Medication Assisted Treatment

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Chronic Pain and the Public Health Crisis

- Estimated affects 11.2% of adult US population
- 3-4% of adult US population on long term opioid
- Lack of evidence for greater than 12 weeks of treatment
- 1999-2014 more than 165,000 people died of overdose related to opioid pain medications in US
- In 2013, 1.9 million persons abused or were dependent on prescription opioid pain medication
- In primary care, opioid dependence ranged from 3-26%
- “One person dies every 19 minutes from prescription drug use.” (Straussner, 2014)
How the Epidemic of Drug Overdose Deaths Ripples Across America

By HAEYOUN PARK and MATTHEW BLOCH  JAN. 19, 2018

Overdose deaths per 100,000

4  8  12  16  20

2003  2004  2005  2006

2007  2008  2009  2010

2011  2012  2013  2014
In fact, death rates from overdoses in rural areas now outpace the rate in large metropolitan areas, which historically had higher rates.
Sources Where Pain Relievers Were Obtained for Most Recent Nonmedical Use among Past Year Users Aged 12 or Older: NSDUH 2010

Note: Totals may not sum to 100% because of rounding or because suppressed estimates are not shown.
• 47 y/o M with morbid obesity, DM2, Depression, Anxiety, Ankylosing spondylitis – currently on hydrocodone-acetaminophen 7.5 mg – 325 mg q6 hrs prn
• 46 y/o F with hx of gastric bypass, anxiety, previously a CNA, newly diagnosed hx of opioid abuse. Husband has ankylosing spondylitis...
Diagnosis of Opioid Use Disorder
A problematic pattern of opioid use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:

- Opioids are often taken in larger amounts or over a longer period than was intended.
- There is a persistent desire or unsuccessful efforts to cut down or control opioid use.
- A great deal of time is spent in activities necessary to obtain the opioid, use the opioid, or recover from its effects.
- Craving, or a strong desire or urge to use opioids.
- Recurrent opioid use resulting in a failure to fulfill major role obligations at work, school, or home.
- Continued opioid use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of opioids.

**DSM-V Criteria for Opioid Use Disorder**
A problematic pattern of opioid use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:

- Important social, occupational, or recreational activities are given up or reduced because of opioid use.
- Recurrent opioid use in situations in which it is physically hazardous.
- 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.
- Tolerance, as defined by either of the following:
  - A need for markedly increased amounts of opioids to achieve intoxication or desired effect.
  - A markedly diminished effect with continued use of the same amount of an opioid. (Note: This criterion is not considered to be met for those taking opioids solely under appropriate medical supervision.)
A problematic pattern of opioid use leading to clinically significant impairment or distress, as manifested by at least two of the following, occurring within a 12-month period:

- Withdrawal, as manifested by either of the following:
  - The characteristic opioid withdrawal syndrome (refer to Criteria A and B of the criteria set for opioid withdrawal).
  - Opioids (or a closely related substance) are taken to relieve or avoid withdrawal symptoms. (Note: This criterion is not considered to be met for those individuals taking opioids solely under appropriate medical supervision.)

- Specify if:
  - In early remission (3 months of no criteria being met (with the exception of cravings)) or sustained remission (12 months or longer (with the exception of cravings).
  - On maintenance therapy
  - In a controlled environment (where access to opioids is restricted).
Referral for Substance Use Evaluation
What is ASAM?

ASAM: American Society of Addiction Medicine

What is the ASAM Criteria?

- Defined national set of criteria/guidelines for the assessment of patients with addictions and co-occurring disorders
- Provides guidelines for placement, continued stay, and transfer/discharge
Who can “do” an ASAM assessment
Credentialed counselor/clinician
Certified Addiction Nurse
Psychologist
Physician

