STATE OF RHODE ISLAND
DEPARTMENT OF BEHAVIORAL HEALTHCARE, DEVELOPMENTAL DISABILITIES AND HOSPITALS
DIVISION OF BEHAVIORAL HEALTH CARE

UNIT  Center of Excellence

POLICY/PROCEDURE NO.
COE - 015

SUBSECTION EFFECTIVE DATE
2/10/17

POLICY/PROCEDURE
Buprenorphine/Naloxone Induction

AMENDMENT / REVISION HISTORY
Approved:
Amended:

POLICY

This document assists Center of Excellence staff by outlining the procedure to be followed on the patient’s first day of induction onto buprenorphine/naloxone and to make staff aware of potential adverse events.

PROCEDURE

Buprenorphine/naloxone induction is described including:

1. Use of Clinical Opioid Withdrawal Scale to determine severity of opioid withdrawal (see Policy #016 for scale)
2. Instructions to staff related to physically taking the medication by the patient.
3. Requirement of observation of the patient for up to two hours after initial dose and structure related to possible additional doses.
4. Requirement to have patient return the following day to complete their induction.

LIST OTHER SUPPORTING DOCUMENTS/RESOURCES

www.pcssmat.org
BUPRENORPHINE/NALOXONE INDUCTION

Day of induction onto buprenorphine/naloxone
Instruct patients not to use opiates or other illicit drugs or alcohol from 5 PM the evening before the induction is to begin. Tell the patient that they must show objective signs and symptoms of opiate withdrawal or they will not be able to start buprenorphine/naloxone (for those with current physiological dependence). Make sure the patient understands that buprenorphine can only be given when withdrawal is present. Recent use of an opiate agonist such as heroin or prescription opioid analgesics followed by buprenorphine can precipitate withdrawal due to the high affinity of buprenorphine for the mu opioid receptor and its partial agonist property. Be sure to make the patient understand that if they fail to show evidence of opiate withdrawal they will be sent home to return on another day to re-attempt induction for their own safety.

If the patient shows signs of mild-moderate withdrawal, they may be started on buprenorphine/naloxone. The combination product (buprenorphine/naloxone 4:1 mg) can be used to start induction. Have the patient drink a small amount of fluid to moisten the mouth (we use water). Give 4/1 mg of buprenorphine/naloxone (2 mg/0.5 mg x2) sublingually. The films/tablets must be placed under the tongue and the patient needs to let the films/tablets dissolve. This usually takes only a few minutes, but if the patient has dry mouth, it can take longer, up to 10-12 minutes. Have the patient stay in the clinic waiting room for 1-2 hours and reassess. If the patient has any withdrawal symptoms, even very mild symptoms, you may dose the patient again to a maximum of 8 mg/2mg on day 1. This may be increased up to 16 mg/4mg on day 2 if the assessment indicates that the patient experienced opiate withdrawal symptoms over the course of the first day (this is nearly always the case and may be characterized by complaints of hot flashes at night, insomnia, or other withdrawal symptoms). You can increase the dose more slowly, but most patients need the 16/4 mg dose to stop craving and abuse of opiates. By day 3, most patients have achieved a stable dose and this is usually the maintenance dose.

Patients may complain of some continuing withdrawal symptoms for a few days after starting buprenorphine and may request dose increases. This is not usually necessary and it takes 5-7 days to reach steady state at a maintenance dose so some mild symptoms are to be expected and the dose should be held at 16/4 mg daily (the symptoms almost always resolve and this will keep the cost of the medication lower for the patient and help to reduce the possibility of diversion).

Patients should not drive to the induction, but should have arranged transportation since buprenorphine can be sedating and may alter mental status (although this is quite rare).

