Buprenorphine Overview and Quality Concerns

James Schuster, MD, MBA
Chief Medical Officer, Community Care
VP of Behavioral Integration, UPMC Insurance Services Division

May 28, 2015
Background

• 2000 - Drug Addiction Treatment Act (DATA 2000) approved by Congress

• Enables qualified physicians to obtain a waiver to prescribe and/or dispense specially approved Schedule III, IV, and V medications for the treatment of opioid addiction in treatment settings other than the traditional opioid treatment program (i.e., methadone clinic)
Background

- 2002 - FDA approved buprenorphine (Subutex and Suboxone) for use in treating opioid addiction
  - Subutex = buprenorphine
  - Suboxone = buprenorphine + naloxone
- These became the first 2 drugs physicians could use to treat opioid dependence in an office setting
- Initially limited to 30 patients per physician practice
- Should be used as part of a complete treatment plan to include counseling and psychosocial support
Background

• 2004 – TIP 40
  – A Treatment Improvement Protocol (TIP) created to provide physicians with clinical practice guidelines on the initial use of buprenorphine in the treatment of opioid addictions

  – Developed by SAMHSA and a team of independent substance abuse treatment professionals, in consultation with NIDA, the DEA, and FDA

  – Primary focus is on the initiation of treatment and does not address treatment after 1-2 years
TIP 40

• Reviews literature regarding safety and effectiveness of buprenorphine for opioid addiction

• Summarizes screening and assessment

• Provides protocols for maintenance and withdrawal treatment approaches

• Discusses treatment of special populations

• Discusses legal and regulatory issues, recommended office policies and procedures
Background

• 2005 – Law changed to allow every certified doctor to treat up to 30 patients regardless of whether group or sole practice

• 2006 – Law increased the number of patients allowed per certified physician to 100
  – Physician must have DATA-2000 waiver for at least 1 year and properly treating patients
Buprenorphine Conference

• January 6, 2011 - “Improving the Quality and Outcomes of Buprenorphine Treatment”

• Co-sponsored by IRETA, ATTC, WPIC, and Community Care

• Inclusive of DPW, counties, payors, content experts

• Objective: address clinical and quality issues surrounding buprenorphine treatment and develop best practice guidelines
Topics for Discussion

• Buprenorphine treatment practices

• Clinical models currently being used

• Quality issues

• Treatment of co-morbid conditions

• Recent research
Buprenorphine Guidelines Development

• January 2011: Community Care Buprenorphine workshop conducted and assembly of expert panel

• January - April 2011: Literature review and proposed guidelines drafted

• May 2011: First round of ratings

• July 2011: Expert panel discussion and second round of ratings

• September 2011: Final list of suggested guidelines compiled
Guideline Review Process

- RAND/UCLA modified Delphi method used to measure expert opinion

- Literature review document and proposed guidelines provided to expert panel

- Round 1 – panel rated the validity of the proposed guidelines

- Panel discussion reviewing items with no consensus

- Round 2 – panel rated guidelines again

- Final list of suggested guidelines compiled
Summary of Key Guidelines

1. Candidacy:
   – Expected to be reasonably compliant
   – Not dependent on CNS depressants, including benzodiazepines and alcohol
   – Interested in treatment
Summary of Key Guidelines

2. Patients should be required to sign a treatment contract that addresses:
   – Use of alcohol and illicit drugs
   – Compliance with required pills and other drug tests
   – Diversion
Summary of Key Guidelines

3. Appropriate dosing of Buprenorphine:
   – Maximum daily dose of 16mg
   – Patient seen weekly until daily dose is established (no other illicit use, no withdrawal symptoms/cravings)
   – Then seen every 2 weeks for the next 2 months
   – Work toward monthly visits
Summary of Key Guidelines

4. Simultaneous psychosocial counseling:
   – Patients should receive an evidence based psychosocial treatment
   – Weekly therapy appointments during stabilization period
   – During maintenance treatment “less frequently”
5. Provide buprenorphine treatment of appropriate duration:

- Patients must express a desire to discontinue and have achieved stabilization

- Patients must have stable housing, income, and adequate psychosocial support
Summary of Key Guidelines

6. Co-occurring mild to moderate depression and anxiety:
   – Prescribers need to consider alternatives to benzodiazepines
   – Advise patients against the use of benzodiazepines
   – Integrate treatment for opioid dependence and depression/anxiety to the greatest degree possible
   – Any off-site treatment should be carefully coordinated with the prescriber
Substance Dependence or Abuse

- In 2013, an estimated 21.6 million persons aged 12 or older (8.2 percent) were classified with substance dependence or abuse in the past year based on criteria specified in the Diagnostic and Statistical Manual of Mental Disorders, 4th edition (DSM-IV).

  - 2.6 million were classified with dependence or abuse of both illicit drugs and alcohol
  - 4.3 million had dependence or abuse of illicit drugs but not alcohol
  - 14.7 million had dependence or abuse of alcohol but not illicit drugs.
Source of Pain Medications Obtained

- Free from friend/relative: 53%
- Bought/took from friend/relative: 15%
- One doctor: 21%
- Other: 4%
- Drug dealer/stranger: 4%
- More than one doctor: 3%

Treatment

- Based on 2010-2013 combined data, commonly reported reasons for not receiving treatment for drug or alcohol use included:

  - (a) not ready to stop using (40.3 %)
  - (b) no health coverage and could not afford cost (31.4 %)
  - (c) possible negative effect on job (10.7 %)
  - (d) concern that receiving treatment might cause neighbors/community to have a negative opinion (10.1 %)
  - (e) not knowing where to go for treatment (9.2 %)
  - (f) no program having type of treatment (8.0 %)
Treatment

• Locations where past year substance use treatment was received:
  – Self-help group
  – Outpatient rehabilitation
  – Inpatient rehabilitation
  – Outpatient mental health center
  – Hospital inpatient
  – Private doctor's office
  – Emergency room
  – Prison or jail
Utilization Trends Among Members