Interpretation of information must be within the assessors scope of practice

IE: counselor can gather info RE: use and h/o withdrawal but would need nursing or medical consult to match treatment level
Multidimensional:
- Treatment based on holistic assessment of six dimensions vs diagnosis
- Six dimensions include: Acute Intoxication/Withdrawal Potential, Biomedical Conditions/Complications, Emotional, Behavioral Cognitive Conditions/Complications, Readiness to Change, Relapse/Continued Use Potential, and Living Environment
Dimensions include:
1. Acute Intoxication/Withdrawal potential
2. Biomedical Conditions/Complications
3. Emotional/Cognitive
4. Readiness to Change
5. Relapse/Continued Use
6. Recovery/Living Environment
Dimension 1: Acute Intoxication/Withdrawal Potential
- Substances used, how much/often, recently?, length of use, method of use, IV drug use, s/sx of acute intox at this time?, lab result?, BAC, Hx of withdrawal, seizures, need for medical withdrawal in the past?, hangovers, blackouts, tremor, memory loss, current withdrawal s/sx
Dimension 2: Biomedical Conditions/Complications
Medical current or past DX: ie. HTN, DM, HIV, Hep B/C TB, liver disease, CAD, MI, CVA, Vitals, Physical problems, weight changes, medications, taking medications as prescribed, pregnancy?, allergies, tremor, memory loss any diagnosis that would prevent client from participating in treatment?
Dimension 3:
Emotional, Behavioral, or Cognitive Conditions and Complications
Anxiety, depression, formal dx, PTSD, h/o Trauma, h/o suicide attempt, hostility, aggressiveness, self injury, current emotional status, mental health history, current services, treatment goals, family issues, school completed, special classes, learning or behavior problems, missing school or work? Medication non adherence? Unstable personality disorder? Would any of above impair/prevent treatment?
Dimension 4
Readiness to Change:
Does the client believe they have a substance abuse problem? Longest period of sobriety, reason for treatment, internal/external motivators, clients perception of why they are where they are, level of motivation, previous treatments, interest in change? Current cravings?
Dimension 4
Readiness to Change:
Prochaska and DiClemente’s Transtheoretical Model

1. Precontemplation: no intention of changing behavior, doesn’t believe there is a problem.
2. Contemplation: Aware a problem exists but no commitment to action,
3. Preparation: Intention to change, experience with change, planning to change within one month
4. Action: Changed behavior, practiced for 3-6 mos
5. Maintenance: Continued commitment to sustained change 6mos-12 mos
6. Relapse: Resumption of old behavior
Dimension 5
Relapse/Continued Use Potential:
History of ability to remain abstinent; past relapse history, adherence to MAT in the past, client insights into their risk for relapse, clients plans to respond to thoughts/feelings/behaviors, skills to cope? Knowledge of triggers/red flag behaviors AA, 12 step programming, strengths limitations, current use, cravings with understanding that craving doesn’t equal use, plan to respond to craving/trigger
Dimension 6
Recovery/Living Environment:
**Level of care is the last decision after assessment of 6 dimensions**
**Risk, needs, skills, and resources are considered for each individual**
**Placement considered within a flexible “spectrum” of service (varying degrees within broad spectrum- limited for purpose of presentation)**
Continuum of Care

- **0.5 Early Intervention**: Assessment, education for at-risk individuals who do not meet diagnostic criteria for SUD (Substance Use Disorder)
- **1 Outpatient**: <9 hours of service/wk (adults) <6 adolescents for recovery/motivational therapy/strategy
- **2 Intensive Outpatient/Partial Hospitalization**: 9+hrs/wk adults 6+/hrs/wk for adolescents for therapies/group work
- **3 Residential/Inpatient**: 24hr structured environment with trained staff available at least 5 hours of clinical work per week
- **4 Medically Managed Intensive Inpatient Services**: 24hrs nursing care with daily MD for severely unstable dimension 1, counseling available
ASAM’s Definition of Addiction:

A- Inability to Abstain
B- Impairment in Behavioral control
C- Craving; desire, urge/hunger for drug or “reward”
D- Diminished insight into one’s behaviors, problems, interpersonal problems
E- Dysfunctional Emotional Emotional Response
ASAM Treatment Model

- Multidimensional
- Clinically and Outcome Driven
- No longer a “fixed” length of stay
- Broad and Flexible treatment options
- Adolescent specific
- Interdisciplinary
- Outcome Driven
- Informed Consent
Clinically Driven/person centered:
*treatment options should be diverse, reflective of the population served
*no longer placement in a “program” with “fixed” length of stay- focus on individualized treatment with variable length of stay
*based on level of functioning and illness at time of assessment, response to treatment and outcome

**ASAM Treatment Model**
ASAM Treatment Model

Broad and Flexible treatment:

