Effective Strategies for the Non-Adherent Buprenorphine Patient: Rational Monitoring and Contingency
Friday, January 27, 2016

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Disclosures/Conflicts of interest

The speakers and planners of this webinar have no relevant financial relationships to disclose
Ted’s Story

29 y.o. man presents to our clinic for ongoing buprenorphine-naloxone management, 12 mg/daily, which has helped him “stay clean for 2 years.” He recently moved to the Bay Area for a new job in a local hospital, seeking a “fresh start”.

Based on self-reported history, we diagnose the following:

- Opioid use disorder (hx of IV heroin use)
- Cocaine use disorder (crack)
- Cannabis/nicotine use disorder
- Alcohol use disorder
- Anxiety disorder, NOS
Ted’s Story

- In addition to prescribing bup 12 mg/daily, per Ted, his prior doctor was prescribing clonazepam 4 mg/daily and alprazolam 4 mg/daily. Without benzos, Ted reports he becomes suicidal.
- Soc Hx: Patient living with his friend, who is also in recovery, and got Ted his new job. He commutes 2 hours each way by bus to his job. He works the night shift.

How will we manage Ted’s benzodiazepines, which put him at increased risk for accidental overdose, especially given his reluctance to make changes?
Is Ted telling the truth about his current substance use?

Without objective data, it is impossible to know.

What to do?!
### Prescription Drug Monitoring Program

#### State Prescription Monitoring Programs

![Map of State Prescription Monitoring Programs](image)

### PDMP

**Prescription Drug Transaction Details**

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Urine Drug Screen

Why Test?

- Diagnosis – substance abuse and dependence
- Pain management – monitoring compliance and detecting addiction
- Accountability - improves outcomes
- Documentation of recovery - advocacy
- Detection of relapse – early intervention
- Prevention – deterrence – in schools, homes, etc
- Detection of Diversion – important to the DEA when they visit
Two basic types of tests

- Screening – highly sensitive but not so specific
  - Immunoassay – lab based or Point of Care Test
  - ELISA, EMIT, DRI – cross reactivity
  - “Presumptive positive”

- Confirmation – highly specific but not easily automated
  - GC/MS
  - LC/MS/MS

- Best used together – screening and if positive then do confirmation for that analyte
Panels

- POCT – 12 panel - limited – “CLIA waived”
- Immunoassay screening by laboratory – extensive panels available - over 125 immunoassay kits now available
- Selecting a drug test panel
  - NIDA 5 – profoundly inadequate today
  - Must include typical drugs of abuse
  - Any other particular drugs of possible concern
    - e.g. buprenorphine, methadone, dextromethorphan, ketamine, etc.
Window of Detection

<table>
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<tr>
<th>Drug</th>
<th>General detection time in urine</th>
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<tr>
<td>Amphetamines</td>
<td>Up to 3 days</td>
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<tr>
<td>THCA (depending on the grade and frequency of marijuana use)</td>
<td></td>
</tr>
<tr>
<td>– Single use</td>
<td>1 to 3 days</td>
</tr>
<tr>
<td>– Chronic use</td>
<td>Up to 30 days</td>
</tr>
<tr>
<td>Cocaine</td>
<td>Hours</td>
</tr>
<tr>
<td>– BEG after cocaine use</td>
<td>2 to 4 days</td>
</tr>
<tr>
<td>Opiates (morphine, codeine)</td>
<td>2 to 3 days</td>
</tr>
<tr>
<td>– Heroin</td>
<td>3 to 5 minutes</td>
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<tr>
<td>– 6-MAM</td>
<td>25 to 30 minutes</td>
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<tr>
<td>Methadone</td>
<td>Up to 3 days</td>
</tr>
<tr>
<td>– EDDP (methadone metabolite)</td>
<td>Up to 6 days</td>
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<tr>
<td>Benzodiazepines (depending on specific agent and quantity used)</td>
<td>Days to weeks</td>
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Cutoffs

