POLICY
This policy describes the use of buprenorphine in the Emergency Department (ED) for management of opioid withdrawal and dependence.

PURPOSE
To clarify and codify the specifics of how buprenorphine may be used in the Emergency Department for the management of opioid use disorders.

DEFINITIONS
Opiate use disorder: A medical condition characterized by a problematic pattern of opioid use that causes impairment, adverse health effects, and/or emotional distress.

PROCEDURE
A. Patient Selection
   1. Buprenorphine may be considered for patients who are in opioid withdrawal, and who meet the following criteria
      a. Age 18 years or older
      b. Daily use of opioids (illicit or prescription) and seeking help
      c. Meets criteria for opiate use disorder
   2. The following patients should be excluded
      a. Acute intoxication with other drugs – alcohol, benzodiazepines, stimulants, etc.
      b. Hypersensitivity to buprenorphine
      c. Methadone use
      d. Severe liver disease
   3. The following patients, may be considered, with the assistance of specialist consultation
      a. Age 17 or under (consultation with child/adolescent psychiatry or chemical dependency should be obtained)
      b. Co-morbid pain disorder or chronic pain (consultation with chemical dependency or pain management should be obtained)
B. Identifying cases in which buprenorphine can be used and dosing regimens
   1. For patients who are potentially candidates for buprenorphine, the amount of opiate withdrawal must be assessed
   2. Patients, to avoid precipitated withdrawal – will need to be in moderate opioid withdrawal before buprenorphine can be used in the ED
      a. COWS = Clinical Opiate Withdrawal Scale, can be used to determine the severity of withdrawal
i. A web-based calculator for the COWS is available at MDCalc: [http://mdcalc.com/cows-score-opiate-withdrawal](http://mdcalc.com/cows-score-opiate-withdrawal)

b. ED providers should look for tachycardia, sweats, anxiety, dilated pupils, myalgias, arthralgias, rhinorrhea, cramping, yawning, nausea, vomiting, and diarrhea as symptoms of opioid withdrawal

3. For patients who are not in withdrawal, or have mild withdrawal (COWS score < 8), the following may be performed
   a. For ED providers with their buprenorphine waiver, a prescription may be given for discharge
      i. Suggested dosing: 8 mg SL buprenorphine daily, up to TID as needed for opiate withdrawal
      ii. Preferred formulation is buprenorphine/naloxone combination product
   b. For ED providers who do not have their waiver, a small test dose of buprenorphine may be given orally
      i. Suggested dosing: 2 to 4 mg buprenorphine SL once, may repeat in 2 hours if well tolerated, and patient still feels withdrawal
   c. For ED providers who do not have their waiver, after a discussion of the rationale with the patient – the patient may be observed in the ED until withdrawal symptoms are more pronounced, and then the patient can be treated for moderate withdrawal (see below)

4. For patients who are in moderate or severe withdrawal (COWS score 8 or higher), the following may be performed
   a. Provide the patient with a dose of buprenorphine, 8 mg SL
   b. Observe the patient for 30-60 minutes
      i. If symptoms and COWS score are improved, then the patient may be given an additional dose of 8 mg SL buprenorphine
      ii. If the patient feels worse or has a worsening COWS score, then the patient may still have opioid in their system from a previous dose (and the buprenorphine precipitated withdrawal), or opiate withdrawal is not the correct diagnosis. Further buprenorphine dosing should be stopped and the patient should be re-assessed and queried about previous opioid use

5. In patients who improved with the initial dose of buprenorphine, the following may be performed
   a. For ED providers with their buprenorphine waiver, a prescription may be given for discharge, with no further buprenorphine dosing in the ED
      i. Suggested dosing: 8 mg SL buprenorphine daily, up to TID as needed for opiate withdrawal
      ii. Preferred formulation is buprenorphine/naloxone combination product
b. For ED providers who do not have their waiver, additional buprenorphine SL may be given in the ED, to prevent withdrawal after discharge
   
i. The rationale for this: buprenorphine, when given at higher doses, will remain in the body for a longer period of time, and slowly be metabolized – allowing for a prolonged effect in treating withdrawal. Buprenorphine has a ceiling effect, and doses above 16 mg primarily act to prolong the duration of withdrawal suppression.
   
