Hypopyon (pus in the anterior chamber)

B. Urgent referral to an ocular professional is generally indicated in patients with the following physical findings at follow-up but individual clinical situations may vary:

1. A larger epithelial defect
2. An abrasion with a purulent discharge
3. A drop in vision of more than one to two lines on a Snellen chart (e.g., drop from 20/20 to 20/80)
4. Corneal abrasion that has not healed after 3 to 4 days
    a. These findings suggest a retained foreign body, poor healing, superinfection, or infectious keratitis.

IV. MANAGEMENT

A. The approach to treatment of corneal abrasions is summarized in the following algorithm. Treatment options vary based upon the subtype of corneal abrasion.

B. Traumatic and foreign body abrasions

1. General Information:
    a. Eye examination, typically including fluorescein staining, is an important diagnostic tool.
    b. Administration of topical antibiotics and, for large abrasions, cycloplegics have been the mainstay of therapy for decades, along with routine follow-up until the eye is healed.

c. Patching was previously routine but is no longer recommended for most patients. (See 'Patching' below.)

2. Contaminated Material:

a. Patients who have a corneal abrasion with contaminated material (farm instruments, vegetable matter) are at risk for developing bacterial keratitis; this is the most common cause of bacterial keratitis among agricultural laborers in undeveloped countries.

b. These patients generally warrant daily monitoring for corneal infiltrate or ulceration.

3. Foreign Body Removal

a. If a corneal foreign body is detected, an attempt can be made to remove it by irrigation after the instillation of topical anesthetic.

i. This is particularly helpful in the case of multiple superficial foreign bodies (e.g., sand).

b. An attempt can then be made to remove the foreign body with a moistened swab, using direct visualization.

c. Foreign bodies under the lid can be removed after flipping the lid.

d. If the foreign body cannot be dislodged by irrigation or with a swab, the patient should be evaluated urgently by an individual trained in the use of instruments to dislodge foreign bodies off the ocular surface.

e. Preferably, foreign body should be removed within 24 hours.

i. While awaiting removal, the patient should generally be treated in the meantime with a topical antibiotic ointment four times a day and no patch.

4. Rust Ring

a. After removal of a foreign body containing iron there is often a residual rust ring and reactive infiltrate.

i. Patients with rust ring should be treated as patients with corneal abrasions.

ii. The rust ring itself is not harmful and will usually resorb gradually.

iii. If there is failure of the epithelium to heal after 2 to 3 days, the referral to an urgent ocular professional should be considered.

5. Topical Antibiotics

a. Low-Risk Abrasions:

i. For adults with low-risk abrasions (e.g., not associated with contact lens wearing, not caused by a foreign body, and not located over the central cornea), close observation without prescribing topical antibiotics is a reasonable option.

ii. Such patients may still benefit from a topical ophthalmologic lubricant to reduce pain.

b. Higher Risk Abrasions:

i. Considerations for selection of topical antibiotics include:

1) An ointment is generally considered better than drops because it functions as a lubricant and may reduce disruption of the remaining and newly generated epithelium.

2) For patients who wear contact lenses, select an ointment or drop that covers for Pseudomonas species (e.g., ciprofloxacin, ofloxacin, or, if fluoroquinolones are not available, tobramycin or gentamicin).

3) For patients who are not contact lens wearers, erythromycin ointment is a good choice, used 4 times daily for 3 to 5 days.

4) For patients who are not contact lens wearers and who insist on a drop rather than an ointment, sulfacetamide 10 percent, polymyxin/trimethoprim, ciprofloxacin, or ofloxacin are reasonable choice).

5) Aminoglycosides should be avoided in these patients because aminoglycosides can be toxic to the epithelium.

6. Ocular Steroids (Typically Avoided):

a. Antibiotic preparations containing steroids are typically avoided because they reduce host resistance to superinfection and may make a missed diagnosis of herpes simplex virus epithelial keratitis or microbial keratitis worse.

7. Pain control — The approach to pain control for corneal abrasions varies according to the size of the abrasion:

a. Small corneal abrasions – Most small abrasions (less than one-fourth of corneal surface area [e.g., a round abrasion that is 4 mm across]) will generally heal overnight if the lid is closed and there is no rubbing or squeezing.

i. Mild to moderate pain can typically be controlled with a very short course of an oral NSAID or acetaminophen.

ii. In the few select patients more advanced analgesia coverage is needed and is at the clinician's discretion.

b. Large corneal abrasions – A large abrasion will not generally heal overnight and additional measures may be required for pain control and to allow for healing.

i. Short courses of medications of 2-4 days is generally adequate.

ii. Cycloplegic (parasympatholytic drops) and patching may also be considered in some patients, especially those with abrasions that cover >50 percent of the corneal surface as follows:

1) Cycloplegic drops – Cycloplegics are parasympatholytic drops that inhibit the miotic (pupil-constricting) response to light; it is this response to light that causes the ache and photophobia of corneal abrasion. These drops do not relieve foreign-body sensation.

2) Patients with large abrasions who are particularly photophobic can be treated for up to 48 hours with cyclopentolate (0.5 to 1 percent) one drop twice daily or homatropine (2.5 to 5 percent) one drop daily.

3) Cycloplegics make the pupil large, causing glare, and also block accommodation, thereby interfering with near work such as reading.

i) Cyclopentolate 0.5 or 1 percent has the shortest duration of action, but still lasts for 24 to 36 hours.

ii) Thus, patients with small abrasions that heal overnight typically find that the side effects of cycloplegic drops outweigh the benefit of pain control.

c. Patching for pain control:

i. Patching may decrease the pain of large corneal abrasions.

ii. Patching is not generally recommended for small abrasions.

iii. Because of the risk of infection, patients with corneal abrasions who also use contact lenses should not be patched. (See the abrasions and recent contact lens wear section below.)

iv. Technique:

1) Suggestion: If the decision is made to apply a pressure patch for pain control caused by a large corneal abrasion, proper application is important.

2) Generally, a properly applied patch precludes blinking. Improper application may allow the patient to blink under the patch or worse, abrade the cornea further.

3) Patching is generally performed as follows:

i) Assemble two gauze eye pads and three strips of tape.

ii) Apply antibiotic ointment to the eye by instilling a small amount (0.5 to 1 inch ribbon) in the inferior lid.

iii) Fold one pad in half.

iv) Ask the patient to gently close both eyes.

v) Use the folded patch to occupy the space over the globe in the orbit and apply pressure to the globe.

vi) Place the second pad over the folded pad.

vii) Ask the patient or an assistant to apply firm pressure to the second pad, while it is being taped firmly with the three strips of tape. These strips are most effective if place obliquely from the midline over the nose toward the cheekbone.

viii) Ask the patient to open the eyes and report if the lid under the patch can be raised. If it can, then the patch has not been applied successfully and generally should be redone.

ix) Leave the patch in place overnight, and generally for no more than 24 hours.

v. Abrasions and recent contact lens wear

1) Contact lens wearers who present with a corneal epithelial defect should be examined to look for a corneal infiltrate, which is a white spot or opacity, or an ulcer, representing a surface breakdown, thinning, or necrosis that occurs in an area of infiltration.

2) Any patient with such a finding should be seen by an ocular professional on an emergent basis.

3) If a corneal abrasion is present and no infiltrate is seen, patients with recent contact lens wear require timely topical antibiotics that are effective against Pseudomonas species (e.g., ciprofloxacin, ofloxacin) or, if fluoroquinolone eye drops or ointment are not available or cannot be used in an individual patient, then tobramycin or gentamicin.

4) Because of the risk of infection, patients with abrasions in the setting of recent contact lens wear should not be patched.

   i) Patching of what appeared to be sterile abrasions can lead to sight-threatening infection.

5) The patient should be checked in in an urgent/emergent timeframe by an ophthalmologist or optometrist to confirm the absence of a corneal infiltrate or ulcer.

6) Patients should refrain from wearing contacts until the eye is fully healed as determined by an ophthalmologist or optometrist.

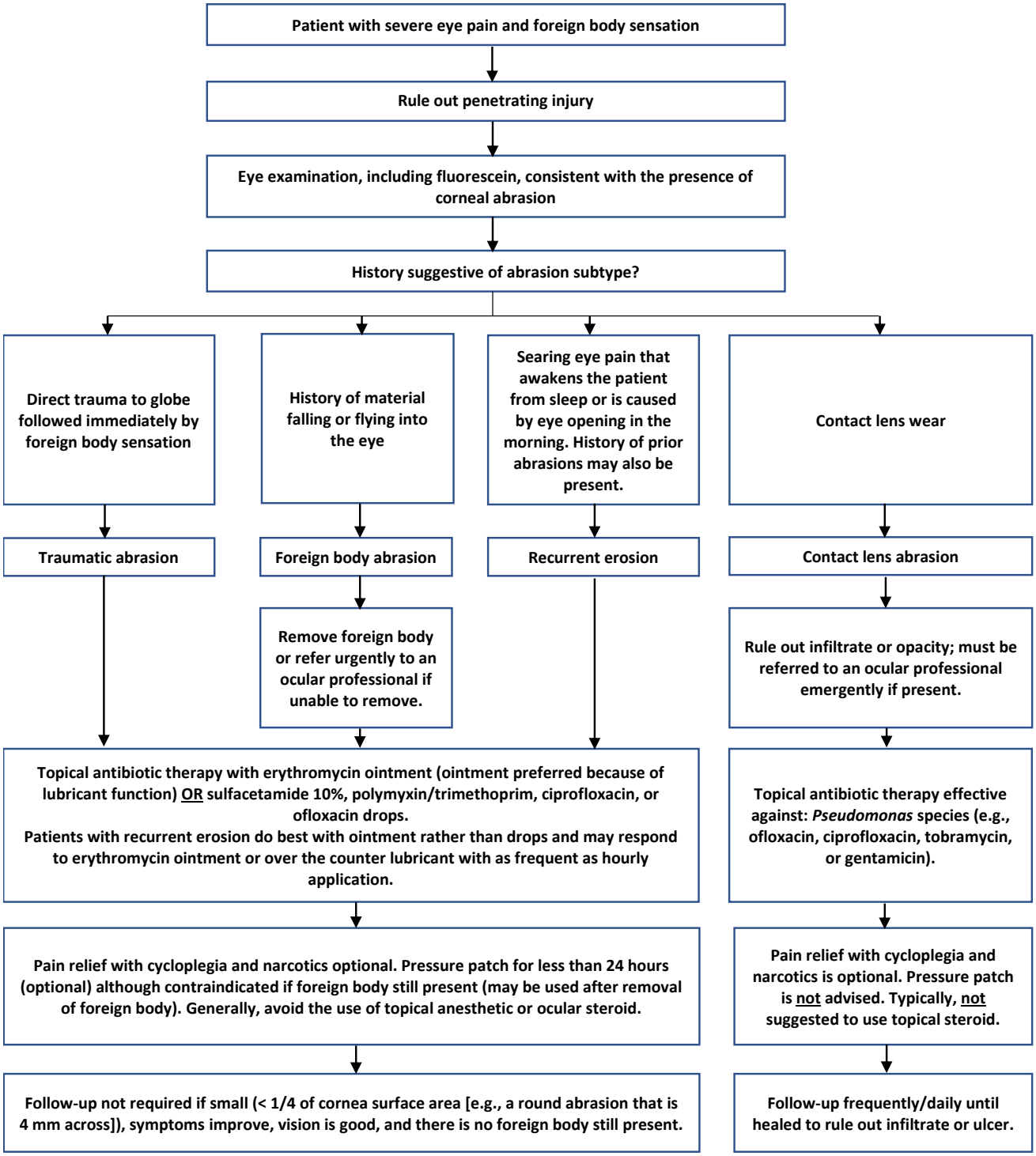
7) Infectious pseudomonas keratitis is a fulminant, necrotizing, ulcerative process that can result in corneal melting and perforation within 24 hours. Even if perforation and vision loss on that basis is averted, there is often permanent corneal scarring that requires corneal transplantation.

8. Treatment to Generally Avoid:

   a. Topical corticosteroids

      i. Corneal abrasions should generally not be treated with a topical corticosteroid because of the increased potential for secondary infection or exacerbation of missed herpes simplex virus or microbial keratitis.

V. MANAGEMENT OF CORNEAL ABRASIONS ALGORITHM



VI. FOLLOW-UP

A. Most small corneal abrasions (less than one-fourth of corneal surface area (e.g., a round abrasion that is 4 mm across) heal within 24 to 48 hours.

1. Follow-up of small abrasions should be considered but may not be necessary as long as symptoms resolve.

a. Such patients should be instructed to return if eye drainage or decreased vision occurs or if symptoms persist beyond 48 hours.

B. Larger abrasions, abrasions from contact lens, abrasions that are associated with decreased vision, generally warrant daily/frequent follow-up until healing has occurred.

VII. REFERENCES

1. Adapted from UpToDate's "Corneal Abrasions and Corneal Foreign Bodies: Management." Accessed 12-28-21.

The Management of Glaucoma

I. BACKGROUND

Glaucoma is a group of diseases that adversely affects vision by causing damage to the optic nerve. Usually, these patients will have elevated intraocular pressure (IOP) readings by tonometry. Normal IOP is defined as 10–23 mm Hg. Less commonly, glaucoma may exist with normal IOP readings. In those with normal IOP, glaucoma is suspected by increased cup/disc ratios, abnormal cupping or frank changes in the optic nerve on ophthalmoscopic exam. Glaucoma is more commonly seen in advancing age, particularly in those over age 60 or in those with a family history of glaucoma. It is more common in African Americans and the overall incidence is 0.5%.

II. CLASSIFICATION

A. Primary Glaucoma (most common)

1. Open Angle
    a. Caused by decrease in outflow of aqueous humor
    b. 90% of cases
    c. Family history usually present
    d. More commonly seen in myopic patients (greater than 5 diopters)
    e. More commonly seen in males of African American descent
2. Closed Angle
    a. Caused by obstruction in outflow of aqueous humor due to a narrow anterior chamber angle determined by gonioscopy
    b. Less common
    c. Shallow anterior chamber
    d. Primarily seen in hypermetropic, 45–60 year-old age group
    e. May present as acute episodic provoked by pupillary dilation (e.g., pharmacologic mydriasis or after entering a darkened room)

B. Secondary (acquired, infrequent), causes include:

1. Chronic steroid use
2. Infectious causes
3. Autoimmune disorders

III. PRESENTATION/SYMPTOMS

Most are asymptomatic until significant peripheral visual field loss has developed, thus the need for screening. Acute glaucoma is uncommon; they may present with intense pain (that may mimic headache) and may be associated with nausea/vomiting, photophobia, lacrimation and visual halos seen around light sources.

IV. SCREENING AND MONITORING

A. Tonometry: Recommended Screening Intervals[1]

[1] *Those with any high-risk factors, every one to two years after age 35.*

1. At ages 35 and 40
2. After age 40, every two to four years
3. After age 60, every one to two years

B. Ophthalmoscopic examination looking for abnormal cup/disc ratio greater than 0.6, or by abnormal disc configuration
   1. Correlate findings with tonometry
   2. Include ophthalmoscopic exam with physical examinations

C. Visual Field Testing – evaluates visual field integrity
   1. Documents status of visual fields and changes
   2. Generally indicated yearly for those diagnoses with glaucoma or glaucoma-suspect
   3. Disadvantages:
      a. Requires specialized equipment and personnel
      b. Requires patient cooperation

D. Pachymetry – assesses corneal thickness that may affect tonometry readings, indicated in selected cases.

Optometry

Routine Optometry Protocols and Procedures

Routine eye exams will be provided to eligible patients every two years for patients under age 50. Routine eye exams will be provided to eligible patients annually for patients over age 50.

I. ROUTINE ON-SITE OPTOMETRIC EYE EXAMINATIONS INCLUDE THE FOLLOWING:

A. Problem oriented history

B. Visual acuity

C. Eye health assessment including tonometry when indicted

D. Refraction

E. Disposition

F. Eyeglass order generation, accelerated recall or referral when indicated

G. Documentation and record keeping

Upon intake, every patient shall receive an eye screening and visual acuity assessment as part of his/her initial intake physical conducted by the on-site nursing staff or other designated on-site medical department personnel. Patients who do not meet the vision portion of the intake physical shall be scheduled for routine optometry clinic:

J. Pass/Fail screening protocol(s) as listed in section II;

H. Patients entering the system wearing prescription spectacle or contact lenses will be scheduled for routine optometry clinic;

I. Patients with a previous diagnosis of glaucoma, other eye disease or other medical condition will be scheduled for baseline optometry assessment and appropriate recall/monitoring;

J. Patients with a positive family history of glaucoma, other eye disease or other medical condition will be scheduled for baseline optometry assessment and appropriate recall/monitoring.

Patients under age 50 who passed the visual portion of the intake physical or who are requesting routine optometry services within two years of their last routine eye examination provided in the system shall be screened for eligibility prior to being scheduled to see the optometrist. Patients over age 50 shall be screened if requesting an eye exam if it has been less than one year. Pass/Fail screening protocol(s) are listed in section II.

II. THE FOLLOWING SCREENING CRITERIA APPLY:

A. 20/40 acuity in one or both eyes with correction – acuity testing to be performed by the nursing or on-site medical staff;

B. Emergence or manifestation of any ocular or systemic sign or symptom that the medical director, nursing staff or other on-site medical staff feel require optometry assessment;

C. Diagnosis of another immediate family member with glaucoma, other eye disease or other medical condition with potential ocular manifestations;

D. As referred by the medical director or medical department.

Patients scheduled for on-site optometry services beyond the scope of routine exams, such as a more advanced ophthalmologic assessment of suspected eye disease or annual dilated retina evaluation of diabetic patients, should be scheduled as per the protocols and procedures established for the health condition and/or as directed by the managing physician/optometrist/ophthalmologist.

Eyeglasses and Contact Lens Protocols

I. EYEGLASSES

A. The Department shall pay for one pair of eyeglasses when determined medically necessary by an optometrist/ophthalmologist.

B. All eyeglasses will meet or exceed FDA and ANSI Z-80 Dress Safety standards.

C. The Department will supply one male zyl (plastic) frame style and one female zyl (plastic) frame style in multiple sizes. Frame style options, such as different color selection or upgraded frame options including metal frames, will NOT be supplied or available to patients through the eyeglass program.

1. Any change from the standard issue frame style will only be supplied when medically indicated and approved through established Department protocols and procedures.

D. Lenses will be clear CR-39 plastic single vision or strait top multifocal design.

1. Any change from clear standard CR-39 plastic or strait top multifocal design lenses will require authorization as medically indicated and approval through established Department protocols and procedures prior to the order being sent to the lab for processing.

2. Tints and/or photochromatic lens options will only be supplied when authorized as medically indicated.

3. Medical conditions which may require tinted lenses include:

a. Albinism

b. Chronic/recurrent Iritis

c. Fixed/dilated pupils

d. Iris anomaly(s)

e. Other medical conditions on an “as needed” basis

4. Subjective photophobia is NOT a medical indication for tinting.

5. Cataracts, glaucoma, diabetic retinopathy, peripheral corneal scarring are conditions where tinted lenses do not provide any therapeutic purpose.

6. Polycarbonate lenses will only be supplied when authorized as medically indicated and for such conditions as functionally monocular patients, amblyopes or when 100% UV blocking is medically indicated

7. High index lens materials will only be supplied when authorized as medically indicated by excessive refractive error

8. For patients assigned to job duties requiring eye wear:

a. It is the facility’s responsibility to provide eyewear to patients assigned to work assignments requiring sun protection or other eye protection. Exception to this area would include amblyopic patients who should be fitted with polycarbonate eyeglasses.

9. Any other lens option(s) or upgrade(s) other than clear CR–39 plastic or strait top multifocal design will only be supplied when authorized as medically indicated.

E. Replacement eyeglasses will be provided by the Department every two years OR when there is a +0.50 diopter/20 degree axis shift and/or one line of acuity improvement and/or as

indicated by the examining optometrist/ophthalmologist, or when the integrity of the current pair of eyeglasses justifies new glasses due to severely scratched lenses, broken frames, etc.

1. The patient shall be financially responsible for the cost incurred for the replacement/repair of frames and/or lenses damaged or destroyed due to negligence or deliberate destruction.

    a. If sufficient funds are not available in the patient's account and the medical staff has determined that the patient's visual health would be adversely affected, the eyewear will be replaced and arrangements made to reimburse the Department from the patient's account when funds become available.

2. The Department shall repair and/or replace all frames and lenses damaged or destroyed as a direct result of a patient's work assignment(s).

    a. The work supervisor shall determine whether the damage occurred as direct result of a patient work assignment.

F. A patient may not possess more than two pair of prescription eyeglasses at any time during their incarceration.

1. A patient is permitted to keep their current glasses worn upon intake if approved by the intake facility. When transferring from the intake facility to another facility or a subsequent intra-facility transfer, the decision of the intake facility shall be honored and the patient permitted to retain current glasses until:

    a. The current prescription is no longer medically correct; or

    b. The current lenses and/or frames are destroyed, lost or damaged.

2. A patient shall not be permitted to assume the responsibility of discarding any extra pair(s) of eyeglass in excess of two. The extra pair will be turned into the medical department where arrangements will be made at the patient's expense to send them to the patient's home, stored in property or given to Security to dispose of properly.

II. CONTACT LENSES

A. Contact lenses shall only be provided when deemed medically necessary and authorized through established Department protocols and procedures for conditions such as true aphakia and keratoconus and shall be addressed on a case-by-case basis.

1. The Department shall be responsible for supplying necessary solutions and other materials for the maintenance of authorized medically necessary contact lenses.

B. Contact lenses are provided only for medical needs such as:

1. Keratoconus

2. Severe myopia or hyperopia (greater than +/- 15 diopters) where standard lenses do not afford adequate refraction.

3. Other medical needs as determined on a case-by-case basis.

C. Patients entering the system wearing contact lenses will be permitted to retain his/her current contact lenses only until Department issued prescription eyeglasses are obtained.

1. The patient shall be responsible for the cost of supplying through the medical department all necessary solutions and other materials for the maintenance of contact lenses until such time as eyeglasses are acquired.

2. Upon receipt of prescription eyeglasses, the patient's contact lenses will be turned into the medical department where arrangements will be made at the patient's expense to

send them to the patient's home, stored in property or given to Security to dispose of properly.

3. Patients entering the system with both acceptable contact lenses and prescription glasses will be required to discontinue contact lens wear and the contact lenses disposed of as indicated in the preceding subsection II.B.

D. The type of contact lens, hard or soft, is determined by the optometrist and not by patient request.

Oral and Maxillofacial Surgery Guidelines

Oral and Maxillofacial Surgery

DX	Primary (Unit) Rx	Secondary (Wexford Health) Rx *Unless emergent, conduct collegial review.
Acute Infections of the Oral Cavity	Pain, swelling, trismus, elevated temperature, airway compromise, dysphasia, elevated tongue Rx: Airway security antibiotics, incision and drainage, culture, sensitivity, gram stains	Refer Emergent if airway involved. May warrant possible referral to OS for biopsy, excisions
Dental Caries involving pulp, periodontal disease	Pain, thermal sensitivity, tooth mobility, cellulites/abscess Rx: Antibiotics, extraction, refer to restorative dentistry, endodontics if indicated	Refer to Endodontist only if complicated endodontics is involved, the tooth is crucial to arch integrity, there is a good periodontal support and a long incarceration is expected.
Impacted Molars Symptomatic	Pain, pressure, shifting teeth pericoronitis, cysts, dysphagia, asymptomatic Rx: Antibiotics, X-ray diagnosis, surgical extraction	Refer Routine if not able to do at unit or Urgent if infected.
Fractured teeth with or without pulp exposure	Pain, thermal sensitivity Rx: Refer for restorative dentistry, endodontics, extractions	None
I. Fracture of Mandibular body and ramus fractures	Pain, swelling, malocclusion, bleeding, motor/sensory nerve deficits Rx: Refer to Oral Surgery	Refer Urgent for reduction and immobilization
II. Mandibular condyle	Trismus, open bite, mandibular deviation, pain, swelling, malocclusion Rx: Refer to Oral Surgery	Refer Urgent for reduction and immobilization
III. Traumatic Injuries of teeth and Alveolar process	Gingival laceration, mobile alveolar segment, pain, malocclusion, bleeding Rx: Tooth refosetion, splinting, surgical removal of alsetor segment	Refer to OS if beyond capability of the unit
IV. Maxilla (Lefort Fractures)	Mobility of maxilla, visual changes, motor/sensory deficits, periorbital ecchymosis, pain, swelling, malocclusion Rx: Refer to Oral Surgery	Refer Urgent for reduction and immobilization
V. Orbit, blow out fractures	Restricted eye movement, visual changes, motor/sensory deficits, periorbital ecchymosis, pain, swelling Rx: Refer to Oral Surgery	Refer Urgent for orbital exploration and reconstruction
VI. Naso-orbital-ethmoid complex	Epistaxis, cerebral spinal rhinorrhea, nasal dysfunction, telechanthus, visual changes, facial asymmetry, motor/sensory deficits, pain, swelling Rx: Refer to Oral Surgery	Refer Urgent for reduction and immobilization, orbital exploration and reconstruction
Mandibular condyle dislocation	Open lock, pain Rx: Reduction with/without immobilization Refer to Oral Surgery if unable to reduce	Refer Urgent for reduction

DX	Primary (Unit) Rx	Secondary (Wexford Health) Rx *Unless emergent, conduct collegial review.
Traumatic injuries to soft tissue of head and neck	Lacerations, pain, swelling, bleeding, tissue emphysema, motor/sensory deficit, cosmetic injury Rx: Multi-layered closure and dressing Refer to Oral Surgery if beyond capabilities of unit	Refer Urgent for reduction and immobilization if fractures are present or within 24 hours to sutures lacerations.
Osteomyelitis maxilla/mandible	Pain, swelling, pathologic fracture, motor/sensory nerve deficit Rx: IV antibiotics (define), culture, sensitivity, gram stain, debridement, wound care, and hyperbaric oxygen. Refer to Oral Surgery	Refer Urgent
Osteoradionecrosis of maxilla/mandible	Pain, swelling, bone exposure pathological fracture Rx: Wound care, IV antibiotic (define), hyperbaric oxygen, debridement and bone grafting. Refer to Oral Surgery	Refer Urgent
Maxillary/mandibular discontinuity bony defects	Unable to fabricate dentures Rx: Mandibular and maxillary tori reduction.	Refer Routine if beyond capabilities of the unit.
Temporomandibular joint disease	Pain, restricted mandibular opening, malocclusion, clicking crepitus in opening and closing Rx: Conservative TX muscle relaxants, fabrication of interocelusal splints.	Refer Routine or Urgent if “closed lock” is present or for severe pain
Benign or malignant pathology of the jaws and adjacent area	Pain, swelling, displacement of teeth, bone expansion, radiopaque/radiolucent lesions, pathological fracture, motor/sensory nerve deficits, metastatic changes Rx: X-ray evaluation, R/O Metastatic Disease, needle aspiration, biopsy, definitive surgery. Refer to Oral Surgery	Refer Urgent for surgical treatment
Complicated Exodontia	Oroantral communications, iatrogenic fractures.	Refer to OS.