* More than one level of care
* Treatment serves many populations
* Treat at the least intensive level that meets the needs of the client
* Clients can move between levels of care and “treatment failure” is no longer a requirement for admission to a more intensive level
Broad and Flexible treatment:

*ie: failure of outpatient treatment prior to admission to inpatient
*meet patient “where they are”
Adolescents:

*Adolescent specific assessment, takes into consideration differences between adult and adolescent
Interdisciplinary/Team Approach:

* Addiction treatment will no longer be limited to the confines of a formal “addiction treatment center”
* With the development of the patient center health care home model new models have appeared
* Addiction treatment can be done in the PCP office with behavioral health staff on site
* Addiction specialists and not will need to learn to collaborate
Outcome based:

* Payment based on outcomes vs what is done or time
* Treatment services based on patient engagement and outcomes
* Encourage decision making, patient collaboration
Informed Consent:

* Outcomes improve if patient engaged
* Increase engagement by asking what “they want”
* Treatment adherence improves when client can make a choice
* Provide education risks vs benefit, treatment provided, or alternative to treatment
Medication Assisted Treatment
Pharmacotherapies for Opioid Use Disorder

- **Methadone**
  - Cannot be prescribed outside a registered narcotic treatment program

- **Buprenorphine**
  - Approved by the FDA in 2002 for office-based practice

- **Naltrexone**
  - Oral or IM
  - Used primarily for induction onto long-acting injectable
  - Approved by FDA in 2010 for treatment of opioid use disorder
Opioid Pharmacology

Function at Receptors: Full Opioid Agonists

- Mu receptor
- Full agonist binding ...
- activates the mu receptor
- is highly reinforcing
- is the most abused opioid type
- includes heroin, oxycodone, methadone, & others

Function at Receptors: Partial Agonists

- Mu receptor
- Partial agonist binding ...
- activates the receptor at lower levels
- is relatively less reinforcing
- is a less abused opioid type
- includes buprenorphine

Function at Receptors: Opioid Antagonists

- Mu receptor
- Antagonist binding ...
- occupies without activating
- is not reinforcing
- blocks abused agonist opioid types
- includes naloxone and naltrexone

Buprenorphine/naloxone (Suboxone)
% Mu Receptor Intrinsic Activity

- Full Agonist (e.g. heroin)
  - Maximum opioid agonist effect is never achieved even when all mu receptors occupied
- Partial Agonist (e.g. buprenorphine)
- Antagonist (e.g. naloxone)

Dose levels:
- No drug
- Low dose
- High dose
How Does Buprenorphine Work?

- **High Affinity for Mu Opioid Receptor**
  - Competes with other opioids and blocks their effects
  - Displaces heroin or other opiates from receptors
    (This can produce withdrawal if patient has opiates in system)

- **Slow Dissociation from Mu Opioid Receptor**
  - Prolonged therapeutic effect
  - > 24 hours

- **“Ceiling Effect” on Opiate Effects**
  - Poor drug for intoxication purposes
  - Safer in an overdose

- **Formulated with Naloxone**
  - Naloxone is poorly absorbed if taken orally
  - Naloxone blocks opiate effects if injected
Mu Opioid Receptor Availability Decreases with Increasing Doses of Buprenorphine PET/11 Carfentanil Label
Buprenorphine, Methadone, LAAM:
Urine Testing for Opioids

Mean % Negative

Study Week

0 2 4 6 8 10

Lo Methadone

Hi Methadone

LAAM

Buprenorphine

Adapted from Johnson, et al., 2000
Clinical Uses of Buprenorphine

- Withdrawal & Detoxification
  - Prevents withdrawal
  - Diminishes craving
  - Does not produce a “high”
  - Blocks (or reduces effect of) heroin
  - Increases treatment retention
Psychosocial Services: Required for treatment of opioid use disorder when prescribing buprenorphine, also best practice
  ◦ Inpatient, intensive outpatient, etc.
  ◦ Cognitive Behavior Therapy
  ◦ Narcotics Anonymous
  ◦ Individual and/or group therapy
  ◦ Family Therapy
  ◦ 12-step
  ◦ Higher psychiatric severity patients are more responsive to increased services
Opioid Use Disorder Maintenance Therapy

- Methadone and Buprenorphine Benefits
  - Lifestyle stabilization
  - Improved health and nutritional status
  - Decrease in criminal behavior
  - Employment
  - Decrease in injection use/shared needles
Substance use can negatively impact other illnesses
May masquerade as an illness that the patient does not have
Can contribute to non-adherence to prescribed regimens
Toxicities due to drug/drug interactions
Significant contributor to cost containment
Starting a MAT program in Primary Care
Figure 1. US counties with physicians with waivers to prescribe buprenorphine.