Buprenorphine Induction Protocol
1. Evaluate the level of opioid withdrawal with the COWS (Clinical Opioid Withdrawal Scale).
2. Wait until a COWS score of 7-10 is observed (see Nielsen et al. 2013).
3. Instruct the patient how to take the medication, under the tongue, no talking and try to minimize swallowing while tablets are dissolving. Swallow when tablets are fully dissolved.
4. Administer the first dose of 2/0.5-4/1 mg under observation in the office or inpatient setting.
5. Keep the patient in the office for at least an hour to determine the effect of the first dose, and then document the effect of the first dose in the medical record.
6. Depending on the amount and type of opioid use, the first day's dose may range from 2/0.5 to 8/2 mgs. Lower doses are required in patients with a lower level of physical dependence.
7. If the patient is not in withdrawal upon evaluation, they will need to be scheduled for induction on another day. Avoid this complication by taking the time make sure that the patient understands the need to be in moderate withdrawal prior to the first buprenorphine/naloxone dose.
8. If the individual in the office is pressing for relief and the doctor is still not certain that he is in sufficient withdrawal then a low dose of 2/0.5 mg can be given, the person observed for an hour and another dose of 2/0.5-4/1mg given if the first dose is well-tolerated.
9. Have the patient return the following day to complete the induction and provide the buprenorphine/naloxone dose (up to 16/4 mg) based on the person’s report of response to the initial doses given on Day 1.
10. Provide a prescription for doses needed to get to the next appointment.
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UNIT Center of Excellence

POLICY/PROCEDURE NO.
COE - 016

SUBSECTION EFFECTIVE DATE
2/10/17

POLICY/PROCEDURE
Clinical Opiate Withdrawal Scale (COWS)

AMENDMENT / REVISION HISTORY
Approved:
Amended:

POLICY
This clinical scale which measures physical and behavioral symptoms of opiate withdrawal will be used in evaluation of patients during buprenorphine/naloxone induction including readiness for the initial dose of medication and response to the medication given.

PROCEDURE
Description
Medical staff assesses level of opioid withdrawal and enters scores before induction, up to two hours after the first dose of medication, and at any additional times over the induction period.

LIST OTHER SUPPORTING DOCUMENTS/RESOURCES
# CLINICAL OPIATE WITHDRAWAL SCALE (COWS)

For buprenorphine/naloxone induction: Enter scores at time zero, 1-2 h after first dose, and at additional times that medication is given over the induction period.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Resting Pulse Rate</th>
<th>Dating Time</th>
<th>Dating Time</th>
<th>Dating Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resting Pulse Rate: (record beats per minute) Measured after patient is sitting/lying for one minute.</td>
<td>0 pulse rate 80 or below</td>
<td>1 pulse rate 81-100</td>
<td>2 pulse rate 101-120</td>
<td>4 pulse rate greater than 120</td>
</tr>
<tr>
<td>Sweating: Over past 1/2 hour not accounted for by room temperature or patient activity.</td>
<td>0 no report of chills or flushing</td>
<td>1 one subjective report of chills or flushing</td>
<td>2 flushed or observable moistness on face</td>
<td>3 beads of sweat on brow or face</td>
</tr>
<tr>
<td>Restlessness: Observation during assessment.</td>
<td>0 able to sit still 1 report difficulty sitting still, but is able to do so</td>
<td>3 frequent shifting or extraneous movements of legs/arms</td>
<td>5 unable to sit still for more than a few seconds</td>
<td></td>
</tr>
<tr>
<td>Pupil Size:</td>
<td>0 pupils pinned or normal size for room light</td>
<td>1 pupils possibly larger than normal for room light</td>
<td>2 pupils moderately dilated</td>
<td>5 pupils so dilated that only rim of the iris is visible</td>
</tr>
<tr>
<td>Bone or Joint aches: If patient was having pains previously, only the additional component attributed to opiate withdrawal is scored.</td>
<td>0 not present</td>
<td>1 mild diffuse discomfort</td>
<td>2 patient reports severe diffuse aching of joints/muscles</td>
<td>4 patient is rubbing joints or muscles and is unable to sit still because of discomfort</td>
</tr>
<tr>
<td>Runny nose or tearing: Not accounted for by cold symptoms or allergies.</td>
<td>0 not present</td>
<td>1 nasal stuffiness or unusually moist eyes</td>
<td>2 nose running or tearing</td>
<td>4 nose constantly running or tears streaming down cheeks</td>
</tr>
<tr>
<td>GI Upset: Over last 1/2 hour</td>
<td>0 no GI symptoms</td>
<td>1 stomach cramps</td>
<td>2 nausea or loose stools</td>
<td>3 vomiting or diarrhea</td>
</tr>
<tr>
<td>Tremor: Observation of outstretched hands</td>
<td>0 no tremor</td>
<td>1 tremor can be felt, but not observed</td>
<td>2 slight tremor observable</td>
<td>4 gross tremor or muscle twitching</td>
</tr>
<tr>
<td>Yawning: Observation during assessment</td>
<td>0 no yawning</td>
<td>1 yawning once or twice during assessment</td>
<td>2 yawning three or more times during assessment</td>
<td>4 yawning several times/minute</td>
</tr>
<tr>
<td>Anxiety or Irritability</td>
<td>0 none</td>
<td>1 patient reports increasing irritability or anxiousness</td>
<td>2 patient obviously irritable, anxious</td>
<td>4 patient so irritable or anxious that participation in the assessment is difficult</td>
</tr>
<tr>
<td>Gooseflesh skin</td>
<td>0 skin is smooth</td>
<td>3 piloerection of skin can be felt or hairs standing up on arms</td>
<td>5 prominent piloerection</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Score</th>
<th>Observers Initials</th>
<th>Blood Pressure/Pulse</th>
<th>Dose of Suboxone Given</th>
</tr>
</thead>
</table>