Methadone, Buprenorphine, and Naltrexone Trend Comparison

© 2015 Community Care Behavioral Health Organization
Concerns with Buprenorphine

• Diversion
  – Some studies suggest that up to 25-30% of individuals in treatment are not adherent to meds as prescribed
  – Reports of significant diversion, selling on the street

• High relapse rate upon discontinuation in at least some populations

• Inadequate access to effective medication assisted treatment in some parts of the state despite continued growth of the number of individuals with opiate addiction
Concerns

• Buprenorphine prescribers often do not effectively coordinate their treatment with other behavioral health (BH) providers
  – In 2010, 71% of Community Care members filling buprenorphine were receiving BHS
  – In 2014, 75% of Community Care members were receiving BHS

• Persistently high dosing from some prescribers

• Physician audits
  – Many physicians charge cash for office visits
  – Notes and member reports indicate that visits may not have recovery focus
MCO Audits of Non-BH Prescribers

• Clinical audits may occur as a result of referrals, analysis of utilization trends, complaints, and as part of compliance reviews

• Prepayment review of medical records and claims submission may also take place in certain circumstances

• Quality of Care concerns identified in an audit may be reviewed by the Quality Improvement area
Previous Audit Findings

• Medical records do not support services billed

• Members billed cash for covered services

• Higher level service billed than actually performed

• Frequency of visits that do not appear to be medically necessary
Audit Findings

- Medically unnecessary confirmatory drug testing performed when no positive qualitative results identified
- Referrals to non-participating labs
- Copied clinical descriptions from one visit to the next
- Accepting payment in cash for visits
DHS Request

• The Pennsylvania Department of Human Services (DHS), the Medicaid Physical Health MCOs, and the Behavioral Health MCOs have developed strategies to address network issues and quality of care issues surrounding buprenorphine treatment for opioid dependency.
Key Prescriber Issues to Address

• Prescriber Quality Concerns
  – Coordination of care between prescribers & behavioral health providers

• Questionable prescriber billing at some sites
  – Use of higher cost evaluation & management codes
  – Evaluate for appropriateness & frequency of services

• Prescriber Quantity
  – Service gaps within particular geographic areas
Key MCO Approaches

• Revisions of prior authorization criteria

• Encouraged release of information – for coordination of care

• Outreach to members engaged with non-par providers or for whom there are other quality concerns
Formulations & Delivery Strategies

• Varying dosages available now

• Long acting injections & implants in trials

• Product portfolio diversity & competition will enable more targeted pathway development

• Possible impact on adherence, diversion, and cost
Next Steps - Variable Across Plans

• Require assessment by licensed substance use treatment provider

• Move away from non-participating and cash-based providers, while bolstering the participating network in both PH and BH contracts

• Continuing discussions with counties substance use treatment providers, and other stakeholders, about effective treatment strategies, including use of best practice guidelines
Best Practice Guideline Development

• Community Care Best Practice Guidelines for Buprenorphine

• Practice Guidance for Buprenorphine for the Treatment of Opioid Use Disorders: Results of an Expert Panel Process
  – www.tandfonline.com/doi/full/10.1080/08897077.2015.1012613

• Federal Guidelines for Opioid Treatment Programs, published by SAMHSA March 2015
  – http://store.samhsa.gov/product/PEP15-FEDGUIDEOTP
BUPRENORPHINE

NEIL A. CAPRETTO, D.O., F.A.S.A.M.
MEDICAL DIRECTOR
GATEWAY REHABILITATION CENTER
Why Buprenorphine?
WHY BUPRENORPHINE BEGAN?

Animal studies showed:

- Partial agonist properties
- Slow “off-rate” from Mu receptor
- Limited or non-existent physical dependence
- Less toxic than other opiates
Effective treatment option for opioid dependence (Ling et al 1998)

Reduces morbidity and mortality (Auriacombe et al 1998)

Improves quality of life (Giacomuzzi, et al 2003, Anisse, 2001)
Buprenorphine: a treatment built on solid foundations

Extensively tested in 46 international clinical trials:

5275 patients from France, Australia, England and the US

A Cochrane review of 13 studies concluded “buprenorphine is an effective intervention for the treatment of opioid dependence”
BUPRENORPHINE

- Legislation passed by the US Congress in September allowing for the use of FDA approved Scheduled III, IV or V medication by office based practitioners

- Signed into law October 17, 2000
SUBUTEX AND SUBOXONE
APPROVED TO TREAT
OPIATE DEPENDENCE (cont’d.)

The Food and Drug Administration (FDA) announced the approval of Subutex (buprenorphine hydrochloride) and Suboxone tablets (buprenorphine hydrochloride and naloxone hydrochloride) for the treatment of opiate dependence. Subutex and Suboxone treat opiate addiction by preventing symptoms of withdrawal from heroin and other opiates.
These products represent two new formulations of buprenorphine. The first of these formulations, Subutex, contains only buprenorphine and is intended for use at the beginning of treatment for drug abuse. The other, Suboxone, contains both buprenorphine and the opiate antagonist naloxone, and is intended to be the formulation used in maintenance treatment of opiate addiction.
Naloxone has been added to Suboxone to guard against intravenous abuse of buprenorphine by individuals physically dependent on opiates. Both drugs are supplied in 2 mg and 8 mg tablets which are placed under the tongue and must be allowed to dissolve.
Buprenorphine is considered to have less risk for causing psychological and or physical dependence than the drugs in Schedule II such as morphine, oxycodone, fentanyl, or methadone.

Subutex and Suboxone are the first narcotic drugs available for the treatment of opiate dependence that can be prescribed in an office setting under the Drug Addiction Treatment Act (DATA) of 2000.