Orthopedic Surgery Guidelines

Orthopedic Surgery Guidelines

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
I. Fractures and Dislocations		
Closed Fractures (Recent)		
1. Non-displaced	Consider: Splint, ice, pain management and elevation	At the discretion of the clinician depending on the clinical scenario: Consider onsite management, ER or Ortho Referral Urgent
2. Displaced	Consider: Splint, ice, pain management and elevation	At the discretion of the clinician depending on the clinical scenario: Consider ER or Ortho Referral Urgent
Open Fractures (Recent)		
1. Clean	Consider: Irrigate, sterile dressing, possible prophylactic antibiotics, Tetanus immunization and pain management	Consider emergent referral to ER or Orthopedics
2. Dirty	Consider: Irrigate, sterile dressing, prophylactic antibiotics, Tetanus immunization and pain management	Consider emergent referral to ER or Orthopedics
Fracture with Nerve Deficit (Recent)	Consider: Splint, ice, elevation and pain management	Consider emergent referral to ER or Orthopedics
Joint Dislocation (Recent)		
1. Closed	Consider: Onsite reduction, and then splint, symptomatic pain management	If successful, consider referral to Ortho; if unsuccessful consider emergent to ER or Orthopedics
2. Open	Consider: Splint, sterile dressing, Tetanus immunization, symptomatic pain management	At the discretion of the clinician depending on the clinical scenario: Consider ER or Ortho Referral Emergent
II. Lumbosacral Spine		
Acute Lower Back Pain		
1. No Neurological Deficit	Consider: Ice/heat and/or NSAIDs and/or muscle relaxant and/or acetaminophen	At the discretion of the clinician

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
2. Nerve Deficit (foot drop, absent reflexes, incontinence)	Consider: Bed rest, ice/heat and/or NSAIDs and/or muscle relaxant and/or acetaminophen	At the clinical discretion of the clinician consider emergent referral to ER or emergent imaging
3. Fracture (Acute)	Consider: Clinician's plan of care is dependent on the clinical scenario including mechanism of injury, patient, type of fracture, patient presentation, symptoms	ER or Ortho or Neurosurgery evaluation at discretion of provider depending on the clinical scenario
Fracture Compression (Recent)		
1. Compression with no neurologic deficit	Consider: Activity modification, analgesics, laboratory evaluation to diagnose secondary causes of osteoporosis, an exercise program can be initiated when pain has diminished	At the discretion of the clinician depending on the clinical scenario
2. Compression with neurologic deficit	Consider: Activity modification, analgesics, laboratory evaluation to diagnose secondary causes, an exercise program can be initiated when pain has diminished	Consider emergent referral to ER and/or emergent imaging and/or urgent referral to neurosurgery or orthopedic spine specialist
Radiculopathy	Consider: Recognizing that the most common cause of radiculopathy is nerve root compression from intervertebral disc herniation or spondylosis, producing painful symptoms but often a self-limiting course. Patients should, however, be evaluated for less common mechanisms associated with permanent and progressive neurologic disability, as prompt diagnosis and treatment may improve outcome and as such a treatment plan may need to be individualized but treatment may include, rest, non-opioid analgesic medications, stretches, avoidance of pain-producing activities, systemic glucocorticoids	At the discretion of the clinician depending on the clinical scenario
Scoliosis, Kyphosis	Consider exercise, analgesic medications with heat for acute pain periods	At the discretion of the clinician

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Tumors or Infection (new diagnosis)	Consider symptomatic treatment while initiating diagnostic evaluation and treatment	At the discretion of the clinician depending on the clinical scenario
Tumors or Infection (established diagnosis)	Consider: Pain management while treatment is ongoing	At the discretion of the clinician depending on the clinical scenario
III. Hand and Wrist		
Fractures and Dislocations	See Section I: Fractures and Dislocations	
Lacerations		
1. No neurological or tendon involvement	Consider: Cleanse w/saline irrigation, Steri-Strip and/or suture, tetanus, oral antibiotic	At the discretion of the clinician depending on the clinical scenario
2. With nerve and tendon involvement, clean wound	Consider: Cleanse/irrigate, sterile dressing, oral antibiotic, tetanus	Refer Urgently to ER/Hand Surgeon/Orthopedics
3. Nerve or tendon involved with dirty wound	Consider: Cleanse/irrigate, sterile dressing, oral or IV antibiotic, tetanus	Refer Urgently to ER/Hand Surgeon/Orthopedics
Carpal Tunnel or Cubital Tunnel	Consider: Splint, analgesics/NSAIDs, glucocorticoids injections and/or oral glucocorticoids	At the discretion of the clinician depending on the clinical scenario
Old Tendon or Nerve Injury	Consider: No treatment unless unsatisfactory functional level	At the discretion of the clinician depending on the clinical scenario
Ganglion Cyst	Consider: Reassurance, observation, measure, educate. If bothersome symptoms may consider aspiration (high rate of recurrence)	Consider routine referral if bothersome and symptomatic treatment unsuccessful and surgery is being considered.
Crushed Fingertip w/Nail Bed Injury	Consider: Cleanse/irrigate, sterile dressing, oral antibiotic, tetanus	At the discretion of the clinician depending on the clinical scenario
Amputations		

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
1. Fingertip not involving bone	Consider: Oral antibiotic with sterile dressing daily, whirlpool daily, review tetanus status	At the discretion of the clinician depending on the clinical scenario
2. Fingertip involving bone	Consider: Sterile dressing, antibiotics. review tetanus status	Refer urgently to ER/Hand Surgeon/Orthopedics
3. Amputation or near amputation	Consider: Sterile dressing, antibiotics, review tetanus status	Typically, refer to ER
Tendonitis		
1. No locking or triggering	Consider: Splint, NSAIDs, analgesics, activity modification (no sports)	At the discretion of the clinician depending on the clinical scenario
2. Locking or triggering	Consider: Splint, NSAIDs, activity modification (no sports)	At the discretion of the clinician depending on the clinical scenario
Infection		
1. Superficial Wound	Consider: Sterile dressing, antibiotics	At the discretion of the clinician depending on the clinical scenario
2. Deep (Flexor Tendon or palm abscess)	Consider: Sterile dressing, antibiotics	At the discretion of the clinician depending on the clinical scenario – May consider ER/Hand Surgeon/Orthopedics
IV. Elbow		
Fractures and Dislocations	Consider - See Section I: *Fractures and Dislocations* Check carefully for radial / medial / ulnar nerve injury	At the discretion of the clinician depending on the clinical scenario – May consider ER/Orthopedics
Bursitis	Consider: NSAIDs; aspiration, glucocorticoid injection	At the discretion of the clinician depending on the clinical scenario – May consider Orthopedics
Lateral or Medial Epicondylitis	Consider: activity modification, NSAIDs, acetaminophen, steroid injections, bracing, targeted strength exercises, glucocorticoid injection	At the discretion of the clinician depending on the clinical scenario – May consider musculoskeletal

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
		ultrasound, MRI and/or Orthopedics
V. Shoulder		
Fractures and Dislocations	Consider: See Section I: Fractures and Dislocations	At the discretion of the clinician depending on the clinical scenario
Acute Pain with No Fracture or Dislocation	Consider: Ice, NSAIDs, pain management, sling or shoulder immobilizer with ROM exercises at 1-3 weeks	MRI/Ortho evaluation at discretion of provider depending on the clinical scenario
Chronic Pain	Consider: NSAIDs, ROM exercises, activity modification, glucocorticoid injection	MRI/Ortho evaluation at discretion of provider depending on the clinical scenario
Multiple shoulder dislocations	Consider: Education on preventing dislocations along with strengthening internal rotators exercises, activity modification	MRI/Ortho evaluation at discretion of provider depending on the clinical scenario
AC Joint Separation		
1. Acute	Consider: Sling, ice, pain management, exercises as tolerated	MRI/Ortho evaluation at discretion of provider depending on the clinical scenario
2. Chronic	Consider: Analgesics, range of motion (ROM) exercises	MRI/Ortho evaluation at discretion of provider depending on the clinical scenario
Clavicle Fracture		
1. Acute	Consider: Ice, sling or shoulder immobilizer	ER or Ortho evaluation at discretion of provider depending on the clinical scenario
2. Chronic	Consider: Analgesics PRN	Ortho evaluation at discretion of provider depending on the clinical scenario
VI. Foot and Ankle		

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Metatarsalgia		
1. Diffuse Forefoot Pain	Consider: Treat symptomatically with NSAIDs	At the discretion of the clinician depending on the clinical scenario – May consider Orthopedics or Podiatry
2. Arthritis	Consider: Treat symptomatically with PRN acetaminophen and/or NSAIDs	At the discretion of the clinician depending on the clinical scenario – May consider Orthopedics or Podiatry
3. Morton's/Interdigital Neuroma (Plantar web space pain)	Consider: Metatarsal pads, pain management, NSAIDs, footwear review	At the discretion of the clinician depending on the clinical scenario – May consider Orthopedics or Podiatry
Hallux Valgus		
1. Bunion	Consider: Symptomatic pain management, wide toe box shoes, NSAIDs PRN	At the discretion of the clinician depending on the clinical scenario – May consider Orthopedics or Podiatry
2. Hallux rigidus – 1st MTPJ stiff, osteoarthritis on X-ray	Consider: Over the counter orthotics, NSAIDs, symptomatic pain management, glucocorticoid injection	At the discretion of the clinician depending on the clinical scenario – May consider Orthopedics or Podiatry
3. Hallux limitus	Consider: Over the counter orthotics, NSAIDs, symptomatic pain management, glucocorticoid injection	At the discretion of the clinician depending on the clinical scenario – May consider Orthopedics or Podiatry
Toenail, Ingrown (mild to moderate)	Consider: Education about nail trimming, importance of footwear that fits, If possible, soak in soapy water multiple times per days for 10 - 20 minutes while pushing the lateral nail fold away from the nail plate, symptomatic pain management	At the discretion of the clinician depending on the clinical scenario
Toenail, Ingrown (moderate to severe)	Consider: Education about nail trimming, importance of footwear that fits, If possible, soak in soapy water multiple times per days for 10 - 20 minutes for 1-2	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	weeks while pushing the lateral nail fold away from the nail plate during the soaking, partial nail avulsion (removal), pain management	
Toes (Claw, Hammer, or Mallet)	Consider: Symptomatic treatment with NSAIDs and/or acetaminophen wide toe box shoes	At the discretion of the clinician depending on the clinical scenario
Calluses	Consider: Counsel about prevention and avoiding ill-fitting shoes, pain management, application of salicylic acid (plasters or ointment) or urea-based creams after paring down the callus.	At the discretion of the clinician depending on the clinical scenario
Corns	Consider: Counsel about prevention and avoiding ill-fitting shoes, pain management, application of salicylic acid (plasters or ointment) or urea-based creams after paring down the callus.	At the discretion of the clinician depending on the clinical scenario
Fracture, Toe Fracture Uncomplicated	Consider: Immobilization by taping the injured toe to the adjacent toe (buddy taping), pain management	At the discretion of the clinician depending on the clinical scenario
Fracture, Metatarsal Fracture (uncomplicated, minimal or non-displaced)	Consider: Ice, elevation, if the fracture is minimally or nondisplaced and conditions requiring emergency referral have been excluded, initial treatment includes immobilization in a posterior splint and non-weight-bearing with a follow-up visit in three to five days	At the discretion of the clinician depending on the clinical scenario
Fracture, Metatarsal Fracture (uncomplicated, displaced)	Consider: Ice, elevation, reduction, splinting	At the discretion of the clinician depending on the clinical scenario – May consider Orthopedics or Podiatry
Midfoot Deformities		
1. Pes Planus (Flat Foot)	Consider: Observation - rarely requires intervention, off-the-shelf orthotics, stretches, weight loss, activity changes	At the discretion of the clinician depending on the clinical scenario
2. Pes Cavus (High Arch)	Consider: Observation - rarely requires intervention, stretches, off-the-shelf orthotics	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
3. Arthritis	Consider: NSAIDs and/or acetaminophen, targeted exercises	At the discretion of the clinician depending on the clinical scenario
4. Fracture Dislocation	Consider: Reduce, splint, pain management	At the discretion of the clinician depending on the clinical scenario – May consider ER, Orthopedics or Podiatry
Hindfoot		
1. Plantar Fasciitis, Heel Spur, Diffuse Heel Pain	Consider: NSAIDs and/or acetaminophen, arch supports, inject with steroid/lidocaine.	At the discretion of the clinician depending on the clinical scenario
Ankle (Sprains)		
1. Acute	Consider: Rest, ice, compression, elevation	At the discretion of the clinician depending on the clinical scenario
2. Chronic - More than 2 sprains in 6 months or chronic instability	Consider: Rest, ice, compression, elevation, strengthen peroneal (lateral calf) muscles, proprioceptive training	At the discretion of the clinician depending on the clinical scenario
Ankle/Dislocations Fractures	Consider: Splint, ice and elevate	At the discretion of the clinician depending on the clinical scenario – May consider ER, Orthopedics or Podiatry
Infection		
1. Diabetic Ulcer	Consider: The management of diabetic foot ulcers typically begins with a comprehensive assessment of the ulcer and the patient's overall medical condition, as such care will need to be individualized but may include wound culture (if discharge), wound care, debridement, possible targeted systemics antibiotics, elevation, footwear evaluation, off-loading pressure from the area and tighter glucose control	At the discretion of the clinician depending on the clinical scenario – May consider ER, Wound Care, Orthopedics or Podiatry
2. Gangrene (Dry)	Consider: Wrap wound lightly wrapped with bulky dry gauze, possible antibiotics	At the discretion of the clinician depending on the clinical scenario – May consider urgent Orthopedics or Podiatry

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
3. Gangrene (Wet = Infection)	Consider: Prepare patient for referral, wound care, possible antibiotics (depending on time of referral)	At the discretion of the clinician depending on the clinical scenario – May consider ER or urgent Orthopedics or Podiatry
4. Osteomyelitis	Consider: Treatment of osteomyelitis includes consideration of issues related to debridement, management of infected foreign bodies (if present), antibiotic selection, and duration of therapy and as such must be individualized to the patient	At the discretion of the clinician depending on the clinical scenario – May consider urgent Orthopedics or Podiatry
Achilles Tendonitis	Consider: Activity modification, heel lifts, NSAIDs and/or acetaminophen, ice or heat.	At the discretion of the clinician depending on the clinical scenario
Achilles Tendon, Rupture	Consider: Splint, crutches, analgesic medication	At the discretion of the clinician depending on the clinical scenario; May consider Orthopedic or Podiatry consultation
Calcaneus, Fracture	Consider: Bulky type dressing, splinting, elevation, ice, pain management.	At the discretion of the clinician depending on the clinical scenario; May consider Orthopedic or Podiatry consultation
VII. Knee		
Acute Knee Injury, No Fracture	Consider: Ice, elevation, NSAIDs and/or acetaminophen, pain management as indicated, crutches, active exercises as tolerated	At the discretion of the clinician depending on the clinical scenario
Chronic Knee Pain	Consider: NSAIDs or acetaminophen, quadriceps exercises, aspirate any effusions, glucocorticoid injection	At the discretion of the clinician depending on the clinical scenario
Unstable Knee (ACL, PCL, etc.)	Consider: Recognize that each case is unique and there is not one approach to a patient with knee instability treatment may include, NSAIDs, pain management, activity modification, targeted exercises to improve stability	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Meniscal Injuries	Consider: Management of meniscal tears depends upon the type of tear, the presence of significant mechanical symptoms (e.g., knee locking), the presence of a persistent knee effusion, age, activity level, and the presence of osteoarthritis or other structural knee damage and as such treatment needs to be individualized but may include rest, pain management, activity restrictions, targeted knee exercises.	At the discretion of the clinician depending on the clinical scenario
Repeat Locking or Effusions	Consider: NSAIDs and/or acetaminophen, activity modification, Joint aspiration	At the discretion of the clinician depending on the clinical scenario
Dislocation of Knee	Consider: Attempt reduction, pain management and prepare for likely emergent referral	Typically needs emergent referral to the ER
Dislocation of Patella	Consider: Reduce, ice, elevation, splint	At the discretion of the clinician depending on the clinical scenario will typically need referral to ER or urgent orthopedics if not reduced
Crepitus or Grinding	Consider: NSAIDs and/or acetaminophen, isometric quad exercises, glucocorticoid injection	At the discretion of the clinician depending on the clinical scenario
Patellar Tendinopathy	Consider: NSAIDs (topical or oral), ice, activity modification – (no sports), isometric quad exercises	At the discretion of the clinician depending on the clinical scenario – May consider Orthopedics
VIII. HIP AND PELVIS		
Fracture	Consider: Clinician's plan of care is dependent on the clinical scenario including mechanism of injury, patient, type of fracture, patient presentation, symptoms	ER or Ortho evaluation at discretion of provider depending on the clinical scenario
Acute Injury w/o Fracture	Consider: Crutches, NSAIDs and/or acetaminophen, analgesics	At the discretion of the clinician depending on the clinical scenario
Chronic Pain	Consider: Acetaminophen or NSAIDs, activity modification (no sports) cane, ROM & strengthening exercises	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Dislocation	Consider: Reduce ASAP, pain management, typically treated as a medical emergency	At the discretion of the clinician depending on the clinical scenario with consideration for ER referral
IX. CERVICAL SPINE		
Fracture	Consider: Stabilize the spine, the disposition of patients with spinal column injury depends primarily upon fracture stability and concomitant injuries.	At the discretion of the clinician depending on the clinical scenario with consideration for ER referral
Chronic Pain	Consider: The differential diagnosis of neck pain is broad. The majority of neck pain complaints are likely related to musculoskeletal causes, but numerous other conditions can present with neck pain so care will need to be individualized and may include, soft collar, NSAIDs, analgesics, heat	At the discretion of the clinician depending on the clinical scenario
X. RIB/STERNAL		
Fracture	Consider: Symptomatic analgesics, activity modification including no sports	At the discretion of the clinician depending on the clinical scenario

Otolaryngology Guidelines

Otolaryngology

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Otitis Externa The term "external otitis" (also known as otitis externa or swimmer's ear) refers to inflammation of the external auditory canal or auricle. Topical antibiotics are highly effective for treating external otitis.	Consider: The selection of therapy should be individualized and based upon consideration of the extent of the condition and symptoms, potential adverse effects of the treatment and the response to previous treatments. Consider: Patient Education items: 1. Avoid the use of ear plugs or other items inserted in the ear canal until healed. 2. Avoid putting Q-tips or other objects into the ear even if there is an itch. Consider as an alternative, more cost-effective, clinically effective option: 1. Using Maxitrol **Ophthalmic** in place of Cortisporin Otic. 2. Eyedrops may be utilized in the ear. 3. Neomycin/polymixin/dexamethasone (Maxitrol) ophthalmic preparation can be used when rapid symptom relief is desired and if the tympanic membrane is intact and there is no concern of hypersensitivity to aminoglycosides. 4. Typically, TID-QID administration is required for effectiveness. 5. Maxitrol should be avoided in chronic/eczematous otitis externa.	At the discretion of the clinician depending on the clinical scenario
Otitis Media Acute otitis media (AOM) is an acute, suppurative infectious process marked by the presence of infected middle ear fluid. The infection is most frequently precipitated by impaired function of the Eustachian tube, resulting in the retention and suppuration of retained secretions. AOM may also be associated with purulent	Consider: The selection of therapy should be individualized and based upon consideration of the extent of the condition and symptoms, potential adverse effects of the treatment and the response to previous treatments. For pain consider: NSAIDS or acetaminophen.	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
otorrhea if there is a ruptured tympanic membrane. AOM usually responds promptly to antimicrobial therapy.	Treatment to consider: • Treat possible causes of Eustachian tube dysfunction such as allergy, acid reflux, smoking or sinusitis. Antibiotics consider: • Augmentin 875/125 1 tablet BID for 10 days • Ceftin 500mg 1 tablet BID for 10 days. • Doxycycline 100mg 1 tablet BID for 10 days – Generally considered a 3rd line agent.	
Sinusitis, Acute Acute rhinosinusitis (ARS) is defined as symptomatic inflammation of the nasal cavity and paranasal sinuses lasting less than four weeks. VIRAL: The most common etiology of ARS is a viral infection. • Treatment for acute viral rhinosinusitis (AVRS) typically focuses on symptomatic management as it typically resolves within 7 to 10 days. BACTERIAL: Patients who fail to improve after ≥10 days of symptomatic management are more likely to have acute bacterial rhinosinusitis (ABRS). • Many patients with ABRS have self-limited disease that resolves without antibiotic therapy. Patients rarely develop complications of bacterial infection beyond the nasal cavity into the central nervous system, orbit, or surrounding tissues.	Consider: The selection of therapy should be individualized. AVRS consider: Patients with acute viral rhinosinusitis (AVRS) should be managed with supportive care. There are no treatments to shorten the clinical course of the disease. ABRS consider: Observation (watchful waiting for a seven-day period) with symptomatic management for immunocompetent patients with ABRS. The symptomatic management of ABRS is similar to that of acute viral rhinosinusitis (AVRS). Antibiotics (if being considered): • Augmentin 875/125 1 tablet BID for 10 days • Doxycycline 100mg 1 tablet BID for 10 days	At the discretion of the clinician depending on the clinical scenario

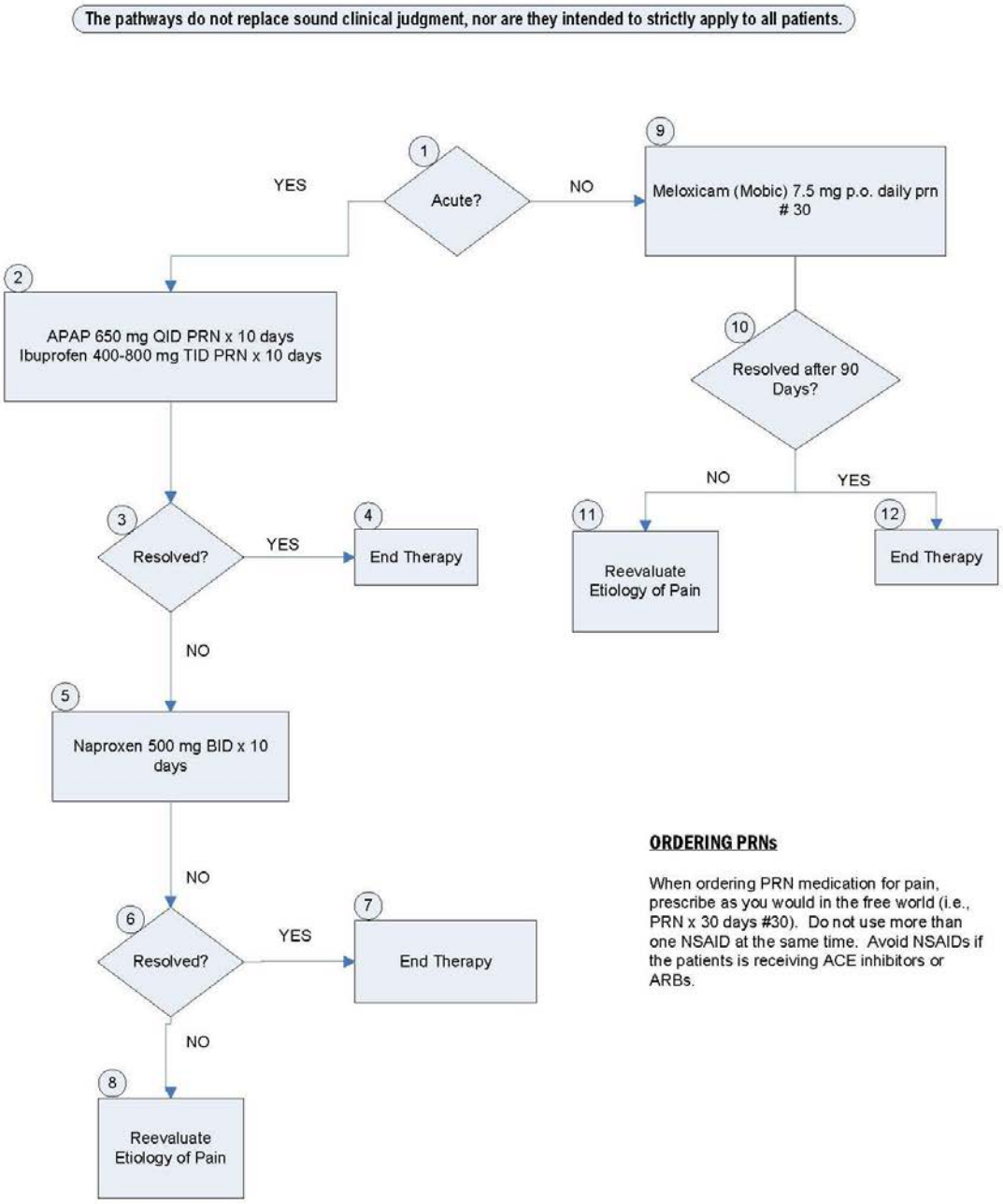
Diagnosis	Onsite Care to Consider	Offsite Care to Consider
• Patients treated with antibiotics may have a shorter course of illness; however, they also experience more adverse events.		
Sinusitis, Chronic Chronic rhinosinusitis (CRS) is defined as an inflammatory condition involving the paranasal sinuses and linings of the nasal passages, which typically persists for 12 weeks or longer. The diagnosis generally has at least 2 of 4 cardinal signs and symptoms (mucopurulent drainage, nasal obstruction, facial pain/pressure/fullness, and decreased sense of smell). CRS cannot be "cured" in most patients, and therapy is intended to reduce symptoms and improve quality of life. Thus, the goals of CRS therapy include the following: • Control of mucosal inflammation and edema • Maintenance of adequate sinus ventilation and drainage • Treatment of colonizing or infecting micro-organisms, if present • Reduction in the number of acute exacerbations.	Consider: Patient education. The selection of therapy should be individualized and based upon consideration of the extent of the condition and symptoms, and the response to previous treatments. Therapies to consider: • Smoking cessation • Intranasal saline • Intranasal corticosteroids • Oral corticosteroids • Antibiotics depending on the presentations and for acute exacerbations • Montelukast (Singulair) • Antihistamines	At the discretion of the clinician depending on the clinical scenario
Tympanic membrane perforation A ruptured eardrum is a hole or tear in the eardrum. The most common causes of a ruptured eardrum are:	Consider: Patient's history and exam. • If purulent discharge, consider an oral antibiotic (for otitis media). • Consider observing the condition for 3-4 weeks or as felt to be clinically appropriate depending on the clinical situation.	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
• Ear infections – The infection can cause fluid to build up and press on the eardrum. • Poking the eardrum – This happens if the patient pokes a Q-tip, or other object into their ear canal. Most of the time ruptured tympanic membranes heal themselves.	Treatment is primarily supportive, as TM perforations generally heal spontaneously. The ear should be kept dry as much as possible since it can predispose to infection if the ear is wet. Consider: Patient education regarding the condition and the importance of keeping the ear dry when showering.	
Tinnitus Tinnitus is a perception of sound in proximity to the head in the absence of an external source. It can be perceived as being within one or both ears, within or around the head, or as an outside distant noise. Tinnitus can be continuous or intermittent. Although both may have a significant impact on the patient, the latter is not usually related to a serious underlying medical problem. The sound may be pulsatile or non-pulsatile. Pulsatile tinnitus raises more concern for underlying significant pathology, though non-pulsatile tinnitus may also be associated with underlying disease.	Consider: Patient education. The selection of therapy should be individualized and based upon the consideration of the extent of the condition and symptoms, patient's history, examination of the patient and the response to previous treatments. Potential treatment for tinnitus includes correcting identified comorbidities as well as directly addressing the effects of tinnitus on quality of life. For many patients, tinnitus is a chronic condition; goals of treatment are to lessen its impact and any associated disability, rather than to achieve absolute cure. Several treatment modalities have been studied, including behavioral treatments and medications, but the benefit for most of these interventions has not been conclusively demonstrated in randomized trials.	At the discretion of the clinician depending on the clinical scenario
Tonsilitis (Recurrent) Chronic tonsillitis refers to the presence of infection and/or inflammation of the oropharynx or tonsils for at least 3 months. Patients with chronic tonsillitis or pharyngitis often have sore throats that get better during antibiotic treatment, but symptoms recur as	Consider: Patient education. The selection of therapy should be individualized and based upon the consideration of the extent of the condition and symptoms, patient's history, examination of the patient, any testing for Group A Streptococcus and the response to previous treatments. Patient education to consider:	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
soon as the antibiotic is discontinued. The cause of chronic tonsillitis is likely multifactorial including various viruses (e.g., Adenovirus, Epstein-Barr virus), bacteria including Group A Streptococcal (GAS) infection, gastroesophageal reflux disease, and possibly allergies.	• Advising the patient that if they have a virus, antibiotics won't help. • Get lots of rest • Drink warm or very cold fluids to help with throat pain • Gargle with warm water or warm salt water 3-4 times per day • Take over-the-counter or prescribed pain relievers such as acetaminophen or NSAIDS.	

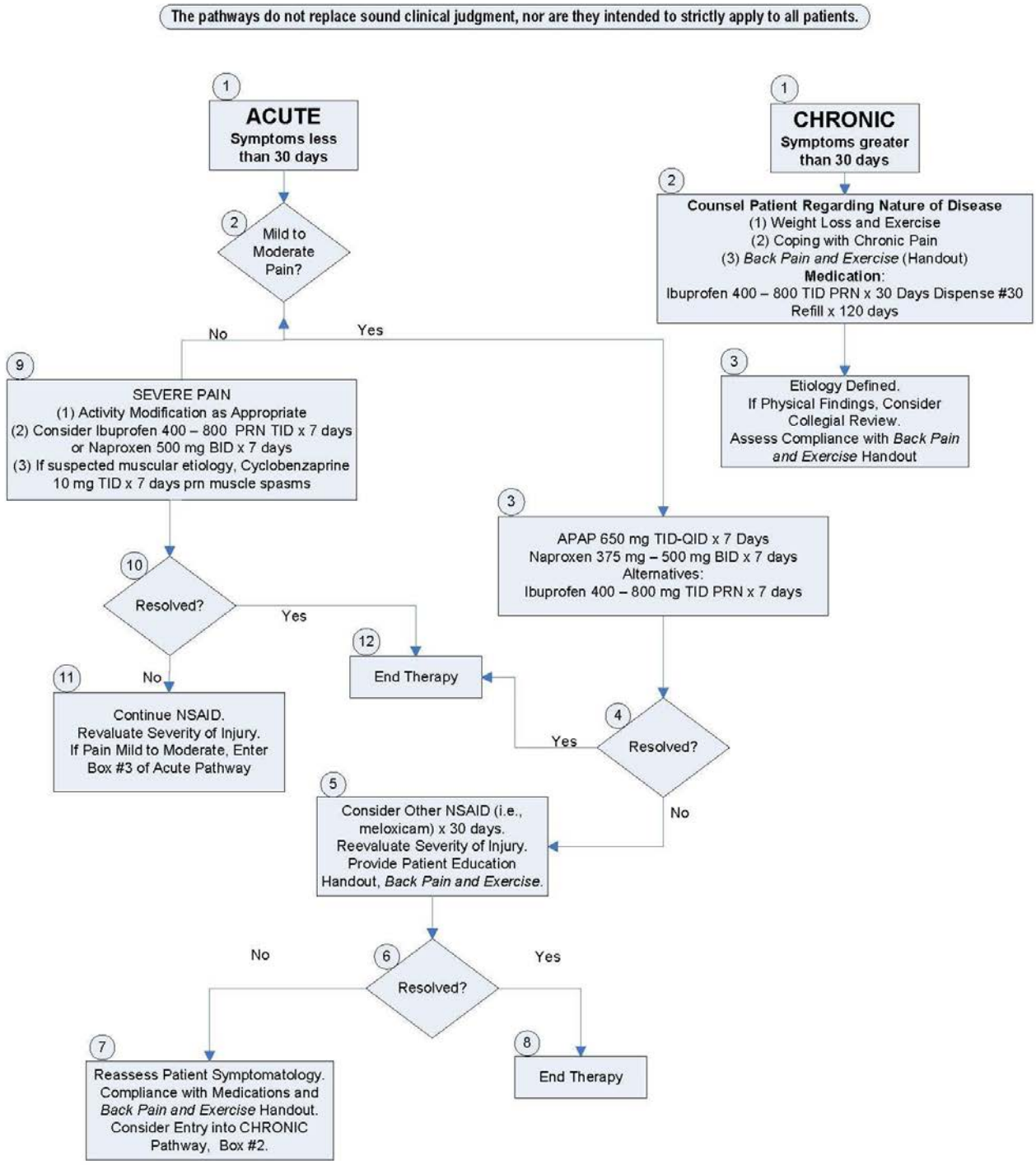
Pain Management

Treatment of Mild to Moderate Pain



Adapted from Blondell RD, Azadfard M, Wisniewski AM "Pharmacologic therapy for acute pain", *Am Fam Physician* 2013; 87(11): 766-72.
Rev. 4/27/2016

Treatment of Low Back Pain



*Adapted from Hills EC "Mechanical Low Back Pain Medication", 2015, www.emedicine.medscape.com/article/310353.
Rev. 4/27/2016

Pharmacologic Treatment of Chronic Pain

The following guidelines are based on current medical evidence and guidelines from leading organizations. Updates will be made as new evidence becomes available. This document is intended to be used as an aide to practitioners and to promote quality patient care. Individual patient clinical data should be considered when applying this information.

I. PURPOSE

These guidelines are intended to assist in the pharmacologic treatment of chronic pain in adult patients. The treatment of migraine headaches or cancer-related pain and the treatment of acute pain due to injury or post-operatively are not addressed in these guidelines.

II. DEFINITION

The American Society of Anesthesiologists define chronic pain as pain of any etiology not directly related to neoplastic involvement, associated with a chronic medical condition or extending in duration beyond the expected temporal boundary of tissue injury and normal healing, and adversely affecting the function or well-being of the individual.[1]

III. DETERMINE BIOLOGICAL MECHANISMS OF PAIN[2]

A. Neuropathic Pain

1. Examples: Sciatica from nerve root compression, diabetic peripheral neuropathy, trigeminal neuralgia, and post-herpetic neuralgia
2. Pain Characteristic: Burning or shooting/stabbing
3. Physical Findings: Numbness; sensitivity to a non-noxious stimulus like light touch or rubbing or coolness of the skin

B. Muscle Pain

1. Myofascial pain: regional muscle soft tissue pain commonly involving the neck, shoulders, trunk, arms, low back, hips and lower extremities
2. Pain Characteristic: Painful muscle dysfunction in one or several muscles in a region of the body with loss of range of motion; and tenderness at muscle sites that causes a referred pain in a typical distribution (trigger points).
3. Physical Findings: Taut bands of muscle; a muscle twitch may be produced with palpation or needling the affected muscle

C. Inflammatory Pain

1. Examples: Arthritis, infection, tissue injury, and postoperative pain
2. Physical Findings: Heat, redness and swelling at pain site

D. Mechanical/Compressive Pain

1. Examples: Muscle/ligament strain sprain; degeneration of disks or facets, or osteoporosis with compression fractures
2. Pain Characteristic: Aggravated by activity and temporarily relieved by rest

IV. GENERAL PRINCIPLES FOR PHARMACOLOGIC MANAGEMENT

A. A thorough medication history is helpful to the development of an effective treatment plan.

B. It is helpful to define refine goals of therapy before prescribing, and tailor medications to meet the individual goals of each patient

C. Identify and treat specific source(s) of pain, and base the initial choice of medication(s) on the severity and type of pain.

1. Give drugs and adequate therapeutic trial.

2. When treating inflammatory or neuropathic pain, benefits may take weeks or longer to appear.

D. Educate patients on potential risks and benefits of drug therapy.

E. Select appropriate drug therapy based on:

1. Characteristic of the agent (onset, duration, available routes of administration, dosing intervals, side effects)

2. Patient factors (age, co-existing diseases, other medications, and response to previous treatments)

F. Establish a pain management plan that may include the addition of other drugs:

1. Rational poly-pharmacy may include the use of two or more drugs with complementary mechanisms of action that may provide greater pain relief with less toxicity and lower doses of each drug.