**SCORE:**
- 5-12 = Mild
- 13-24 = Moderate
- 25-36 = Moderately severe
- More than 36 = Severe withdrawal

8/3/2016
STATE OF RHODE ISLAND
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DIVISION OF BEHAVIORAL HEALTH CARE

UNIT    Center of Excellence

POLICY/PROCEDURE NO.
COE - 017

SUBSECTION EFFECTIVE DATE
2/10/17

POLICY/PROCEDURE
Extended Release Injectable Naltrexone Medical Protocol and Procedures

AMENDMENT / REVISION HISTORY
Approved:
Amended:

POLICY
This protocol outlines the procedures needed to induct an individual onto injectable naltrexone, the opioid antagonist medication assisted treatment, and will be used to guide treatment with this medication.

PROCEDURE
Description

1. Medical staff will review risks and benefits of injectable naltrexone with patient.

2. Nursing staff will orient patient as to injection procedure per this protocol.

3. Adverse events/side effects will be reviewed with the patient prior to administration of injectable naltrexone and follow up query will occur at subsequent visits to determine if any untoward effects have occurred. Clinical intervention will be provided as needed.

LIST OTHER SUPPORTING DOCUMENTS/RESOURCES
EXTENDED-RELEASE INJECTABLE NALTREXONE
MEDICAL PROTOCOL AND PROCEDURES

INTRODUCTION
This is the protocol and procedures to administer extended-release naltrexone injection, or XR-NTX in accordance with federal and state guidelines for medication-assisted treatment. Naltrexone is a FDA approved opioid antagonist, a medication that binds to and effectively blocks opioid receptors. It prevents receptors from being activated by agonist compounds, such as heroin or other prescription opioids. It has been shown to be effective in blocking opioid effects, including euphoria or ‘high’, which is the basis of its effectiveness in the treatment of opioid use disorder and in diminishing alcohol use by those with alcohol use disorders. XR-NTX is used along with counseling and social support to help people who are alcohol or opioid dependent to subsequently cease and/or decrease alcohol or opioid use. A benefit of using XR-NTX is a decrease in cravings for alcohol and/or opioids over time.