Subutex and Suboxone are manufactured by Reckitt Benckiser Pharmaceuticals.
“Qualified Physician”

- Subspecialty board certification in addiction psychiatry from the American Board of Medical Specialties
- Addiction certificate from the American Society of Addiction Medicine
- Subspecialty board certification in addiction medicine from the American Osteopathic Association
- Completed a minimum of 8 hours of training by ASAM, AAAP, AMA, AOA, APA or other organization approved by the Secretary
- Has served as a PI in one of more clinical trials leading to approval
BUPRENORPHINE

- The total number of patients that a practitioner will not exceed 30, except that the Secretary may by regulation change this number.
FUNCTIONS OF DRUGS AT RECEPTORS

Full agonists:

- Occupy the receptor and activate that receptor
- Increasing doses of the drug produce increasing receptor-specific effects until a maximum effect achieved
- Most abused opioids are full agonists
- Examples of full agonist opioids: heroin, LAAM, methadone, morphine
Partial agonists:

- Bind to and activate receptor
- Increasing dose does not produce as great an effect as does increasing the dose of a full agonist (less of a maximal effect is possible)
Intrinsic Activity: Full Agonist (Methadone), Partial Agonist (Buprenorphine), Antagonist (Naloxone)
Buprenorphine has:

- High affinity for mu opioid receptor – Competes with other opioids and blocks their effects
- Slow dissociation from mu opioid receptor – prolonged therapeutic effect for opioid dependence treatment
Good parental bioavailability

Poor oral bioavailability

Fair sublingual bioavailability

For opioid dependence treatment:

   Early clinical trials used an alcohol-based solution

   FDA approval for tablets that are held under tongue
COMBINATION OF BUPRENOPHINE PLUS NALOXONE

Combination tablet containing buprenorphine with naloxone – if taken under tongue, predominant buprenorphine effect

If opioid dependent person dissolves and injects buprenorphine/naloxone tablet – predominant naloxone effect (and precipitated withdrawal)
ABUSE POTENTIAL

Buprenorphine is abusable (epidemiological, Human laboratory studies show)

Diversion and illicit use of analgesic form (by injection)

Relatively low abuse potential compared to other opioids
These studies conclude:

Buprenorphine more effective than placebo

Buprenorphine equally effective as moderate doses of methadone (e.g., 60mg per day)
OVERVIEW TO SAFETY

Highly safe medication (acute and chronic dosing)

Primary side effects; like other mu agonist opioids (e.g., nausea, constipation), but may be less severe

No evidence of significant disruption in cognitive or Psychomotor performance with buprenorphine maintenance

No evidence of organ damage with chronic dosing
OVERDOSE WITH BUPRENORPHINE

Low risk of clinically significant problems

No reports of respiratory depression in clinical trials when comparing buprenorphine to methadone

Pre-clinical studies suggest high doses of buprenorphine should not produce respiratory depression or other significant problems

Overdose of buprenorphine combined with other drugs may cause problems (reviewed next)
BENZODIAZEPINES AND OTHER SEDATING DRUGS

Reports of deaths when buprenorphine injected along with benzodiazepines

Reported from France, where tablets available—appears patients dissolve and inject tablets

 Probably possible for this to occur with other sedatives as well
Buprenorphine is effective and safe when used for maintenance treatment of opioid dependence.

Efficacy of buprenorphine in management of withdrawal not well determined, but withdrawal from buprenorphine may be milder than withdrawal from other opioids; probably best if conducted over longer periods.
Opioid Withdrawal Syndrome

**Acute Symptoms**

- Pupillary dilation
- Lacrimation (watery eyes)
- Rhinorrhea (runny nose)
- Muscle spasms (“kicking”)
- Yawning, sweating, chills, gooseflesh
- Stomach cramps, diarrhea, vomiting
- Restlessness, anxiety, irritability
Using opioids in medical withdrawal

- Use a drug with a long half-life and low abuse potential
- Replace the abused drug with the withdrawal treatment
- Initiate psychosocial interventions
- Taper the withdrawal medication
Description of the Final Sample (Suboxone and non-Suboxone patients)

• Gender: 86 males, 84 females

• Average Age: 31 years old

• Race: 82.9% White, 2.9% Black, 14.1% not reported

• Diagnosis: DSM-IV Opiate Dependence
Drug Use - Heroin*

- **SUBOXONE PATIENTS**
  - Used by 78.8% of the sample
  - Sample used about 11 bags daily
  - Most used within 1 day of DAU admission

- **NON-SUBOXONE PATIENTS**
  - Used by 83.1% of the sample
  - Sample used about 6 bags daily
  - Most used within 1 day of DAU admission
Drug Use - OxyContin

- **SUBOXONE PATIENTS**
  - Used by 40.0% of the sample
  - Sample used about 180 mgs daily
  - Most used within 2.3 days of DAU admission

- **NON-SUBOXONE PATIENTS**
  - Used by 17.2% of the sample
  - Sample used about 150 mgs daily
  - Most used within 3.1 days of DAU admission
Were Patients Transferred to ASU?*

- **SUBOXONE PATIENTS**
  - 97.6% of the patients were transferred to the ASU following Detox

- **NON-SUBOXONE PATIENTS**
  - 45.9% of the patients were transferred to the ASU following Detox
Length of Stay (LOS) on ASU*

- **SUBOXONE PATIENTS**
  - Averaged over an 8 day LOS ($M = 8.54$)

- **NON-SUBOXONE PATIENTS**
  - Averaged over a 3 day LOS ($M = 3.79$)
Total LOS: Admit to DAU Through Discharge from ASU*

- **SUBOXONE PATIENTS**
  - Averaged an approximate 11.5 day LOS ($M = 11.47$)
  - Range from 2 to 24 days

- **NON-SUBOXONE PATIENTS**
  - Averaged an approximate 6.5 day LOS ($M = 6.58$)
  - Range from 0 to 35 days
Objectives of maintenance treatment

- To reduce mortality from overdose and infection
- To reduce opioid and other illicit drug use
- To reduce transmission of HIV, HBV and HCV
- To improve the general health and well-being of patients
- To reduce drug-related crime
- To improve social functioning and ability to stay in work
Ideal in maintenance