2. Generally, avoid prescribing two drugs in the same class at the same time.

3. Be alert for possible interactions with other medication the patient is taking or additive side effects

G. Titrate doses to achieve optimal balance between analgesic benefit, side effects, and functional improvement.

H. Taper and discontinue drugs that do not meet treatment goals.

I. Use caution before starting a patient on long-term opioid therapy.

V. PHARMACOLOGIC TREATMENT OF NEUROPATHIC PAIN [2,3,4,5]

A. Appropriately manage or eliminate the underlying cause of pain.

B. Regional or local pain:

1. Consider use of capsaicin 0.075% cream—applied four (4) times daily.

a. Instruct patients to wash hands before and after each application and avoid mucous membranes

b. Less frequent application increases frequency of burning and stinging

2. Lidocaine patch

a. Usually applied for 12 hours only, then removed for 12 hours

b. Variable absorption, may require up to 3 patches

c. Avoid in patients with cardiac issues

C. Diabetic Neuropathy Treatment Options:

1. Nortriptyline (Pamelor)

a. Usual starting dose: 25 mg qhs, may increase by 25 mg/day every 7-21 days as tolerated

b. Major Drug Interactions:

i. Contraindicated with MAOIs and Reglan

ii. Selected antibiotics, antiarrhythmics, tramadol, cyclobenzaprine, 1st generation antipsychotics, and SSRIs can cause QT interval prolongation and/or serotonin syndrome when co-administered with nortriptyline

c. Adequate trial duration: 6-8 weeks, including 2 weeks at the highest dosage tolerated

2. Duloxetine (Cymbalta)

a. Usual dose: Start at 30 mg daily x 1 week, then 60 mg daily.

a. Major Drug Interactions-

i. Contraindicated with MAOIs and Reglan

ii. Selected antibiotics, antiarrhythmics, tramadol, cyclobenzaprine, 1st generation antipsychotics, lithium and SSRIs can cause QT interval prolongation and/or serotonin syndrome when co-administered with duloxetine

b. Adequate trial duration: 4-6 weeks

3. Gabapentin (Neurontin) – third-line

a. Consider if a contraindication, intolerance, or documented failure despite compliance at therapeutic doses with previously listed options

b. Usual starting dose: 300 mg qhs or 300-400 mg BID, may increase by 100--300 mg BID every 7-21 days as tolerated, adjust for renal function as below:

Renal Function Creatinine Clearance (mL/min)	Total Daily Dose Range (mg/day)
≥ 60	900 to 3600
> 30 to 59	400 to 1400
> 15 to 29	200 to 700
≥ 15	100 to 300

c. For patients, with renal function < 30 ml/min, once daily dosing is needed

d. Adequate trial duration: 8 weeks titration plus 2 weeks at maximum dose

D. Post-Herpetic Neuralgia Treatment Options:

1. First-line: Nortriptyline (Pamelor)

a. Usual starting dose: 10 to 25 mg orally at bedtime; may increase dosage by 25 mg every 2 to 4 weeks until response is adequate.

b. Maximum dosage of 125 mg per day is suggested.

c. Major Drug Interactions:

i. Contraindicated with MAOIs and Reglan

ii. Selected antibiotics, antiarrhythmics, tramadol, cyclobenzaprine, 1st generation antipsychotics, and SSRIs can cause QT interval prolongation and/or serotonin syndrome when co-administered with nortriptyline

2. Second-line: Gabapentin (Neurontin)

a. Usual starting dose: 300 mg orally on day 1, 300 mg twice a day on day 2, and 300 mg 3 times a day on day 3 (or 400 mg BID instead)

i. May increase by 100-300 mg BID every week as tolerated

ii. May increase up to 1800 mg/day (divided into 2-3 doses)

b. Adjust for renal function as below:

Renal Function Creatinine Clearance (mL/min)	Total Daily Dose Range (mg/day)
≥ 60	900 to 3600
> 30 to 59	400 to 1400
> 15 to 29	200 to 700
≥ 15	100 to 300

c. For patients, with renal function < 30 ml/min, once daily dosing should be considered.

3. Other Option: lidocaine patch
   a. Usually applied for 12 hours only, then removed for 12 hours
   b. Variable absorption, may require up to 3 patches
   c. Avoid in patients with cardiac issues

E. Classic Trigeminal Neuralgia Treatment Options:

1. Carbamazepine (Tegretol)
   a. Usual starting dose: 100 to 200 mg twice daily, dose may be increased by 100 mg every other day.
   b. Typical total maintenance dose: 300-800 mg/day, given in 2-3 divided doses.
   c. The maximum suggested total dose is 1200 mg/day.
   d. Major Drug Interactions:
      i. Contraindicated with many HIV drugs
      ii. May cause reduced efficacy of multiple drugs such as anticonvulsants, antipsychotics, and antifungals
      iii. May cause elevation of carbamazepine levels and subsequent symptoms of toxicity (hematologic, neurological and liver abnormalities)

2. Oxcarbazepine (Trileptal)
   a. Less drug interactions and safety concerns than Tegretol
   b. Usual starting dose: 150 mg twice daily, may be increased as tolerated in 300 mg increments every third day until pain relief occurs.
   c. Typical maintenance dose: 300-600 mg twice daily.
   d. The maximum suggested total dose is 1800 mg/day.

3. Other Options:, lamotrigine (Lamictal)
   a. Usually requires slow titration from 25 mg/day to 200 mg BID max dose to prevent rash
   b. Limited efficacy data

F. Fibromyalgia Treatment Options:

1. Duloxetine (Cymbalta)
   a. Usual initial dose: 30 mg orally once daily for 1 week; increase to usual dosage of 60 mg once daily based on tolerability; MAX 60 mg once daily
   b. Major Drug Interactions-refer to Sections C or D for details

2. Nortriptyline (Pamelor)
    a. Usual starting dose: 25 mg qhs, may increase by 25 mg/day every 7 days as tolerated
    b. Major Drug Interactions—refer to Section C or D for details
3. Cyclobenzaprine (Flexeril)
    a. Low dose of 5 mg qhs shown to improve sleep, fatigue, and depression
    b. Contraindicated in cardiac conduction disturbances, arrhythmias, congestive heart failure and hyperthyroidism.
    c. Multiple major drug interactions –
        i. Contraindicated with ziprasidone (Geodon) and MAOIs
        ii. SSRIs, SNRIs, antipsychotics – possible risk of serotonin syndrome and/or QT interval prolongation
4. Pregabalin (Lyrica)
    a. Not available generically
    b. Usual dosing range is 75 mg BID-150 mg TID
    c. Schedule V Drug
    d. Associated with improvement in pain, global assessment and function, and sleep

VI. PHARMACOLOGIC TREATMENT OF MUSCLE PAIN[2]

A. Scientific evidence of the effectiveness of treatment for muscle pain is lacking.

B. Drug Therapy:

1. Low dose nortriptyline may be helpful (refer to Section V.C for drug interactions).
2. Cyclobenzaprine up to 7 days per 180 days.
    a. Up to 10 mg three times a day can be used.
    b. Contraindicated in cardiac conduction disturbances, arrhythmias, congestive heart failure and hyperthyroidism.
    c. Multiple major drug interactions –
        i. Contraindicated with ziprasidone (Geodon) and MAOIs
        ii. SSRIs, SNRIs, antipsychotics – possible risk of serotonin syndrome and/or QT interval prolongation

VII. PHARMACOLOGIC TREATMENT OF INFLAMMATORY PAIN

A. Non-steroidal anti-inflammatory drugs (NSAIDs) should be used for periodic flare-ups of mild to moderate inflammatory or non-neuropathic pain.[2]

B. A 2006 comparative effectiveness review, updated in 2011, funded by the Agency for Healthcare Research and Quality (AHRQ) of analgesics for osteoarthritis did not find clear differences in efficacy of different NSAIDs, but did find differences in risk of serious harms.[6]

C. Chronic NSAID use increases risk of renal insufficiency (especially in diabetics). Monitor renal function and blood pressure.[2]

D. All NSAIDs carry a risk of gastritis and bleeding.[2]

E. Available NSAIDs on Wexford Corporate Formulary [6,7]:

Classification	Drug	Usual Analgesic Dose/Interval
Salicylate (acetylated)	Aspirin	325–650mg every 4–6 hours
Salicylates (nonacetylated)	Salsalate	750–1000mg every 8–12 hours
Propionic acids	Ibuprofen	400 mg every 4–6 hours
	Naproxen	500 mg every 12 hours (naproxen base) -OR- 550 mg every 12 hours (naproxen sodium)
Acetic acids	Diclofenac	50mg every 8 hours
Enolic acids	Meloxicam**	7.5–15mg every 24 hours

**Partially selective NSAID | # should not be used longer than five (5) days; not indicated for chronic pain | Bolded font = On the Wexford Health Corporate Formulary

VIII. PHARMACOLOGIC TREATMENT OF MECHANICAL/COMPRESSIVE PAIN

A. Medications are less effective. Treatment of causes may include surgical decompression or stabilization, splinting, strengthening and use of assistive devices.

B. Acetaminophen (Tylenol) and NSAIDs are typically considered as initial choices of treatment for mild to moderate pain.

C. Medication selection may depend on specific risk factors and co-morbidities.

D. Opioids may be considered for symptoms while other measures are being performed.

IX. FOOTNOTES

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Pharmacologic Treatment of Migraine Headaches

The following guidelines are based on current medical evidence and guidelines from leading organizations. Updates will be made as new evidence becomes available. This document is intended to be used as an aide to practitioners and to promote quality patient care. Individual patient clinical data should be considered when applying this information.

I. PURPOSE

These guidelines are intended to assist in the pharmacologic treatment of migraines in adult patients.

II. DEFINITION

The American Academy of Neurology defines migraine headaches as a chronic condition with episodic manifestations characterized by attacks of head pain and neurologic, gastrointestinal, and autonomic symptoms that vary in frequency, duration, and disability among sufferers and between attacks.

III. GENERAL PRINCIPLES OF MANAGEMENT

A. Establish a diagnosis.

1. Migraine headaches are diagnosed usually by patient history, recognizing the following characteristics:
2. The diagnosis of migraines without aura is typically given when at least five attacks fulfill the following criteria:
    a. Headache attacks lasting 4 to 72 hours (untreated or unsuccessfully treated).
    b. Headache has at least two of the following characteristics:
        i. Unilateral location
        ii. Pulsating quality
        iii. Moderate or severe pain intensity
        iv. Aggravation by or causing avoidance of routine physical activity (e.g., walking or climbing stairs)
    c. During the headache at least one of the following is present:
        i. Nausea, vomiting, or both
        ii. Photophobia and phonophobia
3. The diagnosis of migraines with typical aura is usually given when at least two attacks fulfill the following criteria:
    a. One or more of the following fully reversible symptoms:
        i. Visual
        ii. Sensory
        iii. Speech/language

b. At least two of the following characteristics:

i. At least one aura symptom spreads gradually over ≥5 minutes, and/or two or more symptoms occur in succession

ii. Each individual aura symptom lasts 5 to 60 minutes

iii. At least one aura symptom is unilateral

iv. The aura is accompanied, or followed within 60 minutes, by headache

4. Subtypes of migraine include migraine with brainstem aura, hemiplegic migraine, retinal migraine, vestibular migraine, menstrual migraine, and chronic migraine.

5. Diagnostic testing, including EEG, is not indicated in the routine evaluation of headaches.

a. Neuroimaging may be considered in patients with unexplained, abnormal neuro exam, atypical headache features, or additional risk factors, such as immune deficiencies.

B. Educate migraine sufferers about their condition and help them identify and eliminate triggers.

C. Involve patients in managing their migraines.

1. Encourage patients to use headache diaries to track triggers, frequency and severity of headaches, and response to treatment.

2. Encourage the patient to identify and avoid triggers.

D. Discuss the rationale for each particular treatment, how to use it, and what adverse events are likely.

1. Treatment choice depends on frequency and severity of attacks, the presence and degree of temporary disability, and associated symptoms such as nausea/vomiting.

2. Co-morbidities such as heart disease may limit treatment choices, while other co-morbidities such as epilepsy, hypertension or obesity can help establish the most effective regimen.

E. Taper and discontinue drugs that do not meet treatment goals.

F. Consider preventive treatment if the following is present:

1. Frequent headaches (>2/week)

2. Migraine significantly interferes with patient's daily routines, despite acute treatment

3. Contraindication to, failure, adverse effects, or overuse of acute therapies

IV. PHARMACOLOGIC TREATMENT OF MIGRAINE HEADACHES

A. Acute migraine attacks - mild to moderate

1. First line treatment in patients who are not pregnant and do not have decompensated cirrhosis, acute hepatitis, or fulminant liver failure, is Excedrin Migraine (acetaminophen/aspirin/caffeine).

a. Dosing:

i. Up to two tablets per occurrence per 24 hours.

ii. Do not use more than three times per week to avoid re-bound migraine symptoms, sleep disturbances, and reflux symptoms.

iii. Dispense 24 tablets per month.

2. Other recommended first-line options in patients who are not pregnant and do not have decompensated cirrhosis, acute hepatitis, or fulminant liver failure, include **ibuprofen (Motrin), naproxen (Naprosyn), or aspirin.**
3. Pregnant patients should use Tylenol in place of NSAIDs and combination analgesics.
4. In patients with severe hepatic impairment and decompensated cirrhosis - risk versus benefit should be considered.

B. Acute migraine attacks - moderate to severe

1. Injectable **ketorolac (Toradol)** can be used in patients with moderate to severe symptoms, such as nausea or vomiting, and is as effective as other agents such as intranasal sumatriptan and intravenous prochlorperazine.
   a. Dosing
      i. Weight of 50 kg or greater:
         (1) Single dose should not exceed 30 mg IV or 60 mg IM
      ii. Weight of less than 50 kg:
         (1) Single dose should not exceed 15 mg IV or 30 mg IM
      iii. Age of 65 years or greater:
         (1) Single dose should not exceed 15 mg IV or 30 mg IM
   b. **Contraindications**: pregnancy, advanced renal disease or renal impairment, recent or history of GI bleeding or perforation, history of or active peptic ulcer disease, suspected or confirmed cerebrovascular bleeding, hypersensitivity to aspirin or other NSAIDs, concurrent use with aspirin or other NSAIDs
2. **Sumatriptan (Imitrex)** is an alternative in patients without cirrhosis who have moderate to severe symptoms, presence of nausea or vomiting, or who do not respond to treatments for mild to moderate symptoms.
   a. Generally, avoid using more than two times per week to prevent re-bound migraines.
   b. **Contraindications**: history of arrhythmias, stroke, ischemic heart disease, coronary artery vasospasm, ischemic bowel disease, peripheral vascular disease, uncontrolled hypertension, and severe hepatic impairment.

C. Preventive therapy for migraines

1. General principles:
   a. Start low and increase dose slowly until benefits are achieved or limited side effects occur
   b. Give the drug an adequate trial at adequate dose (two to three months).
   c. Avoid interfering medications (e.g., overuse of acute medications).
   d. Monitor the patient's headache diary.
   e. Re-evaluate therapy. If headache is controlled at six months, consider tapering or discontinuing treatment.
2. Medications with best clinical supportive data for migraine prevention
   a. Beta-blockers (atenolol, metoprolol)
      i. Atenolol: start at 25 mg daily, may increase up to 100 mg/day
      ii. Metoprolol: start at 50 mg per day in two divided doses, may increase up to 200 mg/day

b. Valproic Acid (Depakote)

i. Dosing: 250 mg twice a day, up to a maximum of 1000 mg/day

ii. Adverse effects: nausea, somnolence, tremor, dizziness, weight gain, hair loss; rare-liver failure, pancreatitis

iii. Contraindications: pregnancy

c. Topiramate (Topamax)

i. Dosing: 25 mg/day, with slow titration by 25 to 50 mg/week to the maximum of 100 mg twice daily

ii. Adverse effects: paresthesia, fatigue, anorexia, diarrhea, weight loss, difficulty with concentration, nausea, and taste perversion

iii. Precautions: Category in D in pregnancy

iv. Warnings: Potential for abuse in correctional institutions

V. FOOTNOTES

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7.

Peer Review

M-001: Peer Review Activities

I. PURPOSE

Wexford Health recognizes that peer review is an essential activity in order to maintain integrity and quality of patient care and to monitor clinicians practice patterns, identify strengths and weaknesses. The intent is to use the process as an educational activity through feedback to the clinicians. Such peer review activities will be confidential Quality Management Program material that will be marked confidential and by state statute will not be discoverable. The results are not intended to be used in a punitive manner. The peer review will meet both the ACA standard 4-4411 and the NCCHC standard P-C-02.

II. PROCEDURE

A. Peer reviews will be conducted, at a minimum, on an annual basis. If more frequent review is mandated by contract, it shall be done as required. The peer review(s) will be completed in ninety (90) calendar days from this date.

B. Peer review will be done for medical practitioners, M.D. or D.O., physician assistants, ARNP's, psychiatrists and psychologists. The state regional medical director(s) will establish and implement a process or system for this activity using the tool(s) attached for medicine and mental health. When weaknesses are identified, it will be the responsibility of the regional medical director to initiate a corrective plan and follow up for effectiveness. Jail facilities in a state will be the purview of the state regional medical director. Where there is no prison facility in a state, the CMO will ensure, through delegation, an individual responsible to complete the review. The director of behavioral health will have the same responsibility for the mental health component.

C. Peer review, when completed, will be reviewed by the state regional medical director/director of behavioral health and signed off. The documents will then be forwarded to the corporate chief medical officer. The completed material will be kept in a parallel file for each provider and will be reviewed as part of the recredentialing appointment every two years.

D. Peer review will also include a simple questionnaire that will be used to query, for example, staff including, at random, correctional officers, nursing, secretarial, clerical staff as to the clinicians ability to communicate, cooperate, respect, listen, professional appearance and demeanor, comportment and sense of judgment. Included should be a random sampling of patients being queried as to their perception of their level of confidence in their care, education provided by the clinician, health progress etc.

III. ASSOCIATED FORMS

Peer Review Notification Form

Physician Peer Review: Chronic Care Clinic Worksheet

Physician Peer Review: Sick Call Worksheet

Physician Peer Review: Lab/X-ray Worksheet

Physician Peer Review: Infirmary Admissions Worksheet

Psychiatrist Peer Review Worksheet

Psychologist Peer Review Worksheet

Form PR-001C: Dental Review Form

Peer Review Notification Form

Peer Review Notification Form

Peer Review Notification Form

The individual responsible for performing the Peer Review will complete this form. Please print or type clearly. This form will then be placed in the employee's on-site personnel file. The original Peer Review forms will be sent to the Pittsburgh office and marked "Attention: Credentialing Department."

This form will serve as verification that the required Peer Review has been completed.

On this date _____ a Peer Review was conducted for:
Enter Date

_____ _____
Name of Provider Title

The Peer Review was conducted in accordance with Wexford Health's Peer Review policy. The Peer Review was also reviewed with the provider. The provider completing the Peer Review, whose signature is contained below, was:

_____
Print or Type Full Name of Reviewer

_____
Reviewer Position/Title

_____
Date Reviewed with Provider

In accordance with Wexford Health's Peer Review policy, I conducted a review of the above-named provider. The completed Peer Review is considered privileged and confidential and the results are on file at Wexford Health's corporate office in Pittsburgh, Pa.

_____ _____
Signature of Reviewer Date

Rev. 7/25/2017

Physician Peer Review Worksheet

Wexford Health Sources Incorporated

Peer Review – NEW MEXICO

Provider Peer Review Worksheet*
Chronic Care Clinics

Name of provider: _____ **Facility:** _____

DOC #: _____ **Date of encounter:** _____

Clinic being reviewed: _____

1.	Is the subjective portion comprehensive for clinic, including interval activity for seizure and asthma clinics?	Yes	No	N/A
2.	Does the clinic include pertinent vital signs?	Yes	No	N/A
3.	Is a targeted physical exam with pertinent findings documented, including chronic clinic requirements?	Yes	No	N/A
4.	Were relevant laboratory parameters documented and acted upon when indicated?	Yes	No	N/A
5.	Was treatment appropriate, including additional referrals, testing, medication adj., and ACE inhibitor use?	Yes	No	N/A
6.	Was appropriate education for this encounter documented?	Yes	No	N/A
7.	Was the level of disease delineated?	Yes	No	N/A

Findings:

Adequate: _____ **Not Adequate:** _____ **Needs Improvement:** _____

Discussion/CAP: _____

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Reviewer: _____ **Date:** _____ **Shared with Provider On:** _____

*A minimum of 10 charts must be reviewed per provider each year and must include a combination of Chronic Care Clinic, Intake Physical, Sick Call, Lab/X-Ray, and Infirmary Peer Review forms.

Wexford Health Sources Incorporated

Peer Review – NEW MEXICO

Provider Peer Review Worksheet*
Sick Call

Name of provider: _____ **Facility:** _____

DOC #: _____ **Date of encounter:** _____

1.	Was patient seen within 72 hours of referral?	Yes	No	N/A
2.	Does encounter reflect the reason why the referral was made?	Yes	No	N/A
3.	Is the recorded history comprehensive and relevant for the patient's chief complaint?	Yes	No	N/A
4.	Is a targeted physical exam with pertinent findings documented?	Yes	No	N/A
5.	Was appropriate and comprehensive testing done?	Yes	No	N/A
6.	Were laboratory and diagnostic tests documented and addressed?	Yes	No	N/A
7.	Is the care plan appropriate and well-documented?	Yes	No	N/A
8.	Is pertinent patient education documented?	Yes	No	N/A

Findings:

Adequate: _____ **Not Adequate:** _____ **Needs Improvement:** _____

Discussion/CAP: _____

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Reviewer: _____ **Date:** _____ **Shared with Provider On:** _____

*A minimum of 10 charts must be reviewed per provider each year and must include a combination of Chronic Care Clinic, Intake Physical, Sick Call, Lab/X-Ray, and Infirmary Peer Review forms.

Wexford Health Sources Incorporated

Peer Review – NEW MEXICO

Provider Peer Review Worksheet*
Lab/X-Ray Utilization

Name of provider: _____ **Facility:** _____

DOC #: _____ **Date of encounter:** _____

1.	Was the lab test/X-ray appropriate for diagnosis or clinic?	Yes	No	N/A
2.	Was the lab test result received within 24 hours and X-ray result received within 72 hours?	Yes	No	N/A
3.	Was the lab test/X-ray result initialed and dated by a physician within 72 hours of receipt?	Yes	No	N/A
4.	Were clinically significant findings documented in the progress notes?	Yes	No	N/A
5.	Was plan as indicated, carried out?	Yes	No	N/A
6.	When follow-up care was requested, was this carried out in a timely manner?	Yes	No	N/A

Findings:

Adequate: _____ **Not Adequate:** _____ **Needs Improvement:** _____

Discussion/CAP: _____

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Reviewer: _____ **Date:** _____ **Shared with Provider On:** _____

*A minimum of 10 charts must be reviewed per provider each year and must include a combination of Chronic Care Clinic, Intake Physical, Sick Call, Lab/X-Ray, and Infirmary Peer Review forms.

Wexford Health SOURCES INCORPORATED

Peer Review – NEW MEXICO

Provider Peer Review Worksheet
Infirmary Admissions

Name of provider: _____ **Facility:** _____

DOC #: _____ **Date of encounter:** _____

1.	Is an infirmary admission note completed with diagnosis?	Yes	No	N/A
2.	Does the admission history and physical as documented adequately describe this patient's condition?	Yes	No	N/A
3.	Is indication for admission and type of admission (chronic vs. acute) clearly specified?	Yes	No	N/A
4.	Are three weekly visits for acute admissions and weekly visits by an MD documented?	Yes	No	N/A
5.	Is the plan of care appropriate for admission diagnosis?	Yes	No	N/A
6.	Is MD response to significant nursing entries evident?	Yes	No	N/A
7.	Is a discharge note with follow-up care evident?	Yes	No	N/A

Findings:

Adequate: _____ **Not Adequate:** _____ **Needs Improvement:** _____

Discussion/CAP: _____

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Reviewer: _____ **Date:** _____ **Shared with Provider On:** _____

*A minimum of 10 charts must be reviewed per provider each year and must include a combination of Chronic Care Clinic, Intake Physical, Sick Call, Lab/X-Ray, and Infirmary Peer Review forms.

Wexford Health SOURCES INCORPORATED

PSYCHIATRIST PEER REVIEW WORKSHEET

Name of provider: _____ Facility: _____

DOC #: _____ Date of encounter: _____

1.	Was the initial psychiatric evaluation completed and was the diagnosis consistent with the reported symptoms and MSE?	Yes	No	N/A
2.	Was a treatment plan initiated and was it specific for the patient and signed/dated by the patient and the psychiatrist?	Yes	No	N/A
3.	Was a progress note completed at each visit and was it signed?	Yes	No	N/A
4.	Was the informed consent signed by the patient?	Yes	No	N/A
5.	Were the orders for the medications completed, signed, and dated by the psychiatrist?	Yes	No	N/A
6.	Was the patient seen by a psychiatrist appropriately whenever a new Rx was prescribed or a major change had occurred?	Yes	No	N/A
7.	Was the laboratory work up done (as indicated) before prescribing?	Yes	No	N/A
8.	Was appropriate laboratory monitoring (blood level, CBC, CMP, Lipid profile) done (as indicated) for the prescribed medications?	Yes	No	N/A
9.	Was the AIMS completed before initialing antipsychotic medications and six (6) months thereafter?	Yes	No	N/A
10.	Is the mental health diagnosis listed on the chart's Problem List?	Yes	No	N/A

Findings:

Adequate: _____ Not Adequate: _____ Needs Improvement: _____

Discussion/CAP: _____

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Reviewer: _____ Date: _____ Shared with Provider On: _____

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Approved by the Wexford Health Medical Advisory Committee: 10/21/11

Wexford Health SOURCES INCORPORATED

PSYCHOLOGIST PEER REVIEW WORKSHEET

Name of provider: _____ **Facility:** _____

DOC #: _____ **Date of encounter:** _____

1.	Is the Treatment Plan located in the chart?	Yes	No	N/A
2.	Are treatment goals clearly stated?	Yes	No	N/A
3.	Is therapeutic treatment supported by the history of present illness (diagnosis, Level of Care, sick call request, psychotropic utilization)?	Yes	No	N/A
4.	Is the plan of care followed (return visits, treatment model)?	Yes	No	N/A
5.	Are progress notes in the contractually-approved format?	Yes	No	N/A
6.	Is a mental status examination completed at each session?	Yes	No	N/A
7.	Were pertinent risk factors addressed appropriately (i.e., suicidal, homicidal, or self-injurious behavior; significant medical or psychiatric concerns; EPS)	Yes	No	N/A

Findings:

Adequate: _____ **Not Adequate:** _____ **Needs Improvement:** _____

Discussion/CAP: _____

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_____

Reviewer: _____ **Date:** _____ **Shared with Provider On:** _____

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Approved by the Wexford Health Medical Advisory Committee: 10/21/11

Wexford Health Sources Incorporated

Peer Review – New Mexico

FORM PR-001C

Wexford Peer Review Form for Dentists

PROVIDER: _____ **MONTH:** _____
SITE: _____ **YEAR:** _____

																% Compliant
	Y	N	N/A	Y	N	N/A	Y	N	N/A	Y	N	N/A	Y	N	N/A	
1. Is there an adequate history of the problem documented?																
2. Is the patient's overall health history reviewed at the initial visit?																
3. Is there compliance with Dental Infection Control policies?																
4. Are progress notes legible and accurate?																
5. Are the date and time of the encounter documented?																
6. Is the provider maintaining quality patient radiographs?																
7. Is a plan of care documented?																
8. Are anesthetics and dosages recorded?																
9. Are prophylactic antibiotics given per nationally accepted guidelines?																
10. Are diagnostic procedures appropriately ordered based on the diagnosis?																
11. Are consultations and referrals appropriate and timely?																
12. Is counseling regarding oral hygiene and dental health documented?																
13. Are dental records being maintained thoroughly, legibly, and accurately in accordance with national and community standards?																
14. Is the provider's signature documented?																
15. Are dental exams current (annual)?																
16. Are refusal forms signed and witnessed?																
17. Are consent forms signed and witnessed?																

OVERALL RATING _____EXCELLENT _____GOOD _____FAIR _____POOR _____N/A

Wexford Health Sources Incorporated

Peer Review – New Mexico

Source documents used for this review: ☐ Progress Notes ☐ Consultation Notes ☐ Chronic Care Notes ☐ Infectious Disease Notes
☐ Sick Call Review ☐ Infirmary Notes ☐ Emergency Notes ☐ Lab Data ☐ MARs ☐ Other (please note)_____

CORRECTIVE ACTION	
ISSUE	**PLAN FOR IMPROVEMNT**
1.	
2.	
3.	

Please describe improvement/ongoing needs of areas identified as deficient at last peer review:

ISSUE	IMPROVEMENT PLAN FOR IMPROVEMNT
1.	
2.	
3.	

COMMENTS

REVIEW PERFORMED BY: _____ **DATE COMPLETED:**_____

DATE DISCUSSED WITH PROVIDER: _____

In the space below (or on separate sheet), please feel free to offer any comments you think are pertinent to this peer review or which may clarify a response to one of the questions above.

Prison Rape Elimination Act

Prison Rape Elimination Act Guideline

I. GUIDELINE

Wexford Health supports the Department in its zero-tolerance relating to nonconsensual acts, offender on offender sexual abuse, sexual misconduct, and staff sexual harassment in accordance with the standards set forth in the *Prison Rape Elimination Act of 2003* (PREA).

II. APPLICABILITY

All divisions, facilities, and programs Department-owned and contracted, as specified in contract.

III. DEFINITIONS

A. Health Services Administrator: the manager of the Health Services Program, ultimately responsible for the operation and management of the Health Services program at the site level

B. Department Employee: means a person employed by the Department. This term does not include Wexford Health staff

C. Incarcerated Offender: any individual detained in a Department-owned, operated, or contracted facility who is sentenced or committed to Department of Corrections supervision

D. Nonconsensual Sex Act: a sexual act upon an incarcerated offender perpetrated by another offender if the victimized offender does not consent or is mentally incapable of consent or when the perpetrator is an employee, contractor, or volunteer unless the act is part of a lawful search.

E. Nonconsensual Sexual Contact: touching of an incarcerated offender directly or through clothing of the genitalia, anus, groin, breast, inner thigh, or buttocks for sexual gratification perpetrated by another offender if the victimized offender does not consent or is mentally incapable of consent or perpetrated by an employee, contractor, or volunteer, unless the act is part of a lawful search.

F. Service Providers: this term includes contracted persons, volunteers, interns, temporary employees, or other vendors providing service whose assignment is primarily on the Department's premises, e.g., facility or program office.

G. Sexual Act: contact between the penis and the vagina or the penis and the anus involving penetration, however slight; contact between the mouth and the penis, vagina, or anus; or penetration of the vagina or anus of another person by hand, finger, or other object.

H. Staff Sexual Harassment: repeated statements or comments of a sexual nature to an offender by an employee, volunteer, contractor, official visitor, or other agency representative; includes demeaning references to gender or derogatory comments about body or clothing; and repeated profane or obscene language or gestures.

I. Staff Sexual Misconduct: Nonconsensual sexual contact or acts directed toward an offender by an employee, volunteer, contractor, official visitor, or other agency representative, including completed, attempted, threatened, or requested sexual acts and occurrences of indecent exposure, invasion of privacy, or staff voyeurism for sexual gratification.

J. Staff: any health services staff directly responsible for care or services to the offenders, mainly MD's, PA's, NP's, Nurses, Medical Records personnel, Students, interns, or ancillary staff such as X-ray techs, CNA's, or phlebotomists.

