Innovations to Expand Access to Buprenorphine: From the Street to the Hospital

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Medicine Grand Rounds
The Problem

3 Waves of the Rise in Opioid Overdose Deaths

- **Wave 1:** Rise in Prescription Opioid Overdose Deaths
- **Wave 2:** Rise in Heroin Overdose Deaths
- **Wave 3:** Rise in Synthetic Opioid Overdose Deaths

Buprenorphine Basics

• Partial opioid agonist
• First line treatment for opioid use disorder
• Prescribed by waivered clinician typically in office-based setting
• Rationale for treatment
  • Improved retention in care
  • Decreased opioid use
  • Decreased all-cause and overdose mortality

Mattick 2014, Cochrane Review
Sordo 2017, BMJ
The Opioid Use Disorder Treatment Gap

Williams AR, Nunes E, Olfson M. Health Affairs Blog, 2017
Barriers to OUD Treatment

• Lack of prescribers (3% of PCPs are waivered)
• Waivered physicians not prescribing
  • Lack of knowledge and support
  • Negative attitudes towards patients who use drugs
• Concern for diversion
• Limited coverage by insurance
• Many remain uninsured
• Complex, fragmented system of care
• Stigma
• Current care doesn’t meet patients where they are
Two Local Innovations to Expand Access to Buprenorphine

• Street Medicine Low Barrier Buprenorphine Program
• Project SHOUT
Street Medicine Low Barrier Buprenorphine

- Case: 42M with opioid use disorder, methamphetamine use disorder, HCV, bipolar disorder
- Not engaged in care
- Injection heroin and meth use for 20 years
- Homeless in SF for 8 years
Barriers to Care

- Can’t leave his tent/stuff/pet
- No ID
- No insurance
- Difficulty making regular appointments
- Negative past experiences with medical providers
Engagement by Peer Outreach

I was actually in the park on the corner over there selling dope one morning, and I seen the girls with the HOT team coat, so I asked them if they could help me get suboxone, and they said if I wait here in an hour, the doctor will be here and he’ll hook me up. And I called my ex at the time and she came down and he wrote up both scripts right on the corner right there, and that was pretty cool.
Meeting Patients Where They Are
You would have to wait. And of course, you know, you get high in the wait. You get high and then your resolve goes away. Or all the times - which is really weird - all the times that you really want to get better, it’s always only when you’re high. You get high, and then you’re normal, and you miss that feeling, and you’re like “Dude, I’m absolutely doing this”, but then as soon as you get sick, or you get the need, and you panic, and you get high, and you just get stuck in the cycle.
Delays in Treatment are Barriers to Care

They took like an hour and a half interviewing me and then like an hour and a half interviewing my same ex at the time and they told me “Oh yeah, I think you’re good. We’ll work with you. Why don’t you come back next week and we’ll start dosing you?” And so I had a whole week to catch a habit and stop giving a [care] about the suboxone, and so I just felt toyed with... Being able to get it then and there when I needed it and when I wanted it was crucial.
Treatment on Demand Improves Retention

Woody 1975, Comprehensive Psychiatry
Oh my god, I didn’t need no ID, you know what I’m saying- the first time, and that was a miracle. Because my ID got stolen. So I could just go right to the pharmacy, and they had the prescription for me. I didn’t have to go do this, do this, do that - you know what I’m saying? To start. They started me right away the same day! And that’s huge.
Non-Judgmental Approach

They don’t treat you like an outcast, or nothing like that. They’re not like that. Everybody’s so friendly and welcoming...Because you know, you’ve got people that, even though they don’t say it, they’re thinking it: “Junkie”. Or they got this look on their face like they smell [something], like something stinks, and that makes you feel bad. Like you got a problem. You don’t say “When I grow up I’m gonna be an addict”, you know what I mean? You don’t do that.

And so when you feel judged by those people that doesn’t make you want to come back there.

Right, correct, at all. And this makes me want to come back because I know you guys care about me and want to help me. That makes me want to help myself.
Retention in Care

- Retention = primary goal
- 70% returned after initial visit
- Treatment interruptions commons
  - 42% had 1 month or greater interruption with return to care
Retention in Care and on Buprenorphine by Month

<table>
<thead>
<tr>
<th>Months Since Induction</th>
<th>Retention in Care</th>
<th>Retention on Buprenorphine</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>62%</td>
<td>37%</td>
</tr>
<tr>
<td>3</td>
<td>51%</td>
<td>27%</td>
</tr>
<tr>
<td>6</td>
<td>41%</td>
<td>26%</td>
</tr>
<tr>
<td>9</td>
<td>36%</td>
<td>26%</td>
</tr>
<tr>
<td>12</td>
<td>22%</td>
<td>22%</td>
</tr>
</tbody>
</table>

(n=95) (n=95) (n=73) (n=42) (n=23)
Decreased Heroin Use

• 36% utoxes opioid-negative
• Of patients who came back after initial visit:
  • 34% at least one opioid-negative test
  • 14% abstinence from opioids on all tests

Urine Toxicology Results:
% Positive

<table>
<thead>
<tr>
<th>Substance</th>
<th>% Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>bupe</td>
<td>79%</td>
</tr>
<tr>
<td>opioids</td>
<td>64%</td>
</tr>
<tr>
<td>meth</td>
<td>72%</td>
</tr>
<tr>
<td>cocaine</td>
<td>26%</td>
</tr>
<tr>
<td>benzos</td>
<td>11%</td>
</tr>
</tbody>
</table>
Decreased Heroin and Other Substance Use

And now the [buprenorphine], it helps me. Don’t get me wrong, I still have my street addiction, but this is nothing. I was on like $100 worth of drug, now I’m down to 10. So I know it’s working, because I’ve come down a lot.