- Increases retention compared with placebo
- Comparable efficacy to methadone when used in clinically equivalent doses
- “Ceiling” level of receptor activation increases safety
- Blocks or attenuates effects of other opioids
- Reduces concomitant opioid use
- NOT A CURE – enables participation in a comprehensive program of rehabilitation
Treatment saves lives

1996 Subutex and methadone

French population in 1999 = 60,000,000

No. of deaths

Year


Patients receiving buprenorphine (1998): N= 55,000

Patients receiving methadone (1998): N= 5,360

Auriacombe et al., 2001
Medical Withdrawal vs Maintenance

- N=20
- Both groups received counseling
- High mortality rate in detox group (20%, n=4)

Kakko et al., Lancet; 361:662-668, Feb 22 2003
Diversion and Abuse of Buprenorphine

- Concerns about the misuse, abuse and diversion of buprenorphine are growing
  - DEA recently decided to increase audits of waived physicians in the next 12 months
  - Estimates of how common misuse and diversion of buprenorphine is among users already injecting vary from 20% to 89%

- Press coverage
  - Has drawn attention to the possibility of buprenorphine/naloxone diversion
  - Quoted anecdotal evidence implying increased rates of abuse and diversion

- Scientific literature
Misuse, Abuse, and Diversion Might Jeopardize Physicians’ Ability to Treat Opioid Dependence

The future of opioid-dependence treatment is in the hands of current prescribers
The Initial Call

This is the time to:

- Make it clear that you are not a “pill mill” to risk of attracting “pseudopatients”
- Inform what treatment entails
- Begin setting the groundwork for an effective doctor-patient relationship with clear patient/doctor roles & expectations
Phone Contact Checklist

- Addicted to opioids
- Initial appointment
  - H&P
    - Blood tests
    - Urine drug test
    - Bring all pill bottles
    - Bring photo id
- Comes back another day to start treatment
- Costs discussed

Treatment will require:
- Random urine testing
- Random pill counts
- Regular counseling
- Weekly visits initially
- Initially \( \leq 7 \) days meds
- Progress to less than weekly visits based on meeting treatment goals
- Consent to speak with other care providers
Treatment Consent & Contact

- Formal document
- Treatment entails
  - Drug testing
  - Pill counts
  - Use of lock box
  - Counseling/behavioral treatments
- Not tolerated (trafficking drugs, violence, foul language)
- Frequency of visits & how prescriptions work
- Goals of treatment
  - Abstinence all illicit
  - Meaningful activity
  - Network of supports
- Risks & role of buprenorphine
- Alternative treatments
One Pharmacy

- Treatment agreement specifies use of one pharmacy for buprenorphine and all other prescribed medications
- Local pharmacy list in packet
- Obtain consent for two-way communication with pharmacist
- Communication form between doctor and pharmacy in packet
Support Person

- A non-drug using family member or friend identified by the patient who is invested and engaged in supporting the patient’s recovery
- Support is willing to be educated about addiction and aware of treatment goals
- Support understands medication alone is not treatment of addiction
- Patient provides formal consent for support to communicate with physician
Current Dosing Recommendations: Maintenance

- 4 mg – 16 mg are typically effective for most patients
- 16 mg – 24 mg are at the **upper** limit of recommended doses
  - Evaluate the patient very carefully
  - Recognize that giving **more than needed** is an opportunity for diversion
Supporting Recovery from Opioid Addiction: Community Care
Best Practice Guidelines for Buprenorphine and Suboxone®

January 2013
Tapering Off Phase

The duration of buprenorphine treatment should be individualized to meet the individual needs of each patient.

Before discontinuing buprenorphine, patients must:
1. Express a desire to discontinue
2. Have stable housing and income
3. Have adequate psychosocial and recovery support
4. Agree to conditions for termination and contingencies for treatment and recovery support outlined in the treatment agreement
Screening and Assessment to Determine Candidacy

1. Determine opioid use disorder by Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition

2. Assess psychiatric history with attention paid to current compliance with medication

3. Assess medical history with attention paid to liver, cardiac and respiratory status, medications, and seizures
4. Assess pregnancy status. For pregnant women, it is recommended that a comprehensive assessment be made to determine the appropriateness of buprenorphine vs. methadone treatment. If a pregnant woman is found to be appropriate for buprenorphine, then monotherapy (without a naloxone additive as present in Suboxone) is recommended. Pregnancy testing should be considered as may be necessary throughout the treatment process.
Screening and Assessment to Determine Candidacy (cont’d.)

5. Assess psychosocial and recovery supports, such as employment, family, safe and stable housing, mutual-aid support groups, recovery coaches, and certified recovery counselors.

6. Assess substance use history and current substance use, including alcohol and non-prescribed use of methadone, buprenorphine, and benzodiazepines.

7. Assess substance treatment history, including previous treatment episodes with buprenorphine and/or methadone.
8. Assess for current opioid agonist treatment of current non-prescribed use by conducting a witnessed urine screen (e.g., methadone, buprenorphine, and benzodiazepines)

9. Assess withdrawal status

10. Assess addiction severity

11. Assess potential treatment needs in relation to the physician’s ability to accommodate those needs (e.g., intensive monitoring and interactions with legal system, employers, and others)

12. Assess pain
Selection of Candidates for Buprenorphine Treatment

Buprenorphine should be accessible and persons in recovery (PIRs) with less than ideal characteristics should not be automatically precluded from treatment.
A written agreement with the PRI is strongly advised to communicate all understandings and instructions related to buprenorphine treatment.
Buprenorphine Treatment: The Myths and The Facts
MYTH #1: Patients are still addicted

FACT: Addiction is pathologic use of a substance and \textbf{may or may not} include physical dependence.

