Integrating Opioid Use Disorder Treatment in Clinical Care

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P. Todd Korthuis Disclosures

- Dr. Korthuis has no relevant financial relationship(s) with ACCME defined commercial interests to disclose.

The contents of this activity may include discussion of off label or investigative drug uses. The faculty is aware that is their responsibility to disclose this information.
Target Audience

• The overarching goal of PCSS is to make available the most effective medication-assisted treatments to serve patients in a variety of settings, including primary care, psychiatric care, and pain management settings.
Educational Objectives

• At the conclusion of this activity participants should be able to:
  ▪ Identify models for integrating opioid use disorder (OUD) pharmacotherapy into primary care settings
  ▪ Review keys to successful OUD pharmacotherapy implementation in clinical practice
  ▪ Identify strategies for preventing diversion of buprenorphine/naloxone
Opioid Use Disorder Pharmacotherapy

• Methadone
  ▪ Requires opioid treatment program (OTP) referral

• Buprenorphine
  ▪ Requires Drug Addiction Treatment Act (DATA) 2000 waiver training
  ▪ Office-based (or OTP) prescribing

• Naltrexone
  ▪ Office-based (or OTP) prescribing
Opioid Use Disorder Pharmacotherapy in Primary Care

• Integration into primary care expands access to OUD treatment

• Buprenorphine and methadone reduce opioid use, overdose, HIV, HCV, and criminal activity more than behavioral treatment alone

• Agency for Healthcare Research and Quality (AHRQ) commissioned technical brief to identify promising models for optimizing pharmacotherapy integration

1 Cicero JAMA Psychiatry 2014
2 Mattick Cochrane 2014
3 Mattick Cochrane 2009
AHRQ Technical Brief

- 11 Key informants
  - Small group telephone discussions

- Literature review
  - Published 1995 – 2016
    - Ovid MEDLINE,
    - PsychINFO, etc.
  - Gray sources
    - ClinicalTrials.gov
    - Health Services Research Projects in Progress, etc

5 Clinicians
4 Policy experts
1 Professional society
1 Patient in remission

5,892 abstracts
475 full text articles
27 inform models of care
14 Gray literature citations
Four Common Components for Integration Models had some level of each component

- **Pharmacotherapy**
  - buprenorphine
  - naltrexone

- Coordination and integration of OUD treatment with other medical and psychological needs

- Provider and community education and outreach

- Psychosocial services

Primary Care Practice-Based Approaches
Representative, not exhaustive

1. Office-based opioid treatment
   • Buprenorphine HIV Evaluation and Support Collaborative (BHIVES)

2. Hub and spoke approaches

3. Nurse care manager approaches

Office-Based Opioid Treatment (OBOT)

Pharmacologic:
- Buprenorphine-naloxone prescribed during office visits

Coordination/Integration of Care:
- Some practices designate clinic staff member as coordinator

Education/Outreach:
- DATA 2000 waiver training
- Access to PCSS

Psychosocial:
- On-site brief counseling by physician or other staff
- Off-site referrals

- Expanded to Nurse Practitioners and Physician Assistants in 2017
  - Funding: Provider reimbursement of billable visits

Integrating Buprenorphine into Clinical Practice

• Preparing the Whole Team
  ▪ Front desk/phone room staff
  ▪ Medical assistant
  ▪ Nurse
  ▪ Physicians
  ▪ Counselor
  ▪ Clinic medical director

• Designate a coordinator (“the glue person”)

• OK to start small and slow – just start!
Who Does What?

• Front desk/phone room staff
  ▪ Scheduling, face/voice of practice
• Medical Assistant or Nurse
  ▪ Measure Clinical Opioids Withdrawal Scale (COWS) if needed during induction; collect/run urine drug screen (UDS); check Prescription Drug Monitoring Plan (PDMP)
• Primary Care Provider
  ▪ Confirm DSM-5 diagnosis, assess comorbid conditions, monitor progress
• Clinic medical director
  ▪ Ensure protocols in place and appropriate billing
• Counselor (if available—absence shouldn’t prevent starting OBOT)
  ▪ Behavioral counseling, monitoring
Essential Training for Clinic Team

**Goal:** Develop Shared Philosophy and Scope

- Recognizing and monitoring withdrawal symptoms (vs. “acting out”)
- Importance of timely buprenorphine refills (vs. “we’ll let the provider know…”)
- Embrace substance use disorder as medical condition (vs. moral failure)
- Urine drug screening as medical safety (vs. policing activity)
- Timing of buprenorphine induction
- Relapse is common and does not equal failure
  - Goal is to limit duration and build on success
Timing of Buprenorphine Induction