Note: data source: Drug Enforcement Administration, July 2012. Map date: September 2013.
Starting a MAT program in primary care

- Set your protocols (induction, maintenance, tapering, and discharge)
- Create a patient/clinic agreement
- Referral Process (accepting patients and coordinating with psychosocial services)
- Drug testing (company and frequency, observed or unobserved)
- Find a mentor and/or consider joining an ECHO
- Focus on team-based care and whole patient treatment
• Patient may be referred by PCP, self, treatment center, therapist, counselor, medical office (do not fill out referral based on info from family/friend/loved one, concerned other- pt must call)
• Inductions to be scheduled by MAT nurse/team only.
• All appt/consults should be scheduled on a day when MAT providers are in the building unless permission is given from MD or Pain nurse
• Controlled substance agreement: should be filled out upon inquiry and placed in designated location C
• CONTROLLED SUBSTANCE AGREEMENT- SCAN INTO CHART AS “CONTROLLED SUBSTANCE AGREEMENT” WITH DATE, NURSE TO ADD VERBAGE TO DIRECTIVE ON CHART W DATE SIGNED, REMOVE OLD DATE IF NEEDED
• CONSENT TO ROI- PROCESS/SCAN AS PER PHC POLICY
• MULTIPARTY CONSENT ROI- PROCESS/SCAN PER PHC ROI POLICY
• COMPLIANCE VERIFICATION FOR BEHAVIORAL THERAPY- SCAN INTO CHART AS “Verification of Treatment”
Referral Process Flow
Medication Induction with Provider and/or MAT coordinator if currently using opioids

- Obtain urine drug screen (instant if available) send for confirmatory if indicated (document necessity)
- Review PMP
- Assess patient, including vital signs and clinical opiate withdrawal scale (COWS; see CLINICAL OPIATE WITHDRAWAL SCALE). If the patient is not in opioid withdrawal, assess reliability of patient’s report of last use. If patient is not in withdrawal and may have used opioids in the previous 24 hours (or methadone in the previous 72 hours), reschedule for a different day and reiterate instructions.
- If scale adequate, initiate medication with initial buprenorphine 2 mg/naloxone 0.5 mg. Observe patient take initial dose (2-mg or 4-mg) sublingually. Do not chew, crush, or swallow tablet. Tablets should be held under the tongue until fully dissolved (up to 5 minutes).
- Reassess using COWS ½-2 hours after first dose.
  - If COWS score INCREASED from initial dose, do not administer any additional buprenorphine. Prescribe symptomatic treatment for precipitated withdrawal (e.g. clonidine, ibuprofen, dicyclomine). Reschedule for a different day, instruct patient to abstain from opioids for a greater duration prior to attempting reinduction.
  - If COWS score is ZERO, consider maintaining at 2-4 mg/d dose.
  - If COWS score is decreased, administer an additional 2-4 mg (1-2 tablets or films.)
- Reassess using COWS ½-2 hours after second dose.
  - If patient is comfortable, consider maintaining at 6-8 mg/d dose.
  - If patient still experiencing withdrawal symptoms, administer an additional 2-4 mg (1-2 tablets or films.)
- Reassess using COWS ½-2 hours after third dose.
  - If patient is comfortable, consider maintaining at 8-12 mg/d dose.
  - If patient still experiencing withdrawal symptoms, administer an additional 2-4 mg (1-2 tablets or films.). Target dose is between 12-16 mg/d
- Send target dose to pharmacy
- Follow up in 24 hours or 1 week as indicated
COWS scoring system

**Clinical Opiate Withdrawal Scale (COWS)**

The COWS is a tool used for assessing opiate withdrawal symptoms over a period of time during buprenorphine induction.

