Integrating Buprenorphine Treatment for Opioid Use Disorder in HIV Primary Care

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Kristen Meyers, BS, CADC1
August 17-19, 2016
Day 1- Overview
1:00-4:30PM

1. Multnomah County HIV Clinic and Portland Opioid Epidemic Overview

2. Pre-Implementation Activities: Is your site ready?
   • Activity: Site Checklist and Group Discussion
     • Internal/External System Review
     • Protocols and Materials

3. Buprenorphine Overview

4. Selecting, Assessing and Preparing Patients for Treatment

5. Breakout Session: Simple Case Study
Multnomah County HIV Clinic

- 1,482 patients
- 17,037 visits / year
- Average of 11.4 visits per patient / year
- 51% are age > 50
- 20% experience homelessness or housing instability each year
- 15% have primary languages other than English
- 76% of clients have incomes equal to or below the federal poverty level
- 4 Providers, 4 MA’s, 4 CHN’s, 5 MCM’s, 2 MHNP, 1 PhD Counselor, Clinical Pharmacist, On-site pharmacy
Portland
Our Clinic Building
Opioid Epidemic in Portland

- Deaths from opiate overdose occurred more than twice a week in 2014 (109 deaths). While unacceptably high, this figure is a substantial improvement from three deaths per week in 2011 (156 deaths).

- The decrease in opiate deaths reflects a decrease in heroin-related deaths, which have dropped by more than 30% since 2011.

- Prescription opiate deaths have not decreased. In 2014, half of all fatal overdoses were associated with prescription opiates.

- Deaths represent only a fraction of the overdoses occurring. Ambulances responded to opiate overdoses in Multnomah County more than a dozen times per week (632 times in 2014).

- The expanded availability of naloxone, a drug that reverses opiate overdose, has had a significant effect on overdose outcomes. More than 1,000 lay people in Multnomah County were trained to reverse overdoses using naloxone in 2014 and they reported more than 450 overdose reversals.

- Opiates are the most rapidly growing reason for substance misuse treatment in Multnomah County and in Oregon.
Between 2009 and 2014, 750 people died of heroin or prescription opioid overdose in Multnomah County, the Health Department reports. The deaths represent just a fraction of the crisis, with ambulances responding more than a dozen times a week to overdoses in the community.

Table 1. Opiate Deaths by Drug Types, 2009-2014

<table>
<thead>
<tr>
<th></th>
<th>Any Heroin</th>
<th>Any Rx opiates</th>
<th>Unspecified Opiate</th>
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<tr>
<td>2009</td>
<td>77</td>
<td>51</td>
<td>&lt;3</td>
<td>125</td>
</tr>
<tr>
<td>2010</td>
<td>61</td>
<td>54</td>
<td>4</td>
<td>118</td>
</tr>
<tr>
<td>2011</td>
<td>94</td>
<td>64</td>
<td>4</td>
<td>156</td>
</tr>
<tr>
<td>2012</td>
<td>92</td>
<td>47</td>
<td>&lt;3</td>
<td>131</td>
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<tr>
<td>2013</td>
<td>63</td>
<td>48</td>
<td>4</td>
<td>112</td>
</tr>
<tr>
<td>2014</td>
<td>56</td>
<td>56</td>
<td>3</td>
<td>108</td>
</tr>
<tr>
<td>Total</td>
<td>443</td>
<td>320</td>
<td>15+</td>
<td>750</td>
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</table>

*Some deaths involve both heroin and rx opiates, and are only counted once in the “Total” column
Opioid Overdose Trends

Opioid overdoses driving increase in drug overdoses overall

Drug overdose deaths involving opioids, by type of opioid, United States, 2000-2014

Deaths involving any opioid
Natural & semi-synthetic opioids (e.g., oxycodone, hydrocodone)
Heroin
Other synthetic opioids (e.g., fentanyl, tramadol)
Methadone

SOURCE:

www.cdc.gov/drugoverdose
Number and age-adjusted rates of drug overdose deaths by state, US 2014

2014 Age-adjusted rate

- 2.8 to 11.0
- 11.1 to 13.5
- 13.6 to 16.0
- 16.1 to 18.5
- 18.6 to 21.0
- 21.0 to 35.5
## Heroin Use Has INCREASED Among Most Demographic Groups

<table>
<thead>
<tr>
<th>SEX</th>
<th>2002-2004*</th>
<th>2011-2013*</th>
<th>% CHANGE</th>
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<tbody>
<tr>
<td>Male</td>
<td>2.4</td>
<td>3.6</td>
<td>50%</td>
</tr>
<tr>
<td>Female</td>
<td>0.8</td>
<td>1.6</td>
<td>100%</td>
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<table>
<thead>
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<th>AGE, YEARS</th>
<th>2002-2004*</th>
<th>2011-2013*</th>
<th>% CHANGE</th>
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<tr>
<td>12-17</td>
<td>1.8</td>
<td>1.6</td>
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<tr>
<td>18-25</td>
<td>3.5</td>
<td>7.3</td>
<td>109%</td>
</tr>
<tr>
<td>26 or older</td>
<td>1.2</td>
<td>1.9</td>
<td>58%</td>
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<table>
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<th>RACE/ETHNICITY</th>
<th>2002-2004*</th>
<th>2011-2013*</th>
<th>% CHANGE</th>
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<tr>
<td>Non-Hispanic white</td>
<td>1.4</td>
<td>3</td>
<td>114%</td>
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<tr>
<td>Other</td>
<td>2</td>
<td>1.7</td>
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<table>
<thead>
<tr>
<th>ANNUAL HOUSEHOLD INCOME</th>
<th>2002-2004*</th>
<th>2011-2013*</th>
<th>% CHANGE</th>
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<tbody>
<tr>
<td>Less than $20,000</td>
<td>3.4</td>
<td>5.5</td>
<td>62%</td>
</tr>
<tr>
<td>$20,000–$49,999</td>
<td>1.3</td>
<td>2.3</td>
<td>77%</td>
</tr>
<tr>
<td>$50,000 or more</td>
<td>1</td>
<td>1.6</td>
<td>60%</td>
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<table>
<thead>
<tr>
<th>HEALTH INSURANCE COVERAGE</th>
<th>2002-2004*</th>
<th>2011-2013*</th>
<th>Percent Change</th>
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<tr>
<td>None</td>
<td>4.2</td>
<td>6.7</td>
<td>60%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>4.3</td>
<td>4.7</td>
<td>--</td>
</tr>
<tr>
<td>Private or other</td>
<td>0.8</td>
<td>1.3</td>
<td>63%</td>
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### Heroin Addiction and Overdose Deaths are Climbing

Heroin use has increased among most demographic groups. This chart shows the annual average rate of heroin use (per 1,000 people in each demographic group) for the combined years 2002 to 2004 and 2011 to 2013, and shows the percent increase between those time periods.