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<tr>
<th>Initial test analyte</th>
<th>Initial test cutoff</th>
<th>Confirmatory test analyte</th>
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<td>THCA</td>
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<td>Opiate/metabolites</td>
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<td>– 6-MAM</td>
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<td>– Amphetamine/methamphetamine</td>
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<td>MDEA</td>
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Ethylglucuronide (EtG)

**Formation**

- via conjugation of ethanol with activated glucuronic acid in the presence of membrane bound mitochondrial UDP glucuronyl transferase (UGT)

> Stephan Seidl et al.

![Figure 1. Formation of ethyl glucuronide (EtG) by conjugation of UDP-glucuronic acid and ethanol.](image)


Ted’s UDS is positive for BZDs, bup, cannabis, and cocaine; PDMP negative.
After UDS results, Ted admits he drank to blackout on Saturday night and “probably used cocaine ... that’s what I do.”
Axelrod’s computer simulation competition

- Strategies that did poorly?
  - “Nasty” strategies
  - “Always nice”

- The winning strategy?
  - Just four lines of BASIC
  - “Tit for tat”

How to Play Tit-for-Tat


**Tit for Tat: cooperate, then repeat opponent’s last move**

- **Doctor**
  - Cooperate ➔ Cooperate
  - Cooperate ➔ Cooperate
  - Cooperate ➔ Cooperate
  - Defect ➔ Defect
  - Defect ➔ Defect
  - Cooperate ➔ Cooperate

- **Patient**
  - Cooperate
  - Cooperate
  - Cooperate
  - Defect
  - Defect
  - Cooperate

**Respond to aberrant behavior with Tit for Tat**

- Limit prescriptions to 1-2 weeks
- Increase visits
- Reduce the dose by 10%
- Get urine tox screens *before* prescribing
- Get family involved
- Refer to a higher level of care (e.g., methadone maintenance ... Dr. Scott Steiger pearl)
Evidence for Tit for Tat?

- See the contingency management literature
- Contingency management
  - Punishment certainty > punishment severity
  - Immediate punishment > delayed punishment
  - Punishment = transgression
  - Rewards for good behavior
- South Dakota's “24/7 Sobriety Program” reduced both repeat DUI and domestic violence arrests at the county level (www.rand.org)

Tit for Tat a better alternative to:

- Enabling
- Retaliation
Back to Ted’s Case

Ted’s UDS is positive for BZDs, bup, cannabis, and cocaine; PDMP negative.

Visit #0: Using Tit for Tat, what is the best next step?

A. Tell Ted you can’t treat him because he lied about his drug use and you can’t work with a liar
B. Give Ted an Rx for a month’s worth of buprenorphine 12 mg/day, Clonazepam 4 mg/day, and Alprazolam 4 mg/day, RTC 1 month
C. Give Ted an Rx for a month’s worth of bup 12 mg/day but no benzos, RTC 1 week
D. Do not give Ted prescriptions before confirming with prior prescriber and setting the terms of your relationship (“contract”)
Answer = “D”

- Do not give Ted prescriptions before confirming with prior prescriber and setting the terms of your relationship (“contract”)

What Did We Do?

Treatment Plan Visit #0

- No prescriptions until after confirming with previous provider about hx and Rx
- Previous provider not aware of binge alcohol, cocaine, or cannabis use; no UDS/PDMP; but confirms bup and clon doses. Alpraz only 2mg.
- “Controlled Substance Contract”: No EtOH, no other opioids, no illicits, no cannabis, nicotine okay, AA/NA, weekly UDS/PDMP/pill counts
- Rx’d one week of meds, Alprazolam only 2mg daily as per provider
Ted’s Level of Satisfaction with his Care after Visit #0

- 2 out of 10.

Visit #1
(1 week after initial visit)

- UDS negative except benzos and bup
- PDMP negative for aberrant behavior
- Pill count consistent with prescribing
- Tolerating alprazolam 2 mg daily
Visit #1: Using Tit for Tat, what is the best next step?