INDICATIONS
XR-NTX is indicated for use in adults (eighteen years or older) who meet the following criteria:
1) A primary diagnosis of alcohol dependence and/or opioid dependence disorder;
2) Intent and ability to abstain (in the clinician’s judgment) from alcohol and all opioids immediately prior to receiving the XR-NTX dose and opioid-free (including Tramadol) at least 7-10 days before starting XR-NTX;
3) A baseline evaluation which includes a physical exam, and, where that indicates likelihood of hepatic disease or injury or diminished renal function, appropriate laboratory testing such as liver transaminase levels and bilirubin within normal limits, or creatinine clearance (estimated or measured) 50 ml/min or greater;
4) Negative results on urine beta-HCG (human chorionic gonadotropin) pregnancy test for females;
5) A urine drug screen negative for all opioids, a negative Naloxone/Narcan IV or IM challenge (for patients with opioid addiction) immediately prior to the first injection; and if the Naloxone challenge is negative, an oral Naltrexone Challenge (a half tab of 50 mg administered orally); with no opioid withdrawal present after 1 hour;
6) No signs or symptoms of opioid withdrawal.
CONTRAINDICATIONS AND PRECAUTIONS/WARNINGS

Contraindications for XR-NTX administration include:

1) Patient receiving opioid analgesics;

2) Patient is expected to require opioid analgesics for pain management;

3) Patient with current physiologic opioid dependence;

4) Patient in acute opioid withdrawal;

5) Patient has positive urine screen for opioids;

6) Patient failed Naloxone Challenge or Naltrexone Challenge;

7) Patient has hypersensitivity to XR-NTX;

8) Hepatotoxicity (acute hepatitis and clinically significant liver dysfunction) are observed (i.e., transaminase levels >3 times normal and abnormal bilirubin);

9) Testing indicates severe renal failure or moderate to severe renal insufficiency;

10) Testing indicates pregnancy - Category C (The FDA-assigned pregnancy categories as used in the Drug Formulary - Category C: Animal reproduction studies have shown an adverse effect on the fetus and there are no adequate and well-controlled studies in humans, but potential benefits may warrant use of the drug in pregnant women despite potential risks);

Warning or precautions for XR-NTX administration (requiring clinical judgment) include:

1) Precipitated withdrawal may result for as long as two weeks for patients transitioning from buprenorphine or methadone;

2) Stable chronic hepatitis, e.g., in Hepatitis C infection, may be treated with XR-NTX, based on clinical judgment and ongoing liver function test monitoring;

3) Intramuscular injections should be used with caution in patients with thrombocytopenia or coagulation disorders;

4) Depression and/or suicidality develop as a result of taking XR-NTX;

Pain Management

Pain management may be achieved during XR-NTX blockade with any anesthesia, local or regional nerve block, or with NSAIDs with or without concomitant anxiolytics/sedatives. When reversal of XR-NTX blockade is required for pain management, opioid doses should be carefully titrated by medical staff who are skilled in and equipped for life support management who are not themselves involved in any active medical or surgical
PATIENT COUNSELING AND INFORMATION

Physicians should include the following issues in discussions with patients for whom they prescribe XR-NTX:

1) Advise patients that if they previously used opioids, the fact that they have completed detoxification means that in the future they will more sensitive to lower doses of opioids and at risk of accidental overdose should they use opioids when their next dose is due, if they miss a dose, or after XR-NTX treatment is discontinued. It is important that medical/nursing staff advise the rest of the treatment team of this, and for all care team members to remind patients of this and to have them inform family members and the people closest to the patient of this increased sensitivity to opioids and the risk of overdose.

2) Advise patients that because XR-NTX can block the effects of opioids, patients will not perceive any effect if they attempt to self-administer heroin or any other opioid drug in small doses while on XR-NTX. Further, emphasize that administration of large doses of heroin or any other opioid to try to bypass the blockade and get high while on XR-NTX may lead to serious injury, coma, or death.

3) Patients on XR-NTX may not experience the expected effects from opioid-containing analgesic, antidiarrheal, or antitussive medications.