## Check list - 1

<table>
<thead>
<tr>
<th>Item</th>
<th>Yes / No</th>
<th>If no, next steps</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Administrative Leadership</td>
<td></td>
<td>At clinic level</td>
<td>Consider politics of your organization</td>
</tr>
<tr>
<td>Positive attitude towards buprenorphine treatment and its goals....</td>
<td></td>
<td>At system level</td>
<td></td>
</tr>
<tr>
<td>Physician waivers encouraged</td>
<td></td>
<td></td>
<td>Including non-intervention team prescribers</td>
</tr>
<tr>
<td>Space</td>
<td></td>
<td></td>
<td>Induction schedules vs space availability</td>
</tr>
<tr>
<td>physical space for visits, induction (May take up an exam room for more than Usual visit time)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offices for team staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team Staff Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>clinical mentor identified <a href="http://pcss-o.org/">http://pcss-o.org/</a></td>
<td></td>
<td></td>
<td>Important as you gain experience</td>
</tr>
<tr>
<td>Team members will act as clinical champions</td>
<td></td>
<td></td>
<td>HIV clinic staff looks to this team as a resource</td>
</tr>
<tr>
<td>Substance abuse counselor available</td>
<td></td>
<td></td>
<td>Bup specific experience preferred</td>
</tr>
<tr>
<td>Item</td>
<td>Yes / No</td>
<td>If no, next steps</td>
<td>Comments</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>----------</td>
<td>--------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Team member designated to address bup specific insurance issues.</td>
<td></td>
<td></td>
<td>Could be other clinical staff (Pharm tech)</td>
</tr>
<tr>
<td>Ensure patient access (team vacations, etc)</td>
<td></td>
<td></td>
<td>Waivered physicians</td>
</tr>
<tr>
<td>All Staff Training</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous or planned training(s) in harm reduction, addiction, trauma informed care</td>
<td></td>
<td></td>
<td>Full staff awareness</td>
</tr>
<tr>
<td>All Staff are oriented to the new buprenorphine study</td>
<td></td>
<td></td>
<td>Time designated/planned for periodic updates for all staff</td>
</tr>
<tr>
<td>Program related trainings available to non-intervention team staff</td>
<td></td>
<td></td>
<td>All Staff role in study recruitment</td>
</tr>
<tr>
<td>Front desk and phone triage staff coaching re: opiate withdrawal</td>
<td></td>
<td></td>
<td>Scenarios presented and explained in preparation</td>
</tr>
<tr>
<td>Item</td>
<td>Yes / No</td>
<td>If no, next steps</td>
<td>Comments</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------</td>
<td>-------------------</td>
<td>----------------------------------------------------</td>
</tr>
<tr>
<td>Medical assistants and nursing staff prepared to work with patients in withdrawal</td>
<td></td>
<td></td>
<td>In service update</td>
</tr>
<tr>
<td>Technology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technology (computer/internet/ et c) for data entry (study aspect)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Internal Systems</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Intake Referrals for the Study</td>
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<td></td>
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<tr>
<td>Process for Internal</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Process for External</td>
<td></td>
<td></td>
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<tr>
<td>Internal Referral Available?</td>
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<td></td>
<td></td>
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<tr>
<td>MH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A&amp;D</td>
<td></td>
<td></td>
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Will your site be accepting external referrals
<table>
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<tr>
<th>Item</th>
<th>Yes / No</th>
<th>If no, next steps</th>
<th>Comments</th>
</tr>
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<tbody>
<tr>
<td>Coverage of buprenorphine</td>
<td></td>
<td></td>
<td>Medicaid, commercial, &amp; ADAP policies known</td>
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<tr>
<td>clarified</td>
<td></td>
<td></td>
<td>Patient assistance program(s) process identified</td>
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<tr>
<td>Pharmacy Plans</td>
<td></td>
<td>On site vs Off site pharmacy stocking of buprenorphine</td>
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<tr>
<td>External Systems</td>
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<td>Referral networks defined</td>
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<tr>
<td>MH Counseling</td>
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<td></td>
<td></td>
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<tr>
<td>AD Counseling/Treatment</td>
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<td></td>
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<tr>
<td>Detox</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Methadone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MOU’s Completed where needed</td>
<td></td>
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### Check list continued - 5

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<tbody>
<tr>
<td>Later expectation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O internal communication plan for your staff, your agency</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O external communication plan for community (partners, referral sites, etc)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O development of protocols and procedures</td>
<td></td>
<td></td>
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</table>
HHSC Bup Guidelines-Key Points

• Supportive agency policy for prescribing
• Background describes local issues, setting, and rationale
• Clear description of needed formal Dx, consents and treatment plan before prescribing
• Guide to selecting patients, induction process, and subsequent stabilization and maintenance
• Addresses drug monitoring (UDS)
• Defines required supportive services
• References how to utilize our county health department Opiate Oversight Committee for advice and guidance
• Identifies specific populations of concern, including polysubstance users and methadone
• Discusses discontinuation of treatment
Record Keeping- Federal Requirements

Are there specific Federal record keeping requirements for office-based opioid therapy?

DEA record keeping requirements for office-based opioid therapy go beyond the Schedule III record keeping requirements. According to DEA: Practitioners must keep records (including an inventory that accounts for amounts received and amounts dispensed) for all controlled substances dispensed, including approved buprenorphine products (21 PART 1304.03[b]). In some cases, patients return to the prescribing physician with their filled approved buprenorphine products prescriptions so that the practitioner can monitor the induction process. While it is acceptable for the patient to return to the practitioner with their filled prescription supplies, practitioners shall not store and dispense controlled substances that are the result of filled patient prescriptions.