A. Tell Ted he’s doing great and Rx a month’s worth of the same meds, RTC 1 month
B. Rx a week of meds, but this time cut out the alprazolam, RTC 1 week
C. Tell Ted you talked with a colleague and you now feel Ted is too high risk; Rx 2 weeks of meds at the same doses and give other names for F/U
D. Rx another week of meds, except lower alprazolam to 1.5mg daily.

Answer = “E”

Rx another week of meds, except lower alprazolam to 1.5mg daily.
What Did We Do?

Treatment Plan Visit #1

- Rx’d another week of meds, except lowered alprazolam to 1.5mg daily.

Ted’s level of satisfaction with his care after visit #1

- 1 out of 10.
Visit #2
(2 weeks after initial visit)

- UDS positive for benzos, bup, cocaine, and cannabis; PDMP negative.
- Pill count shows no remaining pills
- Roomate using cocaine in the home
- Ted talks about burden of working the night shift, no money, long commute, uncertain housing, difficult roommate, struggling to keep his job

Visit #2: Using Tit for Tat, what is the best next step?

A. Re-visit the terms of the original agreement, and reduce the daily bup dose to 8mg daily as a response to non-adherence; Rx 1 week meds

B. Re-visit the terms of the original agreement and emphasize the importance of following the contract, but make no changes; Rx 1 week meds

C. Tell Ted that since he broke the contract, you can no longer treat him, and refer him to a methadone clinic
Answer = “A”

- Re-visit the terms of the original agreement, and reduce the daily bup dose to 8mg daily as a response to non-adherence; Rx 1 week meds

What Did We do?
Treatment Plan Visit #2

- Re-explained contract and Rx’d week of meds; same doses.
- No Tit for Tat. Why?
  - Tit for Tat has room for forgiveness
  - We thought we were alliance building
  - Issues of the working poor: money, transportation, time, other pressures
- However, I’m not sure we did Ted any favors...
The Poor and Under-Educated Treated Differently

- People receiving Medicaid are prescribed painkillers
- at 2x rate of non-Medicaid patients
- and die from prescription overdoses at 6x the rate

Reasons for these differences?
- Provider factors
- Patient factors

Ted’s level of satisfaction with his care after visit #2

- 5 out of 10.
Visit #3
(3 weeks after initial visit)

- Patient did not show for his appointment.
- Make up appointment same day in the afternoon, or else no Rx
- At make up appointment, UDS positive for benzos, bup, cocaine, cannabis
- PDMP negative; didn’t bring meds for pill count
- States “I feel terrible.” And says he gets suicidal or relapses to heroin if alprazolam lowered further

Visit #3: Using Tit for Tat, what is the best next step?

A. Re-visit the terms of the original agreement, and reduce the daily bup dose to 8mg daily as a response to non-adherence; Rx 1 week meds
B. Re-visit the terms of the original agreement and emphasize the importance of following the contract, but make no changes; Rx 1 week meds
C. Tell Ted that since he broke the contract, you can no longer treat him, and refer him to a methadone clinic
Answer = “A”

- Re-visit the terms of the original agreement, and reduce the daily bup dose to 8mg daily as a response to non-adherence; Rx 1 week meds

What Did We Do?
Treatment Plan Visit #3

- Alprazolam continued at 1.5 mg daily, despite veiled threats. SI assessed and not active. Patient able to contract “for safety”

- Patient told if UDS positive next week for cocaine or other illicits, we will reduce the buprenorphine dose further and continue reducing at each visit until UDS adhering to treatment.

- We agree cannabis use would not qualify as non-adherence.
Ted’s level of satisfaction with his care after visit #3

- 0 out of 10.

Turned a Corner
Visit #4
(4 weeks after initial visit)
- UDS positive for benzos, bup, and cannabis; PDMP negative.