4) Advise patients that a reaction at the site of XR-NTX injection may occur. Reactions include pain, tenderness, induration, swelling, erythema, bruising, or pruritus. Serious injection site reactions including abscess may occur. Some of these injection site reactions have required surgery. Patients should receive their injection from a healthcare provider qualified to administer the injection. Patients should be advised to seek medical attention for worsening skin reactions.

5) Advise patients that they should be off all opioids, including opioid-containing medicines, for a minimum of 7 to 10 days before starting XR-NTX in order to avoid precipitation of opioid withdrawal. Patients transitioning from buprenorphine or methadone may be vulnerable to precipitation of withdrawal symptoms for as long as two weeks. Ensure that patients understand that withdrawal precipitated by administration of an opioid antagonist may be severe enough to require hospitalization if they have not been opioid-free for an adequate period of time, and is worse than the experience of spontaneous withdrawal that occurs with discontinuation of opioid in a dependent individual.
6) Advise patients that they absolutely must not take XR-NTX if they still have any symptoms of opioid withdrawal. Advise all patients, including those with alcohol dependence, that it is imperative to notify healthcare providers of any recent use of opioids or any history of opioid dependence before starting XR-NTX to avoid precipitation of opioid withdrawal.

7) Advise patients that XR-NTX may cause liver injury. Patients should immediately notify their physician if they develop symptoms and/or signs of liver disease, such as abdominal pain, or a yellowing in the skin or whites of the eyes.

8) Advise patients that they may experience depression while taking XR-NTX. It is important that patients inform family members and the people closest to the patient that they are taking XR-NTX and that they should call a doctor right away should they become depressed or experience symptoms of depression.

9) Advise patients to carry documentation to alert medical personnel to the fact that they are taking XR-NTX. This will help to ensure that patients obtain adequate medical treatment in an emergency.

10) Advise patients that XR-NTX may cause an allergic pneumonia. Patients should immediately notify their physician if they develop signs and symptoms of pneumonia, including dyspnea, coughing, or wheezing.

Advise patients that they should not take XR-NTX if they are allergic to XR-NTX or any of the microsphere or diluent components.

12) Advise patients that they may experience nausea following the initial injection of XR-NTX. These episodes of nausea tend to be mild and subside within a few days post-injection. Patients are less likely to experience nausea in subsequent injections. Patients should be advised that they may also experience tiredness, headache, vomiting, decreased appetite, painful joints, dizziness or syncope, somnolence or sedation, anorexia, decreased appetite or other appetite disorders and muscle cramps.

13) Advise patients that because XR-NTX is an intramuscular injection and not an implanted device, once XR-NTX is injected, it is not possible to remove it from the body and the effects last for at least 30 days.

14) Advise patients that XR-NTX has been shown to treat alcohol and opioid dependence only when used as part of a treatment program that includes counseling and support.
15) Advise patients that dizziness may occur with XR-NTX treatment, and they should avoid driving or operating heavy machinery until they have determined how XR-NTX affects them.

16) Advise patients to notify their physician if they: become pregnant or intend to become pregnant during treatment with XR-NTX; are breast-feeding; experience respiratory symptoms such as dyspnea, coughing, or wheezing when taking XR-NTX; experience any allergic reactions when taking XR-NTX or experience other unusual or significant side effects while on XR-NTX therapy.

Patients should be advised of any other risks and information based on the clinical judgment of their physician.

**STORAGE OF XR-NTX**

XR-NTX is shipped and should be stored under specific temperature-controlled conditions to ensure proper delivery and patient safety. The following handling instructions must be used for XR-NTX before administering to patients:

1) XR-NTX should always be refrigerated at 2° to 8° C (36° to 46° F) and not frozen.

2) XR-NTX should be stored separately from food, in accordance with Occupational Safety and Health Administration Guidelines.

3) Unrefrigerated XR-NTX can be stored at temperatures not exceeding 25°C (77°F) for more than 7 days prior to administration.

4) Check the product expiration date printed on the carton.