<table>
<thead>
<tr>
<th>Patient Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Buprenorphine Induction</strong></td>
<td></td>
</tr>
<tr>
<td>Enter score at time zero, 30 minutes after first dose, 2 hours after first dose, etc.</td>
<td></td>
</tr>
<tr>
<td>Time of Observation</td>
<td></td>
</tr>
<tr>
<td><strong>Bulging Pupil</strong></td>
<td>Recent Data per Minute</td>
</tr>
<tr>
<td>Measured after patient is sitting or lying for observation</td>
<td></td>
</tr>
<tr>
<td>0 = no bulge</td>
<td>1 = subtle bulge</td>
</tr>
<tr>
<td>2 = mild bulge</td>
<td>3 = sharp bulge</td>
</tr>
<tr>
<td>4 = globe bulge greater than</td>
<td>5 =</td>
</tr>
<tr>
<td><strong>Sweating Over Face</strong></td>
<td>Assess every 5 minutes</td>
</tr>
<tr>
<td>5 = prominent</td>
<td>4 = obvious</td>
</tr>
<tr>
<td>3 = slight</td>
<td>2 = minimal</td>
</tr>
<tr>
<td><strong>Respiratory Observation</strong></td>
<td>During Assessment</td>
</tr>
<tr>
<td>0 = able to sit</td>
<td>1 = frequent shifting or extraneous movements of legs</td>
</tr>
<tr>
<td>1 = able to sit still</td>
<td>2 = able to sit still for more than 2 hours</td>
</tr>
<tr>
<td><strong>Pupil Size</strong></td>
<td></td>
</tr>
<tr>
<td>0 = pupils normal or normal for room light</td>
<td></td>
</tr>
<tr>
<td>1 = pupils slightly dilated</td>
<td>2 = pupils moderately dilated</td>
</tr>
<tr>
<td>3 = pupils possibly less than normal for room light</td>
<td>4 = pupils so dilated that the rim of the iris is visible</td>
</tr>
<tr>
<td>Note: Pupil size is usually best evaluated with the patient in a seated position.</td>
<td></td>
</tr>
<tr>
<td><strong>Nasal Stuffy</strong></td>
<td>2 = no running or streaming</td>
</tr>
<tr>
<td>3 = runs continuously or runs down cheek</td>
<td></td>
</tr>
<tr>
<td><strong>Gastrointestinal Stuffy</strong></td>
<td></td>
</tr>
<tr>
<td>0 = no symptoms</td>
<td>1 = abdominal cramps</td>
</tr>
<tr>
<td>2 = loose or frequent bowel movements</td>
<td></td>
</tr>
<tr>
<td><strong>Craving</strong></td>
<td></td>
</tr>
<tr>
<td>0 = no craving</td>
<td>1 = slight craving</td>
</tr>
<tr>
<td>2 = craving</td>
<td></td>
</tr>
<tr>
<td><strong>Anxiety</strong></td>
<td></td>
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<tr>
<td>0 = no anxiety</td>
<td>1 = slight anxiety</td>
</tr>
<tr>
<td>2 = anxiety</td>
<td></td>
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<tr>
<td><strong>Sweating</strong></td>
<td></td>
</tr>
<tr>
<td>0 = no sweating</td>
<td>1 = sweating</td>
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<tr>
<td>2 = sweating</td>
<td></td>
</tr>
<tr>
<td><strong>Total Score</strong></td>
<td></td>
</tr>
<tr>
<td>0 = no signs or symptoms</td>
<td>1 = slight signs or symptoms</td>
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<tr>
<td>2 = moderate signs or symptoms</td>
<td></td>
</tr>
<tr>
<td>3 = severe signs or symptoms</td>
<td></td>
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<tr>
<td><strong>Severity</strong></td>
<td>5-LC = Mild</td>
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<tr>
<td>15-24 = Moderate</td>
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<tr>
<td>25-36 = Moderately Severe</td>
<td></td>
</tr>
<tr>
<td>More than 36 = Severe Withdrawal</td>
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</tbody>
</table>

*Source: Weinon et al., 1999.*
Follow up with provider/MAT coordinator as clinically warranted based on provider’s discretion/patient risk. Consider consistency of urine drug screens/collaborate with treatment team. Follow-up with local treatment center as directed by therapist.

- Assess adequacy of dosage, taking into consideration efficacy of suppressing withdrawal symptoms, interim use of opioids and other drugs, cravings to use, etc. Maintenance doses are typically 12 mg to 16 mg per day, although lower and higher doses may be considered.