Visit #4: Using Tit for Tat, what is the best next step?
A. Re-visit the terms of the original agreement, and further reduce the daily bup dose to 4mg daily; Rx 1 week meds
B. Re-visit the terms of the original agreement and emphasize the importance of following the contract, but make no changes; Rx 1 week meds
C. Re-visit the terms of the original agreement and emphasize the importance of following the contract; increase bup back up to 12 mg/daily; Rx 1 week meds
Answer = “C”

- Re-visit the terms of the original agreement and emphasize the importance of following the contract; increase bup back up to 12 mg/daily; Rx 1 week meds
- Reward course correction

What Did We Do?
Treatment Plan Visit #4

- Increased buprenorphine back to 12mg/day
- continued alprazolam at 1.5 mg daily
- Patient recommitted to the contract
- Started looking for new housing options to get away from cocaine-using roommate
Ted’s level of satisfaction with his care after visit #4

- 2 out of 10.

It’s a Dance...

And you’re teaching your patient the steps
Ted Today!

Don’t Forget Naloxone!
Weighing the Risks and Benefits of Chronic Opioid Therapy

Evidence suggests the use of opioids for treating certain pain is safe and effective; however, the evidence is limited for the use of chronic opioid therapy for chronic pain. For many patients, the benefits of chronic opioid therapy outweigh the risks. However, it is important to carefully consider the risks and benefits when deciding on chronic opioid therapy. Key considerations include:

- The potential for addiction and the need for ongoing monitoring.
- The impact on quality of life and daily functioning.
- The potential for side effects and the need for ongoing management.

Chronic opioid therapy should be prescribed for a limited period and monitored closely. Regular assessment of the patient’s condition and medication regimen is crucial. Monitoring should include:

- Regular review of the treatment plan.
- Ongoing assessment of the patient’s response to therapy.
- Monitoring for signs of addiction or misuse.

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More information regarding

*Drug Dealer, MD: How Doctors Were Duped, Patients Got Hooked, And Why It's So Hard to Stop*

will be sent in a follow-up email.
Thanks for listening!
Questions?

California Society of Addiction Medicine (CSAM)
Treating Addiction in the Primary Care Safety Net (TAPC)

Soraya Azari, MD
Christina Fritsch, MD
Keith Heinzerling, MD
Ako Jacinthe, MD
Anna Lembke, MD
Jean Marsters, MD
Scott Steiger, MD
Kenneth Saffier, MD
NEXT WEBINAR  Friday, 02/24/2017:
Psychological Approaches to Pain Management for the Primary Care Provider meeting

Friday, 03/24/2017  Friday, 07/28/2017
Friday, 04/28/2017  Friday, 08/18/2017*
Friday, 05/19/2017  Friday, 09/22/2017
Friday, 06/23/2017

You can view our previous webinars:

✓ “Expanding Access to Medication Assisted Treatment Utilizing Nurse Care Managers”
✓ “Patient Confidentiality and Medication-Assisted Treatment in California Primary Care Settings”
✓ “Office-Based Buprenorphine: Patient Selection, Induction, and Management”
✓ for a small fee for CME/CEU on the CSAM Education Center at: http://cme.csam-asam.org/

OR

Free on the CHCF TAPC Program Resource Page at: https://tapcprogram.com/
This webinar is eligible for 1 AMA/PRA Category 1 Credit and 1 CEU

After the webinar ends, stay online and you will be automatically transferred to a site where, after you answer a brief quiz and evaluation, you will be sent a certificate by email. The link to the quiz/evaluation/CME site will be sent to you about 1 hour after the conference.

Save the date!

CSAM Addiction Medicine Review Course and Board Exam Preparation
August 24 - August 27, 2017
Hilton San Francisco Union Square
Special thanks to

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Susannah Brouwer, California Care Innovations (CCI)

Michael Barack, CSAM
Olma O’Neill, CSAM