• Schedule patient for induction soon after intake visit
  ▪ Or provider education on home induction

• Must be in at least mild-to-moderate opioid withdrawal in order to begin induction
  ▪ The more severe the withdrawal, the greater the relief

• Withdrawal symptoms typically begin
  ▪ 12-24 hours after last dose of a short-acting opioids like heroin
  ▪ 2-4 days after last dose of long acting opioids like methadone
Clinical Opioid Withdrawal Scale (COWS)

- Measures withdrawal symptoms
- Guides timing of first dose of buprenorphine
- Easily administered by medical assistants and nurses
COWS Assessment
Rates 11 Withdrawal Symptoms:

- Resting pulse rate
- Sweating
- Restlessness
- Pupil size
- Bone or joint aches
- Runny nose
- GI upset
- Tremor
- Yawning
- Anxiety or irritability
- Goose bumps
Withdrawal severity:
Mild 5-12; Moderate 13-24; Moderately severe 25-36; Severe >36
Giving First Dose Buprenorphine

A Rough Guide

- COWS ≥ 8, or…

- COWS < 8, and no self-reported opioid use in the past 3 days and clinical UDS negative for opioids*

* Non physiologically dependent patient to prevent relapse, or someone who has completed withdrawal

Prior to Buprenorphine Induction

- Counsel patient on:
  - Alternatives
  - Induction timing
  - Precipitated withdrawal
  - Role of behavioral treatment
- Treatment agreement
- PDMP check
- Potential Labs:
  - UDS, HIV, HCV, HBV, CBC, liver enzymes, urine pregnancy
- Write buprenorphine prescription
## Induction and Stabilization Dosing Schedule

**Tailor to Patient**

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

*Suboxone equivalents dose: 8mg Suboxone = 5.7mg Zubsolv, 4.2mg Bunavail

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**SAMHSA, Medications for Opioid Use Disorder. Treatment Improvement Protocol (TIP) Series 63; 2018. Available at: https://store.samhsa.gov/product/SMA18-5063FULLDOC**
Home Induction

- Office-based induction can be a barrier to initiation
- Pilot trials of home vs. office-based inductions demonstrate comparable retention rates and safety
- Patient selection:
  - Understand induction process
    - Prior bup experience predicts success
  - Can contact provider for problems
- Provider available for phone consultation

Home Induction Hand-Out

Day One Summary: 4 mg under your tongue, wait 1-3 hours. If still feel sick, take 4 mg again. Wait 1-3 hours. If still sick, take 2-4 mg again. Do not take more than 12 mg on Day 1.

<table>
<thead>
<tr>
<th>Time</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Dose</td>
<td>4 mg</td>
</tr>
<tr>
<td>2nd Dose if needed</td>
<td></td>
</tr>
<tr>
<td>3rd Dose if needed</td>
<td></td>
</tr>
</tbody>
</table>

How’s it going? Still feel really bad? Call your doctor at

2nd Dose 4 mg
6-12 hours after 1st dose

2 mg or

3rd Dose 2 or 4 mg
6-12 hours after 1st dose

= Total mg taken on Day One

Buprenorphine/Naloxone Treatment Phases

• Induction (1-3 days)
  - Must be in moderate withdrawal
  - Start with 4mg and gradually increase
  - Titrate to effect (average dose 16mg)

• Stabilization/Maintenance
  ▪ Combine with random UDS and counseling, if available
    - Lack of counseling shouldn’t prevent treatment
    - Provider medical management as “counseling”
  ▪ Patients typically continue buprenorphine for years
Typical Buprenorphine Clinic Schedule
A Rough Guide—Tailor to Practice and Patient

<table>
<thead>
<tr>
<th></th>
<th>Before Induction</th>
<th>Induction (Days 1-3)</th>
<th>Month 1</th>
<th>Month 2</th>
<th>Month 3 and after</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior authorization</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment agreement</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinic visit</td>
<td>X</td>
<td>2x/week</td>
<td>Weekly</td>
<td>Every 2 weeks</td>
<td>Every 4 weeks</td>
</tr>
<tr>
<td>Counseling</td>
<td>X</td>
<td></td>
<td>Weekly</td>
<td>Every 2 weeks</td>
<td>Every 4 weeks</td>
</tr>
<tr>
<td>Refill</td>
<td>-</td>
<td>1-3 day supply</td>
<td>7 day supply</td>
<td>14 day supply</td>
<td>28 day supply</td>
</tr>
<tr>
<td>UDS</td>
<td>X</td>
<td>X</td>
<td>Weekly</td>
<td>Every 2 weeks</td>
<td>Months</td>
</tr>
</tbody>
</table>