Maintain a log of patients prescribed-
Site specific as to how this looks and is kept
Inclusion/Exclusion Criteria

Inclusion criteria
(patients must meet ALL requirements to be eligible)

- HIV-positive
- Eligible for primary care at the intervention site
- Diagnosed with an opioid use disorder as determined by DSM-V criteria and desiring pharmacotherapy for this disorder
- Currently receiving primary care (or willing to start primary care) at the intervention site
- Age > 18 years or emancipated minor able to consent for medical and substance use treatment
- It is recommended that female patients receiving buprenorphine use adequate birth control methods (pill, IUD, condom with spermicide, abstinence, etc.)
- Able to comply with buprenorphine treatment program policies.

Exclusion criteria
(patients meeting ANY of these criteria are ineligible)

- Severe hepatic dysfunction, i.e. AST and/or ALT ≥ 5x upper limit of normal
- DSM-V criteria for benzodiazepine use disorder
- DSM-V criteria for alcohol use disorder
- Active suicidal ideation
- Psychiatric impairment that impedes ability to provide informed consent to make decision regarding their own care (dementia, delusional, actively psychotic)
- Methadone or opioid analgesic doses exceed levels allowing for safe transition to buprenorphine (methadone >30-60 mg)
- Patients with acute or chronic pain syndrome requiring chronic use of opioid analgesics
- Patient has serious/uncontrolled/untreated medical problems (hypertension, hepatic failure, asthma, diabetes, etc.) or psychiatric disorders.
Site specific issues

Referrals (to you / your site)
• will your site be accepting referrals from outside your clinic?
• will your site have a formal internal referral process if pt’s provider is not part of the study?

Patient access / team backup
• How will you plan for ongoing patient care/access when team members are not available?

Referrals (from you)
• What will be your process for referring out for higher level of care (MH / Detox / MTD)?
• Are some or all of those services in-house? Are none of them?
Buprenorphine 101-Review

A brief review for those waivered, and a short learning for those who are not.

We will review:

• How does it work?

• How is it typically supplied? (4:1 combination)

• Its relevance in HIV: BHIVES 12-Month Results
How Does Buprenorphine Work?

- **Buprenorphine**
  - Empty Receptor
  - Receptor Sends Pain Signal to the Brain
  - Withdrawal Pain

- **Opioid**
  - Perfect Fit – Maximum Opioid Effect
  - No Withdrawal Pain
  - Euphoric Opioid Effect

- **Imperfect Fit – Limited Opioid Effect**

- **Buprenorphine still blocks opioids as it dissipates.**
Opioid Activity Levels

- Full Agonist: Methadone
- Partial Agonist: Buprenorphine
- Antagonist: Naltrexone

Mu Receptor Intrinsic Activity (“How High”)

<table>
<thead>
<tr>
<th>%</th>
<th>100</th>
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<tbody>
<tr>
<td>0</td>
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<td>1</td>
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<td>8</td>
<td>0</td>
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<tr>
<td>9</td>
<td>0</td>
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Drug Dose

- no drug
- low dose
- high dose

(“How Much”)
Buprenorphine/naloxone (4:1 combination = “Suboxone”)

- Partial opioid agonist
  - Decreased overdose risk
- Naloxone inactive unless injected – then precipitates withdrawal
  - Decreased risk of abuse
- Sublingual, once daily
  - Safe for flexible dosing
  - Can split tablets
  - Is now available in film
The U.S. Food and Drug Administration approved Probuphine, the first buprenorphine implant for the maintenance treatment of opioid dependence. Probuphine is designed to provide a constant, low-level dose of buprenorphine for six months in patients who are already stable on low-to-moderate doses of other forms of buprenorphine, as part of a complete treatment program.

Only a health care provider who has completed the training and become certified through a restricted program called the Probuphine Risk Evaluation and Mitigation Strategy (REMS) program should insert and remove the implants.
Probuphine

Implants placed under the skin of the upper arm
BHIVES 12-Month Results:

• Improved Drug Outcomes\(^1\)
  • Opioid use: 84% → 42%

• Improved HIV Outcomes\(^2\)
  • Receipt of ART: 60% → 68%
  • Viral suppression: 17% → 57%*

• Improved quality of care, quality of life\(^3\)

• Conclusion: Integrated buprenorphine and HIV Care feasible and safe

Fiellin JAIDS 2011
2 Altice JAIDS 2011
3 Korthuis JAIDS 2011
Selecting, Assessing, and Preparing Patients

- Be aware of inclusion/exclusion criteria
- Confirm DSM-V Dx
- Understand use disorder hx and current use hx for all substances
- Be aware of psychosocial factors (homeless, DV, MH)
- Encourage harm reduction approach/relationship
- Insurance coverage (access to medication) is important final piece
Case 1: Brandi

- 40 year old female, client of HHSC. Brandi is taking college classes and is struggling with long term opiate use, most recently heroin. Well controlled HIV for a number of years on Tivicay + Truvada. Other meds: Wellbutrin, Vit D, and B-12. She is on oral contraceptives, LMP 3 weeks ago.

Addiction Hx:
- Began using cocaine at age 10, family history of substance use disorder.
- Started abusing prescription opiates after surgery at 15 yo, with subsequent heroin use when unable to obtain prescription opiates. Her chart record demonstrates periods of early prescription refills and suspected diversion behavior.
- Sustained 4 years sobriety in late 20’s, unsuccessful attempts to quit since then and no formal treatment history.
Case 1: Brandi

At provider visit, patient requests treatment for her addiction due to failure to maintain school grades and has heard of suboxone and thinks it could work for her

Would you give this patient a tentative DSM-V dx of opiate use disorder?
Case 1: Brandi - Provider Assessment

• Identify comorbid factors and communicable diseases concerns
  • Refer Patients who need medically supervised withdrawal management
  • Current use and withdrawal potential

• Review prior labs

• Do you understand this patient's medical history?
  • Assess for drug interactions
  • Confirm contraceptive plan
SUBJECTIVE
Brandi P is a 40 year old female who has been dealing with issues of opiate use. she has been struggling with ongoing use of heroin, some opiate pills at time . She relates behaviors associated with her opiate use, including:

- Buying or selling opiates: Yes
- Unable to control use: Yes
- Excessive time acquiring, using or recovering: Yes
- Use negatively affects work, school or home life: Yes
- Endangered him/herself or others while using: No
- Tried to cut back on her use?: Yes

she does not have a history of previous detox attempts from opiates she does have a period of abstinence from opiate use in the past. Intermittent self detox - short lived

Though she describes the above substance use pattern, she reports that she does not have significant issues with chronic pain. ' my body just aches '

In addition to the described opiate use, she reports the use of other substances:

- Alcohol: No
- Benzodiazepines: Years ago
- Barbituates: No
- Stimulants: Yes (meth,)
- Hallucinogens: No
- Inhaled solvents: No

If "yes" to any above: details uses 3 - 4 x /wk re meth, snorts or shoots up , has tried to cut down ( last use & frequency, route of use, relative amounts)

In addition to these concerns about substance use, she is taking HIV medications ( Tivicay + Truvada= DOL+TDF+FTC), and reports she missed 3-4 doses in the past 30 days, and the following medication side effects: appetite loss.

she has already been assessed for chronic medical conditions that require medical monitoring, treatment or prevention (hepatitis, STD's, TB, and tobacco use). These conditions are either stable or treated.
Review other drug interactions

DRUGS SELECTED FOR INTERACTION SEARCH:
Dolutegravir, Tenofovir Disoproxil (TDF), Emtricitabine
AND Buprenorphine/naloxone, Bupropion (Wellbutrin®, Zyban®)

RESULTS:
- Dolutegravir & Buprenorphine/naloxone
- Dolutegravir & Bupropion (Wellbutrin®, Zyban®)
- Tenofovir Disoproxil (TDF) & Buprenorphine/naloxone
- Tenofovir Disoproxil (TDF) & Dolutegravir (DTG)
- Emtricitabine & Tenofovir

http://www.hiv-druginteractions.org/checker
Drug Interactions - General

Additive side effects
Anticholinergic medications (ie 1\textsuperscript{st} gen antihistamines, tricyclics, antipsychotics)
  • Constipation, difficulty urinating etc
  • Respiratory depression and sedation
Caution for OTC dextromethorphan (sedation)
Beno’s – increased risk of accidental injury/ED visits

Ceiling effect (of Bup) – higher doses do not increase resp depression

Serotonin Syndrome
• One case report of SS with single dose Bup
• Mild to moderate SS – 43% in women attending a Suboxone Clinic: antidepressant dose may need modifying*

QT prolongation
• Negligible risk in general vs significant risk with high dose methadone
Drug interactions - even PIs not an issue

<table>
<thead>
<tr>
<th></th>
<th>Atazanavir</th>
<th>Emtricitabine/TAF</th>
<th>Ritonavir</th>
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</thead>
<tbody>
<tr>
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<td></td>
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</tr>
<tr>
<td>Buprenorphine</td>
<td>☢</td>
<td>☢</td>
<td>☢</td>
</tr>
<tr>
<td>Emtricitabine/TAF</td>
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<tr>
<td>Ritonavir</td>
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</tr>
</tbody>
</table>

http://www.hiv-druginteractions.org/checker
Potential Interaction

Atazanavir

Buprenorphine

Quality of Evidence: Low

Summary:
Atazanavir/ritonavir increased buprenorphine AUC (67%) and Cmin (69%); norbuprenorphine increased by ~2-fold. If coadministered, monitor for sedation and cognitive effects and consider a dose reduction of buprenorphine. There are three case reports of clinical symptoms of opiate excess during coadministration which required dose reduction of buprenorphine. Coadministration of unboosted atazanavir and buprenorphine is not recommended as it may decrease atazanavir plasma concentrations.
Should I do anything differently?

• 3A4 inhibitors – what are the risks? Should I do anything differently?

  • Due to ceiling effect, increased levels of BUP are safe
  • Use normal induction protocols: start with low dose and repeat as needed.

Potent inhibitors of CYP3A4 include clarithromycin, erythromycin, diltiazem, itraconazole, ketoconazole, ritonavir, verapamil, goldenseal and grapefruit. Inducers of CYP3A4 include phenobarbital, phenytoin, rifampicin, St. John's Wort and glucocorticoids.

• 3A4 inducers – what are the risks? Should I do anything different?

  Example: stable buprenorphine maintenance, new prescription for rifampin
  • Risk of opiate withdrawal

  Nevirapine, tipranavir
Interaction with other drugs of abuse

Alcohol
• Risk of combined sedation

Benzo’s
• Death reported IV Bup + benzo

Cocaine
• Risk of opiate withdrawal
• Direct drug interaction vs decreased absorption via SL route due to vasoconstriction
Case 1, Brandi - Provider Assessment Cont.

We want to be sure we are:

• Reviewing med interactions

• Addressing chronic pain

• Beginning education about buprenorphine

• Obtaining UDS and urine HCG

• Initiating/offering ‘kick-packs’ prescriptions
OBJECTIVE:
T - 97.9  BP - 110/68  P - 82  RR - 12  Wt - 112lb

General: cooperative, mild distress, pale and thin
15 min of 25 min spent in face to face discussion reviewing issues & options for treatment of her opiate use, discussing her labs and their meaning, and establishing a plan for her care

Labs - (include relevant here: HIV control, CD4, AST/ALT, creat, etc)

ASSESSMENT /PLAN:
Tentative DSM V diagnosis of Opiate Use Disorder
Based on the history above, as well as the review of the patient's past medical hx, she appears to meet criteria for opiate use disorder. Since there is not evidence of significant sedative or alcohol use, she does not require referral to a treatment program.

I have advised the patient that she is a potential candidate for buprenorphine treatment, and will have her see the clinic alcohol/drug counselor for a formal assessment, confirmation of diagnosis, and planning for induction.