- Physical dependence on a medication for treatment of a medical problem \textbf{does not} mean the person is engaging in pathologic use and other behaviors.
MYTH #2: Buprenorphine is simply a substitute for heroin or other opioids

**FACT:** Buprenorphine *is* a replacement medication; it is *not simply* a substitute

- Buprenorphine is a legally prescribed medication, not illegally obtained.
- Buprenorphine is a medication taken sublingually, a very safe route of administration.
- Buprenorphine allows the person to function normally.
MYTH #3: Providing medication alone is sufficient treatment for opioid addiction

**FACT:** Buprenorphine is an important treatment option. However, the complete treatment package must include other elements, as well.

- Combining pharmacotherapy with counseling and other ancillary services increases the likelihood of success.
MYTH #4: Patients are still getting high

**FACT:** When taken sublingually, buprenorphine is slower acting, and does not provide the same “rush” as heroin.

- Buprenorphine has a ceiling effect resulting in lowered experience of the euphoria felt at higher doses.
Counseling Buprenorphine Patients

- Address issues of the necessity of counseling with medication for recovery

- Recovery and Pharmacotherapy
  - Patients may have ambivalence regarding medication
  - The recovery community may ostracize patients taking medication
  - Counselors need to have accurate information
Counseling Buprenorphine Patients

Issues in 12-Step Meetings:

- Medication and the 12-Step program
  - Program policy
    - “The AA Member: Medications and Other Drugs”
    - NA: “The ultimate responsibility for making medical decisions rests in each individual”
  - Some meetings are more accepting of medications than others
Counseling Buprenorphine Patients

- Recovery and Pharmacotherapy:
  - Focus on “getting off” buprenorphine may convey that taking medicine is “bad.”
  - Suggesting recovery requires cessation of medication is inaccurate and potentially harmful.
  - Support patient’s medication compliance
  - “Medication,” not “drug”
“He (Dr. Khantzion) knows that his perspective, highly valuable as it may be, isn’t the whole truth nor the whole picture, and that kind of sanity is hard to find in the field in which science all too easily becomes religion at its dogmatic worst instead of an open-ended search for the truth.”

Jerome D. Levin
Addiction is a BIO-PSYCHO-SOCIAL- SPIRITUAL DISEASE

Good treatment address all four aspects
ADDICTION BATTERS A THRIVING FAMILY
“I use to be totally against it but now because of my wife’s success I have done a 180 degree turn in my thinking about Suboxone. I am so incredibly grateful because today I have my wife back, my children have their mother back and we are a family again”

-- call from a husband celebrating the one year recovery anniversary of his wife
Buprenorphine in the Community

Julie Kmiec, DO
Assistant Professor of Psychiatry
May 28, 2015
Objectives

- Describe our clinic structure
- Describe challenging cases/behaviors and describe response
- Describe typical quandaries for physicians prescribing buprenorphine
- Describe challenging third party payer behaviors
Policies & Procedures

- WPIC NATP
  - Urine drug test - every physician visit
    - Sent out to lab, not point of care testing
  - Physician visits weekly until 4 UDS positive for bup/norbup only and patient meets therapy requirements
  - Therapy 2.5 hours monthly to start
- Private patients
1. To keep, and be on time to, all of my scheduled appointments with the doctor or her designee. If I do not attend the appointment I will not receive a prescription.

2. To complete a urine drug screen upon each visit. If you do not complete a urine drug screen you will not get a refill. That is, if I do not have drug screen results from your last visit you will not get a refill.

3. To conduct myself in a courteous manner in the physician’s office and in WPIC. (Refer to the UPMC “Patient and Visitor Code of Conduct” policy)

4. Not to arrive at the office intoxicated or under the influence of drugs. If I do, the doctor may choose not to see me, and I will not be given any medication until my next scheduled appointment.

5. Not to sell, share, or give any of my medication to another person. I understand that such mishandling of my medication is a serious violation of this agreement and would result in my treatment being terminated from buprenorphine treatment without recourse for appeal.

6. To respond within 24 hours to any callbacks by my doctor or designee and will bring all of the remaining medications for inventory accuracy. I also agree and will be prepared to provide a urine sample for drug screening. Callbacks may occur at any time but are likely to occur at least twice a year in most circumstances.

7. Not to deal drugs, steal, or conduct any other illegal activities on or near the premises.

8. That the medication is my responsibility and that I will keep it in a safe and secure place. I agree that lost, stolen, or mishandled medication will not be replaced regardless of the reasons for such loss.

9. To keep my medication out of the reach of children.

10. Not to obtain medications from any other physicians, pharmacies, or other sources without first informing my physician who is prescribing buprenorphine. I understand that mixing buprenorphine with other medications can be harmful; especially benzodiazepines such as Valium, Xanax, and Klonopin. I understand that a number of deaths have been reported among persons mixing buprenorphine with benzodiazepines and other drugs of abuse, including alcohol.

11. To sign a release of information allowing my buprenorphine-prescribing doctor to discuss any aspect of my treatment with any other doctors/treatment providers I may see.

12. To take my medication as the doctor has instructed and not to alter the way I take the medication without first consulting the doctor.

13. That medication alone is not sufficient treatment for my illness, and I agree to participate in any educational, supportive, or relapse prevention programs recommended by my doctor to assist in my treatment.
Qualitative vs. Quantitative Urine Drug Testing

- Qualitative testing, usually immunoassay, tells presence or absence of drug
- Qualitative can be sent for confirmation testing
  - GC/MS
  - LC/MS
  - LC/MS/MS
- These tests name substance (if true positives, and may or may not give level)
25 year old single male who lived with girlfriend and child

Employed in pizza shop

Started seeing him through Ambulatory Detox program then he mentioned interest in bup/nx
MG

- Does not have insurance, paying out of pocket for meds
- Started on bup/nx and tolerating 12/3 mg for weeks
- Gets acceptance to R-B patient assistance program, then reports having increase in cravings and urges to use
- Dose increased to 16/4 mg daily
MG

- Starts saying how great things are after dose change, did Xmas shopping early
- Doesn't leave urine specimen at visit, "forgot"
- Next visit, urine +cocaine, -buprenorphine
- What would you do?
MG