IV. OTHER SPECIFICATIONS

A. General Requirements

1. Facility Administrator's, or designees, will immediately respond to allegations of nonconsensual acts or contact and staff sexual misconduct and harassment, fully investigate reported incidents in accordance with Human Resources and Wexford Health Guidelines, pursue disciplinary action, and refer for investigation and prosecution those who violate the requirements set forth in this guideline.
2. During intake, staff will communicate to offenders, verbally and in writing, information about the Department's zero tolerance of nonconsensual acts and contact and staff misconduct and harassment and will provide information including this guideline.
3. Each site has an assigned PREA liaison responsible for the following:
    a. Coordinate facility PREA-related activities with the PREA coordinator;
    b. Ensure facility compliance with training requirements; and
    c. Tracking and reporting

B. Offender Reporting

1. Offenders who are victims of or have knowledge of nonconsensual sexual acts or contact or staff misconduct or harassment should be encouraged to immediately report the incident by one of the following methods:
    a. Report the incident to medical staff
    b. Report to mental health
    c. Report to security staff

C. Prevention and Intervention

1. Staff must be alert to situations in which nonconsensual sexual acts or contact, or staff sexual misconduct or harassment might occur and be capable of identifying the following indicators:
    a. Overly friendly behavior of staff and/or offenders
    b. The exchange of money, food, notes or pictures

D. Victim Services Provided

1. Victim services to offenders who allege that they are victims of nonconsensual sexual acts or contact or staff sexual misconduct or harassment, services must include, at minimum;
    a. Medical examination, documentation, and treatment of injuries; and
    b. Mental health crisis intervention and treatment
2. The following standards for examination of victims of nonconsensual sexual acts or staff sexual misconduct will be followed:
    a. If the victim refuses medical or mental health attention, staff will document the refusal on the Medical Treatment Refusal (ROR) form;
    b. If reported within 72 hours of the incident, employees will, with the victim's permission, immediately transport the victim to a medical facility equipped to evaluate and treat sexual assault/rape victims; and
    c. If reported more than 72 hours after the incident, employees will, with the victim's permission, adhere to the following:
        i. Refer victims to in house health care providers responsible for treatment and follow up care for sexually transmitted or other communicable diseases,

completing a patient history, and conducting an examination to document the extent of physical injury and determine whether referral to another medical facility is required; and

ii. Upon request from law enforcement, transport the victim to a community medical facility for evidence collection.

iii. Crisis intervention and trauma-specific treatment, for offenders victimized by nonconsensual sexual acts will be referred to Mental Health for follow up.

E. Staff Training

1. Prior to working with offenders, all Wexford Health staff with direct and/or incidental contact with offenders must receive documented PREA training during orientation, and biannually thereafter. Training will include, but is not limited to:

a. Review of this guideline, the *Prison Rape Elimination Act* (2003), and any other applicable state or federal laws;

b. Prevention, investigation, and prosecution of sexual misconduct;

c. The Department's zero tolerance stance;

d. Recognition of sexual misconduct, predatory offenders, potential victims, and/or staff involvement;

e. Facility procedures on sharing confidential information;

f. Reporting procedures;

g. An offender's right to be free from sexual misconduct;

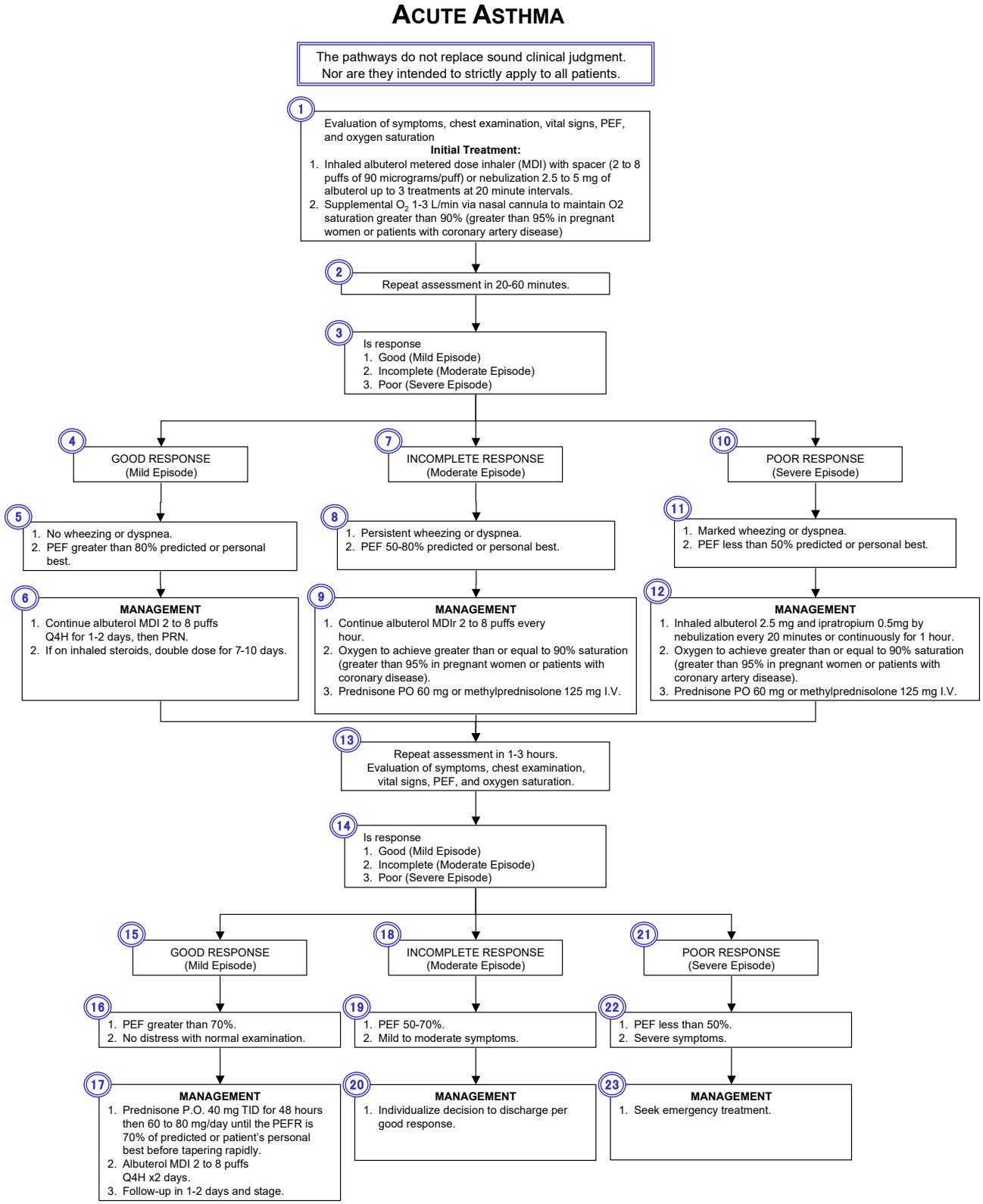
h. Offender and employee rights to be free from retaliation for reporting sexual abuse;

i. The dynamics of sexual abuse in confinement; and

j. Common reactions of sexual abuse victims.

Respiratory Disorders

Acute Asthma



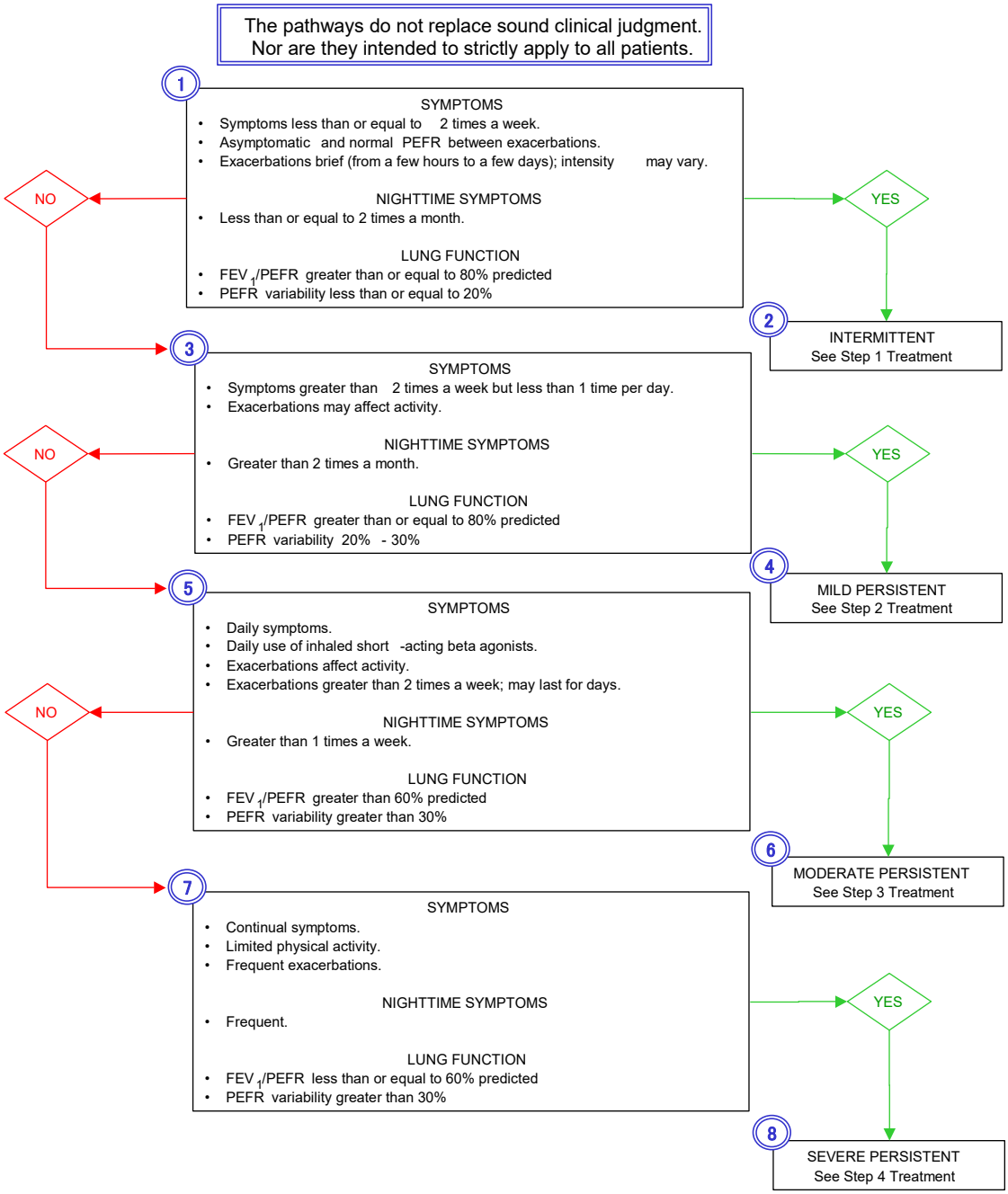
Severity of Asthma Exacerbation

SEVERITY OF ASTHMA EXACERBATION

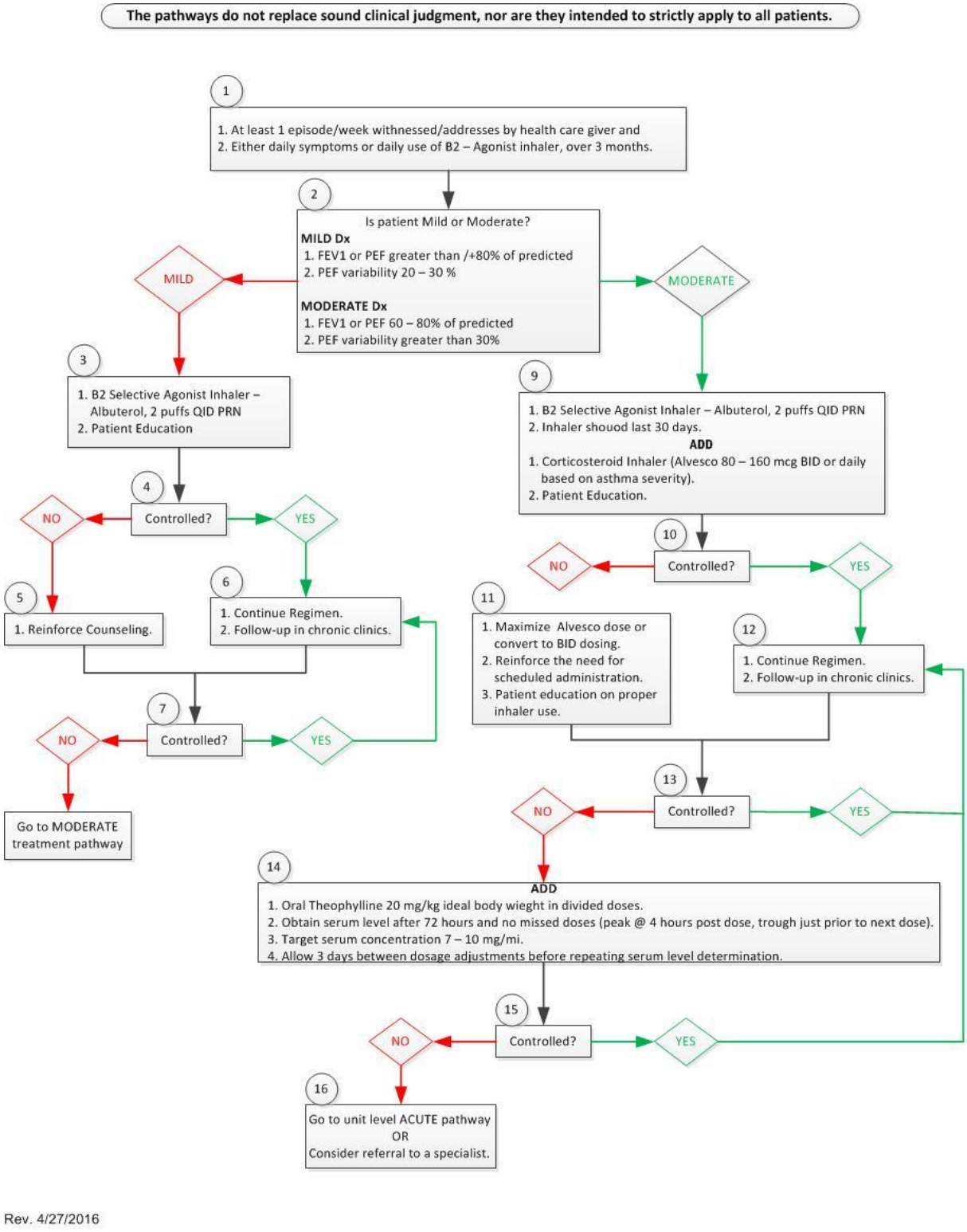
	MILD	MODERATE	SEVERE
SYMPTOMS			
Dyspnea	Speaks in Sentences	Speaks in phrases	Speaks in single words
Position, preferred	Can lie down	Sitting	Sits upright
Alertness	Normal/agitated	Agitated	Agitated or drowsy
SIGNS			
Respiratory rate	Normal to 30% above mean	30-50% above mean	Greater than 50% above mean
Heart rate	Less than 100 bpm	100-120 bpm	Greater than 120 bpm
Color	Normal	Pale	Cyanotic
Accessory muscle use	None/mild intercostals retractions	Moderate intercostals retractions, chest hyperinflation, use of sternocleidomastoid muscles	Moderate intercostals retractions; chest hyperinflations; tracheosternal retraction during inspiration.
Auscultation	End-expiratory wheezing	Inspiratory and expiratory wheezing	Inaudible breath signs (no wheezing)
Pulsus paradoxus	Less than 10 mm Hg	10-25 mm Hg	Greater than 25 mm Hg
TESTS			
PEF	80% of predicted or baseline	50-80% of predicted or baseline	Less than 50% of predicted or baseline
O_2 Saturation	Greater than 95%	91-95%	Less than 91%
PCO_2	Less than 43 mm Hg	Less than 42 mm Hg	Greater than 44 mm Hg
PO_2 (Room air)	Normal	Greater than 60 mm Hg	Less than 60 mm Hg
PH	Respiratory alkalosis	Pseudo normal	Respiratory acidosis

PEF, peak expiratory flow
PCO_2: partial pressure of carbon dioxide
PO_2: partial pressure of oxygen

Chronic Asthma Severity Classification/Management



Chronic Asthma



Rev. 4/27/2016

* National Heart, Lung, and Blood Institute, National Asthma Education and Prevention Program Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma, Full Report 2007 http://www.nhlbi.nih.gov/files/docs/guidelines/01_front.pdf

Asthma Control: Achieving the Best Outcomes with Medication Use and Targeted Patient Education

I. INTRODUCTION

According to National Heart, Blood, and Lung Institute Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma, there are four (4) essential components of asthma care: medication, patient education, environmental control measures, and management of comorbidities. While identifying precipitating factors and treating comorbidities are part of the approach to management, the first two (2) components are critical in achieving success through appropriate drug selection and patient compliance. Therapy is initiated based on asthma severity, such that mild intermittent asthma does not require daily use of maintenance medication, but typically only short-acting bronchodilators or rescue medicine.

II. HELPFUL GUIDANCE FOR CORRECTIONAL MEDICAL PERSONNEL

It has been recognized in the community that up to 25% of patients may overuse their rescue inhalers due to poor technique, lack of understanding, and abuse. In corrections, inhalers can be used to make handcuff keys, to obtain special privileges such as restricted work details or improved housing units, and to experience secondary side effects. Therefore, it is critical to assess the patient's knowledge of asthma and skills in administering inhalers.

III. INTERMITTENT ASTHMA CONTROL

Rescue inhalers should not be needed more than two (2) days/week in intermittent asthma, and should be ordered as patient-specific medications and not as stockpiled medications. Because each canister contains 200 actuations, a typical refill frequency should not exceed 3–6 months, but a time frame for refills should be clearly specified on all prescriptions.

During the asthma clinic, the word PROFILE should be written on the prescription to ensure that the patient doesn't receive any additional drug unless the present supply of the medication is exhausted and the patient presents an empty inhalation canister during the visit.

Patients with a remote history of asthma typically do not require a prescription for a short-acting beta agonist. In many situations, an order for albuterol nebulization prn for asthma exacerbations is sufficient to assure that the patient can obtain necessary treatment in the medical unit in case of an unexpected asthma attack.

IV. MILD TO MODERATE PERSISTENT ASTHMA CONTROL

When the asthma is mild to moderate persistent, a daily maintenance medication is typically needed.

For mild persistent asthma control, leukotriene receptor antagonist (e.g., Singulair) can be used if the following causes are identified:

- Asthma is exercise-induced
- Patient has wheezing due to perennial allergic rhinitis or virus
- Patient has history of smoking, or is a current smoker
- Patient is obese

Ciclesonide (Alvesco) is an inhaled corticosteroid on the Wexford Health Corporate Formulary that is FDA-approved for asthma management at doses of 80–320 mcg BID based on disease severity and previous use of corticosteroids.

- Practitioners may start with 160 mcg BID in patients with moderate to severe disease.

- Clinical studies have shown efficacy with 160 mcg once daily dosing for mild to moderate persistent symptoms, which may improve patient compliance.

In general, adherence to asthma medication regimens in the community tends to be very poor, with reported rates of nonadherence ranging from 30–70%. This may account for poor asthma control and higher likelihood of complications, ER visits, and long-term hospitalizations. Therefore, in patients experiencing frequent symptoms, it may be beneficial to order Alvesco as Directly Observed Therapy (D.O.T.) and/or to utilize a higher dose (e.g., 320 mcg) once daily to ensure patient adherence.

- The patient should be educated that Alvesco is used as a chronic therapy for prevention of asthma of attacks, and not as a rescue medication.
- Alvesco should be ordered as patient-specific drug only and generally not kept as stock in facilities.
- PROFILE should be indicated on all orders to ensure that a new supply is sent only when the present canister is empty.
    - With BID dosing, the canister will last 30 days and with daily dosing, the canister should last 60 days.
    - Should the inhaler run out before 30 days or asthma becomes severe, a seven (7) day course of prednisone may be considered as a clinical option to regain asthma control along with patient education.

V. SEVERE PERSISTENT ASTHMA CONTROL

Progression to maximal dose of inhaled corticosteroid and the possible addition of a long-acting beta agonist or an oral steroid may be necessary in severe asthma.

VI. REFERENCES

1. National Heart, Lung, and Blood Institute, National Asthma Education and Prevention Program Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma, Full Report 2007 http://www.nhlbi.nih.gov/files/docs/guidelines/01_front.pdf
2. Magnussen H, Hofman J, Staleta P et al. “Similar efficacy of ciclesonide once daily versus fluticasone propionate twice daily in patients with persistent asthma”. J Asthma 2007 Sep; 44(7): 555-63.
3. Dahl R, Engestatter R, Trebas-Pietras E. “A 24-week comparison of low-dose ciclesonide and fluticasone propionate in mild to moderate asthma”. Respir Med. 2010 Aug; 104(8) :1121-30.

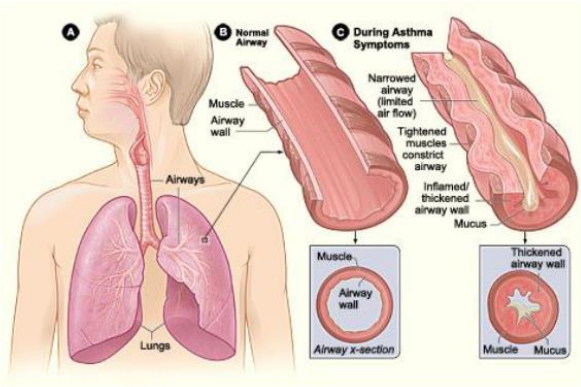
Wexford Health SOURCES INCORPORATED

How to Properly Use Your Inhaler

1. Remove the cap from the end of the inhaler device.
2. Open mouth wide.
3. Hold the inhaler about 1 inch in front of your mouth. See image above for the correct spacing.
4. Exhale completely.
5. As you start to breathe in deeply with your mouth open wide, press the silver canister down one time and breathe in the spray.
6. Hold your breath for 10 to 15 seconds.
7. Then exhale slowly. If instructed – repeat these steps.
8. Rinsing your mouth and/or brushing your teeth may be required after the use of certain inhalers, such as inhaled steroids.

Wexford Health SOURCES INCORPORATED

What is Asthma?



Asthma is a lung disease that inflames and narrows the airways. Asthma can cause wheezing (a whistling sound when you breathe), chest tightness, shortness of breath, and coughing.

Asthma is different for each person. Talk to your doctor about the things that seem to make your asthma worse.

Treatment

Most people with asthma will be given an inhaler. There are two main types of inhalers, a maintenance inhaler and a rescue inhaler. Not everyone is given both inhalers. It is very important to know the difference between the two and use them as prescribed. Both types of inhalers contain drugs that can cause serious health problems if overused or used incorrectly.

Types of Inhalers

Maintenance Inhaler

- Should be used as prescribed.
- Keeps your asthma in "control" so that you do not have an asthma attack and very few symptoms.

Rescue Inhaler

- Should be used only when having asthma symptoms *(wheezing, chest tightness, shortness of breath, and coughing)*.
- Usually 1-2 puffs taken only when having the above symptoms, then every 4-6 hours if symptoms continue.
- It is to be used as needed, not daily.
- If symptoms do not go away, go to the Health Care Unit promptly, as you may need additional treatment.

Summary of Guideline Recommendations for Periodic Health Examinations

Summary of Guideline Recommendations for Periodic Health Examinations

These guideline recommendations describe Wexford Health guidelines for a number of periodic health interventions for the populations we serve.

These recommendations are provided only as assistance for physicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's physician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations

I. INTRODUCTION

A. The Wexford Health Summary of Guideline Recommendations for Periodic Health Examinations (RPHE) originated in the Wexford Health Medical Advisory Committee.

B. The starting point for the recommendations is the rigorous analysis of scientific knowledge available as presented by the United States Preventive Services Task Force (USPSTF) in their Guide to Clinical Preventive Services, 2nd Edition and ongoing releases of evidence reports and recommendations from the 3rd Edition.

C. The recommendations include:

1. **SR:** Strongly Recommend: Good quality evidence exists which demonstrates substantial net benefit over harm; the intervention is perceived to be cost-effective and acceptable to nearly all patients.

2. **R:** Recommend: Although evidence exists which demonstrates net benefit, either the benefit is only moderate in magnitude or the evidence supporting a substantial benefit is only fair. The intervention is perceived to be cost-effective and acceptable to most patients.

3. **NR:** No Recommendation Either For or Against: Either good or fair evidence exists of at least a small net benefit. Cost-effectiveness may not be known or patients may be divided about acceptability of the intervention.

4. **RA:** Recommend Against: Good or fair evidence which demonstrates no net benefit over harm.

5. **I:** Insufficient Evidence to Recommend Either For or Against. No evidence of even fair quality exists or the existing evidence is conflicting.

6. **I-HB:** Healthy Behavior is identified as desirable but the effectiveness of physician's advice and counseling is uncertain.

D. Physicians are encouraged to review not only the needs of individual patients they see, but also of the populations in the communities they serve to determine which specific population recommendations need to be implemented systematically in their practices. The recommendations contained in this document are for screening and counseling only. They do not necessarily apply to patients who have signs and/or symptoms relating to a particular condition.

E. Where appropriate, specific website URL's are provided which link directly to the clinical consideration section of the U.S. Preventive Services Task Force. The clinical consideration section provides additional information needed to interpret and implement the recommendations.

F. These recommendations are provided only as assistance for physicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's physician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at

the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations.

G. State/County directives and guidelines supersede this guideline.

Summary of Guideline Recommendations for Periodic Health Examinations, Table 1: Wexford Health

Abdominal Aortic Aneurysm	Wexford Health *recommends* a one-time screening for abdominal aortic aneurysm (AAA) with ultrasonography in men ages 65 to 75 years who have ever smoked. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/abdominal-aortic-aneurysm-screening*
Alcohol Misuse	Wexford Health *recommends* that clinicians screen adults aged 18 years or older for alcohol misuse and provide persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce alcohol misuse. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/alcohol-misuse-screening-and-behavioral-counseling-interventions-in-primary-care*
Breast Cancer	Wexford Health *recommends* biennial screening mammography for women aged 50–74 years. Wexford Health *recommends* that the decision to start screening mammography in women prior to age 50 years should be an individual one. Wexford Health recognizes that women age 40–49 years with a parent, sibling, or child with breast cancer are at a higher risk for breast cancer and thus may benefit more than average-risk women from beginning screening in their 40s. The screening is recommended to occur after relevant counseling by their clinician regarding the potential risks and benefits of the procedure. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/breast-cancer-screening1*
Cervical Cancer	Wexford Health *strongly recommends* that a Pap smear be completed for women between the ages of 21 and 65 and then every three (3) years thereafter or as dictated clinically. Women over the age of 65 do not require a screening as long as they have had an adequate prior screening and are not otherwise at high risk for cervical cancer. Women who have had a hysterectomy with removal of the cervix and do not have a history of high grade precancerous lesion or cervical cancer will not require further screening. These recommendations do not apply to women who have received a diagnosis of a high grade precancerous lesion or cervical cancer, women with in-utero exposure to DES, or women who are immunocompromised (such as those with HIV). *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/cervical-cancer-screening*
Chlamydia	Wexford Health *strongly recommends* screening for chlamydia in sexually active women age 24 years and younger and in older women who are at increased risk for infection. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/chlamydia-and-gonorrhea-screening*

Colorectal Cancer	Wexford Health *strongly recommends* screening for colorectal cancer using fecal occult blood testing in adults, beginning at age 50 years and continuing until age 75 years. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/colorectal-cancer-screening*
Colorectal Cancer High Risk	Wexford Health *recommends* screening persons at higher risk for colorectal cancer by following the American Cancer Society Guidelines on Screening and Surveillance for the Early Detection of Colorectal Adenomas and Cancer in People at Increased Risk or High Risk. *Clinical Considerations:* *http://www.cancer.org/cancer/colonandrectumcancer/moreinformation/colonandrectumcancerearlydetection/colorectal-cancer-early-detection-acs-recommendations*
Coronary Heart Disease	Wexford Health *recommends* initiating low-dose aspirin use for the primary prevention of cardiovascular disease (CVD) in adults aged 50–59 years who have a 10% or greater 10-year CVD risk, are not at increased risk for bleeding, have a life expectancy of at least 10 years, and are willing to take low-dose aspirin daily for at least 10 years. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/aspirin-to-prevent-cardiovascular-disease-and-cancer*
Depression	Wexford Health *recommends* screening for depression in the general adult population, including pregnant and postpartum women. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/depression-in-adults-screening1*
Diabetes, Type 2	Wexford Health *recommends* screening for abnormal blood glucose as part of cardiovascular risk assessment in adults aged 40–70 years who are overweight or obese. Clinicians should offer patients with abnormal blood glucose behavioral counseling interventions to promote a healthful diet and physical activity. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/screening-for-abnormal-blood-glucose-and-type-2-diabetes*
Gonorrhea	Wexford Health *recommends* screening for gonorrhea in sexually active women age 24 years and younger and in older women who are at increased risk for infection. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/chlamydia-and-gonorrhea-screening*
Hepatitis B Screening	Wexford Health *recommends* screening for the hepatitis B virus (HBV) infection in persons that are at high risk for infection. *Clinical Consideration:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/hepatitis-b-virus-infection-screening-2014*

Hepatitis B Vaccination	Wexford Health *strongly recommends* immunizing persons for hepatitis B who are injection drug users, persons who have a history of multiple sexual partners in the previous six (6) months, persons who have recently acquired a sexually transmitted disease, and the recipients of certain drug products. *Clinical Considerations:* *http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5516a1.htm*
Hepatitis B Vaccination for Diabetes	Wexford Health *strongly recommends* that all previously unvaccinated adults aged 19–59 years with diabetes mellitus (type 1 and type 2) be vaccinated against hepatitis B as soon as possible after a diagnosis of diabetes is made. *Clinical Considerations:* *http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6050a4.htm*
Hepatitis C	Wexford Health *recommends* screening for the hepatitis C virus (HCV) infection in persons that are at high risk for infection. Wexford Health also recommends offering a 1-time screening for HCV infection to adults born between the years of 1945 and 1965. Wexford Health will follow state and county recommendations for HCV screening in the regions we serve. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/hepatitis-c-screening*
HIV Infection	Wexford Health *strongly recommends* that clinicians screen for the HIV infection in adolescents and adults aged 15–65 years. Younger adolescents and older adults who are at increased risk should also be screened. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/human-immunodeficiency-virus-hiv-infection-screening*
Hypertension	Wexford Health *strongly recommends* that Wexford Health physicians screen adults aged 18 and older for high blood pressure. *Clinical Considerations*: *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/high-blood-pressure-in-adults-screening*
Influenza Vaccine	Wexford Health *strongly recommends* a routine annual influenza vaccination for all persons who do not have contraindications. Optimally, a vaccination should occur before the onset of influenza activity in the community. Health care providers should offer a vaccination by October, if possible. The vaccination should continue to be offered as long as influenza viruses are circulating. Priority should focus on immunizing adults for influenza who are residents of chronic care facilities, or ones that suffer from chronic cardiopulmonary disorders, metabolic disease (including diabetes mellitus), hemoglobinopathies, immunosuppression, and renal dysfunction. Clinical Consideration: *http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6430a3.htm*
Lipid Disorders	Wexford Health *strongly recommends* screening for lipid disorders with either a fasting or a non-fasting lipid profile l in males age 35 and older, and females age 45 and older. Wexford Health *recommends* screening men aged 20–35 for lipid disorders if they are at increased risk for coronary heart disease and screening women aged 20–45 for lipid disorders if they are at increased risk for coronary heart disease. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/lipid-disorders-in-adults-cholesterol-dyslipidemia-screening*