Medications have been reviewed, and there is not concern for drug interactions. ***

- UDS & urine HCG ordered
- Buprenorphine education begun, and “kick-packs” Rx will be written once induction scheduled (clonidine & loperamide with OTC pain med)
Case 1: Brandi - Coordinator Assessment

1. Acute Intoxication and/or Withdrawal Potential

2. Biomedical conditions and complications

3. Emotional/Behavioral/Cognitive conditions and complications

4. Readiness to Change

5. Relapse/Continued Use/Continued Problem potential

6. Recovery Environment
Case 1: Brandi - Coordinator Assessment

Brandi is a 40 year old female who meets with CM for an evaluation of opioid dependence and treatment options.

Brief Use History: CL started using substances at the age of 10 (cocaine) and opiates at 15 years. CL reports her drug of choice is primarily heroin (IDU) approx .5 grams/day. CL reports she also uses the following substances; prescription pain pills when she can get them. CL does not have a history of past overdose(s).

Last use of the following substance(s): IDU heroin this morning, ¼ gram.

Withdrawal/Tolerance: Brandi reports using more heroin to obtain the same effect. Reports she used to be able to use 1-3x per week, now using almost daily. This is getting in the way of school/grades.

Physical or Mental Health Conditions: Brandi reports the following conditions: Mild depression/anxiety. MH medications is Wellbutrin, not in MH counseling.

Brief Treatment History: CL does not have past treatment history. She has attended a few groups or NA meetings in the past, nothing consistent.

O: Client arrived on time. Posture, behavior, mood and affect all within normal limits. Orientation, judgement, insight, and memory all within normal limits, attention, concentration, and thought content all within normal limits. Does not report SI or HI at this time.
Case 1: Brandi - Coordinator
Assessment chart note

A: F11.20 Opioid Use Disorder (Moderate-Severe, 4+ symptoms)

Based on CL self report and DSM-V criteria for diagnosis of opiate use disorder, Brandi does qualify for office based buprenorphine for opioid dependence and completes enrollment paperwork to participate in this program.

Readiness to Change: Based on CL self report and CM’s assessment, Brandi demonstrates the following stage of change: Preparation. CL is actively thinking about treatment options.

Recovery Environment: Brandi demonstrates the following supports in place: sister and boyfriend are supportive contacts.

Treatment Planning: Brandi reports the following plan for treatment: Find local AA or NA group (list given to CL), schedule one-one counseling at Lifeworks NW. Attend visits with this CM as scheduled during induction, stabilization and maintenance phase.

P:

CM reviews with Brandi how office based buprenorphine works at this clinic. CL understands she will need to present in withdrawal for her induction appt. CL is scheduled for an induction appt with PCP on 6/10/15.

CM confirms that CL insurance does cover buprenorphine medication, no PA required.

Note sent to PCP to request Rx for induction dose and “kick pack” at Westside pharmacy, CL will pick up “kick pack” now and CM will pick up on 6/10/15 on behalf of CL.
Definitions of Addiction

**ASAM:** Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.

http://www.asam.org/for-the-public/definition-of-addiction

**Gabor Maté:** Any repeated behavior, substance-related or not, in which a person feels compelled to persist, regardless of its negative impact on his or her life and the lives of others.

Gabor Mate, *In the Realm of Hungry Ghosts*, 2010
DSM-5 Diagnostic Criteria of Opioid Use Disorder

DSM 5: 11 Criteria for SUDs Diagnosis on a Continuum of Severity

• Taking substance in larger amounts for longer than intended
• Wanting to cut down or stop using, but not managing to
• Spending a lot of time getting, using, or recovering from use
• Cravings and urges to use the substance
• Unable to manage at work, home or school
• Continuing to use, even when it causes problems in relationships
  • Giving up important social, occupational or recreational activities
  • Using again and again, even when it puts them in danger
  • Worsening physical or psychological problems that are aggravated by continued use
• Needing more of the substance to get desired effect (tolerance) *
• Development of withdrawal symptoms; relieved by taking more of the substance. *

Mild (2-3) Moderate (4-5) Severe (6+)

• *Not counted in SUD diagnosis if symptoms of tolerance or withdrawal occur during appropriate medical treatment with prescribed medications.
Case 1: Brandi - cont

• Educate patient about buprenorphine treatment
• Complete a treatment agreement, communicate with other providers in patient’s circle (ROI)
• Get PA and other insurance review started (if needed)
• Determination of study participation in multi-site eval (7 day window for data manager appt, data manager finalizes study participation and consent).
• Schedule data manager visit (if not seen that same day)
• Schedule induction visit with PCP and coordinate patient obtaining kick-pack, and prepares patient for induction
HHSC Tx Agreement
A Detox Story

Story 1
Breakout Session - You do it

Case 2: Raul

- 41 year old male, client of HHSC, with prior history of sports related injuries leading to long term opiate use. Currently describes daily heroin use and recent HIV diagnosis at county STD clinic.
- HIV CD4 = 870, VL 80,000 no known complications; on no HIV meds
- Hep C co-infection with initial AST 159/ALT 301, on repeat it was AST 64/ALT 95
- All other routine labs normal
- hx L5-S1 discectomy 9/95; skiing injury 3/97 T7-8 disc lesion, recurrent R L5-S1 disc herniation and C6-7 discectomy/fusion 9/98. C6-7 treated w/ anterior fusion/plating 2/9/00. Persistent pain partially treated with gabapentin and patient on disability.
- Social: HIV pos wife, currently separated, stable housing with disability income, past IT network job x15y

- Addiction Hx:
  - Prior alcohol, marijuana and stimulant abuse, currently using heroin and marijuana at this time and ½ ppd tob
  - No treatment history
  - Patient motivated for opiate treatment due to new diagnoses of HIV and Hep C
Integrating Buprenorphine Treatment for Opioid Use Disorder in HIV Primary Care

Day 2

Michael MacVeigh, MD
Kristen Meyers, BS, CADC
August 17-19, 2016
Day 2- Morning Overview
9:30-12:30PM

Initializing, Stabilizing and Maintaining Patients

- Office Based Induction Visit
- Stabilization Visits
- Maintenance Visits
(Diverted) Suboxone Home Induction

Story 2
Another Self Induction Example

Story 3
Inducing Raul

- 41 year old male, with heroin addiction, untreated HIV and improved transaminases associated with Hep C. He presents for his 8am office based induction.