5) XR-NTX product received from a specialty pharmacy is patient-specific.

**PREPARATION OF XR-NTX**

XR-NTX is supplied in single-use cartons containing on 380 mg vial of XR-NTX microspheres diluent for suspension, one 5-mL prepackaged syringe, and customized 1.5 and 2-inch administration (thin-walled) needles with needle protection devices.

Remove carton from refrigeration, open the box, and allow XR-NTX to reach room temperature (approximately 45 minutes) prior to injection.
2) Parenteral products should be visually inspected for particulate matter and discoloration prior to administration whenever solution and container permit.

3) XR-NTX must be suspended only in the diluent supplied and must be administered only with one of the needles supplied.

4) Select needle length based on assessment of patient's body habitus. Consider using the 2-inch needle with protection device for patients with a large amount of subcutaneous tissue overlying the gluteal muscle. Consider alternative treatment for patients whose body type precludes an intramuscular injection with one of the provided needles.

5) Warm the diluent vial to near body temperature by rolling in the hand until it no longer feels cool to the touch.

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

7) XR-NTX must not be administered intravenously, subcutaneously or into adipose – it must be injected into the deep muscle to minimize the risk of adverse injection site reaction.

**MEDICAL PROCEDURES**

The physician or designee will obtain a thorough substance use-focused history and a baseline physical examination. Immediately prior to the first injection of XR-NTX, the physician or designee will conduct the following procedures:

1) Determine, based upon the patient's self-report and any other available information, that the patient is interested in remaining abstinent from opioids and ready to begin trying to do so.

2) Perform urine drug screen (UDS) for opioids (11 panel, on-site drug screen) for natural and synthetic opioids to detect all possible opioids patient may have used.

3) If any significant doubt remains about the assessment of the patient's opioid status or the veracity of patient self-reporting, the Naloxone Challenge should be administered for patients with opioid addiction because it minimizes the duration of severe withdrawal. In regions known to have significant prevalence of buprenorphine diversion, the Naltrexone Challenge should also be administered, following Naloxone Challenge, because naloxone does not displace buprenorphine whereas naltrexone does. The Naltrexone Challenge Test 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 1 hour.

4) If any clinical concern is raised by history or physical exam of either hepatic or renal status, liver function tests/ with transaminase levels and bilirubin should be performed and results should be within normal limits and/or creatinine clearance (estimated or measured) 50 ml/min or greater.

5) Perform urine beta-HCG (human chorionic gonadotropin) pregnancy test for females.

6) The physician or designee will:
   a. Explain to the client the benefits and risks/possible side effects as indicated in Patient Counseling and Information listed above.
   b. Provide the client with written support information based on Patient Counseling and Information listed above.
   c. Evaluate the client based on the above reference criteria and prescribe XR-NTX, as indicated.

XR-NTX will be administered by the appropriate medical personnel at the program, using aseptic techniques as follows:
   1) The patient will recline, face down and the gluteal muscle must be relaxed prior to injection.
   2) The injection will be given deep intramuscular (IM) using the 1 ½ inch or 2 inch 20 gauge needle provided in the XR-NTX kit into the upper, outer quadrant of the buttock.
   3) Always first aspirate for blood prior to injection, and if blood is withdrawn, abort injection in that site and move to another site in same side buttock and quadrant.
   4) Injection site will rotate monthly from right to left gluteal muscle.
   5) The first injection will always be in the right gluteal muscle. In the event of the suspension viscosity thickening to the point of causing a needle jam, the needle should be withdrawn, replaced with the second needle provided in the kit, and injection reattempted at a different site on the same side buttock and quadrant.
   6) Appropriate medical personnel will monitor the injection site for any problems (redness, infection, swelling and/or itching at the injection site that gets worse over time), observe the client for any adverse reactions, and monitor the client for medication effectiveness and side effects over time.

Injection site side effects that develop and signs of allergic reaction must be reported immediately to the physician.

Reference: Florida Alcohol and Drug Abuse Association, Jan 2015