Obesity	Wexford Health *recommends* screening all adults for obesity. Clinicians should offer or refer patients with a body mass index (BMI) of 30 kg/m2 or higher to intensive behavioral interventions. Intensive counseling may be delivered by primary care physicians, NPs, PAs, nurses or by other qualified professionals including dietitians and nutritionists. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/obesity-in-adults-screening-and-management*
Osteoporosis	Wexford Health *recommends* screening for osteoporosis in women aged 65 years and older and in younger women whose fracture risk is equal to or greater than that of a 65-year-old white woman who has no additional risk factors. *Clinical Considerations*: *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/osteoporosis-screening*
Pneumococcal Disease Vaccinations	Wexford Health *recommends* pneumococcal vaccinations among all adults aged ≥65 years and those adults aged 19–64 years with underlying medical conditions that put them at greater risk for serious pneumococcal infection including. Age less than 65, not severely immunocompromised: • For those who have not received any pneumococcal vaccine or for those whose vaccination history is unknown, a single dose of PPSV23 (Pneumovax) vaccine should be considered. Age 65 and older, not severely immunocompromised: • For those who have not received any pneumococcal vaccine or for those whose vaccination history is unknown, a single dose of PCV13 (Prevnar) vaccine in addition to a single dose of PPSV23 (Pneumovax) should be considered. • Timing of vaccines - Patients should be immunized with PCV13 (Prevnar) vaccine first, then PPSV23 (Pneumovax) vaccine 1 year later. • If the patient has received PPSV23 (Pneumovax) when less than 65, a minimum interval of 5 years between doses should be maintained between the PPSV23 Pneumovax vaccines. Severely immunocompromised patients (e.g. chronic renal failure, malignancy, HIV, organ transplant, congenital immunodeficiency, sickle cell disease): • For those who have not received any pneumococcal vaccine or for those whose vaccination history is unknown, a single dose of PCV13 (Prevnar) vaccine in addition to a single dose of PPSV23 (Pneumovax) should be provided. • Timing of vaccines – Patients should be immunized with PCV13 (Prevnar) first then PPSV23 (Pneumovax) vaccine at least 8 weeks after receiving the PCV13 (Prevnar) vaccine. • If the patient has received PPSV23 (Pneumovax) when less than 65, a minimum interval of 5 years between doses should be maintained between the PPSV23 Pneumovax vaccines. *Clinical Considerations:* *https://www.cdc.gov/vaccines/vpd/pneumo/downloads/pneumo-vaccine-timing.pdf*

Prostate Cancer	Wexford Health concludes that routine screening for prostate cancer using prostate specific antigen (PSA) is not recommended due to the significant potential harm and very small potential benefit. This recommendation applies to men in the general U.S. population, regardless of age. The recommendation does not include the use of the PSA test for surveillance after diagnosis or treatment of prostate cancer. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/prostate-cancer-screening*
Sexually Transmitted Diseases Counseling	Wexford Health *recommends* behavioral counseling for all sexually active adolescents and for adults who are at increased risk for sexually transmitted infections (STIs). *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/sexually-transmitted-infections-behavioral-counseling1*
Skin Cancer Counseling	Wexford Health *recommends* counseling adolescents, and young adults aged 10 to 24 years who have fair skin about minimizing their exposure to ultraviolet radiation to reduce risk for skin cancer. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/skin-cancer-counseling*
Syphilis	Wexford Health *strongly recommends* that clinicians screen persons at an increased risk for syphilis infection including all pregnant women. *Clinical Consideration:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/syphilis-infection-screening*
Tetanus	Wexford Health *strongly recommends* immunizing adults for tetanus by completing the Td vaccine series if the primary series hasn't been received. Boosters should be given every ten (10) years or at least at age 50. *Clinical Considerations:* *http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6001a4.htm*
Tobacco Use	Wexford Health *strongly recommends* that clinicians ask all adults (including all pregnant females) about tobacco use, advise them to stop using tobacco, and provide behavioral interventions. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/tobacco-use-in-adults-and-pregnant-women-counseling-and-interventions1*

Summary of Guideline Recommendations for Periodic Health Examinations, Table 2: Wexford Health– Pregnant Females

Alcohol Misuse	Wexford Health *recommends* screening and behavioral counseling interventions to reduce alcohol misuse by adults, including pregnant women, in primary care settings. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/alcohol-misuse-screening-and-behavioral-counseling-interventions-in-primary-care*
Bacteriuria	Wexford Health strongly recommends screening for asymptomatic bacteriuria with a urine culture for pregnant women at 12–16 weeks' gestation or at their first prenatal visit, if later. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/asymptomatic-bacteriuria-in-adults-screening*
Breastfeeding	Wexford Health *recommends* structured breastfeeding education and behavioral counseling programs to promote breastfeeding where allowable by the DOC/county authority. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/breastfeeding-counseling*
Chlamydia	Wexford Health *recommends* screening all asymptomatic pregnant females age 24 years or younger and other women that are at increased risk for chlamydia infection. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/chlamydia-and-gonorrhea-screening*
Gestational Diabetes	Wexford Health *recommends* screening for gestational diabetes mellitus (GDM) in asymptomatic pregnant women after 24 weeks of gestation. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/gestational-diabetes-mellitus-screening*
Gonorrhea	Wexford Health *recommends* screening for gonorrhea in sexually active women age 24 years and younger and in older women who are at increased risk for infection. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/chlamydia-and-gonorrhea-screening*
Hepatitis B Virus Screening	Wexford Health *strongly recommends* screening for hepatitis B virus (HBV) infection in pregnant women at their first prenatal visit. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/hepatitis-b-in-pregnant-women-screening*
HIV Infection	Wexford Health *strongly recommends* that clinicians screen all pregnant women for HIV, including those who present in labor who are untested and whose HIV status is unknown. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/human-immunodeficiency-virus-hiv-infection-screening*

Neural Tube Defects Prevention	Wexford Health *strongly recommends* prescribing 0.4–0.8 mg/day of folic acid supplementation from a least one (1) month prior to conception through the first trimester of pregnancy to women planning to become pregnant who have not had a previous pregnancy affected by a neural tube defect. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/folic-acid-to-prevent-neural-tube-defects-preventive-medication*
Preeclampsia	Wexford Health *recommends* the use of low-dose aspirin (81 mg/d) as preventive medication after 12 weeks of gestation in women who are at high risk for preeclampsia. *Clinical Consideration:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/low-dose-aspirin-use-for-the-prevention-of-morbidity-and-mortality-from-preeclampsia-preventive-medication*
Rh (D) Incompatibility Testing	Wexford Health *strongly recommends* Rh (D) blood typing and antibody testing for all pregnant women during their first visit for pregnancy-related care. Clinical Considerations: *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/rh-d-incompatibility-screening*
Rh (D) Incompatibility Unsensitized Rh (D) - negative	Wexford Health *recommends* repeated Rh (D) antibody testing for all unsensitized Rh (D)-negative women at 24–28 weeks' gestation. *Clinical Considerations:* *http://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/rh-d-incompatibility-screening*

Transgender Guidelines

Medical Management of Transgender Patient Guideline

These guideline recommendations summarize the Wexford Health guidelines for transgender patients or those patients experiencing gender dysphoria.

These recommendations are provided only as assistance for clinicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's clinician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations.

I. DEFINITIONS

A. **Asexual:** Refers to a person not attracted to either sex.

B. **Bisexual**: Refers to a person attracted to both sexes.

C. **Endocrine Society:** Using clinical guidelines, offers evidence-based solutions to clinical problems.

D. **Female-to-Male (FtM):** Refers to a biological female who identifies as, or desires to be, a member of the male gender. The term transgender male or trans male, is used to refer to the gender identity of a person who is FtM.

E. **Gender**: A biopsychological construct used to classify a person as male, female, both, or neither. Gender encompasses all relational aspects of social identity, psychological identity, and human behavior.

F. **Gender-affirming Hormones:** Hormonal therapy utilized to facilitate biological change(s) during transition. The term cross-sex hormones is often utilized in the medical literature.

G. **Gender Conformity:** Behavior and appearance that adheres to the social expectations of a particular gender.

H. **Gender Dysphoria (GD):** The condition of feeling that one's emotional and psychological identity as male or female is different from one's biological sex. By definition, GD implies that there is a state of distress or anxiety directly related to this conflict.

I. **Gender Expression:** Includes mannerisms, clothing, hair style, and choice of activities that individuals use to express their gender identity.

J. **Gender Identity:** Individuals' own sense of their gender, which they may choose to communicate to others by means of gender expression.

K. **Gender Nonconformity:** Behavior or appearance that does not match the societal roles or expectations for one's assigned gender.

L. **Intersex:** Refers to a person whose sexual/reproductive anatomy or chromosomal pattern does not seem to fit the typical biological definition of male or female.

M. **Male-to-Female (MtF):** Refers to a biological male who identifies as, or desires to be, a member of the female gender. The term transgender female or trans female is used to refer to the gender identity of a person who is MtF.

N. **Real-life Experience:** When individuals live as the gender with which they identify.

O. **Sex Reassignment Surgery:** The surgical component of an individual's transition; also referred to as gender-affirming or gender confirmation surgery.

P. **Transgender (TG):** A general term used for individuals whose gender identity does not conform to the typical expectations associated with the gender they were assigned at birth.

Q. **Transition:** The period during which TG individuals change their physical, social, and legal characteristics to the gender with which they identify. Transition may also be regarded as an ongoing process of physical change and psychological adaptation.

R. **World Professional Association for Transgender Health (WPATH):** Professional organization devoted to the understanding and treatment of GD based in East Dundee Illinois.

II. SPECIAL CONSIDERATIONS

A. **Suicidality:** Transgender adults with GD are at an increased risk of suicidal ideation and suicide prior to initiation of their gender transition, regardless of the clinical endpoint of their transition. The end point may be living as the psychologically identified gender, hormone therapy, cosmetic treatments, breast augmentation/removal, and/or sex reassignment surgery. The risk of suicide may decrease after receiving the appropriate, individual treatment.

B. **Co-morbid Conditions**:

1. Anxiety/depression
2. Increased risk of being HIV (+) – particularly in MtF persons

III. INTERACTING WITH TRANSGENDER INDIVIDUALS

A. Respect and trust are essential to the clinician-client relationship.

B. Gender-neutral forms of address (e.g., Patient Smith, Offender Roberts, etc.) should be used.

IV. MULTIDISCIPLINARY TREATMENT APPROACH

Recommended for managing issues associated with the incarceration of TG individuals, including providing medical treatment when indicated.

V. INTAKE SCREENING

A. Based on the Prison Rape Elimination Act, individuals will be assessed during intake for risk of sexual victimization, including those individuals who are known or perceived to be gay, lesbian, bisexual, TG, intersex, or gender nonconforming.

B. If an individual identifies as transgender, a mental health referral will be initiated.

C. Any patient who is receiving hormonal medication at the time of intake should be continued on the hormonal medication, provided that:

1. The hormones represent an established treatment that has been prescribed under the supervision of a qualified physician.
2. The patient cooperates in obtaining written records or other necessary confirmation of his/her previous treatment.
3. The medical provider determines that the hormones are medically necessary and not contraindicated for any reason.

VI. PROBLEM LIST

A. To provide appropriate medical treatment and management, all individuals who identify as TG – whether or not they are receiving treatment, will have the appropriate diagnosis entered on the problem list. This will ensure that the appropriate evaluations are completed in a timely fashion. The treatment of TG patients needs to be individualized and consideration of

the individual's presentation and preferences, and attention to safety and security needs of the individual, while keeping in mind the safe and orderly operations of the facility.

B. The problem list will be updated as needed.

VII. GENDER DYSPHORIA CRITERIA

A. An individual identifying as transgender is not necessarily diagnosed with gender dysphoria.

B. Screening for GD in TG individuals is essential.

C. Untreated or under-treated GD is associated with increased morbidity and mortality.

D. Treatment modalities may include:

1. Psychotherapy.
2. Hormone therapy, if indicated.
3. Other treatment as determined to be medically necessary.

E. If indicated, hormone therapy may improve GD, mental health co-morbidities, and overall quality of life.

F. A diagnosis of GD will be recorded in the problem list, and referral to a mental health professional for co-management of GD is recommended.

VIII. MULTIDISCIPLINARY APPROACH TO THE ASSESSMENT AND MANAGEMENT OF THE TG INDIVIDUAL

Patient requests for hormonal therapy or other necessary medical treatment will be forwarded on to the Health Services Administrator who will initiate the GD evaluation process by contacting mental health for a mental health evaluation.

Step 1: Mental Health Assessment

A. Transgender status is based on an individual's self-report.

1. The history or subjective component of the evaluation serves as the primary source for identifying a person as TG.

B. Mental health assessment will include:

1. History of gender identity and screening for GD.
2. Screening for other mental health disorders related to autism, eating, mood, personality, psychosis and substance abuse.
3. Identifying history of abuse or neglect and any current or past self-harm ideations or attempts.
4. Performing an assessment of affective, cognitive, and psychosocial functioning, if indicated.
5. Psychosocial treatment recommendations, if indicated.
6. Medical referral, if indicated.

C. Diagnostic Assessment:

1. Presenting problems/symptoms

a. Outline the individual's concerns, including who made the referral and when.

D. Relevant historical information:

1. This psychosocial history may include:
    a. Review of the individual's development history (including gender identity).
    b. Sexual history (including sexual predation or victimization).
    c. Trauma.
    d. Mental health history.
    e. Suicide attempts or self-harm.
    f. Criminal history.
    g. Educational experience and progress.
    h. Family dynamics.
    i. Peer relations.
    j. Social support expected upon release.

E. Diagnostic formulation
    1. List diagnostic impressions, if applicable.

F. Care level formulation
    1. Discussion of the individual's ongoing need for mental health services and assign a care level based on need.

G. If the individual desires medical intervention, the mental health staff refer the individual for evaluation by the medical staff.

Step 2: Medical Assessment

A. Done upon referral from mental health staff after diagnosis of GD.

B. Includes:
    1. Review of the mental health assessment.
    2. Assessment of overall health, including OB/GYN as indicated.
    3. Review of sexual activity, sexual orientation, and gender identity.
    4. Assessment of previous treatment (hormonal therapy, surgery, etc.).
    5. Evaluation of co-occurring medical disorders.
    6. HIV/STI testing.

C. Essential due to risks from hormonal therapy.

D. Informed consent:
    1. Individuals must be counseled on the risks and long-term effects of hormonal therapy.
        a. Use of gender-affirming hormones in the management of TG individuals is considered off-label use and does not currently have FDA approval.
        b. Due to the irreversibility of some of the treatment options and the side effects, the individual's informed consent is required before initiating treatment and must be documented within the medical record.

Step 3: Agency/Regional Level Consultation

A. Upon completion of the mental health and medical evaluations, if the patient/offender meets the criteria for transgender therapy, the clinician will:

1. Discuss with the Regional Medical Director.
2. Review the case during collegial review.
3. Review case with the agency medical director or the Transgender Committee, if applicable.

Step 4: Individualized Treatment

A. Treatment and management for the TG individual required individualized care guided by treatment goals to allow for successful transition through:

1. Education.
2. Counseling.
3. Real-life experience.
4. Medical evaluation.
5. Hormone treatment.
6. Other medical treatment as necessary.
7. Due to the limitations of incarceration, a real-life experience.

B. One year of continuous hormone therapy and living in the desired gender role is expected before initiating genital surgical treatment.

IX. MENTAL HEALTH TREATMENT CONSIDERATIONS

A. Individual's understanding/expectations of treatment options.

1. Before starting treatment, medical and mental health staff will discuss the individual's outcome expectations to identify realistic goals.

B. Psychotherapy

1. Can be used to learn about and treat an individual's moods, thoughts, or behaviors.
2. Can be supportive to individuals experiencing distressing thoughts or feelings.

C. Mental health services

1. Individuals may be referred to psychiatry for mental health concerns or medication management of other mental illnesses in conjunction with GD.
2. A mental health consult is not necessary for a diagnosis of GD.

X. CRITERIA FOR STARTING TREATMENT

A. Persistent, well documented gender dysphoria/gender incongruence.

B. Capacity to make a well-informed decision.

C. Relevant medical or mental health issues are well controlled.

XI. HORMONE TREATMENT: ELIGIBILITY, GOALS, OVERVIEW

A. Important part of transitional treatment for many transgender individuals.

1. Goals of hormone treatment: To suppress the endogenous hormones and the physical characteristics of the birth sex.

2. Supplement hormones and enhance characteristics of the preferred gender, utilizing principles of hormone replacement therapy for hypogonadal individuals of the TG individual's identified gender.

B. Eligibility and Readiness for Gender-affirming Hormone Therapy

1. WPATH Criteria:

a. Gender dysphoria that is persistent and documented:

i. Current medical and/or mental health conditions are well controlled.

ii. Legal age of majority (18 in most states, 19 in Alabama and Nevada).

iii. Informed consent.

2. Endocrine Societal Criteria:

a. Also includes criterial for transsexualism as an alternate criterion for GD and requires three (3) months of documented real-life experience of psychotherapy.

b. Describes readiness criteria to include further consolidation of the preferred gender identity and progress in the gender transition, including a willingness and ability to take hormones as prescribed.

XII. HORMONE THERAPY FOR MALE-TO-FEMALE (MTF)

A. More complex of the two (2) gender-affirming regimens.

B. May consist of a single medication or a combination of anti-androgen and an estrogen, with a potential progestin adjunct.

1. Androgen suppression alone may be used for individual's desiring a more androgynous appearance.

C. Individuals should have a realistic expectation of the treatment results as well as the timeline of when to expect them.

D. Realistic expectations can avoid any attempts to self-increase the dosage in hopes of speeding up results.

E. Most treatment results are reversible upon cessation of treatment, but breast growth is permanent, and infertility may be irreversible.

XIII. GOAL LEVELS OF TREATMENT MTF

A. Serum estradiol < 200 pg/ml (premenopausal level)

1. Should not exceed those of a premenopausal female, but doses used to achieve an adequate level may be significantly higher than those used in hormone replacement therapy in menopausal women.

2. Not everyone requires estradiol as a part of their hormone therapy and do well on anti-androgen therapy alone.

3. Use the lowest effective hormone dose.

B. Testosterone < 55 ng/dl

1. Some individuals do poorly with testosterone levels < 35 ng/dl.
2. Ideal level is 35 – 55 ng/dl.

XIV. MEDICATIONS FOR MTF INDIVIDUALS

Goal levels for MtF: Serum estradiol <200 pg/mL and serum testosterone <55 ng/dL						
Anti-androgen drugs*	Dose	Mode of Action	Adverse Effects	Contraindications	Interactions	Notes/Monitoring
Spironolactone (1st Line)	• Starting: 25–50 mg BID • Typical: 50mg BID • Max: 200mg BID	Potassium-sparing antihypertensive that directly inhibits testosterone secretion and androgen binding to the androgen receptor	• Mild diuretic • Hyperkalemia • Excretion of sodium, calcium, and chloride • Decreased libido	• Renal insufficiency • Potassium > 5.5 mmol/L • Avoid after orchiectomy	• Digoxin • ACE inhibitors • ARBs • Potassium-sparing diuretics	• Baseline labs: BMP • Follow-up labs: BMP in 1 week, monthly x 3 months, and Q 3 months during the first year. • When stable, BMP Q 6 to 12 months
Finasteride (2nd Line)	• Low: 1 mg daily • High: 5–10 mg daily	5a reductase inhibitor, which blocks the conversion of testosterone to the more active 5a dihydrotestosterone	Sexual dysfunction	None pertinent	Antiretrovirals and diltiazem may increase finasteride levels	• High dose: unable to take spironolactone • Low dose: Treatment of male pattern baldness • Use in combo with spironolactone for rate individuals not achieving desired effects • May be used after orchiectomy if hirsutism or male pattern baldness are present
Progesterone; Medroxyprogesterone (2nd Line)	• Starting 2.5 mg daily • Typical: 5–10 mg daily • Max: 20 mg daily	• Anti-androgen effect at high doses • May help breast development at cellular level	• Increased CV risk • Weight gain • Edema • Mood disorder • Increased facial/body hair	Same as estrogen	Antiretrovirals	• Not as effective as spironolactone • Adjunct for individuals on maximum estrogen doses with unsatisfactory effects • Monitoring: Same as estrogen

**Anti-androgen medications are no longer needed after orchiectomy*

XV. ESTROGENS

Goal levels for MtF: Serum estradiol <200 pg/mL and serum testosterone <55 ng/dL					
Estrogen	Dose	Adverse Effects	Contraindications	Notes	Monitoring
Estradiol (1st Line)	• Starting: 2–3 mg daily • Typical: 4 mg daily • Max: 8 mg daily	Common: • Increase in weight • VTE • Dyslipidemia • Insulin resistance • Prolactin levels • Edema • N/V • Migraine Less Common: • LFT abnormalities • Increase in CV events especially in those over 50 taking progesterone with estrogens • Increased triglycerides in those taking oral estrogens • Increased risk of pancreatitis, cholelithiasis, diabetes mellitus, hypertension, hyperkalemia (in spironolactone users) Rare or plausible but have not been observed: • Liver damage • Prolactinoma • Breast cancer (compared to men never exposed to estrogen)	Absolute: • Estrogen-dependent cancer Precautions: • History of VTE • CAD • Hyperlipidemia • Diabetes mellitus • Cigarette smoking • Highly sedentary lifestyle • Migraine • Seizure disorder • Retinopathy • Heart failure • Valvular heart disease • Family history of estrogen-dependent tumor	• Interactions: • CYP3A4, 1A2 inhibitors/inducers • Transdermal formulations better for older individuals or those with risk factors for VTE • Stop estrogens 2 weeks prior to surgery or immobilizing event. Restart after mobilization or one week after surgery. • Consider adding aspirin therapy to those at high risk for VTE • Individuals who enter the facility on conjugated estrogen should be switched to a different form of estrogen due to inability to monitor estrogen levels with this preparation • IM injections cause greater peaks and troughs in estrogen levels making oral preparations preferable	• Baseline: lipids, CMP, CBC, BP, weight, serum estradiol, serum testosterone, CBC, prolactin, PT/PTT (when DVT risk exists) • Every 3 months after starting estrogen during first year: Serum testosterone, estradiol, CBC, lipids, CMP, weight, BP. • Every 6-12 months after first year of therapy: CBC, CMP, lipids, BP, weight, serum testosterone, estradiol, prolactin • Routine prostate and breast cancer screening
Estradiol Valerate (Progynova) (2nd Line)	• 5–20 mg IM Q 2 weeks				

XVI. TABLE 1: MTF DRUG EFFECTS TIMELINE

Initial Effects	Changes	Maximum Effect
1 – 3 months	• Decreased libido and spontaneous erections	3 – 6 months
3 – 6 months	• Redistribution of body fat • Decrease in muscle mass and strength • Softening and decreased oiliness of skin • Breast growth • Decreased testicular volume	1 – 3 years
6 – 12 months	• Decrease in terminal hair growth	> 3 years
Variable	• Male sexual dysfunction • Decreased sperm production	Variable
Voice changes do not occur with hormone treatments		

XVII. TABLE 2: MTF DRUG RISKS

Very high risk of serious adverse outcomes	
• Thromboembolic disease	
Moderate to high risk of adverse outcomes	
• Macroprolactinoma • Breast cancer • Severe liver dysfunction (transaminases >3x upper limits of normal)	• CAD • Cerebrovascular disease • Severe migraine headaches

XVIII. HORMONE THERAPY FOR FEMALE-TO-MALE (FTM)

A. Less complex of the two (2) gender-affirming regiments

B. Consists mainly of testosterone supplementation

C. Individuals should have a realistic expectation of the treatment results as well as the timeline of when to expect them

D. Uterine bleeding should cease within a few months of high-dose testosterone therapy, but treatments such as gonadotropin-releasing hormone (GnRH) agonists, medroxyprogesterone, and endometrial ablation may be used to stop menses prior to starting testosterone therapy or decrease estrogen levels.

E. Most effects are reversible upon cessation of treatment, but changes to hair, voice depth, and fertility may be irreversible.

XIX. MEDICATIONS FOR FTM INDIVIDUALS

Goal levels for FtM: Serum estradiol <50 pg/ml and serum testosterone 320 – 1000 ng/dl					
Drug	Dose	Adverse Effects	Contraindications	Notes	Monitoring
• Testosterone Cypionate IM • Testosterone Enanthate IM	• Starting: 50-100 mg Q 2 weeks or 25 – 50 mg weekly • Typical: 200mg Q 2 weeks or 100mg/week • Max: 400mg Q 2 weeks or 200 mg/week	Common: • Increased weight • Oily skin • Acne • Male pattern baldness • Vaginal atrophy • Infertility • Dyslipidemia • Mood changes • Skin irritation with patch • Risk of exposing partners or children with topical testosterone Less Common: • Increase in edema, BP, aggressiveness • Erythrocytosis • Abnormal LFTs • Sleep apnea Rare or plausible but not observed: • Increased risk of CV disease, breast/ovarian cancer, endometrial hyperplasia	Absolute: • Pregnancy • Breast cancer • Breastfeeding Precautions: • Erythrocytosis • Cardiac, hepatic, renal, or vascular disease with edema or risk of edema • Sleep apnea or high risk of sleep apnea due to obesity or chronic lung disease • Dyslipidemia	• Interactions: Warfarin Cyclosporine Insulin • Causes drop in blood glucose in DM patients • May notice cyclic variation in mood with IM dosing Q 2-4 weeks. Use a lower, more frequent dose, or transdermal • Transdermal reaches same levels as IM but in a longer timeframe • Menses typically stop in early months of treatment, but may persist when using transdermal USE IN CORRECTIONS: • Injectable testosterone is the preferred formulation in the correctional environment due to potential risk of abuse and/or diversion. • Testosterone is a DEA controlled substance	• Baseline-Lipids, BMP, CBC, BP, weight, serum testosterone, BMD (if osteoporosis risk exists) • Every 3 months after starting testosterone for first year-Serum testosterone, estradiol (for 6 months after cessation of menses), BP, CBC, lipids, CMP, weight • Every 6-12 months after 1st year of therapy—CBC, CMP, lipids, BP, weight, serum testosterone When to check specific formulations: IM: • Testosterone levels just prior to next dose. Adjust to mid-normal range of 350-800 ng/dl Patch: • Testosterone levels after 1 week • Continue screenings for cervical and breast cancer if tissue is still present

XX. TABLE 4: DRUG EFFECT TIMELINE FOR FTM MEDICATIONS

Initial Effects	Changes	Maximum Effect
Within first 3 months	• Fat redistribution • Cessation of menses • Clitoral enlargement • Vaginal atrophy	1 – 2 years (may take up to 5 years)
Within first 6 months	• Increased skin oiliness • Acne	
Within 6 – 12 months	• Increased facial/body hair • Scalp hair loss • Increase muscle mass and strength • Deepening of the voice	

XXI. TABLE 5: FTM MEDICATIONS: DRUG RISKS

Very high risk of serious adverse outcomes	Moderate-to-high risk of adverse outcomes
• Breast or uterine cancer • Erythrocytosis (Hct > 50%)	• Severe liver dysfunction (transaminases > 3 x upper limit of normal)

XXII. GENDER-AFFIRMING (SEX REASSIGNMENT) SURGERY

A. Considered on a case-by-case basis.

B. Criteria

1. In addition to the eligibility and readiness criteria for hormone therapy, general criteria for consideration of surgery include:
   a. At least 12 months of successful use of hormone therapy.
   b. Participation in psychotherapy as clinically indicated.
   c. Full-time real-life experience in their preferred gender.
   d. Consolidation of gender identity.

C. The patient must request consideration for and demonstrate via informed consent a practical understanding of gender-affirming surgery including but not limited to:

1. Permanence.
2. Potential complications.
3. Short and long-term treatment plans.

D. Requests for surgery are submitted to the Regional Medical Director for initial review and recommendation to the medical director, who is the approving authority.

E. Each referral should include:

1. Comprehensive medical and mental health summaries.
2. Comprehensive psychosocial assessment (by a licensed clinical social worker).
3. Criminal history.
4. Institutional adjustment report.

XXIII. FUTURE CONSIDERATIONS

A. MtF will need to be monitored for prostate cancer.

B. FtM will need to be monitored for breast and cervical cancer.

C. FtM with history of PCOS will need monitored for insulin resistance and the development.

XXIV. PATIENT EDUCATION AND INFORMED CONSENT

A. Crucial to the treatment process.

B. Must be documented in the medical record.

XXV. REFERENCES

1. Deutsch, B. & Feldman, J. (2019). Primary Care of Transgender Individuals. Retrieved from UpToDate
2. Federal Bureau of Prisons (2016). Medical Management of Transgender Patients. Retrieved from http://www.bop.gov/resources/health_care_mngmt.jsp
3. Illinois Department of Corrections (2013). Evaluations of Offenders with Gender Identification Disorders.
4. Pennsylvania Department of Corrections (2016). Diagnosis and Treatment of Gender Dysphoria. [13.2.1 Section 19]
5. Safer, J. & Tangpricha, V. (2018). Transgender Women: Evaluation and Management. Retrieved from UpToDate
6. U.S. Department of Justice (2018). Transgender Offender Manual [Policy 5200.04 CN-1]
7. West Virginia Division of Corrections & Rehabilitation (2019). Gender Nonconforming Inmate/Residents. Policy Directive [Policy 411.00]

XXVI. ATTACHMENTS

Feminizing Gender-affirming Hormone Treatment for Transgender Patients: Consent and Counseling Form

Masculinizing Gender-affirming Hormone Treatment for Transgender Patients: Consent and Counseling Form

Feminizing Gender-affirming Hormone Treatment for Transgender Patients

Consent and Counseling Form

Facility Name:_____

Patient Name:_____ **ID#:** _____

You want to take estrogen and other medications to feminize your body. Once you start these medications, some of them will need to be taken for the rest of your life in order to maintain their effects. Before using these medications, you need to know more about how they might affect you, including possible benefits, side effects, risks, and warning signs. We have listed them here for you. It is important that you understand all of this information before you start. We are happy to answer any questions you might have, so please ask!

What are the Different Medications that Can Help Feminize You?

Estrogen is the female gender-affirming hormone, and there are different types of estrogen that can help you appear more like a woman. There are also medications, called androgen antagonists, or anti-androgens, or androgen blockers, that can help you appear less like a man. Androgen is the male gender-affirming hormone.

WARNING – Who should NOT take estrogen?

It should not be used by anyone who has a history of:

- An estrogen-dependent cancer
- Blood clots that could or did travel to the lungs

It should be used WITH CAUTION and only after a full discussion of risks, by anyone who:

- Has a strong family history of breast cancer of other cancers that grow faster when estrogens are present
- Has diabetes
- Has eye problems such as retinopathy
- Has heart disease, heart valve problems, or a tendency to have easily clotted blood
- Has hepatitis
- Has high cholesterol
- Has kidney or liver disease
- Has migraines or seizures
- Is obese
- Smokes cigarettes

Please review and initial each statement to show you understand the benefits, risks, and changes that may occur from taking these medications. At the end of the document, indicate your preference regarding hormone therapy. Then sign and date the form.

Feminizing Effects

_____ I know that estrogen or anti-androgens, or both, may be prescribed to help me appear less like a man and more like a woman.

_____ I know that it can take several months or longer for the effects to become noticeable. I know that no one can predict how fast, or how much, change will happen.

_____ I know that if I am taking estrogen, I will probably develop breasts.

- I know it can take several years for breasts to get to their full size.
- I know the breasts will remain, even if I stop taking estrogen.
- I know I should examine my breasts for irregularities as soon as they start growing. I should also have a clinician examine them every year.
- I know I might have a milky discharge from my nipples (Galactorrhea). If I do, I know I should have it evaluated by my clinician because it could be caused by the estrogen or by something else.
- I know that no one knows if taking estrogen increases the risk of breast cancer.