- DSM-V opiate use disorder has been confirmed per study protocol and does not require medically supervised withdrawal management. He has entered the study and completed consent to participate. He has been educated about buprenorphine treatment and completed a treatment agreement. The patient’s treatment goal is to attend weekly groups at our local partner agency, ROI completed and all care providers informed of the plan.

- Labs from prior visit show
  - UDS+ for THC and Heroin, no other substances
  - Transaminases: AST 64  ALT 95
Inducing Raul

• He reports his last use of heroin was at 6pm the previous night

• Patient has taken 0.2mg of clonidine three hours before this visit to “chill out” (brings another dose with him)

  - Sweaty {YES/NO:63::"Yes"}
  - Anxiety (nervousness/restlessness) {YES/NO:63::"Yes"}
  - Joint Aches {YES/NO:63::"Yes"}
  - Runny nose {YES/NO:63::"Yes"}
  - Nausea/Vomiting/Stomach cramps {YES/NO:63::"Yes"}
  - Diarrhea {YES/NO:63::"Yes"}
  - Muscle twitching {YES/NO:63::"Yes"}
Inducing Raul

Objective Findings:
- Patient exhibits no signs of suspected intoxication.
- BP 146/87; Pulse 92; facial flushing observed; able to sit still; mild tremor felt but not seen, 1 yawn observed, no goose bumps. Pupils are 2mm but non-responsive to light.
- His COWS Score = 10, clearly mild

Provider decided to wait due to mild COWS score and lack of reactive pupils. Patient was advised that more time was needed for his body to demonstrate clear withdrawal. Patient was reassured that the medication would relieve symptoms but needed to avoid inducing precipitated withdrawal. Clear plan for re-check every 15-30 minutes, write Rx for induction doses (2 or 4 mg), involve clinical coordinator to assist the patient, and to obtain induction dose from onsite pharmacy.

Objective measures trump subjective measures
- Pupil size and reactivity
- Goosebumps
- Yawning
- Pulse

What would you do?
# Opioid Withdrawal Symptoms

<table>
<thead>
<tr>
<th>Signs and Symptoms</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse rate</td>
<td>Elevated pulse rate (above 100 bpm) may indicate withdrawal</td>
</tr>
<tr>
<td>Runny nose or tearing</td>
<td>Nasal stuffiness, nose running</td>
</tr>
<tr>
<td>Lacrimation</td>
<td>Moist/tearing eyes</td>
</tr>
<tr>
<td>Mydriasis</td>
<td>Pupils appearing larger than normal for room light</td>
</tr>
<tr>
<td>Piloerection</td>
<td>Piloerection of skin or hair standing up on arms</td>
</tr>
<tr>
<td>Diaphoresis</td>
<td>Reports of chills and flushing, observable beads of moisture or sweat</td>
</tr>
<tr>
<td>Chills</td>
<td>Reports of chills</td>
</tr>
<tr>
<td>Anxiety/irritability</td>
<td>Irritability or anxiousness observable or self-reported</td>
</tr>
<tr>
<td>Yawning</td>
<td>Observed yawning during observation period</td>
</tr>
<tr>
<td>Tremulousness</td>
<td>Tremor or muscle twitching</td>
</tr>
<tr>
<td>GI symptoms</td>
<td>Stomach cramps, nausea, loose stools, vomiting or diarrhea</td>
</tr>
</tbody>
</table>
Inducing Raul-Cont.

- It has been 20 minutes and now has more frequent yawning, BP 154/92; Pulse 104, visible sweat on brow, goosebumps on forearms and pupils are 4mm and reactive to light. His COWS score = 21, moderate and ready for induction and situation discussed with team to ensure room available for next 1-2 hours.

- Induction dose selected 4mg suboxone, time documented and dose observed (sublingual). Patient resting in exam room with plan for repeat evaluation in 20-30 minutes. Clinical coordinator available to assist patient as needed, team support also aware.

Induction process:

08:45; 4 mg Suboxone sublingual

09:05; Assessment: no changes, patient reports feeling no different and worried it isn’t working. Patient reassured
        Suboxone dose: 4mg

09:45; Assessment: patient reports less irritable, less nausea, no goosebumps, still mild sweaty
        Suboxone dose: 0 mg, reassess in 20 min

10:05; Assessment: patient reports markedly better, wants to go home
        Suboxone dose= home Rx for 3x4mg, 1x4mg tonight and 2x4mg in AM
Avoiding Precipitated Withdrawal

% Mu Receptor Intrinsic Activity

Drug Dose

no drug low dose high dose

Full Agonist

Partial Agonist: Buprenorphine

(“How Much”)
Inducing Raul-Cont.

Assessment and follow up plan to include:

• Appropriate ICD-10 diagnosis (F11.10, F11.20)

• 1-2 day return visit (be aware of weekends and time off) with PCP and Clinical Coordinator

• Confirmation of dosing (typically 8mg bid)
Management of Precipitated Withdrawal

- If a participant develops signs or symptoms of opioid withdrawal after dosing with BUP/NX, the medical clinician can:
  - Administer non-narcotic medications that provide symptomatic relief
  - Increase the dose of BUP/NX to overcome withdrawal symptoms
Stabilizing Raul

1st Visit: It’s the next day, Raul has taken 8mg that morning and is reporting that he still feels jittery, didn’t sleep well and he ate less than usual for breakfast because his stomach was queasy. Raul denies any other opiate use and asks “is this going to get better?”

- BP 122/74, P 76
- Not sweaty, no goosebumps, pupils are 1-2mm, no tremor
- COWS=2
- Obtain UDS
- Involve clinical coordinator as needed and forward notes to keep updated

Is he on a sufficient dose at 12mg?
Team decided to increase by 4mg, patient sent home with total of 16mg/day (8mg bid) and return appt for the next day)
Stabilizing Raul-Cont

- **2nd Visit:** Raul returns and has taken his doses as prescribed and reports feeling much better. Once again, denies any other opiate use but describes still having some cravings. He is eating well and denies any specific side effects.
  - BP 120/70, P 74
  - No objective signs of withdrawal
  - COWS=0
  - Previous UDS results not back, testing today unlikely to help

- Raul met with Clinical Coordinator for a risk assessment and reinforcement of treatment plan
  - Reviewed use history since last visit
  - Assessed for risk of relapse and craving concerns
  - Confirmed home situation does not promote other opiate use (no cookers, dirty cottons, old needles, or “lost stash”)
  - Treatment plan and goals emphasized

    – Is he on a sufficient dose at 16mg?