- Called in for 24-hour callback
- Does not have any film strips, tells me he was given a partial fill
- Leaves "urine" which was deduced by lab to be soap and water
Now What Would You Do?
MP

- 38 year old on bup/nx maintenance for >1 yr
- 16/4 mg daily, twice monthly to monthly visits
- Has co-occurring depressive disorder, goes to WPIC for SI and also reports she is drinking a fifth of vodka daily for past year
- Monitored for alcohol withdrawal in WPIC
- What do you do when she follows up with you?
Testing for Alcohol

- Breath alcohol
- Urine alcohol (7–12 hours)
- EtG/EtS (metabolites of alcohol; 1 drink 3–4 days prior)
- PEth testing (serum, persists in blood as long as 3 weeks after only a few days of “moderately heavy” drinking – 4 drinks per day)
MT

- 46 year old single female
- Bup/nx 16/4 mg daily, came after discharge from another clinic after discharge due to bzd use
- Difficulty maintaining abstinence from heroin at first, then denies use and urines are consistent with this
What do you think about these results?
How Do You Treat MT?
Table II. Characteristics of Seven Urine Samples Judged to be Adulterated (Patients A–F) Compared to Samples Judged to be Authentic Samples (Patients G–H)

<table>
<thead>
<tr>
<th>Patient</th>
<th>Creatinine (mg/dL)</th>
<th>Buprenorphine (ng/mL)</th>
<th>Norbuprenorphine (ng/mL)</th>
<th>Ratio*</th>
<th>Naloxone (ng/mL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>101.8</td>
<td>220</td>
<td>&lt; 5.0</td>
<td>†</td>
<td>&lt; 100</td>
</tr>
<tr>
<td>B</td>
<td>54.6</td>
<td>610</td>
<td>6.7</td>
<td>0.011</td>
<td>113</td>
</tr>
<tr>
<td>C</td>
<td>13.5</td>
<td>1400</td>
<td>19</td>
<td>0.014</td>
<td>624</td>
</tr>
<tr>
<td>D</td>
<td>&lt; 5.0</td>
<td>10,000</td>
<td>Present†</td>
<td>†</td>
<td>4103</td>
</tr>
<tr>
<td>E</td>
<td>51.6</td>
<td>13,000</td>
<td>230</td>
<td>0.018</td>
<td>4260</td>
</tr>
<tr>
<td>E</td>
<td>56.0</td>
<td>29,000</td>
<td>270</td>
<td>0.009</td>
<td>11,636</td>
</tr>
<tr>
<td>F</td>
<td>37.4</td>
<td>49,000</td>
<td>250</td>
<td>0.005</td>
<td>15,155</td>
</tr>
<tr>
<td>G</td>
<td>292.4</td>
<td>990</td>
<td>1200</td>
<td>1.212</td>
<td>&lt; 100</td>
</tr>
<tr>
<td>H</td>
<td>308.8</td>
<td>1200</td>
<td>1000</td>
<td>0.833</td>
<td>&lt; 100</td>
</tr>
</tbody>
</table>

* Ratio = urine norbuprenorphine/buprenorphine.
† Cannot be calculated.
‡ Norbuprenorphine was detected but could not be quantitated.
DO

- 50 year old single male on bup/nx 16/4 mg daily for 3.5 years
- Occasional +bzd during treatment
- Had +opi on last UDS, when discussing this on 12/26 he states, “I ate 1/3-1/2 jar of poppy seeds yesterday.”
  - Because “I love them.”
- What do you do?
24 hour call-back

Patient has to come in within 24 hours of phone call, bring meds in for count and give urine specimen for toxicology testing
DO

- Brings in 10 Suboxone Film strips, which is 22 short of what he should have
- Urine toxcology showed +bzd, +bup/norbup
- Now what do you do?
Table 2
Attitudes and norms in relation to diversion past month and diversion treatment episode.

<table>
<thead>
<tr>
<th>Attitudes and norms</th>
<th>Diversion past month</th>
<th>Diversion treatment episode</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Entire population (n = 411)</td>
<td></td>
<td>24.1% (n = 99)</td>
</tr>
<tr>
<td>Attitudes</td>
<td></td>
<td>26.1% (n = 35)</td>
</tr>
<tr>
<td>Illicit medication saves lives (n = 405)</td>
<td></td>
<td>25.4% (n = 52)</td>
</tr>
<tr>
<td>Agree (n = 134; 33.1%)</td>
<td></td>
<td>16.7% (n = 3)</td>
</tr>
<tr>
<td>Somewhat agree (n = 205; 50.6%)</td>
<td></td>
<td>26.1% (n = 43)</td>
</tr>
<tr>
<td>Somewhat disagree (n = 48; 11.9%)</td>
<td></td>
<td>7.9% (n = 3)</td>
</tr>
<tr>
<td>Disagree (n = 18; 4.4%)</td>
<td></td>
<td>32.0% (n = 48)</td>
</tr>
<tr>
<td>Norms</td>
<td></td>
<td>26.1% (n = 14)</td>
</tr>
<tr>
<td>Sharing with a sick friend is the right thing</td>
<td></td>
<td>25.0% (n = 32)</td>
</tr>
<tr>
<td>to do (n = 410)</td>
<td></td>
<td>38.7% (n = 41)</td>
</tr>
<tr>
<td>Agree (n = 165; 40.2%)</td>
<td></td>
<td>7.7% (n = 1)</td>
</tr>
<tr>
<td>Somewhat agree (n = 103; 29.4%)</td>
<td></td>
<td>13.6% (n = 14)</td>
</tr>
<tr>
<td>Somewhat disagree (n = 128; 36.6%)</td>
<td></td>
<td>25.0% (n = 32)</td>
</tr>
<tr>
<td>Disagree (n = 106; 30.3%)</td>
<td></td>
<td>38.7% (n = 41)</td>
</tr>
<tr>
<td>Deterrence</td>
<td></td>
<td>12.97 (4.04)</td>
</tr>
<tr>
<td>Views about treatment</td>
<td></td>
<td>12.61 (3.60)</td>
</tr>
<tr>
<td>Social bonds index (n = 389)</td>
<td></td>
<td>13.77 (standard deviation: 4.14)</td>
</tr>
</tbody>
</table>