- Very stable patients often require less frequent visits and UDS.
- Recurrence of use reverts to Month 1 schedule until stable again.
Buprenorphine HIV Evaluation and Support Collaborative (BHIVES)

**Pharmacologic:**
- Buprenorphine-naloxone

**Coordination/Integration of Care:**
- Integration of OUD, primary care, and HIV care into same setting
- Nonphysician staff coordinates care

**Education/Outreach:**
- Patient and provider educational material available

**Psychosocial:**
- On-site services vary, includes both individual and group counseling

**Funding:** Patient insurance, Ryan White Care Act
BHIVES
Observational study in 11 HIV clinics (n=386)

At 12 months, integrated treatment:

- Decreased heroin/opioid use\(^1\)
- Increased ART uptake\(^2\)
- Improved quality of care, quality of life\(^3, 4\)

Conclusion:

- Integrating buprenorphine in feasible and safe in HIV primary care

\(^1\) Fiellin JAIDS 2011
\(^2\) Altice JAIDS 2011
\(^3\) Korthuis JAIDS 2011
\(^4\) Korthuis JAIDS 2011
Collaborative Models for Buprenorphine Implementation
Hub - and - Spoke

Pharmacologic:
- Primarily buprenorphine-naloxone

Coordination/Integration of Care:
- Coordination and integration between hub and spoke as well as within each spoke
- RN case manager and/or care connector (peer or behavioral health specialist) organizes care coordination

Other:
- Hub provides consultation services
- Available to manage clinically complex patients, MAT tapering, methadone prescribing

Education/Outreach:
- Outreach to community prescribers to increase pool of providers with buprenorphine prescribing waivers

Psychosocial:
- Embedded within spoke site
- Includes social workers, counselors, community health teams

Other:
- Hub provides consultation services
- Available to manage clinically complex patients, MAT tapering, methadone prescribing

Funding:
- CMS State Medicaid waiver
Hub and Spoke Model

Integrated Health System for Addictions Treatment

- Corrections
- Probation and Parole
- Family Services
- Residential Services
- Mental Health Services
- In Patient Services
- Substance Abuse Out Pt Treatment
- Pain Management Clinics
- Medical Homes

Hub
- Assessment Care
- Coordination
- Methadone
- Complex Addictions Consultation

Spokes
- Nurse-Counselor Teams w/ prescribing MD

Vermont Department of Health
Increased Treatment Engagement in Vermont

Variations on Hub and Spoke

• Group Practices with Internal Buprenorphine Team
  ▪ 1-2 providers do buprenorphine inductions (hub)
  ▪ Other primary care providers continue refills/monitoring (spokes)

• Primary Care – Opioid Treatment Program Partnerships
  ▪ Opioid treatment programs (hub) provide induction and behavioral support services
  ▪ Primary care practices (spokes) prescribe maintenance buprenorphine
Nurse Care Manager Model
“Massachusetts Model”

Pharmacologic:
• Primarily buprenorphine-naloxone

Coordination/Integration of Care:
• Nurse Care Manager manages patients in coordination with primary care and medical assistant
• Use of care partner to assist with SBIRT

Funding:
• State Medicaid reimburses Federally Qualified Health Center (FQHC) nurse care manager visits

Education/Outreach:
• Physician training program
• Health Department trains on best practices
• Nurse Care Managers receive:
  ▪ Initial 8 hour and quarterly MAT training
  ▪ Site visits
  ▪ Email and telephone support
  ▪ Case review
  ▪ Access to addiction list serve

Psychosocial:
• Integrated counseling services on-site or nearby

Buprenorphine Diversion

- Variable diversion in RADARS¹
- When diverted, mostly used for self-treatment of withdrawal
- Low overdose risk decreases possibility of harm if diverted
- Less abuse with combination product

Diversion and Misuse

Diversion:
• Unauthorized rerouting or misappropriation of prescription medication to someone other than for whom it was intended

Misuse:
• Taking medication in a manner, by route or by dose, other than prescribed
Reasons for Buprenorphine Diversion and Misuse

Reasons for Diversion

- Peer pressure
- Help addicted friend and family
- Make money

Reasons for Misuse

- Habit
- Perceived under-dosing
- Relieve opioid withdrawal and craving
- Get high
- Relieve anxiety, depression, and pain