- Team decided to remain at 16mg, patient sent home with total of 16mg/day (8mg bid) and return appt for one week
Logistics when prescribing

- **Location of and relationship with pharmacy**
  - Consider talking with pharmacy per patient or from a system perspective about this process involving multiple visits and frequent prescribing

- **Actual prescription sig wording:** Strongly advised to include date to be filled and next refill date for team coordination and safety

  Example 1: buprenorphine-naloxone (SUBOXONE) 4-1 mg SL tablet 3 Tab

  Sig: Place 1 Tab under the tongue tonight and 2 Tabs tomorrow AM PA = 15058358103 (TBF 8/17/16, NRF due 8/18/16)

  Example 2: buprenorphine-naloxone (SUBOXONE) 8-2 mg SL tablet 14 Tab

  Sig: Place 1 Tab under the tongue 2 (two) times daily. PA = 15058358103 (TBF 8/18/16, NRF due 8/25/16)

  DEA Waiver Number must be on a hard copy prescription

- **Target dose** is the dose that results in the optimal relief of objective and subjective opioid withdrawal symptoms and cravings. The median expected dose is 16mg daily, though lower doses such as 8mg per day may be sufficient and higher doses such as 24mg may be required. Maximum daily dose is 24mg.
  - Most patients reach their target dose within the first two weeks of treatment
Visit frequency for suboxone prescribing

Medication visit frequency for office-based induction:

- Visit Pre-induction
- Visits on day 1, 2, 3 when initiate treatment
- Visit 1-2 weeks post initiation of treatment
- Visit 3-6 weeks post initiation of treatment
- Monthly visits until 6-12 months
- If doing very well, visits every 2 months starting at month 7-13.

Who is the patient going to see at these visits?
  - Our model: Alternate visits between provider and clinical coordinator
  - Logistics of Rx refills
  - When to do UDS
Maintaining Raul

- Week 1: Raul returns on 8mg bid suboxone and comes in for his scheduled provider/clinical coordinator shared visit. Provider running late, clinical coordinator sees patient first
- Patient initially reports he is doing well with no use
- UDS from 8/17/16 is negative for opiates + THC (UDS obtained 1 day after induction, 2 days after last use)
- Clinical coordinator assesses CL for relapse risk, coping skills and reviews treatment plan
- Provider meets with Raul after brief review of visit with coordinator. Provider confirms patient history and determines plan to continue 8mg bid dose. UDS ordered and return visit scheduled in one week for provider appt (with clinical coordinator input)
Maintaining Raul

- Week 1 Review: Raul was stable, Prior UDS + for THC only, continued on 8mg bid

- Week 2: Raul returns for scheduled visit with provider who sees him while waiting for clinical coordinator. Raul reports no use since last visit, feeling good on current dose, adherent to HIV meds.
  - PCP reviews UDS+ for heroin from Week 1 visit………What will you do?

- Elicit patient response and discuss reason for relapse
  - Was relapse due to dose issue?
  - Was relapse due to other reasons (“challenge” med effectiveness)
  - Offer clinical coordinator presence to discuss further (patient comfort/preference)

- Decide on dosing plan

- Discussion of THC use, discussion of group meetings/treatment plans

- Emphasize support for ongoing suboxone prescribing in the face of expected relapse, with focus on safety
# Induction & Stabilization Dosing Schedule

<table>
<thead>
<tr>
<th>Day</th>
<th>Suggested Dosing*</th>
<th>Maximum Dose (suggested)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>2-4mg (wait 45 min) + 4mg if needed</td>
<td>8mg</td>
</tr>
<tr>
<td>Day 2</td>
<td>Day 1 dose + 4mg if needed (single dose)</td>
<td>12mg</td>
</tr>
<tr>
<td>Day 3</td>
<td>Day 2 dose + 4mg if needed (single dose)</td>
<td>16mg</td>
</tr>
<tr>
<td>Day 3-28</td>
<td>May increase dose 4mg per week, if needed</td>
<td>24mg</td>
</tr>
</tbody>
</table>

* All doses must be directly observed
Maintenance - Patient Issues

- Polydrug Use
- Mental Illness
- Home Inductions
- Lost meds, travel
- Relapse prevention and coping skills
- Frequency of visits and UDS
- Anticipate pain management issues, surgery/emergencies
- Be flexible with the patient and the change process.
- Signs of patient instability, relapse, diversion
Maintenance - System Issues

- Establish appropriate infrastructure to facilitate a team effort around treatment with buprenorphine.
  - Pharmacy planning
  - Flexibility with scheduling/double booking
- “The glue person” = clinical coordinator
  - Role of the clinical coordinator for maintenance visits
  - Relationship with data manager/prescribing providers/patient
- Anticipate insurance and cost issues
- Lack of support in the treatment community
- Current systems do not offer “on demand” treatment, nor does this study
- Transitions to and from jail
- Cultivate relationships with other agencies
Day 2- Afternoon Overview
1:40PM-3:10PM

1. Maintaining Patients – Continued
2. Transitioning Patients to Standard of Care
   • Taper (self-taper, slow-taper, rapid-taper)
3. Signs of Patient Instability
   • (diversion, theft, relapse)
4. Next steps
   • (barriers to integrating bup, successful ways to expand program, obtaining a mentor for consult)
5. Wrap Up
Maintenance - Patient Issues

- Polydrug Use
- Mental Illness
- Home Inductions
- Lost meds, travel
- Relapse prevention and coping skills
- Frequency of visits and UDS
- Anticipate pain management issues, surgery/emergencies
- Be flexible with the patient and the change process.
- Signs of patient instability, relapse, diversion
Maintenance - Scenario:

Relapse

- Relapse is expected. Decision balances between either dose increase or recognizing “challenging” behaviors
  - Typically challenging behaviors occurs in first month of stabilization vs ongoing symptoms and use suggesting inadequate dosing
  - Case Example
- Randall P, 50 year old male, well controlled on Stribild. Previous successful induction for heroin use disorder. Initially started on 8mg bid, returns 4 days later for his second stabilization visit (due to weekend= day 4) and describes having a lot of symptoms and he ended up using more Suboxone than prescribed. "I took between 24 and 32 mg a day". On Sunday morning, out of suboxone, he used heroin and presents now in withdrawal. COWS=18

- What do you do??
- Do you re-induce?
- Would you repeat UDS?
- Is dose sufficient? If not, what dose?
- When would you see him again?
Maintenance - Scenario:

Relapse

Important Points:

- Relapse prevention and coping skills
- Be flexible with patient with the change process
- Ongoing polydrug use
- Signs of patient instability, relapse, diversion
- Home inductions
What is the language of change?