* $\chi^2$-test, significant at $p < 0.001$.
** $t$-test, significant at $p < 0.05$.
*** $t$-test, significant at $p < 0.01$.
**** $t$-test, significant at $p < 0.001$. 
49 y/o WF who was on methadone maintenance for 8 years, stable with take homes, converted to bup/nx

- Reliable, meets requirements
- Then changes in bup and norbup levels despite no dose change
What do you think of these urine results? How would you handle this situation?
JC

- 33 y/o SWF with kids
- Never had UDS positive for illicit substances
- Always comes to physician appointments
- Has trouble meeting therapy requirement
- What would you do?
64 year old single woman with schizophrenia who was discharged from prior clinic due to regular + bzd

Pt adamantly denied use of bzd

Stabilized on bup/nx 16/4 mg daily

Did have UDS + bzd, but confirmation tests negative

What do you think is causing false positive bzd?
<table>
<thead>
<tr>
<th>Medication</th>
<th>Amphetamine or Methamphetamine</th>
<th>Phencyclidine</th>
<th>Methadone</th>
<th>Opiates</th>
<th>Benzodiazepines</th>
<th>Cannabinoids</th>
<th>Barbiturates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antihistamines/decongestants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brompheniramine</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diphenhydramine</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doxylamine</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phenylpropanolamine</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonprescription nasal inhaler</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antidepressants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bupropion</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clomipramine</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sertraline</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trazodone</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venlafaxine</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antibiotics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quinolones (selected agents)</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analgesics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ibuprofen</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naproxen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antipsychotics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlorpromazine</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promethazine</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quetiapine</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
23 year old single male with impacted wisdom teeth

Vicodin after first visit to oral surgeon, not paid for by insurance because of Suboxone

Pt came to appointment and mentions he is going to have wisdom teeth removed and likely need opioid pain relievers

He mentions he already was prescribed Vicodin but couldn't fill it and got Ibuprofen instead

How do you handle this situation?
Releases of information are signed, called oral surgeon's office to discuss what is being done, the typical pain regimen

Letter faxed to insurance so pt will be able to get short supply of oxycodone/acetaminophen

Film counts and pill counts done

RM still seen even though he had films left
JJ

- Was on Suboxone tabs
- Suboxone Film came out and was covered by insurance
- Pt protested the change, started crying
- Why do you think JJ was so upset?
DH

- Presented to Ambulatory Detox for Suboxone
- Reported he went to Suboxone clinic 5-6 times from January-February, was prescribed #14 per week, only needed 1 strip per day
- Rarely took them until June, then used 1 strip twice weekly, then in October started injecting Suboxone, \( \frac{1}{4} \) - \( \frac{1}{2} \) strip at a time
Pregnancy

- Female patient stable on buprenorphine/naloxone becomes pregnant
- Convert to buprenorphine mono-product
- May need to increase dose as pregnancy progresses due to increased blood volume, increased metabolism, especially in 3rd trimester
- After birth, switch back to buprenorphine/naloxone, it is not contraindicated in breastfeeding
Pt had positive UDS for bup/norbup (levels appeared normal)

Pt seen weekly, not attending therapy, using cocaine

Clinic called by AGH, informed us pt overdosed on heroin, found by daughter 1-2 days after she was last seen in clinic

The UDS from the last clinic visit came back +opi, very low bup/norbup levels
Intramuscular

Naloxone HCl 0.4 mg/mL (Narcan)
1 x 10 mL as one flip-top vial (NDC 0409-1219-01) OR
2 x 1mL single dose vials (NDC 0409-1215-01)

Refills: _____

Intramuscular (IM) syringe, 23 G, 3cc, 1 inch

Qty: _____ Refills: _____

Sig: For suspected opioid overdose, inject 1mL IM in shoulder or thigh.
Repeat after 3 minutes if no or minimal response.

Intranasal

Naloxone HCl 1 mg/mL
2 x 2 mL as pre-filled Luer-Lock needless syringe
(NDC 76329-3369-1)

Refills: _____

2 x Intranasal Mucosal Atomizing Device (MAD 300)

Refills: _____

For suspected opioid overdose, spray 1mL in each nostril.
Repeat after 3 minutes if no or minimal response.

Pharmacist: Call 1-800-788-7999 to order MAD 300.
The lost, stolen, flushed, or left in a KFC bag on a bus script

- CK left his prescription in a KFC bag on a bus, also had his script misplaced or stolen
  - Never had a UDS negative for cocaine or opiates, rarely was positive for bup/norbup
- CB had his prescription stolen at the homeless shelter and also lost a prescription
  - Went to WPIC or Mercy ED twice reporting SI and was admitted to BHU twice
Taper

- Patient requests to taper off of buprenorphine
- Patient should be stable
- Patient should be engaged in recovery program
- Recommend slow taper
Third Party Issues

- Prior authorization
  - Seeing patient at 3 PM for first time, hard to have authorization in place

- Medicaid Issues
  - Gateway, UHC - trouble filling more than 4 scripts for buprenorphine in 1 month
  - More than 1 prescriber prescribing buprenorphine in practice
  - No more than 6 scripts in 1 month paid for by Medicaid FFS, UPMC for You, UHC
Meds Automatically Covered Regardless of Six-Drug Limit