- Therapy compliance will be confirmed for continuation within the program and document compliance.

- Pill/Film counts should be done as needed or by random call back as needed

Random urine testing for drugs of abuse, confirmatory sent if needed and appropriately documented for necessity.
Maintenance period —Follow up with provider/MAT coordinator as clinically warranted based on provider’s discretion/patient risk, may increase or decreased based as needed based on relapses or other risk factors
  • Maintenance dosing - Ask patient about withdrawal symptoms? cravings well controlled? relapses? consistent drug screens?
  • PMP
  • Assess psychosocial changes
  • Continued treatment as directed by center/counselor
  • Pill/Film counts should be done at visits as needed, can consider random call backs as needed
  • Urine testing for drugs of abuse and alcohol will be done as indicated; generally very visit. send for confirmation if indicated and document.
  • Prescription given until follow-up appt.
Dose reduction phase or maintenance

- Taper as tolerated, patient dependent
- Consider tapering to lowest effective dose, may need increased or decreased - patient dependent
- May require more frequent follow-up while tapering
<table>
<thead>
<tr>
<th>1st VISIT/consult w nurse/MAT coordinator/Provider:</th>
<th>2nd VISIT/consult w nurse/MAT coordinator/Provider:</th>
<th>3rd VISIT/consult w nurse/MAT coordinator/Provider:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Controlled substance Agreement</td>
<td>340B pricing Discuss induction (process and purpose) Discuss precipitated withdrawal</td>
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</tr>
<tr>
<td>UA/oral Drug screen</td>
<td>ROI Multi-party consent Intake questionnaire</td>
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<tr>
<td>PMP REVIEW</td>
<td>Ref to Substance tx Labs drawn/ordered CBC, CMP, HIV, Hep C, lipids</td>
<td>Ref to Substance tx Labs drawn/ordered CBC, CMP, HIV, Hep C, lipids</td>
</tr>
<tr>
<td>Chart Flagged</td>
<td>Ref to SA eval scheduled/attended Verify UADS Verify correct dose Vitals</td>
<td>Ref to SA eval scheduled/attended Verify UADS Verify correct dose Vitals</td>
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<tr>
<td>RCI</td>
<td>Vital COWS Provider Step in Review Labs</td>
<td>Vital COWS Provider Step in Review Labs</td>
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<td>Multi-party consent</td>
<td>Provider Step in Review Labs</td>
<td>Provider Step in Review Labs</td>
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<tr>
<td>Intake questionnaire</td>
<td>Labs drawn/ordered CBC, CMP, HIV, Hep C, lipids</td>
<td>Labs drawn/ordered CBC, CMP, HIV, Hep C, lipids</td>
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<tr>
<td>Ref to Substance tx</td>
<td>Referral from PCP</td>
<td>Referral from PCP</td>
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<tr>
<td>Labs drawn/ordered CBC, CMP, HIV, Hep C, lipids</td>
<td>Explain Buprenorphine</td>
<td>Labs drawn/ordered CBC, CMP, HIV, Hep C, lipids</td>
</tr>
<tr>
<td>Referral from PCP</td>
<td>Discuss UADS – Benzodiazepine</td>
<td>Referral from PCP</td>
</tr>
<tr>
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<td>Discuss UADS – Benzodiazepine</td>
<td>Referral from PCP</td>
</tr>
<tr>
<td>Induction/nurse:</td>
<td>Discuss UADS</td>
<td>Labs drawn/ordered CBC, CMP, HIV, Hep C, lipids</td>
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<td>Verify SA eval scheduled/attended Verify UADS Verify correct dose Vitals</td>
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<td>Vitals</td>
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<td>COWS</td>
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<td>Referral from PCP</td>
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<tr>
<td>2nd day induction(if needed/nurse):</td>
<td><strong>app at provider/nurse discretion</strong></td>
<td><strong>app at provider/nurse discretion</strong></td>
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<tr>
<td>Nurse PRN</td>
<td>BHC consult</td>
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<td>Scheduling</td>
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<td>Verification of Treatment form</td>
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<td>Referral completion</td>
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<td>Reminder Calls</td>
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<td>Appt verification</td>
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<td>PRV counts</td>
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<tr>
<td>Reminder Calls</td>
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</tr>
<tr>
<td>Documentation scanning</td>
<td>Documentation scanning</td>
<td>Documentation scanning</td>
</tr>
</tbody>
</table>