_____ I know that the following changes are usually not permanent – they are likely to go away if I stop taking the medicines:

- I know my body hair will become less noticeable and will grow more slowly, but it won't stop completely, even if I take the medicines for years.
- I know I will probably have less fat on my abdomen and more on my buttocks, hips, and thighs. It will be redistributed to a more female shape, changing from an "apple" shape to more of a "pear" shape.
- I know that if I already have male pattern baldness, it may slow down, but will probably not stop completely. It is also unlikely that hair that has been lost will grow back.
- I know I may lose muscle and strength in my upper body.
- I know my skin may become softer.

_____ I know that my body will make less testosterone. Upon release, this may affect my sex life in different ways and my future ability to cause a pregnancy.

- I know my sperm may no longer reach maturity. This could make me less able to cause a pregnancy. I also know I might never produce mature sperm again, but I know that it's also possible that my sperm could still mature. So, I know that I might get someone pregnant if we have vaginal intercourse and we don't use birth control. The options for sperm banking have been explained to me.
- I know my testicles may shrink down to half their size. Even so, I know that I will need regular checkups for them.
- I know it is likely that my penis won't be hard in the morning as often as it has been before. It is also likely that I will have fewer spontaneous erections.
- I know I may lose the ability to obtain an erection for intercourse.
- I know I may have less sex drive.
- I know this treatment may (but is not assured to) make me permanently unable to make a woman pregnant.

_____ I know that some parts of my body will not change much by using these medicines.

- I know the hair of my beard and moustache may grow more slowly than before. It may become less noticeable, but it will not go away.
- I know the pitch of my voice will not rise, and my speech patterns will not become more like a woman's.
- I know my Adam's apple will not shrink.
- Although these medicines can't make these changes happen, there are other treatments that may be helpful.

Risks of Taking Feminizing Medications

_____ I know that the side effects and safety of these medications are not completely known. There may be long-term risks that are not yet known.

_____ I know that I should not go to take more medicine than I am prescribed. I know it increases health risks. I know that taking more than I am prescribed won't make changes happen more quickly or more significantly. I know my body can convert extra estrogen into testosterone, and that can slow down or stop my appearing more womanly.

_____ I know these medicines may damage the liver and may lead to liver disease. I know I should be checked for possible liver damage as long as I take them.

_____ I know these medicines cause changes that other people will notice. Some transgender people have experienced harassment, discrimination, and violence because of this. Others have lost the support of loved ones. I know I can reach out to psychology services to help me find support resources. I also know that the facility does not tolerate harassment, discrimination, and violence in any circumstances. If I feel I am the recipient of any of these actions, I will notify a facility staff member.

Risks of Taking Estrogen

_____ I know that taking estrogen increases the risk of blood clots that can result in:

- Chronic problems with veins in the legs
- Heart attack
- Pulmonary embolism (blood clot to the lungs) which may cause permanent lung damage or death
- Stroke, which may cause permanent brain damage or death

_____ I know that the risk of blood clots is much worse if I smoke cigarettes, especially if I am over 40. I know the danger is so high that I should stop smoking completely if I start taking estrogen and that I should not start to smoke again when I am released from the facility.

_____ I know that taking estrogen can increase the deposits of fat around my internal organs. This can increase my risk for diabetes and heart disease.

_____ I know that taking estrogen can raise my blood pressure. I know that if my blood pressure goes up, my clinician can work with me to try and control it with diet, lifestyle changes, and/or medication.

_____ I know that taking estrogen increases my risk of getting gallstones. I know that I should talk with my clinician if I get severe or long-lasting pain in my abdomen.

_____ I know that estrogen can cause nausea and vomiting. I know that I should talk with my clinician if I have long-lasting nausea or vomiting.

_____ I know that estrogen can cause headaches or migraines. I know I should talk with my clinician if I have headaches or migraines often, or if the pain is unusually severe.

_____ I know that it is not yet known if taking estrogen increases the risk of prolactinomas. These are non-cancerous tumors of the pituitary gland. I know they are not usually life-threatening, but they can damage vision and cause headaches. I know this possibility needs to be checked periodically by a clinician for at least 3 years after I start taking estrogen.

_____ I know that I am more likely to have dangerous side effects if:

- I smoke
- I am overweight
- I am over 40 years old
- I have a history of blood clots
- I have a history of high blood pressure
- My family has a history of breast cancer

Risks of Taking Androgen Antagonists

_____ I know that spironolactone affects the balance of water and salts in the kidneys, which may:

- Increase the amount of urine I produce, making it necessary to urinate more frequently.
- Increase thirst
- Reduce blood pressure
- Cause (although rarely) high levels of potassium in the blood, possibly leading to changes in the heart rhythms that may be life-threatening.

_____ I know that some androgen antagonists make it more difficult to evaluate test results for cancer of the prostate. I know that if I am over 50, I should have my prostate evaluated every year with a prostate-specific antigen test, as applicable.

Prevention of Medical Complications

_____ I agree to take feminizing medications as prescribed, and I agree to tell my clinician if I have any problems or if I am unhappy with the treatment.

_____ I know that the dose and type of medication that is prescribed for me may not be the same as for someone else.

_____ I know that I need periodic physical exams and blood tests to check for any side effects.

_____ I know that feminization medications can interact with other drugs and medicines – including alcohol, diet supplements, herbs, and other hormones, and street drugs – causing complications. I know that I need to prevent complications because they can be life-threatening. That's why I need to be honest with my clinician about whatever else I take or use. I also know that this will not interfere with my getting medical care; I will continue to get medical care here no matter what information I share about what I take.

_____ I know that it can be risky for anyone with certain conditions to take feminizing medicines. I agree to be evaluated if my clinician thinks I may have such a condition. Then, we will decide if it's a good idea for me to start or continue using these medications.

_____ I know that I should stop taking estrogen two weeks before any surgery or when I may be immobile for a long time. This will lower the risk of getting blood clots. I know that I can start taking estrogen again a week after I'm back to normal or when my clinician says it's okay.

_____ I know that using these medicines to appear more womanly is an "off-label" use. I know that this means that using these medicines for this purpose is not approved by the Food and Drug Administration (FDA). I know that the medicine and dose that is recommended for me is based on the judgment and experience of the clinician.

_____ I know that I can choose to stop taking medicines at any time. I know that if I decide to do that, I should do it with the help of my clinician. This will help me make sure there are no negative reactions. I also know that my clinician may suggest that I cut the dose or stop taking it altogether if certain conditions develop. This may happen if the side effects are severe or if there are health risks that cannot be controlled.

My Signature Below Confirms That:

- My clinician has talked with me about:
  - The benefits and risks of taking feminizing medication.
  - The possible or likely consequences of hormone therapy.
  - Potential alternative treatments.
  - I understand the risks that may be involved.
  - I know that the information in this form includes the known effects and risks. I also know that there may be unknown long-term effects or risks.
  - I have had enough opportunity to discuss treatment options with my clinician.
  - All of my questions have been answered to my satisfaction.
  - I believe I know enough to take, refuse, or postpone therapy with feminizing medications.
- I am 18 years of age or older.

Based on All of this Information:

_____ I want to begin taking estrogen.

_____ I want to begin taking androgen antagonists (e.g., spironolactone).

_____ I do not wish to begin taking feminizing medication at this time.

Patient's Signature **Date**

Prescribing Clinician's Signature **Date**

Your health is important to us. If you have any questions or concerns, please submit a sick call request.

Masculinizing Gender-affirming Hormone Treatment for Transgender Patients

Consent and Counseling Form

Facility Name:_____

Patient Name:_____ **ID#:** _____

You have expressed a desire to take testosterone to masculinize your body. Before beginning treatment, there are several details about treatment that you need to be familiar with, including the possible advantages, disadvantages, risks, warnings, and alternatives. These topics are covered below. It is important that you understand all of this information before initiating treatment. We are happy to answer any questions you might have. So just ask.

What is Testosterone?

Testosterone is the hormone responsible for male features. It builds muscle, causes the development of facial hair, and is responsible for the deepening of a person's voice during puberty. Testosterone also may increase sex-drive.

How is Testosterone Taken?

Testosterone is usually injected every 1 – 4 weeks. It is not used as a pill because the body may not absorb it properly, and it can cause liver problems. Some people use skin creams and patches, but these are not used in the correctional environment.

The doses used for injections differ from products to product and from patient to patient. Doses may range from 100 mg to 400 mg. The injections are given into a large muscle to slow the release of the hormone. There can be unwanted swings in hormone levels. This can be controlled by changing how often the dose is given, how much of a dose is given, or by changing formulations.

Warning – Who Should NOT Take Testosterone?

Testosterone should NOT be used by anyone who is pregnant or has uncontrolled coronary artery disease. It should be used with caution and only after a full discussion of risks by anyone who has acne, family history of heart disease or breast cancer, blood clot history, high levels of cholesterol, liver disease, or high red blood cell count. Caution should also be used in obese patients and persons who smoke.

Monitoring

Periodic blood tests to check on the effects of the hormone will be required for treatment. Routine breast exams and pelvic exams with pap tests should be continued, if applicable.

Benefits and Risks of Testosterone Treatment

Benefits	Risks
• Appearing more like a man: o Larger clitoris* o Coarser skin o Deeper voice* o Increased body/facial hair* o Increased muscle mass o Increase strength o Elimination of menstrual periods • Increased physical energy • Protection against bone thinning (osteoporosis) *Permanent changes	• Acne (may permanently scar) • Blood clots • Emotional changes • Headache • High blood pressure • Increased red blood cell count • Infertility • Inflamed liver • Interaction with drugs for diabetes and blood thinners • Male pattern baldness • Increased abdominal fat • Increased risk of heart disease • Swelling of hands, feet, and legs • Weight gain

Please review and initial each statement to show that you understand the benefits, risks, and changes that may occur from taking these medications. At the end of the document, indicate your preference regarding hormone therapy, then sign and date it.

Masculinizing Effects of Testosterone

_____ I know that testosterone may be prescribed to make me appear less like a woman and more like a man.

_____ I know that it can take several months or longer for the effects to become noticeable.

_____ I know that no one can predict how fast or how much change will take place.

_____ I know that the changes may not be complete for 2 – 5 years after starting testosterone.

_____ I know the following changes are likely to be permanent, even if I stop taking testosterone:

- Bigger clitoris (typically about half an inch to a little more than an inch).
- Deeper voice.
- Growth of facial hair (moustache and beard).
- Hair loss at the temples and crown of the head and the possibility of becoming completely bald.
- More, thicker, and coarser hairs on abdomen, arms, back, chest, and legs.

_____ I know that the following changes are usually not permanent and will likely go away if I stop taking testosterone:

- Acne (but the scars will be permanent)
- Elimination of menstrual periods (typically stop 1 – 6 months after starting testosterone)
- Increased abdominal fat (redistribution of fat to a more masculine shape)
- Decreased fat on buttocks, hips, and thighs
- More muscle mass and strength
- Vaginal dryness

_____ I know that the effects of testosterone on fertility are unknown. I have been told that I may or may not be able to get pregnant even if I stop taking testosterone. I know I might still get pregnant even after testosterone stops my menstrual periods. I know my birth control options upon release (if applicable). I know I cannot take testosterone if I am pregnant.

_____ I know that some aspects of my body will not be changed:

- Losing some fat may make my breasts appear slightly smaller, but they will not shrink very much.
- Although my voice may deepen, other aspects of the way I speak will not change.

Risks of Testosterone

_____ I know that the medical effects and safety of testosterone are not completely known. There may be long-term risks that are not known yet.

_____ I know not to take more testosterone than prescribed. I know this would be a risk to my health. I know that taking more testosterone than I am prescribed will not make changes happen more quickly or more significantly. I know that my body can convert extra testosterone into estrogen, which can slow down or reverse the progress of my transition.

_____ I know that testosterone can cause changes that increase my risk of heart disease. I know these changes include:

- Less good cholesterol (HDL), which is needed to protect against heart disease, and more bad cholesterol (LDL), which may increase the risk of heart disease.
- Higher blood pressure
- Increased deposits of fat around my internal organs

_____ I know that my risk of heart disease is higher if people in my family have had heart disease, if I am overweight, or if I smoke.

_____ I know that I should have periodic heart-health checkups for as long as I take testosterone. I know I must watch my weight and cholesterol levels and have them checked by my clinician.

_____ I know that testosterone can damage the liver and possibly lead to liver disease. I know I should be checked periodically for possible liver damage for as long as I take testosterone.

_____ I know that testosterone can increase my red blood cell count and hemoglobin. I know the increase is usually only to the level that is normal for a man. I know normal levels would have no health risks; however, higher increases can cause problems that can be life-threatening. These problems include stroke or heart attack. As such, I know I need to have periodic blood checks for as long as I take testosterone.

_____ I know that taking testosterone can increase my risk for diabetes. It may decrease my body's response to insulin, cause weight gain, and increase deposits of fat around my internal organs. I know I should have periodic checks of my blood glucose for as long as I take testosterone.

_____ I know that my body can turn testosterone into estrogen. I know that no one knows if this could increase the risk of cancers of the breast, ovaries, or uterus.

_____ I know that taking testosterone can thin the tissues of my cervix and the walls of my vagina. This can lead to tears or abrasions during vaginal intercourse. I know it does not matter if my partner is a man or a woman. This raises my risk of getting a sexually transmitted infection, including HIV. I know I should speak frankly with my provider regarding the best ways to prevent and check for infections. I am aware that sex between patients, or between patients and staff, is not permitted within the facility.

_____ I know that testosterone can give me headaches or migraines. I know it is best to talk with my clinician if I get them frequently or if the pain is unusually severe.

_____ I know that testosterone can cause emotional changes. For example, I could become more irritable, frustrated, or angry. I know my provider can help me find resources to explore and cope with these changes.

_____ I know that testosterone causes changes that other people will notice. Some transgender people have experienced harassment, discrimination, and violence because of this. Others have lost the support of loved ones. I know I can reach out to psychology

services to help me find support resources. I also know that in the facility, harassment, discrimination, and violence are not tolerated under any circumstances. If I feel I am the recipient of any of these actions, I will notify a facility staff member.

Prevention of Medical Complications

_____ I agree to take testosterone as prescribed, and I agree to tell my clinician if I have any problems or am unhappy with the treatment.

_____ I know that the dose and type of medication prescribed for me may not be the same as it is for someone else.

_____ I know that I need periodic physical exams and blood tests to check for any side effects.

_____ I know that testosterone can interact with other drugs and medicines, including alcohol, diet supplements, herbs, and other hormone, and street drugs. This kind of interaction can cause complications. I know that I need to prevent complications because they can be life-threatening. I need to be honest with my clinician about other items I am taking. I also know that this will not interfere with my getting medical care; I will continue to get medical care here no matter what information I share about what I take.

_____ I know that it can be risky for anyone with certain conditions to take testosterone. I agree to be evaluated if my clinician thinks I may have one of these conditions. Then, we will decide if it is a good idea to start or continue using testosterone.

_____ I know that using testosterone to appear more masculine is an "off-label" use. I know this means it is not approved by the Food and Drug Administration (FDA) for this purpose. I know the medicine and dose recommended for me is based on the judgement and experience of the clinician.

_____ I know that I can choose to stop taking testosterone at any time. I know if I decide to stop, I should discontinue with the help of my clinician to ensure there are no negative reactions. I know my clinician may suggest I cut the dose of stop taking it altogether if certain medical conditions develop. This may happen if the side effects are severe or if there are health risks that cannot be controlled.

My Signature Below Confirms That:

- My clinician has talked with me about:
  - The benefits and risks of taking testosterone.
  - The possible or likely consequences of hormone therapy.
  - Potential alternative treatments.
- I understand the risks that may be involved.
- I know that the information in this form includes the known effects and risks. I also know that there may be unknown long-term effects or risks.
- I have had enough opportunity to discuss treatment options with my clinician.
- All of my questions have been answered to my satisfaction.
- I believe I know enough to take, refuse, or postpone testosterone therapy.
- I am 18 years of age or older.

Based on All of This Information:

_____ I want to begin taking testosterone.

_____ I do not wish to begin taking testosterone at this time.

_____ _____

Patient's Signature **Date**

_____ _____

Prescribing Clinician's Signature **Date**

Your health is important to us. If you have any questions or concerns, please submit a sick call request.

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Urology Guidelines

Urology Guidelines

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Benign Prostatic Hyperplasia (BPH) Benign prostatic hyperplasia (BPH) increases in prevalence as men age. Urinary symptoms include increased frequency of urination, nocturia, hesitancy, urgency, and weak urinary stream.	Consider: Education of the patient. The selection of therapy, or the decision to initiate therapy, should be individualized and based upon consideration of the extent of the condition and symptoms, potential adverse effects of the treatment and the response to previous treatments. Lifestyle modifications — Lifestyle modifications and behavioral interventions are typically first-line treatments for most patients. Lifestyle modifications include: • Limiting fluid intake before bedtime or prior to transport • Limiting intake of mild diuretics (e.g., caffeine) • Limiting intake of bladder irritants (e.g., highly seasoned or irritative foods) • Avoiding constipation • Increasing activity, including regular strenuous exercise • Weight control Additional behavioral interventions include: • Kegel exercises at time of urinary urgency. • Timed voiding regimens – In patients who exhibit obstructive complaints (i.e., decreased force of stream) or who are noted to carry a high post-void residual, instructing them to attempt to empty their bladder based on a time interval rather than by the usual sensations can be effective in reducing lower urinary tract symptoms (LUTS). Requesting that they urinate "by the clock"	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	(every 90 to 120 minutes during the daytime) can be effective. • Double-voiding techniques – Similarly, men who complain of obstructive symptoms may benefit by following one urination by a second attempt at emptying (the double void) within a minute or two of the initial void. Medications: • Hypotension is an important potential side effect of medications. • Terazosin - Because of this, terazosin will generally need to be initiated at bedtime (to reduce postural lightheadedness soon after starting the medication), and the dose then titrated up over several weeks. • Tamsulosin - Has a lower risk of hypotension.	
Epididymal Cyst/Spermatocele An epididymal cyst is generally asymptomatic and palpated as a soft round mass in the head of the epididymis. An epididymal cyst that is larger than 2 cm is called a spermatocele.	Consider: Evaluation and education of the patient. Epididymal cysts and spermatoceles do not generally require treatment, but spermatoceles may, at rare instances, necessitate surgical excision because of chronic pain.	At the discretion of the clinician depending on the clinical scenario
Epididymitis or Epididymo-orchitis Acute epididymitis is the most common cause of scrotal pain in adults. N. gonorrhoeae and C. trachomatis are the most common organisms responsible for acute epididymitis in men under the age of 35.	Consider: Evaluation and education of the patient. The selection of therapy should be individualized and based upon consideration of the extent of disease, patient's risk of an STD, and treatment availability, and the response to any previous treatments.	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
E. coli and Pseudomonas species are more frequent in older men, often in association with obstructive uropathy from benign prostatic hyperplasia. The clinical features of acute epididymitis include localized testicular pain with tenderness and swelling on palpation of the affected epididymis, which is located adjacent to the testis. More advanced cases present with secondary testicular pain and swelling (epididymo-orchitis).		
1. Patients under the age of 35 or who are at risk of sexually transmitted infections.	Consider coverage for N. gonorrhoeae and C. trachomatis with: ceftriaxone (500 mg intramuscular injection in one dose, or 1 g if patient weighs 150 kg or greater) plus doxycycline (100 mg orally twice a day for 10 days). For patients unable to tolerate doxycycline, a single azithromycin dose (1 g orally) is an alternative option. For patients unable to tolerate ceftriaxone due to cephalosporin allergy, a single 240 mg intramuscular dose of gentamicin plus a single 2 g oral dose of azithromycin is an option.	
2. Patients 35 years of age or older and who are at low risk for sexually transmitted infections.	Consider coverage for enteric pathogens with levofloxacin 500 mg orally once daily for 10 days. For patients who are unable to take fluoroquinolones, trimethoprim-sulfamethoxazole (one double-strength tablet twice a day for 10 days) is a good alternative.	
3. Patients of any age who participate in insertive anal intercourse.	Consider coverage for N. gonorrhoeae, C. trachomatis, and enteric pathogen infections with ceftriaxone (500 mg intramuscular injection in one dose, or 1 g if patient	

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	weighs 150 kg or greater) plus a fluoroquinolone (levofloxacin 500 mg orally once daily for 10 days).	
Foreskin **1. Balanitis** Balanitis is defined as inflammation of the glans penis. Balanitis has a wide range of causes, but most cases are related to inadequate hygiene in uncircumcised men. When the foreskin is not routinely retracted and the glans is not cleansed in an appropriate fashion, buildup of sweat, debris, exfoliated skin, and bacteria or fungi can occur, resulting in inflammation. Predisposing factors include diabetes mellitus, trauma (e.g., zipper injury), obesity, and edematous conditions (e.g., congestive heart failure, cirrhosis, nephrotic syndrome). Of cases with identifiable etiologies, infection is the with Candida is the most common.	Consider: Evaluation and education of the patient. The selection of therapy should be individualized and based upon consideration of the presentation, extent of disease, and previous treatment tried. Attention to genital hygiene is the most important approach for most men with balanitis. Retraction of the foreskin with thorough genital cleansing can be both preventive and therapeutic. Twice-daily cleansing of the affected area should be encouraged. Empiric Treatment for candidal infection with clotrimazole 1% cream or miconazole 2% cream twice daily for 7 to 14 days can be helpful. For those who have no improvement on antifungal therapy, a trial of hydrocortisone 1% cream or ointment twice daily for seven days for nonspecific dermatitis may be helpful.	At the discretion of the clinician depending on the clinical scenario
Phimosis Phimosis, an abnormal constriction of the opening in the foreskin that precludes retraction over the glans penis, results from chronic inflammation and edema of the foreskin. Development of a phimosis often complicates sexual function, voiding, and hygiene.	The selection of therapy should be individualized and based upon consideration of the presentation, extent of disease, and previous treatment tried. Foreskin manipulation/stretching exercises for patients: • Apply a thin layer of a medium to high potency steroid cream around the entire foreskin. The patient should be instructed to apply the cream all the way around from the area of the penis tip down to where the foreskin meets the skin lower on the penis shaft.	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	• The patient should gently massage the cream into the foreskin, rubbing the foreskin tissue slowly until the cream has been fully absorbed into the skin. • Advise the patient to carefully try to pull the foreskin back, stopping when they start feeling discomfort or pain. Advise applying some cream to the tip of the penis, once it's exposed enough. • Advise the patient to repeat these steps 2 to 4 times a day until they can fully retract their foreskin without any pain or discomfort. • This can take anywhere from 4 to 8 weeks and sometimes longer, so the patient should be instructed to not be concerned if their foreskin doesn't budge after a few days.	
Hydrocele A hydrocele is a collection of peritoneal fluid between the parietal and visceral layers of the tunica vaginalis, which directly surrounds the testis and spermatic cord. Idiopathic hydrocele, the most common type, generally arises over a long period of time. Inflammatory conditions of the scrotal contents (epididymitis, torsion, appendiceal torsion) can produce an acute reactive hydrocele, which often resolves with treatment of the underlying condition.	Consider: Education of the patient. Hydrocele fluid in the scrotal sac transilluminates well, which differentiates the process from a possible hematocele, hernia, or solid mass. Most hydroceles do not require intervention.	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Incontinence (Urinary) Urinary incontinence is the involuntary leakage of urine. **1. Male** Men are more likely to experience urinary incontinence as they get older. Urge urinary incontinence is the most common type of incontinence among men, it manifests as a sudden and compelling desire to pass urine that is difficult to defer and is accompanied by involuntary leakage. Stress urinary incontinence (SUI) occurs in the absence of a bladder contraction and is due to inadequate urethral sphincter function, either from mechanical damage to the urethral sphincter or from physiologic effects that limit sphincter function.	Consider: Education of the patient. The selection of therapy, or the decision to initiate therapy, should be individualized and based upon consideration of the extent of the condition and symptoms, potential adverse effects of the treatment, treatment availability and the response to previous treatments. Depending on the patient a workup may include review of potentially causative medications, U/A, urine C&S, and a PSA. Lifestyle modification: Weight loss in obese men has many benefits, including improvement of urinary incontinence symptoms. Other lifestyle modifications may include avoiding excessive fluid consumption, caffeine reduction and avoiding constipation. Pelvic floor muscle exercises and bladder training may assist patients depending on the cause. Medications: Duloxetine, an SNRI, is approved for the treatment of SUI in many European countries. In the United States, there are no medications approved for SUI but there have been studies showing effectiveness in some patients.	At the discretion of the clinician depending on the clinical scenario
Female Estimates of prevalence vary depending on the population studied, the measurement period (e.g., daily or weekly) and the instruments used to assess severity. Overall prevalence of urinary incontinence among non-pregnant women age 20 years and above has been reported to range from 10 to 53 percent.	Consider: The selection of therapy should be individualized. Initial treatments for most types of incontinence (stress, urgency, or mixed) include lifestyle modifications and pelvic floor muscle exercise, along with bladder training in women with urgency incontinence and in some women with stress incontinence. Depending on the patient a workup may include review of potentially	

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Both the prevalence and severity of urinary incontinence increase with age. Obesity is a strong risk factor for incontinence. Obese women have a nearly threefold increased odds of urinary incontinence compared with non-obese women. Increasing parity is a risk factor for urinary incontinence and pelvic organ prolapse.	causative medications, U/A, and a urine C&S. Lifestyle modification: Weight loss in obese women has many benefits, including improvement of urinary incontinence symptoms. Other lifestyle modifications may include avoiding excessive fluid consumption, caffeine reduction and avoiding constipation.	
Prostatitis **1. Acute Prostatitis** The clinical presentation of acute prostatitis is generally not subtle. Patients are typically acutely ill, with spiking fever, chills, malaise, myalgia, dysuria, irritative urinary symptoms (frequency, urgency, urge incontinence), pelvic or perineal pain, and cloudy urine. Men may also complain of pain at the tip of the penis. Swelling of the acutely inflamed prostate can cause voiding symptoms, ranging from dribbling and hesitancy to acute urinary retention. Acute prostatitis can occur in the setting of cystitis, urethritis, or other urogenital tract infections. Thus, underlying conditions such as functional or anatomical anomalies (e.g., urethral strictures), that predispose to other urogenital infections can increase the risk of prostatitis. Prostate infections following urogenital instrumentation, including chronic indwelling bladder catheterization, intermittent bladder catheterization, and prostate biopsy are well documented	Consider: The selection of therapy should be individualized depending on the presumptive cause and the patient's presentation and clinical status. The presence of typical symptoms of prostatitis should generally prompt digital rectal exam, and the finding of an edematous and tender prostate on physical exam in this setting usually establishes the diagnosis of acute bacterial prostatitis. Labs to consider: U/A and urine C&S. Medications: A variety of antimicrobials may be used for the treatment of acute prostatitis, which should be treated empirically pending culture results. Empiric antibiotic therapy should adequately treat gram-negative organisms unless a study is available that suggests an alternate bacterial cause. For patients with acute prostatitis who can take oral medications, consider trimethoprim-sulfamethoxazole (one double-strength tab orally every 12 hours) or a fluoroquinolone (ciprofloxacin 500 mg orally every 12 hours or levofloxacin 500 mg orally once daily) as empiric therapy.	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	Patients under the age of 35 or who are at risk of sexually transmitted infections: Consider coverage for N. gonorrhoeae and C. trachomatis with: ceftriaxone (500 mg intramuscular injection in one dose, or 1 g if patient weighs 150 kg or greater) plus doxycycline (100 mg orally twice a day for 10 days).	
Chronic Bacterial Prostatitis The presentation of chronic bacterial prostatitis can be quite subtle. Classically, men present with symptoms of recurrent urinary tract infection (frequency, dysuria, urgency, perineal discomfort, and perhaps a low-grade fever) with repeated isolation of the same organism from the urine. However, this presentation is reported by the minority of patients. Most patients have only one or some of these features. Chronic bacterial prostatitis is often presumptively diagnosed and empirically treated with antimicrobials when men present with chronic (e.g., longer than three months) or recurrent urogenital symptoms, particularly if bacteriuria is also present.	Consider: Education of the patient. The selection of therapy, or the decision to initiate therapy, should be individualized and based upon consideration of the extent of the condition and symptoms, potential adverse effects of the treatment, treatment availability and the response to previous treatments. Prolonged antibiotic therapy (e.g., at least six weeks) with an agent that has good penetration into the prostatic tissue is generally necessary for treatment of chronic bacterial prostatitis. Nevertheless, the infection frequently recurs. Trimethoprim-sulfamethoxazole twice daily is generally the drug of choice for both initial and recurrent episodes, if organism susceptibility and patient tolerance allow. Treatment is typically for 2-3 months. Doxycycline and Fluoroquinolones (Ciprofloxacin & Levaquin) are also alternative regimens.	At the discretion of the clinician depending on the clinical scenario
Chronic Prostatitis/Chronic Pelvic Pain Syndrome Chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS) is a clinical syndrome in men defined by pain or discomfort in the pelvic region, often accompanied by urologic symptoms or sexual dysfunction. Despite the use of the term "prostatitis," it is unclear to urologists what degree	Consider: Education of the patient. The selection of therapy, or the decision to initiate therapy, should be individualized and based upon consideration of the extent of the condition and symptoms, potential adverse effects of the treatment, treatment availability and the response to previous treatments.	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
the prostate is the source of symptoms. The diagnosis of chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS) is based on the presence of characteristic symptoms of pain or discomfort in the pelvic region, often accompanied by urologic symptoms or sexual dysfunction, for at least three of the preceding six months, after exclusion of other causes of these symptoms.	Generally, patients should be evaluated for a possible bacterial infection, including acute or chronic bacterial prostatitis, cystitis, urethritis, or epididymitis. A urinalysis should typically be performed in all patients, with urine culture as indicated. There are a variety of pharmacological and non-pharmacological therapies that may be tried and treatment should be individualized.	
Testicular Cancer Testicular cancer, while relatively rare, is the most common solid tumor in men between the ages of 18 and 40. It usually presents as a painless mass discovered by the patient or clinician, although rapidly growing germ cell tumors may cause scrotal pain from hemorrhage and infarction. On physical examination, testicular cancer is usually a firm, nontender nodule or mass that does not transilluminate. Some patients with germ cell tumors may have associated gynecomastia, typically associated with elevated levels of beta-hCG.	Consider: Evaluation and education of the patient.	Consider: Scrotal ultrasound is the typical diagnostic test of choice to evaluate a concerning testicular nodule or mass. Referral to Urology should be considered for patients with a suspicious or concerning ultrasound.
Urethritis **1. Male** Urethritis, or inflammation of the urethra, is a common manifestation of sexually transmitted infections among males. Dysuria, or discomfort with urination, is usually the chief complaint in males with urethritis and is reported in the majority of males with gonorrhea and over half of patients with nongonococcal urethritis (NGU).	Consider: U/A and testing for Gonorrhea and Chlamydia. Patients presenting with sexually transmitted infections or risk factors should also routinely be offered screening for syphilis and HIV infection. The initial antimicrobial treatment of urethritis is typically empiric at the point-of-care and should be offered to males with suspected or confirmed urethritis.	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Recurrent or persistent symptoms are common following therapy for urethritis. Possible causes include poor adherence to the regimen, reinfection, antimicrobial resistance (particularly in the case of N. gonorrhoeae), and involvement of other organisms inadequately treated by the empiric regimen (in particular, M. genitalium or in men who have sex with women [MSW], Trichomonas).	The preferred regimen for gonococcal infections is a single intramuscular dose of ceftriaxone (500 mg for individuals <150 kg or 1 g for individuals ≥150 kg). If testing results for C. trachomatis are not available at the time of treatment, presumptive therapy for chlamydia co-infection is also indicated. In such cases, consider adding doxycycline 100 mg twice daily for 7 days.	
Female Evaluation for urethritis is warranted in sexually active women with dysuria, particularly those with pyuria on urinalysis but no bacteriuria. Causes of urethritis in women include chlamydia, gonorrhea, trichomoniasis, Candida species, herpes simplex virus, and noninfectious irritants.	Consider: U/A, urine C&S, and testing for Gonorrhea and Chlamydia. The selection of therapy, or the decision to initiate therapy, should be individualized and based upon consideration of the extent of the condition and symptoms, potential adverse effects of the treatment, treatment availability and the response to previous treatments.	At the discretion of the clinician depending on the clinical scenario
UTI (Urinary Tract Infection) Urinary tract infections (UTIs) include cystitis (infection of the bladder/lower urinary tract) and pyelonephritis (infection of the kidney/upper urinary tract). Clinical manifestations of cystitis consist of dysuria, urinary frequency, urgency, and/or suprapubic pain.	See the breakdown below:	