   ii. Suggested dosing: After the patient has tolerated an initial 8 mg of buprenorphine, followed by a second dose of 8 mg of buprenorphine, a third dose of 8 mg to 16 mg may be given
   
   iii. Target total dose is 24 mg to 32 mg SL of buprenorphine. ED providers should consider a total of 32 mg when patients are heavy opioid users

6. For patients with severe withdrawal who are unable to tolerate oral medications, buprenorphine may be given IV/IM to manage withdrawal
   
a. Dosing range: 0.3 mg IV, 0.3 to 0.6 mg IM

b. If withdrawal is resolved, the following may be performed
   
i. For ED providers with their buprenorphine waiver, a prescription may be given for discharge, with no further buprenorphine dosing in the ED
      
i. Suggested dosing: 8 mg SL buprenorphine daily, up to TID as needed for opiate withdrawal
      
      ii. Preferred formulation is buprenorphine/naloxone combination product

   
   ii. For ED providers who do not have their waiver, additional buprenorphine SL may be given in the ED, to prevent withdrawal after discharge
      
      i. Suggested dosing: 8 mg buprenorphine SL once. If the patient tolerates this dose after 30-60 minutes, a second dose of 8 mg SL may be given – for a total of 16 mg of SL buprenorphine.
      
      ii. ED providers should consider a total of 16 mg after initial IM/IV dosing when patients are heavy opioid users

   
   c. If withdrawal is improved but not resolved, the patient should be given a dose of SL buprenorphine, 8 mg
      
i. The patient can then be managed as per the treatment algorithm for SL buprenorphine, as above.

C. Suitability for discharge
   
   1. Patients, after receiving the final dose of buprenorphine, must be observed for 60 minutes
2. Patients who meet the following criteria 60 minutes after the last dose may be discharged:
   a. The patient does not have withdrawal symptoms
   b. The patient is not somnolent
   c. The patient has a safe means of transportation home
3. To avoid recurrent ED visits for buprenorphine, the following criteria must also be met for discharge
   a. The patient has an existing relationship with an addiction treatment program, that he/she will follow up with
   b. The patient has an existing relationship with a physician who can prescribe buprenorphine that he/she will follow up with
   c. The patient has been referred, from the ED, to existing addiction treatment programs.
      i. ED transitional care managers or social workers should see patients in the ED to help facilitate follow-up when available
      ii. If outside transitional care manager or social work hours, an ED transitional care manager or social work referral should be placed during the ED visit to assist in follow up after discharge
D. Management of precipitated withdrawal with buprenorphine
   1. If patients develop withdrawal when buprenorphine is given, further buprenorphine dosing should be stopped
   2. The following medications may be used to help with symptoms
      a. Ondansetron
      b. Clonidine 0.1 to 0.2 mg PO once
      c. Acetaminophen
      d. NSAIDs
      e. For refractory symptoms, the following may be considered
         i. Lorazepam 1-2 mg PO/SL
         ii. Fentanyl 25 mcg IV, titrate with repeat doses every 15 minutes until withdrawal is less severe
E. Management of somnolence with buprenorphine
   1. Due to the inherent characteristics of buprenorphine, it is less sedating than other opioids
   2. Somnolence with buprenorphine suggests that another drug – such as alcohol, or sedatives – may be in the patient’s system
3. If supportive measures fail, the following may be considered
   a. Naloxone boluses of 2 mg, followed by – as needed – a continuous infusion of 4 mg per hour
   b. If benzodiazepine ingestion is suspected, and the patient remains excessively somnolent – after careful consideration of the contraindications for flumazenil, flumazenil may be given at a dose of 0.2 mg IV

F. Additional considerations
1. Given the high risk of relapse/treatment failure with substance abuse disorders, patients with opiate use disorder remain at risk of opiate overdose. As such, ED providers managing patients with buprenorphine should provide a discharge prescription for naloxone
   a. Prescription instructions: Naloxone nasal spray 4 mg, Disp #2. Use as directed

APPENDIX