**Change talk**

- **Preparatory talk**
  - Desire to change
  - Ability to change
  - Reasons to change
  - Need to change

- **Mobilizing talk**
  - Commitment language
  - Activating language
  - Taking steps

**Sustain talk**

- **Preparatory talk**
  - Desire not to change
  - Inability to change
  - Reasons not to change
  - Need to keep status quo

- **Mobilizing talk**
  - Commitment to status quo
  - Activating language
  - Taking steps to remain
Chronic pain
John M. is a 61 year old with well controlled HIV on Complera. He has been diagnosed with opiate use disorder (heroin and Vicodin). He describes using Vicodin when on business trips or his family is in town. He was stabilized on 24 mg suboxone a day due to history of high dose/daily opiate use. Although he initially denied chronic pain issues, and focused on his desire to stop opiate use; after 4 months, he reports persistent back pain issues, but denies cravings. Evaluation reveals no significant underlying problem other than DJD, and he describes partial relief with current suboxone dose. UDS are normal, other than bup since stabilization

What would you do?
- Per protocol and in general, MAT is not directed at pain, dose would not be increased
- Focus on maintaining current dosing and non-opiate treatment modalities
- Involve Clinical Coordinator to continue to work with patient on treatment plan, relapse prevention
- Would you change frequency of UDS and office visits?

Important Points:
- Anticipate Pain Management Issues
- Surgery/emergencies/acute pain
- Stolen and Lost Meds/Travel
- Be Flexible and Patient With the Change Process
- Mental Illness
Pain Management in Patient on BUP/NX

• **Minor pain** (e.g. dental procedure)
  • Continue BUP/NX
  • Add non-narcotic agents (e.g. paracetamol)

• **Moderate pain** (e.g. elective minor surgery)
  • Stop BUP/NX on day of procedure
  • Manage pain with short-acting opioids
  • Resume BUP/NX next day

• **Severe acute pain** (e.g. major trauma)
  • Stop BUP/NX
  • Use opioid pain meds; may switch to methadone
Maintenance - System Issues

- Establish appropriate infrastructure to facilitate a team effort around treatment with buprenorphine.
  - Pharmacy planning
  - Flexibility with scheduling/double booking
- “The glue person” = clinical coordinator
  - Role of the clinical coordinator for maintenance visits
  - Relationship with data manager/prescribing providers/patient
- Anticipate insurance and cost issues
- Lack of support in the treatment community
- Current systems do not offer “on demand” treatment, nor does this study
- Transitions to and from jail
- Cultivate relationships with other agencies
Maintaining vs Tapering

- **Maintaining-** what this really looks like with long term patients
  - Flexible, non-judgmental, harm reduction

- **When would you taper off?**
  - Diversion or theft of controlled substances - witnessed vs suspected
  - No significant improvement or worsening clinical course
  - Patient initiates taper requests
  - Threatening behavior or violence

- **Pace of Taper**
  - Buprenorphine-maintained patients who were clinically stable and wanted to discontinue treatment were tapered slowly. Slow tapers have been shown to be more successful than rapid tapers. The pace of a voluntary taper was determined by the patient and could be halted or reversed at the patient’s request.

- **Return to PCP vs intervention team**
Example 14-Day Taper

<table>
<thead>
<tr>
<th>Day</th>
<th>Bup/Nx Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>12</td>
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<td>5</td>
<td>8</td>
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<td>6</td>
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<tr>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>15</td>
<td>off</td>
</tr>
</tbody>
</table>
Buprenorphine Detox vs. Maintenance: Which is Better?

- Multi-site trial of buprenorphine/nx for 653 prescription opioid-dependent patients in 10 primary care clinics
- Detox phase followed by maintenance phase for those who relapse
- “Success” = minimal or no use on UDS & self-report

![Success at 12 Weeks:]

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Detox Phase:</td>
<td>6.6%</td>
</tr>
<tr>
<td>Maintenance Phase:</td>
<td>49.2%</td>
</tr>
</tbody>
</table>

1 Weiss Arch Gen Psych 2011
Buprenorphine vs. Methadone

Treatment Retention

Percent Retained

Study Week

Johnson NEMJ 2000
Diversion Information

Diversion of buprenorphine occurs in many part of the country and is localized by prescribing patterns.

Typically, reports of abuse/diversion increase as buprenorphine prescribing increases and then decreases over time, follows similar patterns to other opioids.

RADARS® System
Subutex & Suboxone: How Much is Prescribed vs. Abuse/Diversion Reports
Nabarun Dasgupta, MPH
Researcher, RADARS System
Buprenorphine/naloxone: Lower Diversion Potential

- Precipitated withdrawal when injected
- When diverted, mostly used for self-treatment of withdrawal, instead of intoxication
- Low overdose risk decreases possibility of harm if diverted

Yokell Curr Drug Abuse Rev 2011
Larance Drug & Alc Dep 2011
Bazazi J Addict Med 2011
Abuse, Misuse and Diversion Rates

Drug Diversion

Key Informant

Opioid Treatment Program

Poison Center

per 1,000 URDD
Missed BUP/NX Doses
For Those Who Return After a Missed Dose

- 1-3 Days
  - Evaluate & resume BUP/NX at previous dose

- 4-5 days
  - Evaluate & resume BUP/NX at half previous dose and increase as needed

- ≥ 5 days
  - Evaluate & resume induction dosing protocol
Wrap up - Next Steps

• Address parking lot questions

• What's next: each site has clear plan of what they need to move forward

• Plan for Site Visit