Drugs to treat:
- Abnormal or irregular heartbeat
- Angina
- Asthma or COPD (chronic obstructive pulmonary disease)
- Bipolar disorder*
- Cancer
- Depression*  
  for patients with depression
- Diabetes
- Enzyme deficiencies
- Glaucoma
- Hemophilia
- Hepatitis
- High blood pressure*  
  for patients with angina, heart disease, heart attack, stroke, kidney disease, diabetes or glaucoma
- HIV/AIDS
- Immune deficiency
- Infection*  
  for patients with HIV/AIDS, cancer, organ transplant, sickle cell anemia or diabetes
- Multiple sclerosis
- Nausea and vomiting*  
  for patients with cancer or pancreatitis
- Opiate dependency
- Parkinson's disease
- Pulmonary hypertension
- Serious mental illness
- Thyroid disorders

Drugs to prevent:
- Blood clots
- Pregnancy
- Seizures*  
  for patients with seizure disorder

Drugs to:
- Reduce stomach acid*  
  for patients with gastrointestinal bleeding, Barrett’s esophagitis or Zollinger Ellison
- Stop migraine headaches
- Suppress the immune system
Taking Other Controlled Substances with Buprenorphine

- Benzodiazepines
- Barbiturates
- Benzodiazepine receptor agonists
- Stimulants
- Muscle Relaxers
• “It helps with my appetite.”
• “It helps me sleep.”
• “It helps with my anxiety.”
• “What about when it’s legal?”
Summary

- A number of aberrant behaviors may occur when treating patients with addiction.
- They are symptoms of addiction and not necessarily reasons for discharge.
- Physician knowledge of urine drug testing, frequent visits, frequent urine testing, callbacks, and engagement with patients can help limit risk and promote recovery.
Questions/Comments
Engaging Members in Treatment
Time for Change

Amy Shanahan, MS, CADC
the reason or reasons one has for acting or behaving in a particular way

the general desire or willingness of someone to do something
I'm not quite sure about all the benefits and risks for being on Buprenorphine but people have told me that it is easier than having to go to a methadone clinic everyday.
impossible

unable
Motivational Strategies

• Motivational Interviewing
• Motivational Enhancement Therapy
• Motivational Incentives – or behavioral modification strategies
• Community Reinforcement & Family Training (CRAFT)
• MATRIX model
Motivational “Spirit”

• Strengths-based
• Respect of a person's autonomy to make decisions
• Individualized and person-centered
• Focus on intervention & engagement
• Accept individual goals and smaller steps toward goals
• Use empathy, not authority or power
Empathy

https://www.youtube.com/watch?v=1Evwgu369Jw
Summary - Using Motivational Strategies

Buprenorphine & Methadone Maintenance

• Team approach
• Treatment Integration
• One could try Buprenorphine & then switch
• Increased our capacity for Buprenorphine
• Engagement of over 40%
• NOTE: Motivational strategies assist people to stay or not in treatment
Engagement article

“Enhancing Treatment with Buprenorphine”
The Community View of Buprenorphine

Message Carriers of Pennsylvania

Celebrating and delivering the significance of Recovery

May 28, 2015

Presented by: Robin Horston Spencer, MBA, MS, MHS, OWDS
Background Information Given In The Survey

Healthcare providers prescribe buprenorphine to treat pain or opioid dependence. These are the drug’s approved uses; however, buprenorphine is sometimes used “off-label” for the treatment of depression. Most forms of buprenorphine are approved for adults only, except for injection, which can be used in children as young as two years old.
Questions from Survey

1). Are you in Recovery
2). How long?
3). Do you use buprenorphine?
4). Do you think buprenorphine is helpful?
5). Do you think it should be prescribed to addicts?
How Long Have You Been in Recovery?

- 0-5 Years: 61%
- 6-10 Years: 14%
- 11-20 Years: 13%
- 21-35 Years: 10%
- 36+ Years: 2%

Duration of Recovery
Do You Have a Family Member in Recovery?

- Yes: 64%
- No: 36%
Do You Use Buprenorphine?

- Yes: 19%
- No: 81%

Buprenorphine Use
What Purpose Do You Use Buprenorphine?

• 74% Addiction

• 6% Depression

• 3% Headaches

• 17% Chronic Pain Management
Do You believe Buprenorphine is Helpful?

- Yes: 63%
- No: 37%
Should Buprenorphine Be Prescribed to Addicts?

- Yes: 57%
- No: 43%
Additional Comments

• 54% agree it should be used, IF it’s used properly
• 27% say they don’t know
• 9% had other comments:
  – “I got off heroin with the use of suboxone and a certified MD.”
  – “It contains synthetic opiates.”
  – “Not as a pain reliever or to treat depression.”
  – “Whatever works for you!”
  – “You are just putting one drug down for another.”
"As a Certified Addictions Counselor, with 11 plus years in this capacity (3 as supervisor); I have been able to identify many patterns in recovering addicts. It is safe to say that patients (those under doctor supervision) in recovery who remain in treatment for longer periods of time show a more likelihood of obtaining long term abstinence. There is also a percentage who through the years have suffered from the stigma of addiction and choose to spend their latter years of treatment on the medication Buprenorphine. The medication offers a decrease in the stigma because the patient is treated in a doctor’s office offering a sense of normalcy. Another positive factor of Buprenorphine is milder/less severe withdrawal in event of relapse”.  

Myra F., MSW, CAC
“Medication Assisted Treatment allows us another tool to utilize in the treatment planning and referral process. As a provider, I’ve seen individuals who have had dozens of treatment episodes with limited results. To continue the same recommendation despite reports of chronic relapse and limited sobriety is the definition of insanity. Why not get creative and utilize some of these tools available to us? MATP services are a great tool to assist those suffering from opioid dependence and if utilized in conjunction with therapeutic services can provide extremely positive outcomes. I truly believe Substance abuse treatment, especially when combined with medication assisted treatment services, is as much as an art as it is a science. As a licensed treatment provide who works directly with medication assisted treatment services I see firsthand how it provides the individual “craving control” which allows them to heal and develop the coping skills they need. MAT services can act as a facilitator for change.”

Daniel G. C.A.D.C.
Questions?
Thank You!!!