**Visit Flow**
Drug Screens

- Drug screen results will be used as a clinical marker to assess compliance in treatment. Positive drug screens may be a factor in considering termination of buprenorphine therapy.
- Meaningful drug screen results may require that samples are obtained with less than 24 hours advance notice, and not solely on days of treatment appointments. To this end, the patient needs to provide means by which they can be reliably contacted to request drug screening. If distance from the patient’s home precludes providing requested drug screen specimens at the Medical Center, an alternative laboratory facility may be considered.
- Failure to provide requested drug screening or to be available for contact may be considered sufficient grounds for terminating therapy.
**Drug Testing**

**Drug Metabolism Guide**

<table>
<thead>
<tr>
<th>Parent Drug</th>
<th>Metabolites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocodone</td>
<td>Norhydrocodone</td>
</tr>
<tr>
<td>Codeine</td>
<td>Norcodeine</td>
</tr>
<tr>
<td>Morphine</td>
<td>Normorphine</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>Noroxycodone</td>
</tr>
<tr>
<td>Tramadol</td>
<td>Nortramadol</td>
</tr>
<tr>
<td>Methadone</td>
<td>Normethadone</td>
</tr>
<tr>
<td>Ketamine</td>
<td>Norketamine</td>
</tr>
<tr>
<td>Methadone</td>
<td>Normethadone</td>
</tr>
</tbody>
</table>

**Diagram:**

- **OPIOID METABOLISM**
- **PRIMARY METABOLIC PATHWAYS**
  - CYP2D6
  - CYP3A4
  - CYP2C19

<table>
<thead>
<tr>
<th>Parent Drug</th>
<th>Primary Metabolites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codeine</td>
<td>Morphine, Hydrocodeine (minor)</td>
</tr>
<tr>
<td>Hydrocodone</td>
<td>Hydroxymorphine, Hydroxyhydromorphone</td>
</tr>
<tr>
<td>Oxycodone</td>
<td>Oxymorphone, Noroxycodone</td>
</tr>
<tr>
<td>Tramadol</td>
<td>Nortramadol</td>
</tr>
<tr>
<td>Methadone</td>
<td>Normethadone</td>
</tr>
</tbody>
</table>

*Adapted from Smith HI, Opioid Metabolism. May 22, 2009 (81/33-294)*)

*Adapted from Trapp RC et al. Opioids: Pharmacology, Pain Management. 2008. 1064-1086 (1358)*
• The patient is expected to bring any unused pills/films to scheduled appointments to be counted when requested; pill/film counts should be recorded in the EMR.
• Patient will be responsible to bring medication to the clinic or to another designated healthcare provider for pill/film counts on an unannounced basis if requested.
• Inconsistent medication counts or failure to comply with requested medication counts may be considered sufficient grounds for terminating therapy.
Patients will be expected to participate in counseling or other recovery-oriented activities as recommended by his/her treatment team while they are receiving buprenorphine therapy.
If a patient returns with a drug screen positive for other substances, patient may be required to intensify counseling and return to more frequent (ie. weekly) visits if patient wants to continue treatment program. If patient does not want to continue program, patient can be discharged from the program.

If a patient's drug screen is negative for suboxone, the patient may be dismissed from the program.
• Document, Document, Document

• Be Prepared for Multiple Submissions 3 months, 6 months, 12 months for MCO’s and Title X

• Supported diagnosis code: Opioid Use Disorder F 11.20

• Documentation to support that all prescribed narcotics and benzodiazepines have been discontinued
• If on a prescribed benzodiazepine, submit documentation from prescriber related to safe taper in place (new change)

• Urine drug screen done as well as the results (be prepared to send a copy)

• Discussion of taper, self report cravings (0-10 scale)

• Documentation to support if taper is not appropriate at this time

Prior Authorizations
- Document risk
- Be Prepared to re-submit
- Review of PDMP (must be documented in chart, cannot just be handwritten on the form)
- Do NOT send copy of PDMP to the insurance company (they are not entitled to have this)

Date of last counseling session and compliance
Prior Authorizations

- Projected treatment plan: Every week x 4, then every two weeks x 2-4, then monthly

- Projected frequency of counseling: Groups and/or individual sessions as determined by substance abuse/mental health specialist (generally every 2 weeks to 1 month)

- Projected maintenance dose (use best guess or dose you are requesting)
Renewals (to avoid delays and denials):

- Send a copy of requested Urine drug screen/ date should be written on form as well

- PDMP documentation should be typed in the medical record AND must be handwritten on the form as well

- Compliance with office visits and counseling should also be included in medical record as well as handwritten on the form.
Prior Authorizations

Things to remember...