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
1. Male - Uncomplicated Acute Uncomplicated UTI = Simple Cystitis in men is uncommon. The term acute simple cystitis is used to refer to an acute urinary tract infection (UTI) that is presumed to be confined to the bladder.	Consider: U/A and urine C&S. The selection of therapy should be individualized and based upon consideration of the extent of the condition and symptoms, potential adverse effects of the treatment, treatment availability and the response to previous treatments. For empiric antimicrobial treatment one of the first-line regimens recommended include: • Nitrofurantoin (Macrobid, 100 mg orally twice daily for 7 days) • Trimethoprim-sulfamethoxazole (TMP-SMX, one double-strength tablet [160 mg TMP/800 mg SMX] orally twice daily for 7 days) Follow-up urine cultures are not typically needed in men with acute simple cystitis whose symptoms resolve on antimicrobials.	At the discretion of the clinician depending on the clinical scenario
Male - Complicated Acute Complicated UTI = pyelonephritis - infections that have signs or symptoms that suggest an infection extending beyond the bladder, which include: • Fever • Other signs or symptoms of systemic illness (including chills or rigors, significant fatigue or malaise beyond baseline) • Flank pain • Costovertebral angle (CVA) tenderness.	Consider: U/A and urine C&S. The selection of therapy including the decision to send patients to the ER should be individualized. The decision is generally based upon potential urinary tract obstruction, consideration of the extent of the condition and symptoms, patient factors, treatment availability and the response to previous treatments. If empiric therapy is chosen generally broad-spectrum IV antibiotics are chosen.	At the discretion of the clinician depending on the clinical scenario
Female – Uncomplicated Acute simple cystitis should be suspected in women who have acute symptoms of dysuria, urinary	Consider: Urinalysis can be performed either by microscopy or by dipstick. Urine culture and susceptibility testing is considered optional in most women	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
frequency or urgency, and/or suprapubic pain, particularly in the absence of vaginal symptoms (e.g., vaginal pruritus or discharge). The probability of cystitis is greater than 50 percent in women with any of these symptoms and greater than 90 percent in women who have dysuria and frequency without vaginal discharge or irritation.	with acute simple cystitis, but may be performed in patients who are at risk for infection with a resistant organism. For empiric antimicrobial treatment there are numerous first-line regimens recommended including: • Nitrofurantoin (Macrobid, 100 mg orally twice daily for 5 days) • Trimethoprim-sulfamethoxazole (TMP-SMX, one double-strength tablet [160 mg TMP/800 mg SMX] orally twice daily for 3 days) • Amoxicillin-clavulanate (500 mg twice daily) for 5 days.	
Female - Complicated Acute Complicated UTI = pyelonephritis - infections that have signs or symptoms that suggest an infection extending beyond the bladder, which include: • Fever • Other signs or symptoms of systemic illness (including chills or rigors, significant fatigue or malaise beyond baseline) • Flank pain • Costovertebral angle (CVA) tenderness	Consider: U/A and urine C&S. The selection of therapy including the decision to send patients to the ER should be individualized. The decision is generally based upon potential urinary tract obstruction, consideration of the extent of the condition and symptoms, patient factors, treatment availability and the response to previous treatments. If empiric therapy is chosen generally broad-spectrum IV antibiotics are chosen.	At the discretion of the clinician depending on the clinical scenario
Pregnancy – UTIs and asymptomatic bacteriuria in the Pregnant Patient The incidence of bacteriuria in pregnant women is approximately the same as that in nonpregnant women, however, recurrent bacteriuria is more common during pregnancy.	Consider: U/A and urine C&S. The selection of therapy should be individualized and based upon consideration of the extent of the condition and symptoms, potential adverse effects of the treatment on the mother and the fetus, treatment availability and the response to previous treatments.	At the discretion of the clinician depending on the clinical scenario

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	For empiric antimicrobial treatment one of the first-line regimens recommended include: • Nitrofurantoin (Macrobid, 100 mg orally twice daily for 5- 7 days). This medication is generally avoided during the first trimester and at term if other options are available. This medication also does not achieve therapeutic levels in the kidneys so should not be used if pyelonephritis is suspected. • Amoxicillin 500 mg orally every 8 hours or 875 mg orally every 12 hours for 5-7 days • Trimethoprim-sulfamethoxazole (TMP-SMX, one double-strength tablet [160 mg TMP/800 mg SMX] orally twice daily for 3 days) – This medication is generally avoided during the first trimester and at term. Follow-up urine cultures are generally suggested in pregnant patients. The C&S is generally performed a week after completion of therapy for asymptomatic bacteriuria and a UTI.	
Varicocele A varicocele, which is present in 15 to 20 percent of post-pubertal males, is caused by dilatation of the spermatic veins. It is generally left-sided, may first appear at puberty, and may become larger over time. Varicocele is diagnosed by its characteristic physical findings, which range from minimal left-sided scrotal fullness to a large, soft, left-sided scrotal mass ("bag of worms") that decompresses and disappears in the recumbent position.	Consider: Education of the patient. Most varicoceles do not require intervention.	At the discretion of the clinician depending on the clinical scenario

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Vascular Disorders

Vascular Surgery Guidelines

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Abdominal Aortic Aneurysm (AAA) (Asymptomatic) Associated History: Risk factors for atherosclerosis include aging and hypertension. AAAs have a tendency to run in families. Associated Exam Findings: Pulsatile abdominal mass in midline of abdomen, usually just above umbilicus. May have femoral or popliteal aneurysms which show up as pulsatile masses either in the groin or behind the knees.	Consider: Patient education about the condition. The selection of therapy, or the decision to initiate therapy, should be individualized and based upon consideration of the extent of the condition and symptoms, patient's history and examination, testing completed, potential adverse effects of the treatment and the response to previous treatments. Consider: For patients with asymptomatic AAA who do not have indications for elective repair, medical treatment is aimed at reducing the risk for future cardiovascular events and limiting the rate of aortic expansion. Consider: Cardiovascular risk reduction strategies, which may include medical therapy (antiplatelet therapy, statin therapy, antihypertensive therapy), smoking cessation and aerobic exercise to reduce the risk of future cardiovascular events.	At the discretion of the clinician depending on the clinical scenario. For asymptomatic patients, the risk of AAA rupture generally exceeds the risk associated with elective AAA repair when aneurysm diameter exceeds 5.5 cm. Earlier repair may benefit patients with well-documented rapid aneurysm expansion (>5 mm in six months or 10 mm per year) on serial imaging studies performed by the same modality. Consider: The optimal surveillance schedule for patients who are not undergoing AAA repair has not been clearly defined so clinician discretion is advised, especially for AAAs with a greater expansion rate. Consider: The Society for Vascular Surgery (SVS) support longer surveillance intervals for small AAAs and suggest the following surveillance schedule: • Initial ultrasound screening aortic diameter >2.5 cm but < 3.0 cm, rescreening after 10 years. • For AAA 3.0 to 3.9 cm, imaging at 3-year intervals. • For AAA 4.0 to 4.9 cm, imaging at 12-month intervals. • For AAA 5.0 to 5.4 cm, For imaging at 6-month intervals

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Abdominal Aortic Aneurysm (AAA), (Symptomatic) Associated Symptoms: Symptomatic abdominal aortic aneurysm (AAA) refers to any of a number of symptoms (e.g., abdominal pain, limb ischemia, back/flank pain, hypotension) that can be attributed to the aneurysm. Associated History: Known abdominal aneurysm. Associated Exam Findings: Tender, pulsatile abdominal mass, and possible flank ecchymosis.	Consider: The selection of a treatment plan should be individualized and based upon consideration of the extent of the condition and symptoms, patient's known history and examination, and testing completed.	At the discretion of the clinician depending on the clinical scenario recognizing that each case is unique. Consider: In cases with hemodynamic instability or suspicious symptoms/signs, the patient is typically referred to the ER emergently. Consider: In cases where the diagnosis is unknown and the patient is hemodynamically stable, then an urgent abdominal ultrasound or AAA ultrasound or abdominal CT scan.
Carotid Bruit/Stenosis/Occlusion, (Asymptomatic) Asymptomatic refers to the presence of carotid atherosclerosis in individuals with no history of ipsilateral carotid territory ischemic stroke or transient ischemic attack (TIA) within the preceding six months. Associated History: Risk, factors for atherosclerosis, no TIA or prior stroke. Possible Exam Findings: Cervical bruit auscultated with stethoscope. Occlusion — There is no role for revascularization to prevent recurrent stroke in the setting of complete carotid chronic occlusion. Intensive medical therapy is indicated.	Consider: Patient education about the condition. The selection of therapy, or the decision to initiate therapy, should be individualized and based upon consideration of the extent of the condition and symptoms, patient's history and examination, testing completed, potential adverse effects of the treatment and the response to previous treatments. Intensive medical therapy lowers the risk of stroke in patients with asymptomatic carotid stenosis and therapy may include medical therapy (antiplatelet therapy, statin therapy, antihypertensive therapy), glycemic control, smoking cessation, weight management and aerobic exercise to reduce the risk of future cardiovascular events.	At the discretion of the clinician depending on the clinical scenario. Annual duplex ultrasonography: Most patients with asymptomatic carotid stenosis should be followed with noninvasive vascular imaging of the carotid artery, particularly if they may be candidates for revascularization. Carotid revascularization: Optimal patient selection for carotid revascularization is controversial given the periprocedural risk relative to the low absolute risk reduction associated with revascularization. Stenosis 70 to 99 percent: Per UpToDate, for medically stable patients with asymptomatic carotid atherosclerotic disease at baseline who have a life expectancy of at least five years and have a severe (70 to 99 percent) carotid artery stenosis, either intensive medical therapy alone or intensive medical therapy plus carotid revascularization may be considered. Stenosis of 80 to 99 percent: Per UpToDate, many vascular surgeons have adopted a more conservative approach and would only consider

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
		carotid revascularization for a patient with a more severe stenosis of 80 to 99 percent.
Carotid Bruit or Stenosis, (Symptomatic) Associated Symptoms: Stroke-weakness or numbness of one side of body, facial drooping, blindness in one eye, and/or slurred speech of over 24 hours duration. Transient ischemic attach (TIA) – above symptoms of less than 24 hours duration which disappear completely. Associated History: Prior stroke or TIA, risk factors for atherosclerosis. Potential Exam Findings: Cervical bruit, abnormal neurologic exam. Diagnostic studies: Carotid duplex scan and may need CT scan or MRI. Duplex scan with >70% stenosis portends a significant risk for CVA (especially when associated with TIA and ipsilateral findings for amaurosis fugax).	Consider: The selection of the treatment plan should be individualized and based upon consideration of the extent of the condition and the associated signs and symptoms, patient's history and examination, testing completed, and the response to previous treatments or interventions. Treatment of symptomatic extracranial carotid atherosclerotic disease includes intensive medical management and may or may not include carotid revascularization with carotid endarterectomy (CEA) or carotid artery stenting (CAS). Optimal medical therapy includes antithrombotic therapy, statin therapy, glycemic control and other risk factor modification including smoking cessation. It is recommended for all patients with atherosclerotic carotid artery stenosis in any location and regardless of symptoms.	At the discretion of the clinician depending on the clinical scenario. But generally, any patient with symptoms/signs consistent with acute symptomatic stenosis should generally be referred urgently or emergently for evaluation & work-up based on the individual patient's scenario.
Claudication Claudication is defined as a reproducible discomfort of a defined group of muscles that is induced by exercise and relieved with rest. The symptoms result from an imbalance between the supply and demand for blood flow due to peripheral artery disease (PAD). Symptoms: Calf, thigh, or buttock pain, on walking relieved by rest. Associated History: Risk factors for PAD are similar to those that promote the development of coronary atherosclerosis including	Consider: Patient education about the condition. The selection of therapy, or the decision to initiate therapy, should be individualized and based upon consideration of the extent of the condition and symptoms, patient's history and examination, testing completed, potential adverse effects of the treatment and the response to previous treatments. Continue to advise the patient on the importance of stopping smoking and an escalating exercise program	At the discretion of the clinician depending on the clinical scenario.

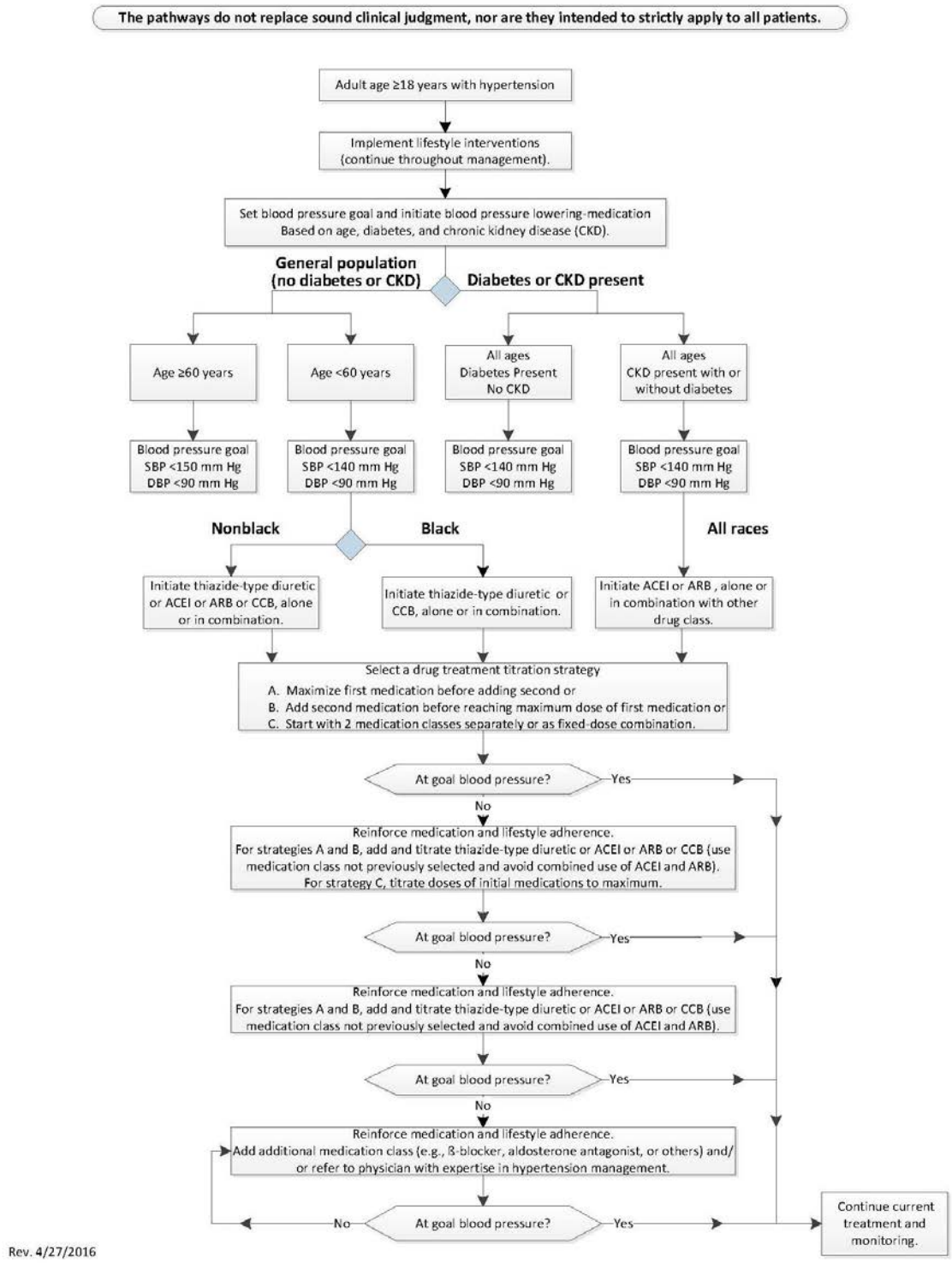
Diagnosis	Onsite Care to Consider	Offsite Care to Consider
older age, cigarette smoking, diabetes, high blood pressure, and high cholesterol. Potential Exam Findings: Diminished or absent lower extremity pulses, pallor of distal extremity on leg elevation, cool skin temperature, trophic changes (e.g., hair loss, muscle atrophy) and non-healing ulcer.	(walking: 30-60 min. per day, 5 days per week). Medications to consider: Cilostazol (Pletal) 100 mg twice daily should be taken a half hour before or two hours after eating, because high-fat meals markedly increase absorption. Cilostazol is contraindicated in heart failure of any severity. Consider: Medications for cardiovascular risk modification.	
Swollen Leg (Acute)	Consider: See Wexford's guideline, "Approach to the Patient with an Acutely Swollen Leg."	Consider: See Wexford's guideline, "Approach to the Patient with an Acutely Swollen Leg."
Swollen Leg (Chronic) Symptoms: Edema of leg(s), pain in legs while ambulatory. Associated History: Chronic swelling, prior trauma or DVT, varicose veins, prior surgery of leg. Bilateral: If both legs are involved may be systemic in nature, i.e., congestive heart failure, kidney failure, or liver failure. Unilateral: Swelling more likely to be a focal process such as DVT, infection, etc.	Consider: Patient education about the condition. The selection of therapy, or the decision to initiate therapy, should be individualized and based upon consideration of the extent of the condition and symptoms patient's history and examination, potential adverse effects of the treatment and the response to previous treatments. Consider: Leg elevation, exercise, compression stockings and weight management Consider patient education about a goal of normalizing the BMI.	At the discretion of the clinician depending on the clinical scenario.
Ulcer (PAD associated) Ischemic ulcers associated with peripheral arterial disease (PAD) often begin as minor traumatic wounds and then fail to heal because the blood supply is insufficient to meet the increased demands of the healing tissue. Symptoms: Ulceration or infected tissue, present on toe(s), usually over area or bony prominence, painful.	Consider: Patient education about the condition. The selection of therapy should be individualized and based upon consideration of the extent of the condition and symptoms, the history of the wound, patient's history and examination, testing completed, potential adverse effects of the treatment and the response to previous treatments.	At the discretion of the clinician depending on the clinical scenario.

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
Associated History: Slow onset, usually with a prior history of arterial occlusive disease, claudication, or diabetes. May present with fever. Patient feels better when leg is in dependent position. Possible exam findings: Extremity may show signs of occlusive disease (see claudication, or ischemic extremities). Ulcer typically occurs on the toes or lateral aspect of foot or ankle. May have gangrenous changes with tenderness, and cyanosis around ulcer.	Consider: Cardiovascular risk reduction strategies, which may include medical therapy (antiplatelet therapy [either aspirin or clopidogrel (Plavix) are appropriate choices], statin therapy, antihypertensive therapy), smoking cessation, diabetes control [if applicable] and exercise to reduce the risk of future cardiovascular events. Ongoing wound care including ulcer debridement: Wound debridement is an important component of the management of ulcers related to PAD and should be guided/performed by clinicians familiar with wound debridement. Off-loading of the affected area should be considered as an approach to assist with wound healing by keeping shoes or boots from potentially rubbing against the ulcer.	
Ulcer (Venous) Ulceration or infected tissue, excessive limb swelling, presence chronic (longstanding) chronic venous insufficiency in nature. Associated History: Conditions that may precede venous ulceration may include chronic venous insufficiency, varicose veins, prior trauma or DVT in leg, chronic leg swelling, or ulcers in the past that have healed. Possible Exam Findings: Edema, Pain (dull ache, burning or cramping pain), ulceration usually on medial aspect of ankle, stasis dermatitis or brawny or woody change to surrounding skin.	Consider: Patient education about the condition. The selection of therapy should be individualized and based upon consideration of the extent of the condition and symptoms, the wound's history, patient's history and examination, testing completed, potential adverse effects of the treatment and the response to previous treatments. General patient education to consider to manage symptoms of chronic venous insufficiency include avoidance of prolonged standing, leg elevation, exercise, smoking and encourage appropriate skin care. Off-loading of the affected area should be considered as an approach to assist with wound healing by keeping shoes or boots from potentially rubbing against the ulcer.	At the discretion of the clinician depending on the clinical scenario.

Diagnosis	Onsite Care to Consider	Offsite Care to Consider
	Treatment to consider: Wound care that may include, Dome paste bandage (or zinc gelatin) or Unna boot must be placed directly on skin and wrapped from toes to just under knee with Kerlix or Kling wrap placed over this. Unna boot should be changed typically every 7–10 days, and skin and ulcer washed. May take 8–12 weeks or longer to heal ulcer depending on size. If infected, often need IV Antibiotics, bed rest, dressing changes. Ulcer debridement: Wound debridement is an important component of the management of venous ulcers and should be performed by clinicians familiar with wound debridement. Compression therapy: Static compression therapy is an essential component in the treatment of chronic venous disease. Medications to consider: aspirin and Trental (pentoxifylline).	
Varicose Veins Enlarged superficial veins on lower extremities, that generally cause cosmetic problems but may be very painful especially if thrombosed. Associated History: Family history, pregnancy, trauma, or prior DVT in leg. Exam: One to multiple engorged veins on lower leg, usually medial aspect.	Consider: Patient education about the condition. Consider: Leg elevation, exercise compression stockings and weight management.	At the discretion of the clinician depending on the clinical scenario.

JNC8 Hypertension Management Algorithm

The 2014 Hypertension Guideline Management Algorithm SBP indicates systolic blood pressure; DBP, diastolic blood pressure; ACEI, angiotensin-converting enzyme; ARB, angiotensin receptor blocker; and CCB, calcium channel blocker. ACEIs and ARBs should not be used in combination. If blood pressure fails to be maintained at goal, reenter the algorithm where appropriate based on the current individual therapeutic plan.



I. REFERENCE

1. The Eighth Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure, JAMA. 2014; 311(5):507-520

High Blood Pressure Handout

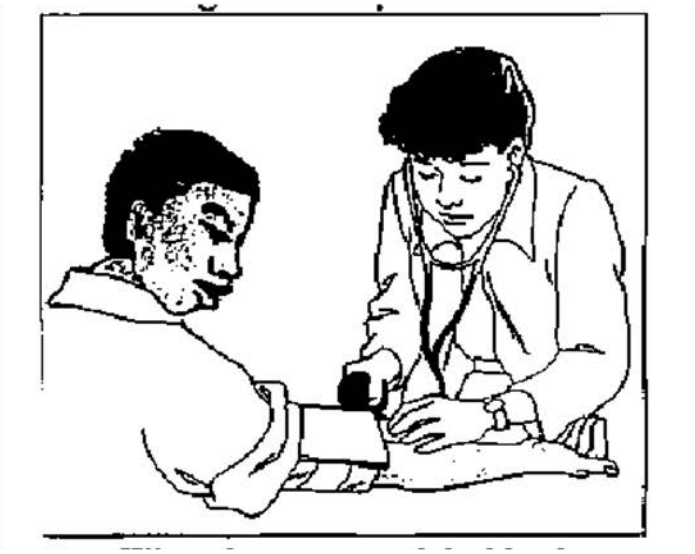
This is page 1 of the handout

Hypertension

(hi-PER-ten-shon)

or

high blood pressure



When the pressure of the blood

in the blood vessels is too high

it can cause stroke or heart attack.

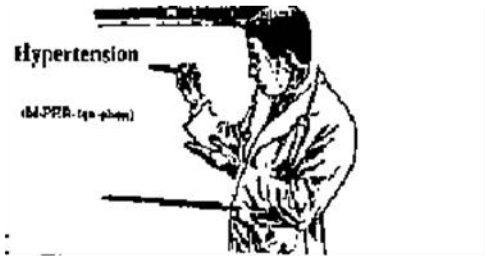
High Blood Pressure Handout

This is page 2 of the handout

What to do

1) Take your pills every day

2) Always see your doctor for a check-up



3) Rest and relax

4) Exercise

-walking

-dancing

High Blood Pressure Handout

This is page 3 of the handout

5) Do not use salt or eat salty foods

6) Drink less caffeine

Only 2 cups per day

less coffee
less tea
less colas

Or

less chocolate too!

7) Drink less alcohol

Only 2 shots or 2 beers per day

8) Stop or cut down smoking

9) Watch your weight

High Blood Pressure Handout

This is page 4 of the handout

Call or go see your doctor if you have:

Severe headache

Blurring of vision

Dizziness or fainting

Weakness in arms or legs

Trouble speaking

Chest pain

Steady cough

Pounding heart

Fast heart beat

Shortness of breath

Nose bleeds

#_____

Medications

_____

_____

_____

Vascular Surgery Guidelines

Table 1: Classification of Blood Pressure for Adults

JNC 6 Parameters		JNC 7 Parameters	JNC 8 Parameters
SBP/DBP			
Optimal	<120/80	→ Normal	Normal
Normal Borderline	120–129/80–84 130–139/85–89	} Prehypertension	Normal
Hypertension	≥140/90	→ Hypertension	Hypertension if patient has diabetes, renal failure, or has no diabetes with age less than 60 years. If patient has no diabetes and is 60 years or older, the goal is <150/90
Stage 1 Stage 2 Stage 3	140–159/90–99 160–179/100–109 ≥180/100	→ Stage 1 } Stage 2	Staging system has been abandoned in the newest guidelines.

II. REFERENCES

1. The Sixth Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. Arch Intern Med 1997;157:2413-46.
2. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. Arch Intern Med 2003;289:2560-71.
3. The Eighth Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure, JAMA. 2014;311(5):507-520

Table 2: Causes for Lack of Responsiveness to Therapy

Causes for Lack of Responsiveness to Therapy

Nonadherence to Therapy

- Cost of medication
- Instructions not clear and/or not given to the patient in writing
- Inadequate or no patient education
- Lack of involvement of the patient in the treatment plan
- Side effects of medication
- Organic brain syndrome (e.g., memory deficit)
- Inconvenient dosing

Drug-Related Causes

- Doses too low
- Inappropriate combinations (e.g., two centrally acting adrenergic inhibitors)
- Rapid inactivation (e.g., hydralazine)
- Drug interactions:
  - **Nonsteroidal anti-inflammatory drugs**
  - Oral contraceptives
  - Sympathomimetics
  - Antidepressants
  - Adrenal steroids
  - Nasal decongestants
  - Licorice-containing substances (e.g., chewing tobacco)
  - Cocaine
  - Cyclosporine
  - Erythropoietin

Associated Conditions

- Increasing obesity
- Alcohol intake more than 1 oz of ethanol per day
- Smoking
- Sleep apnea
- Insulin resistance or hypersinsulinemia
- Anxiety-induced hyperventilation or panic attacks
- Chronic pain
- Intensive vasoconstriction (arteritis)
- Organic brain syndrome

Secondary Hypertension

- Renal insufficiency
- Renovascular hypertension
- Pheochromocytoma
- Hyperparathyroidism
- Aortic coarctation
- Cushing syndrome

Pseudoresistance

- “White-coat hypertension” or office elevations
- Pseudohypertension in older patients
- Use of regular cuff on a very obese arm

Volume Overload

- Inadequate diuretic therapy
- Excess sodium intake
- Fluid retention from reduction of blood pressure
- Progressive renal damage

JNC 8 GUIDELINES FOR THE MANAGEMENT OF HYPERTENSION IN ADULTS

In any adult 18 years of age or older diagnosed with hypertension, the first strategy is to implement lifestyle modification and set blood pressure goal, followed by initiation of blood pressure lowering medications based on the following algorithm.

In the general population, pharmacologic treatment is recommended to be initiated when blood pressure is 150/90 mm Hg or higher in adults 60 years and older, or 140/90 mm Hg or higher in adults younger than 60 years.

In patients with hypertension and diabetes, pharmacologic treatment may be initiated when blood pressure is 140/90 mm Hg or higher, regardless of age.

Initial antihypertensive treatment in a general non-black population should include either:

1. Thiazide diuretic (e.g., HCTZ or Dyazide)
2. Calcium channel blocker - CCB (e.g., amlodipine, diltiazem)
3. ACE inhibitor (e.g., lisinopril), or
4. ARB (e.g., losartan)

If the target blood pressure is not reached within one month after initiating therapy, consider increasing the dosage of the initial medication or adding a second medication.

III. DRUGS IN SPECIAL POPULATIONS

When initiating therapy in patients of African descent the without chronic kidney disease the guidelines suggest using CCBs and thiazides instead of ACEIs.