Lofwall M, Buprenorphine Diversion and Misuse in Outpatient Practice. J Addiction Med 2014; 8:327-332
Recognizing Diversion

- **Patient Red Flags**
  - Requesting maximum doses
  - Higher than needed doses
  - Past history of diversion or misuse
  - Partner or friends using opioids
  - Signs of injection

- **Monitoring**
  - Pill Counts
  - Negative urine buprenorphine or norbuprenorphine
  - Prescription Drug Monitoring Program (PDMP)
    - Have staff check each visit
Risk of Diversion and Misuse

• Other full opioid agonists, *preferred over*
  ▪ Methadone, *preferred over*
    - Buprenorphine, *preferred over*
      o Naltrexone (antagonist)

2) Lofwall M, Buprenorphine Diversion and Misuse in Outpatient Practice. *J Addiction Med* 2014; 8:327-332
Buprenorphine/Naloxone: Decreased 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
Strategies to Limit Diversion

- Caution when prescribing
  - Use lowest dose that works
- Urine toxicology screens
  - Include buprenorphine
- PDMP queries
- Pill Counts
- Long-acting preparations
  - Monthly XR-naltrexone depot injection
  - Monthly buprenorphine depot injection
  - 6-Month buprenorphine implant (stable patients)
Buprenorphine Diversion Prevention Checklist

• Talk
  ▪ Define and discuss diversion; examples and triggers

• Examine
  ▪ Non-healing track marks, abscesses, nasal erosions

• Listen
  ▪ Repeated early refill and dose increase requests

• Monitor
  ▪ Buprenorphine testing, PDMP, pill counts

• Collaborate
  ▪ Family, pharmacist, counselor feedback
When Patients Misuse or Divert

• Stress willingness to continue working together, and…

• Consider higher level of care
  - Increase visit frequency?
  - Referral for dispensary-based buprenorphine/methadone?
  - Referral for residential treatment?
    (but…make sure “higher level of care” ≠ “no care”)

• Consider switch to long-acting naltrexone or buprenorphine
Provider Implementation Resources

- USCF Substance Use Consultation “Warm Line”
  - (855) 300-3595; Mon-Fri, 10:00am-6:00pm ET

- Provider Clinical Support System (PCSS)
  - www.pcssNOW.org

- ECHO
  - https://echo.unm.edu/opioid-focused-echo-programs/

Addiction Medicine ECHO
Support for Primary Care Providers

- Weekly tele-mentoring CME conference
  - Case presentations
  - Panel discussion
  - Brief Didactic

- Inter-professional panel
  - Addiction medicine physicians
  - Addiction psychiatrist
  - Counselor
  - Peer

- [https://echo.unm.edu/opioid-focused-echo-programs/](https://echo.unm.edu/opioid-focused-echo-programs/)

References


References


• www.effectivehealthcare.ahrq.gov/reports/final.cfm
PCSS Mentor Program

• PCSS Mentor Program is designed to offer general information to clinicians about evidence-based clinical practices in prescribing medications for opioid addiction.

• PCSS mentors are a national network of providers with expertise in addictions, pain, evidence-based treatment including medication-assisted treatment.

• 3-tiered approach allows every mentor/mentee relationship to be unique and catered to the specific needs of the mentee.

• No cost.

For more information visit: pcssNOW.org/mentoring
PCSS Discussion Forum

Have a clinical question?

Ask a Colleague
A simple and direct way to receive an answer related to medication-assisted treatment. Designed to provide a prompt response to simple practice-related questions.

Ask Now
PCSS-MAT is a collaborative effort led by the American Academy of Addiction Psychiatry (AAAP) in partnership with the: Addiction Technology Transfer Center (ATTC); American Academy of Family Physicians (AAFP); American Academy of Neurology (AAN); American Academy of Pain Medicine (AAPM); American Academy of Pediatrics (AAP); American College of Emergency Physicians (ACEP); American College of Physicians (ACP); American Dental Association (ADA); American Medical Association (AMA); American Osteopathic Academy of Addiction Medicine (AOAAM); American Psychiatric Association (APA); American Psychiatric Nurses Association (APNA); American Society of Addiction Medicine (ASAM); American Society for Pain Management Nursing (ASPMN); Association for Medical Education and Research in Substance Abuse (AMERSA); International Nurses Society on Addictions (IntNSA); National Association of Community Health Centers (NACHC); National Association of Drug Court Professionals (NADCP), and the Southeast Consortium for Substance Abuse Training (SECSAT).

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Funding for this initiative was made possible (in part) by grant nos. 5U79TI026556-02 and 3U79TI026556-02S1 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.