- Documentation is everything!
- Check the PDMP and record it in your records, send those records with all requests
- Highlight areas that you want seen for review
- Don’t send in more than 15d ahead of renewal, they will reject and not process
FDA urges caution about withholding opioid addiction medications from patients taking benzodiazepines or CNS depressants: careful medication management can reduce risks (9-20-2017)

- The combined use of these drugs increases the risk of serious side effects; however, the harm caused by untreated opioid addiction can outweigh these risks. Insurance prior auth forms are lagging in this change.
- Discuss risks with patient and document, goal is harm reduction.
• Initial Consult and Physical: New or Established patient physical

• Induction: 99215 (established level 5 due to time)

• Follow-up appointments: 99213 or 99214 depending on time and if patients need their other health problems addressed (DM2, HTN, etc.)
Team-Based Care: Weekly Staffing

- Pain team: BHC, RN, LPN, MD, PA, ARNP, Nurse Care Mgr
- Weekly review of MAT patients
- Review of drug screens and counseling reports
- Time to discuss challenging cases
- Plan of care for the following week
- Substance Use Treatment Units (county)
- Residential Treatment Units
- County Jail
- Department of Corrections
- Half-way house
- Homeless Shelters
- Local Hospital/Emergency Departments
In 2015, 33,000 fatal overdoses from opioids according to the CDC.

On average, there are 91 people dying after an overdose of opioids each day and for every fatal overdose, there are believed to be roughly 30 nonfatal overdoses.

According to a recent study in JAMA, analyzing claims data from Medicaid in PA 2008-2013, only 33% of heroin overdose survivors and 15% of prescription opioid overdose survivors had been dispensed buprenorphine, naltrexone or methadone within six months of an overdose.

For most communities, immediate intervention with a combination of Medication Assisted Treatment (MAT) and therapy (considered the gold standard of opioid use disorder) are limited for those patients who suffer from a nonfatal overdose, revealing a missed opportunity for the health care system.

In 2015, researchers at Yale tested a collaborative intervention for opioid dependent patients who presented to the emergency department with

- Usual care of a handout with contact information for addiction services
- Information on treatment options, the first dose of buprenorphine (MAT) and an appointment with a primary care provider within 72 hours of discharge who could continue the buprenorphine treatment.

After 30 days, 78% of those who were given their first dose of buprenorphine were still in treatment compared to 37% who only received the handout.

This effective collaborative care effort between the emergency department, substance abuse services and primary care is rare but encouraging.
• Marshalltown
  ◦ PHC (clinic), SATUCI (counseling), Marshall County Jail, Department of Corrections
  ◦ If patient identifies as having a substance use disorder on intake physical with Jail Nursing Staff, referred for a substance use disorder evaluation/counseling, patient can be started on naltrexone while in jail (voluntary) by jail physician per standing orders protocol
  ◦ Goal is follow-up within 72 hours of discharge at PHC, patient is fast-tracked through appointment process to decrease risk of relapse, overdose and death
  Close the loop, prevent recidivism
Take Home Points for MAT

- Helps with withdrawal while patient is undergoing counseling and substance treatment
  - Buprenorphine/Naloxone is safe and effective in suppressing withdrawal symptoms and blocking the effects of illicit opioids

- Safe Medication
  - Overdose with Buprenorphine/Naloxone has a low likelihood of clinically significant problems. Morbidity and mortality are linked to use with other drugs such as benzodiazepines.
Take Home Points for MAT

- Patients can continue to function on medication leading to stabilization in home/work environment
  - Does not cause disruption in cognitive and psychomotor performance or end-stage organ damage
- Diversion potential exists but is less than prescribed opioids or methadone
- Can be done in the primary care office setting after receiving appropriate training
- You have the ability to change patient outcomes in your community!
Thank you!

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- Primary Health Care, Inc - Marshalltown