Per guidelines, CCBs and thiazide-type diuretics are recommended to be used instead of ACEIs and ARBs in patients over the age of 75 with impaired kidney function due to the risk of hyperkalemia, increased creatinine, and further renal impairment

IV. DRUG NO LONGER RECOMMENDED AS PRIMARY CHOICES PER GUIDELINES

The following agents demonstrated inferior cardiovascular outcomes when compared with the four (4) main recommended classes of drugs:

1. Beta-blockers (e.g. atenolol, metoprolol)
2. Alpha-blockers (e.g. terazosin)
3. $Alpha_1$/beta-blockers (eg, carvedilol)
4. Central $alpha_2$-adrenergic agonists (e.g. clonidine)
5. Direct vasodilators (e.g. hydralazine)
6. Loop diuretics (e.g. furosemide)
7. Aldosterone antagonists (e.g., spironolactone)

Drug Treatment Considerations for Hypertension[2]	
Patient Characteristics	Preferred Drugs
Demographic Characteristics	
African-American	Thiazide diuretic, calcium channel blocker
Concomitant Diseases	
Post-myocardial infarction	Beta-blocker; ACE inhibitor, ARB
Congestive heart failure	Diuretic; +Beta-blocker +ACE inhibitor/ARB,+ spironolactone
High CVD risk	Thiazide diuretic; Beta-blocker; ACE inhibitor, CCB
Renal insufficiency	ACE inhibitor/ARB
Diabetes mellitus	Thiazide diuretic; ACE inhibitor/ARB, CCB
Recurrent stroke prevention	Thiazide diuretic; ACE inhibitor

V. REFERENCES

4. The Sixth Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. Arch Intern Med 1997;157:2413-46.
5. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. Arch Intern Med 2003;289:2560-71.
6. The Eighth Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure, JAMA. 2014;311(5):507-520

Table 3: Risk Stratification Factors

Target Organ Disease

- Heart diseases
  - LVH
  - Angina/Prior MI
  - Prior coronary artery bypass graft
  - Heart failure
- Stroke or transient ischemic attach
- Nephropathy
- Peripheral arterial disease
- Hypertensive retinopathy

Major Risk Factors

- Smoking
- Dyslipidemia
- Diabetes mellitus
- Gender
  - Men
  - Postmenopausal women
- Family history
  - Women <age 65 years
  - Men <age 55 years

Medications on the Wexford Health Corporate Formulary Used to Treat Hypertension

	24 HR INITIAL DOSE	24 HR MAX DOSE	SIDE EFFECTS*
ACE Inhibitors			
Enalapril (Vasotec®)	2.5 mg	40 mg	Headache, fatigue, syncope, diarrhea, nausea, abdominal pain, dry cough
Lisinopril (Zestril®)	10 mg	40 mg	Dizziness, headache, hypotension, syncope
Angiotensin II Blockers			
Losartan (Cozaar)	50 mg	100 mg	Dizziness, headache, abdominal pain, diarrhea, nausea, cough, sinusitis, edema
Alpha Adrenergic Blockers			
Terazosin (Hytrin®)	1 mg	20 mg	Asthenia, dizziness, headache, peripheral edema, syncope, blurred vision, nasal congestion, nausea, dyspnea
Alpha Adrenergic Agonist			
Clonidine (Catapres®)	0.1 mg	2.4 mg	Fatigue, sedation, malaise, depression, orthostatic hypertension, nausea, diarrhea, urine retention, rash
Beta Andrenergic Blockers			
Atenolol (Tenormin®)	50 mg	100 mg	Fatigue, lethargy, dizziness, bradycardia, nausea, diarrhea, dyspnea, bronchospasm
Metoprolol (Lopressor®)	100 mg	450 mg	Fatigue, dizziness, depression, bradycardia, nausea, diarrhea, dyspnea, bronchospasm, rash
Calcium Channel Blockers			
Amlodipine (Norvasc)	5 mg	10 mg	Peripheral edema, headache, fatigue, occasional palpitations
Verapamil SR (Calan SR®)	240 mg	480 mg	Asthenia, dizziness, headache, bradycardia, AV block, peripheral edema, constipation, nausea, elevated liver enzymes
Diltiazem XR (Dilacor XR®)	120 mg	540 mg	Headache, somnolence, irritability, hypertension, photophobia, nausea, diarrhea, dysgeusia, anorexia, nocturia
Diuretics			
Furosemide	20 mg	160 mg	Vertigo, headache, paresthesia, blurred vision, nausea, diarrhea, anorexia, dermatitis, anemia
Spironolactone	25 mg	200 mg	Headache, drowsiness, confusion, ataxia, diarrhea, gastritis, urticaria, breast tenderness
Hydrochlorothiazide	6.25 mg	25 mg	Dizziness, headache, paresthesia, anorexia, nausea, diarrhea, abdominal pain, dermatitis, hyperuricemia

** Not all side effects listed are seen with different dosage forms. The listed side effects occur with a greater than 3% incidence.*

Wexford Health
SOURCES INCORPORATED

Warfarin Management

Warfarin Management

VI. PURPOSE

All patients receiving Warfarin therapy will be managed safely, effectively, and methodically. Patients for whom Warfarin is prescribed should be followed either in Cardiovascular Chronic Clinic or General Medical Chronic Clinic. They do not need a separate "Anticoagulation Chronic Clinic." As discussed in these materials under 'Principles of Warfarin Administration,' once a patient's anticoagulation has been deemed stable, the INR value should be monitored every 2–4 weeks. Documentation of INR for patients on Warfarin therapy will be entered on the included 'Warfarin Facility Tracking Log' and 'Warfarin patient Flow sheet.' These forms will be reviewed during either the Cardiovascular Chronic Clinic or General Medical Chronic Clinic.

VII. GOALS

A. To effectively track all patients on Warfarin within each correctional facility utilizing the Wexford Health Warfarin Facility Tracking Log

B. To effectively manage each patient on Warfarin utilizing the Wexford Health Warfarin Patient Flow Sheet

C. To provide educational material to each patient utilizing the Wexford Health Warfarin Patient Information Fact Sheet

D. To provide educational materials to site clinicians by way of the Wexford Health Warfarin Drug Monograph

E. To convert to Jantoven as the Wexford Health formulary choice as a Warfarin product

VIII. PROCESS

Each Regional Medical Director will be expected to implement, track, and monitor compliance with these components.

IX. PROCEDURE

A. All patients identified on Warfarin within the facility are entered onto the Warfarin Facility Tracking Log.

B. Each patient will have an individual flow sheet placed in the medical record. It is recommended that the flow sheet be placed immediately behind the Master Problem List.

C. Patients identified at intake on Warfarin should be scheduled to see a physician or physician extender within 3–5 days. An INR should be drawn within the first 24 hours of intake.

D. Review of the initial INR, initiation of the flow sheet, and documentation on the Master Problem List should be completed at this encounter.

E. The Patient Information Fact Sheet should be reviewed with the patient at this encounter.

F. The site medical authority will develop a system with the responsible nurse or pharmacy technician to effectively populate, track, and manage the Warfarin Tracking Log.

G. The Warfarin Drug Monograph should be placed in the Wexford Health Pharmacy Guidelines manual as appropriate and be readily available for all clinical staff.

X. ASSOCIATED FORMS AND RESOURCES

Warfarin Facility Tracking Log
Warfarin Patient Flow Sheet
Warfarin Patient Information Fact Sheet
Warfarin Drug Monograph.

Warfarin Drug Monograph

XI. INTRODUCTION

Warfarin is an extremely "high risk" medication. It has a narrow therapeutic index, which is compounded by significant side effects associated with both underdosing and overdosing. Patient compliance is therefore a critical issue with Warfarin administration. Warfarin is rarely a Keep On Person Medication (KOP). All Warfarin administration should be Directly Observed Therapy (DOT). Medication refusal should be reported to the responsible physician or designee upon a patient missing even a single dose. A patient who misses a dose due to a court appearance (or other reason that renders them unavailable) should be sought out and given their medication.

Warfarin is the generic name for two commercial products Coumadin® and Jantoven®® is on the approved Wexford Health formulary. Jantoven® is available in all the same strengths as Coumadin® 1, 2, 2.5, 3, 4, 5, 6, 7.5, and 10mg tablets. The tablets have the same color coding as Coumadin® and the tablets are scored for splitting and dosage titration.

XII. WARFARIN MONITORING

Warfarin is monitored using a calculated value called the International Normalized Ratio (INR). The INR formula is the patient's PT in seconds divided by the reference lab's mean PT in normal range.

The target INR for most patients should be between 2.0–3.0. The target INR range for patients with: mechanical heart valves, antiphospholipid syndrome, or to prevent a recurrent Ml in an aspirin intolerant patient should be between 2.5–3.5.

A patient's lNRs may fluctuate for no easily apparent reason. Practitioners should be aware of the potential drug and food interactions, as well as compliance issues, which may cause this to occur.

XIII. PRINCIPLES OF WARFARIN ADMINISTRATION

A. A loading dose of Warfarin is not clinically indicated.

B. The typical starting dose is 5 mg p.o. q.d. (expect a therapeutic INR by day 4–5).

C. Higher doses of 7.5–10 mg q.d. may be given if there is a particular urgency to reach a therapeutic level.

D. Low doses of 2.5 mg q.d. should be used as a starting point in the elderly, those with liver disease or for those with a high risk of bleeding.

E. Concurrent initial administration of Heparin or Low Molecular Weight Heparin is indicated in thrombophilic states (Protein C deficiency) and thromboembolism.

F. Warfarin has an initial paradoxical procoagulant effect; therefore Heparin and LMWH require at least a four- to five-day overlap with Warfarin to achieve a therapeutic intensity of anticoagulation.

G. Warfarin may be started alone for chronic stable atrial fibrillation.

H. INR should be monitored every 2–4 weeks when stable.

XIV. GUIDELINE FOR ADJUSTING WARFARIN DOSAGES

I. INR less than 2: increase weekly Warfarin dose by 5–20%

J. INR 3–3.5: decrease weekly Warfarin dose by 5–15%.

K. INR 3.6–5. 0: consider withholding one dose, and decrease weekly dose by 10–15%

L. INR 5–10: withhold 1–2 doses, decrease weekly dose by 10–20%

Example: Patient with an INR of 3.5 who is currently taking Warfarin 5 mg/day p.o..
Reduce weekly dose 10% (35.0 mg–3.5 mg = 31.5mg)
New weekly dose 31.5mg/week divided by 7 = 4.5 mg/day

Solution: Pt. takes a 2.5mg tab plus a 2.0mg tab each day
OR
4mg tab day alternate with a 5 mg tab day 2
(Continue alternating thereafter)

M. INR >10: hold Warfarin, Vitamin K 3–5 mg p.o. one dose, anticipate significantly lower INR in 24–48 hours

In cases of significant bleeding, patients will need to receive Vitamin K by slow infusion and Fresh Frozen Plasma (FFP) in an inpatient setting.

XV. WARFARIN GUIDELINES FOR PATIENTS WITH CHRONIC ATRIAL FIBRILLATION

A. Presence of valvular heart disease

B. Presence of one or more major risk factor(s):

C. Prior TIA or CVA

D. HTN

E. CHF and/or LV dysfunction

F. Age >75

G. Presence of 2 minor risk factors

1. DM
2. CAD

H. Aspirin alone may be used when patients have one minor risk factor, are greater than 60 years of age, and/or have structural heart disease. No treatment is indicated when patients are less than 60 years of age with no structural heart disease.

XVI. WARFARIN GUIDELINES FOR DVT OR PE

Risk Group	Duration
First event, reversible risk,* age <60 years	3–6 months
First event, reversible risk,* age >60 years	3–6 months
Or first event with idiopathic cause	
Recurrent event of first event with nonreversible risk factor**	12 months – lifetime

* Surgery, trauma, transient immobility
** Cancer, inhibitor deficiency, antiphospholipid syndrome or factor V Leiden
Ref: AMJ Respiratory Critical Care Medicine 1999; 159: 1–14

XVII. PERIOPERATIVE MANAGEMENT OF A PATIENT ON WARFARIN

A. **Orthopedic and gynecologic surgeries:** Orthopedic and gynecologic surgeries have a low risk of bleeding and lowering the Warfarin dose to achieve an INR of 1.3–1.5 before surgery is appropriate, restarting at the regular dose post-operatively.

B. **Dental procedures:** Warfarin typically does not cause serious bleeding during routine cleaning or drilling of teeth when the INR is in the therapeutic range. A root canal procedure or an extraction of a tooth involves deeper tissues supplied by blood vessels. For root canal or extractions the dentist should be aware the patient is taking Warfarin. The dentist and cardiologist (or surgeon) should evaluate whether it is advisable to temporarily stop Warfarin prior to dental procedures. Patients may be able to safely stop Warfarin for short periods of time. (Example: Patients taking chronic Warfarin for prevention of venous thrombosis or stroke probably have little risk in stopping for a few days). Many heart valve patients can stop Warfarin for a few days, under supervision of a treating cardiologist or surgeon. Some patients will require an alternative anticoagulant regimen during the time that Warfarin is withheld.

Increased Bleeding Tendency		
Inhibit Platelet Aggregation	**Inhibit Procoagulant Factors**	**Ulcerogenic Drugs**
Cephalosporins	Antimetabolites	Adrenal
Iopidogrel	Quinidine	Corticosteroids
Dipyridamote	Quinine	Indomethacin
Indomethacin	Saticylates	Potassium products
Penicillin, parenteral		Salicylates
Salicylates		
Sulflinpyrazone		
Ticlopidine		
Use of these agents withoral anticoagutants may increase the chances of hemorrhage		

Decreased Anticoagulant Effects				
Induction of Enzymes		**Increased Procoagulant Factors**	**Decreased Drug Absorption**	**Other**
Antithyroid drugs	Nafcillin	Estrogens	Aluminum hydroxide	Ethchlorvynol
Barbiturates	Phenytoin	Oral contraceptives .	Cholestyramin[1]	Griseofulvin
Carbamazepine	Rifampin	Vitamin K (including nutritional supplements)	Colcstipol[1]	SpironoInctone[2]
Clutethimide				Sucralfate
Griscofulvin				
Decreased anticoagulant effect may occur when these drugs are administered with oral anticoagulants.				
[1]Cholestyramine and colestipol may increase the anticoagulant effect by binding vitamin K in the gut; yet, the decreased drug absorption appears to be of more concern.				
[2]Diuretic-induced hemoconcentration with subsequent concentration of clotting factors has been reported to decrease the effects of oral andcoagulants.				

C. d.

INR Ranges Based Upon Indication		
Indication	**Targeted INR Range**	**Targeted INR**
Acute myocardial infarction with risk factor[1]	2.0 - 3.0	2.5
Recurrent myocardial infarction	2.5 - 3.5	3.0
Atrial fibrillation (moderate- to high-risk patients)	2.0 - 3.0	2.5
Valvular heart disease	2.0 - 3.0	2.5
Tissue heart valves	2.0 - 3.0	2.5
Prevention of venous thromboembolism (High risk surgery)	2.0 - 3.0	2.5
Treatment of venous thrombosis	2.0 - 3.0	2.5
Treatment of pulmonary embolism	2.0 - 3.0	2.5
Bileaflet mechanical heart valve	2.0 - 3.0	2.5
Mechanical heart valve (caged ball, caged disk)	2.5 - 3.5	3.0
[1]Up to 3 months of therapy following heparin or LMWH in patients with anterior Q-wave infarction, severe left ventricular dysfunction, mural thrombus on 2D echo, atrial fibrillation., history of systemic or pulmonary embolism, congestive heart failure.		
For complete discussion, *Chest,* 2001, 119 (Suppl): 1S-370S		

Contraindications
Hemorrhagic tendencies
Blood dyscrasias
Pregnancy
Hypersensitivity to warfarin
Recent or potential surgery of CNS or eye
Cerebrovascular hemorrhage
Aneurysms
Pericarditis and perieardial effusion
Bacterial endocarditis
Malignant hypertension
Traumatic surgery resulting in large open surfoce
Bleeding tendencies of GI, GU, Resp tract

Wexford Health SOURCES INCORPORATED

Warfarin Facility Tracking Log

Patient Name Last First MI	DOC #	Warfarin Therapy On MPL (Y or N)	Warfarin Flow sheet On Chart (Y or N)	Indication For Warfarin (Use Numbers from Legend Below)	Goal INR (Write In Goal)	Anticipated Stop Date (or N/A)
						___/___/___
						___/___/___
						___/___/___
						___/___/___
						___/___/___
						___/___/___
						___/___/___
						___/___/___
						___/___/___
						___/___/___

Instruction: The date is the date the blood was drawn. It is recommended that INRs be drawn routinely on Tuesdays for weekly or monthly monitoring. Medication adherence and results of INRs should be reviewed on Thursdays. INRs should be monitored at least weekly until stable and every 2–4 weeks when stable. (More frequent monitoring may be necessary if following up a significant sub or supra therapeutic result.) Please refer to the Wexford Warfarin Drug Monograph for additional information.

Indication and INR Range:

1. Acute myocardial infarction with risk 2.0–3.0
2. Recurrent myocardial infarction 2.5–3.5
3. Atrial fibrillation (moderate to high-risk patients) 2.0–3.0
4. Valvular heart disease 2.0–3.0
5. Tissue heart valves 2.0–3.0
6. Prevention of venous thromboembolism (high-risk surgery) 2.0–3.0
7. Treatment of venous thrombosis 2.0–3.0
8. Bileaflet mechanical heart valve 2.0–3.0
9. Mechanical heart valve (caged ball, caged disk) 2.5–3.5
10. Other

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Warfarin Patient Flowsheet

Name _____ DOC #: _____ DOB/Age: _____/_____

Clinical Indication: _____ INR Therapeutic Range#: _____

☐ Warfarin fact sheet reviewed with patient ☐ Master Problem List Populated

Date	Current Dose	INR	Complications	Dose Change	Next INR Date	Provider's Initials

Guideline for Adjusting Warfarin Dosages:

- INR less than 2–increase weekly Warfarin dose by 5–20%
- INR 3 to 3.5–decrease weekly Warfarin dose by 5–15%
- INR 3.6 to 5.0–consider withholding one dose, and decrease weekly dose by 10–15%
- INR 5 to 10–withhold 1–2 doses, decrease weekly does by 10–20%.
- INR >10–hold Warfarin, Vitamin K 3–5 mg po one dose, anticipate significantly lower INR in 24–48 hours

Example: Patient with an INR of 3.5 who is currently taking Warfarin 5 mg.day po.
Reduce weekly dose 10% (35.0 mg – 3.5 mg = 31.5 mg)
New weekly dose = 31.5 mg/week divided by 7 = 4.5 mg/day
Solution: Pt. takes a 2.5 mg tab plus a 2.0 mg tab each day
OR
4 mg tab day 1 to alternate with a 5 mg tab day 2
(Continue alternation thereafter)

In cases of significant bleeding patients will need to receive Vitamin K by slow infusion and Fresh Frozen Plasma (FFP) in an Inpatient setting.

Indication and INR Range Acute myocardial infarction with risk 2.0–3.0

- Recurrent myocardial infarction 2.5–3.5
- Atrial fibrillation (moderate to high-risk patients) 2.0–3.0
- Valvular heart disease 2.0–3.0
- Tissue heart valves 2.0–3.0
- Prevention of venous thromboembolism (high-risk surgery) 2.0–3.0
- Treatment of venous thrombosis 2.0–3.0
- Bileaflet mechanical heart valve 2.0–3.0
- Mechanical heart valve (caged ball, caged disk) 2.5–3.5
- Other*

*Warfarin is the generic name for two commercial products Warfarin and Jantoven. Jantoven is on the approved Wexford formulary

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Warfarin Patient Education

WARFARIN

Why Am I Taking Warfarin?

"**Good clots**" help prevent blood loss when you are injured. Some people with diseases of the heart or blood vessels can develop "**harmful clots**" that can form inside blood vessels blocking normal blood flow in the body.

- Warfarin is known as a blood thinner or anticoagulant.
- Warfarin is prescribed to prevent blood clots. Over 2 million people in the U.S are on blood thinners.
- Taking Warfarin may lower your chances of a heart attack or stroke.
- You are taking Warfarin for the following medical problem(s):

_____

_____

- The blood test that will monitor the amount of Warfarin you will need to take is called the INR.
- Your INR blood test range should be between _____ and _____
- Getting the right dose can be a very tricky process. Too little Warfarin will allow your blood to clot.
- Too much Warfarin can lead to serious bleeding. That is why it requires frequent blood tests especially in the early phase of treatment.

What Should I Do?

Take action NOW. "Self management" is a key to good health. You can live longer for your family, improve your health and reduce your risk of illness.

- Take your medicine the way you and your doctor have agreed to.
- Never skip a pill and never double up on pills if you have missed a dose.
- Do get your blood tested when you are supposed to.
- Stay away from rough sports or other situations where you could be bruised, cut or injured.
- Always wear shoes to protect your feet.
- Be careful when using sharp objects, including razors and fingernail clippers.
- Let any caregiver know that you are taking Warfarin, especially the dentist.
- Don't take pills from the commissary without letting the doctor know first, especially Aspirin, Tylenol, and Motrin. This can alter the effects of your Warfarin in an unfavorable way
- Continue to eat the same amounts of green colored foods that are rich in Vitamin K. Avoid big changes in how much you regularly eat. This does not mean that you must stop eating healthy vegetables, but do not suddenly change your usual amount.
- Foods that are High in Vitamin K include:
  - Peas, Spinach, Kale, Collard Greens, Broccoli, Cabbage, Brussels Sprouts, Lettuce, Cauliflower and Garbanzo Beans (chick peas)

Put In A Sick Call Slip If:

You begin to have the following symptoms:

- Red, dark or brown urine
- Black or bloody stools
- Throwing up or vomiting blood or "coffee ground" like material
- Excessive bleeding from any cuts
- Unexpected bruising or black and blue marks on your skin for unknown reasons
- For females: excessive menstrual bleeding
- Nosebleeds
- Bleeding from gums when brushing your teeth
- Unusual pain or swelling

EMERGENCY!

Tell a correctional officer or deputy to call medical if:

- You develop sudden weakness, become sweaty, dizziness or have unusual pain/swelling of your stomach.
- If you have bleeding that doesn't stop after 10-15 minutes.
- If you have sudden changes in your vision.
- If you were not available for Medication pass and missed taking your Warfarin pill

Non-Vitamin K Oral Anticoagulant (NOAC) Guidelines for Utilization

I. BACKGROUND

Non-vitamin K oral anticoagulants (NOAC) are alternatives for antithrombotic therapy for nonvalvular atrial fibrillation, venous thromboembolism (VTE) disease, and venous thromboembolism prophylaxis. Current NOACs available on the market include rivaroxaban (Xarelto), apixaban (Eliquis), dabigatran (Pradaxa) which are approved for use in nonvalvular atrial fibrillation to prevent stroke and systemic embolism, treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE), and prevention of recurrence of DVT and PE. Additionally, rivaroxaban and apixaban are approved for postoperative DVT prophylaxis in hip and knee replacement surgery, while dabigatran is approved for DVT prophylaxis in hip replacement surgery. Edoxaban (Savaysa) is another NOAC which is only approved for prevention of stroke and systemic embolism in nonvalvular atrial fibrillation and treatment of DVT and PE follow 5 to 10 days of initial treatment with a parenteral anticoagulant.

While NOACs are approved for the indications above, warfarin (Coumadin) provides a clinically effective and more cost effective option for anticoagulation. Warfarin is appropriate for use in nonvalvular and valvular atrial fibrillation to prevent stroke or embolism as well as treatment and prevention of DVT and/or PE. Warfarin is also effective at providing anticoagulation in other indications which include mechanical heart valve replacement, antiphospholipid syndrome and thromboprophylaxis following hip or knee replacement surgery or hip fracture surgery. Appropriate monitoring of the international normalized ratio (INR) is recommended and the INR range is individualized to the indication for warfarin use. Warfarin is the preferred anticoagulant on formulary and is considered the first line anticoagulant agent unless there is appropriate clinical rationale as to why its use is contraindicated.

II. RECOMMENDED THERAPEUTIC RANGE FOR WARFARIN BASED ON INDICATION

Indication	Target INR Range
Atrial Fibrillation	2.0-3.0
Anterior MI	2.0-3.0
Cardioembolic Stroke	2.0-3.0
Hypercoagulable State	2.0-3.0
Left Ventricular Dysfunction with previous thromboembolism or LV thrombus	2.0-3.0
Thromboembolism (DVT,PE)	2.0-3.0
Thromboembolism prevention	2.0-3.0
Valvular Atrial Fibrillation	2.0-3.0
Valve Replacement: Bioprosthetic • Atrial • Mitral	 2.0-3.0 2.0-3.0
Aortic Valve Replacement: Mechanical • Bileaflet, St. Jude • Bileaflet or current generation tilting disk • Older generation valves: Ball & cage, Caged disk	 2.0-3.0 2.0-3.0 2.5-3.5
Mitral Valve Replacement: Mechanical	2.5-3.5

Because warfarin is the preferred anticoagulant on formulary, use of a NOAC beyond 30 days of therapy within the correctional facility will need to be accompanied by rationale as to why the NOAC is preferred. Warfarin therapy is NOT considered to be a failure due to noncompliance with the medication, unwillingness/inability to have PT/INR monitored or dietary changes in vitamin K

intake. Medication adherence as well as appropriate monitoring should be achievable in a correctional facility. Inability to achieve a therapeutic INR in a patient on warfarin should be closely examined to determine if other factors such as diet or concomitant medications are impacting warfarin dosing. Any requests due to warfarin failure will need appropriate documentation as to why the patient failed warfarin therapy.

III. ALGORITHM FOR NOAC TRANSITION TO WARFARIN

- Assessment of order for NOAC (rivaroxaban, apixaban, dabigatran, edoxaban) should include the following
  - Drug requested
  - Dose requested
  - Indication for use
  - Appropriateness of therapy
    - Is the dose requested appropriate for the indication for use?

- Indication for use will determine how to approach therapy:
  - Nonvalvular Atrial fibrillation
    - If the nonvalvular atrial fibrillation is new onset, then patient should be started on warfarin therapy. Low molecular weight heparin (LMWH) should be used as bridging therapy and should be continued for a minimum of 5 days AND until the INR is therapeutic for at least 24 hours.
      - Enoxaparin (Lovenox) is a LMWH that can be used for bridging therapy
        - Dosing:
          - Creatinine Clearance (CrCl) ≥ 30 ml/min: 1 mg/kg/dose SQ every 12 hours OR 1.5 mg/kg/dose once daily
          - Creatinine Clearance (CrCl) < 30 ml/min: 1 mg/kg/dose SQ once daily
    - Patient's current length of stay in the correctional facility is less than 30 days, the ordered NOAC should be continued.
    - Patient's current length of stay in the correctional facility is greater than 30 days, then the patient should be converted to warfarin UNLESS THERE IS A DOCUMENTED WARFARIN FAILURE IN THE PAST.
      - The documented reason why the patient failed warfarin in the past should be clearly documented on the non-formulary request form.

  - New onset Venous Thromboembolism (VTE)
    - New onset VTE should be treated with warfarin therapy. LMWH should be used as bridging therapy and should be continued for a minimum of 5 days AND until the INR is therapeutic for at least 24 hours.

  - Current therapy for VTE on NOAC
    - Patient's length of stay is anticipated to be less than 30 days OR if the patient has a DOCUMENTED WARFARIN FAILURE IN THE PAST, the NOAC should be continued.
    - Patient does not meet the above criteria; the length of therapy the patient has received prior to being incarcerated should be assessed.
    - *Less than 6 months* of therapy with NOAC
      - The patient should be transitioned to warfarin therapy
    - *Greater than 6 months of therapy with NOAC*
      - Assess indication for use

- Patient has recurrent unprovoked or provoked VTE in the past; patient should be switched to warfarin therapy.
- Patient has history of single episode of VTE
  - Review length of therapy:
    - Does patient need to continue anticoagulation therapy?
    - Does patient have any risk factors for bleeding?
      - History of GI bleed?
      - Intravenous drug/ETOH abuse?
      - Fall risk?
      - Comorbidities?
      - Concomitant medications?
    - Does patient have risk factors for recurrent VTE?
    - Above questions should be assessed for each case
    - If provider makes assessment that anticoagulation should continue, the patient should be transitioned to warfarin.

IV. CONVERSION OF NOAC TO WARFARIN

- Switching from Xarelto (rivaroxaban) or Eliquis (apixaban) to warfarin
  - No clinical trial data are available to guide converting patients from Xarelto or Eliquis to warfarin.
  - INR measurements are affected by both Xarelto and Eliquis, so INR measurements made during coadministration with warfarin may not be useful for determining the appropriate dose of warfarin.
  - One approach is to discontinue Xarelto or Eliquis and begin both a parenteral anticoagulant (LMWH) and warfarin at the time the next dose of Xarelto or Eliquis would have been taken.
  - Parenteral anticoagulation should be discontinued once the INR is within the therapeutic range.

- Switching from Pradaxa (dabigatran) to warfarin
  - When converting from Pradaxa to warfarin, adjust the starting time of warfarin based on creatinine clearance as follows:
    - For CrCl ≥50 mL/min, start warfarin 3 days before discontinuing PRADAXA.
    - For CrCl 30-50 mL/min, start warfarin 2 days before discontinuing PRADAXA.
    - For CrCl 15-30 mL/min, start warfarin 1 day before discontinuing PRADAXA.
    - For CrCl <15 mL/min, no recommendations can be made.
  - Because Pradaxa can increase INR, the INR will better reflect warfarin's effect only after Pradaxa has been stopped for at least 2 days.

- Switching from Savaysa (edoxaban) to warfarin
  - Oral option: For patients taking 60 mg of Savaysa, reduce the dose to 30 mg andbegin warfarin concomitantly. For patients receiving 30 mg of Savaysa, reduce the dose of Savaysa to 15 mg and begin warfarin concomitantly. INR must be measured at least weekly and just prior to the daily dose of Savaysa to minimize the influence of Savaysa on INR measurements. Once a stable INR≥ 2.0 is achieved, Savaysa should be discontinued and the warfarin continued.
  - Parenteral option: Discontinue Savaysa and administer a parenteral anticoagulant and warfarin at the time of the next scheduled Savaysa dose. Once a stable INR ≥ 2.0 is

achieved, the parenteral anticoagulant should be discontinued and the warfarin continued.

V. ATTACHMENT

Algorithm for Non-vitamin K Oral Anticoagulant Use

VI. REFERENCES

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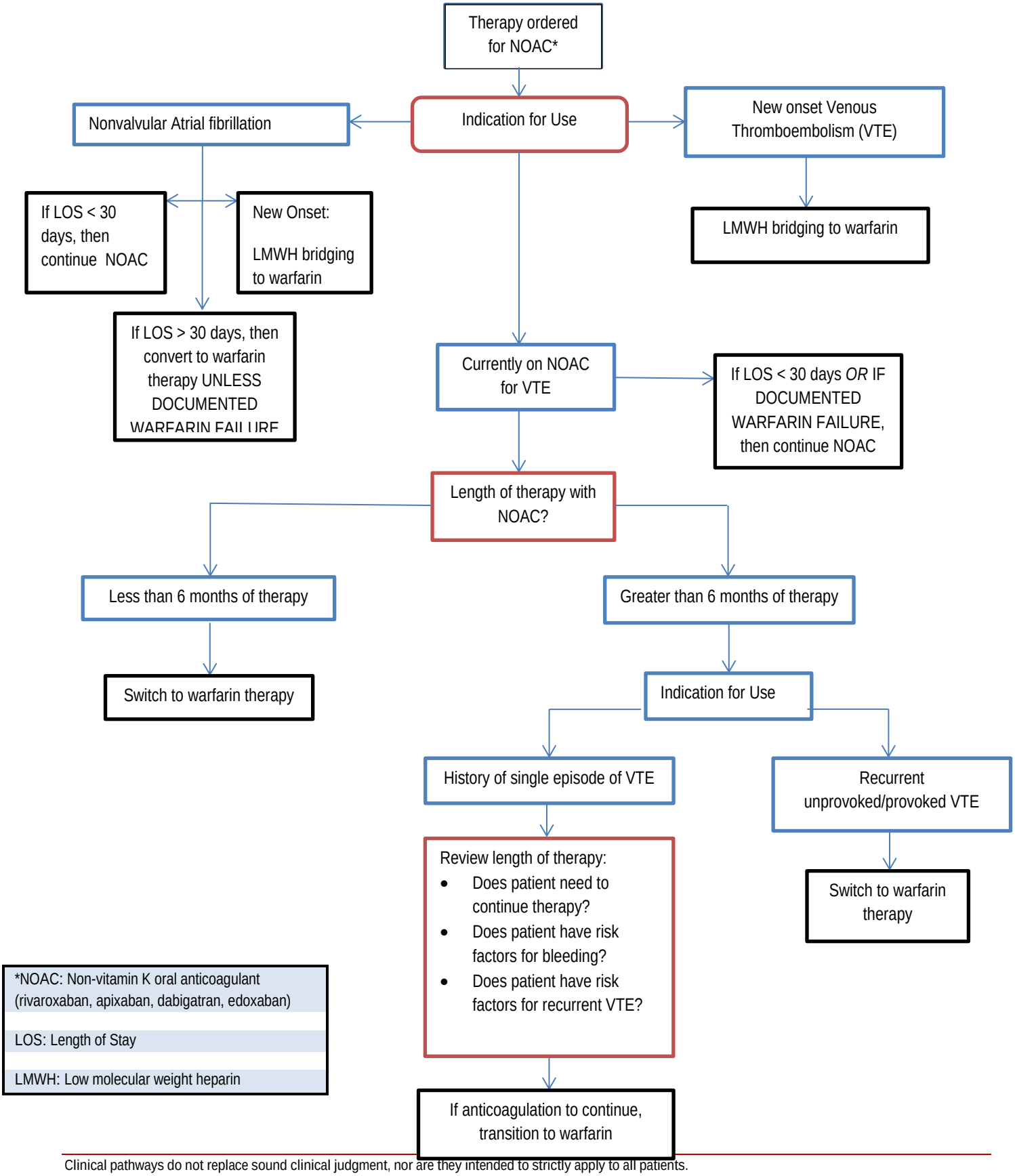
Algorithm for Non-vitamin K Oral Anticoagulant Use



*NOAC: Non-vitamin K oral anticoagulant (rivaroxaban, apixaban, dabigatran, edoxaban)

LOS: Length of Stay

LMWH: Low molecular weight heparin