When I was injecting, I would poke and smoke. When I say smoke I mean using crack- I smoked it. So it was like a routine- poke, smoke. You know what I’m saying. So now with [buprenorphine], I don’t have that desire to poke and smoke. I’m saying the routine is over for me.
Improved Health

Yeah I mean I guess because of [buprenorphine], I have more money for food so I can eat better, which is something I really miss... Even though I don’t have a lot of money, I don’t spend all my money on dope so, I can at least get something.

Well, I’m alive. I haven’t overdosed, you know. I’m pretty good actually.
Improved Wellbeing

“[Drug use] was all-consuming in my life. Now since I’ve started [buprenorphine] I’ve actually been watching sunsets again, and just trying to enjoy being alive. As opposed to constantly trying to figure out how I’m going to get high.

It stopped me from doing things I don’t want to do. Maybe stealing, or asking people for help, stuff like that. So, it’s a lot better. It took a lot of pressure off me.
Future Goals

From where I’m living in my situation right now, it’s really easy to fall off and screw it all up. And I’m working towards a goal right now to get a job and rekindle my relationship, so I’m really motivated to not mess up. So I’m pretty strict on how I’m taking [buprenorphine].
Experiences with Diversion

I guess I hear people trying to sell them when I walk by a lot. But I’d rather have mine than the money. It’s worth a lot more to me. If I had the money I’d probably just spend it on heroin. Like I’d rather just keep the suboxone and not have to stab myself and worry about it all day.

I’m not gonna give away my last [buprenorphine] though, but yeah, if I had, you know, enough where I’d be well, then yeah... It’s just that and just understanding, you know, what drug dependency is, and you don’t want to see people you care about or really anybody withdrawing or sick, you know. So if I’m in a position to help anybody I’ll help them.
Diversion

• Multiple studies: diverted buprenorphine used to treat opioid withdrawal or as maintenance treatment in patients not able to access care

I had started back using. And one day I’m scraping together some money, and I’m like “Damn I’m sick. I’m getting sick!” right? “Wish I had a suboxone”. You feeling me? And she go “I’ve got a suboxone! Give me that five dollars.” So I bought a suboxone, you know, and she gave it to me, I put it under my tongue. That changed my life, I came back.

That helped you come back, that got you back into treatment?

Yeah, of course it did. I should have never left. I never will again.

Fox 2015, J Subst Abuse Treat
Mitchell 2009, Am J Addict
Bazazi 2011, J Addict Med
Lofwall 2012, Drug Alcohol Depend
Genberg 2013, Addict Behav
Low Barrier Buprenorphine: Conclusions

• Broaden definition of success in addiction treatment →
  • Improved retention in care
  • Improved health and wellbeing
• Referring to “higher level of care” often means patient doesn’t access care at all
• Excessive focus on risk of diversion is counterproductive
• Harm reduction approach:
  • Streamline access to care and remove barriers (treatment on demand!)
  • Meet patients where they are (literally!)
  • Support through ongoing drug use and treatment interruptions
What is SHOUT?

- Capacity building for hospitalists and maternity care providers
- Target patients with OUD hospitalized for acute care
- Prevent withdrawal, support recovery via MAT
- Harm reduction model applied to inpatient services
- Partner with ED- Bridge project
Why treat OUD in the hospital?

- 8-29% of hospitalized patients have a non-alcohol substance use disorder
- Often not otherwise engaged in care
- 67% of hospitalized people who use drugs state that they would like to cut back or quit
- 25-30% of patients with SUD leave AMA
Drug Related Death Rate per 1000 Post Discharge

- No hospital admission: 2
- 28 days after discharge: 31.7
- 1-3 months: 14.9
- 3 months-1 year: 10.6
Withdrawal Management

• Adjunctive medications
Withdrawal Management

- Adjunctive medications
- Methadone 20-30mg
Withdrawal Management

• Adjunctive medications
• Methadone 20-30mg
• Buprenorphine taper
Withdrawal Management

- Adjunctive medications
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- **Maintenance Opioid Agonist Therapy**
Hospital Initiation of Buprenorphine

- 72% received MAT in 6 mo after discharge
- 12% in MAT at 6 months
- 65% days in MAT over 6 months

**Bar Chart:**
- **Linkage**
  - Received MAT in 6 mo after discharge: 72%
  - In MAT at 6 months: 16%
  - Days in MAT over 6 months: 65%
- **Detox**
  - Received MAT in 6 mo after discharge: 12%
  - In MAT at 6 months: 3%
  - Days in MAT over 6 months: 7%
SHOUT Intervention

• Webinars
• Evidence based guidelines
  • Buprenorphine starts and maintenance
  • Methadone starts and maintenance
  • Perioperative/acute pain
• Toolkit for implementation
  • Order set
  • Handouts
• Coaching calls, site visits
Barriers to Implementation

- Unclear regulations, inaccurate perceptions
- Concerns regarding increasing volume
- Stigma

<table>
<thead>
<tr>
<th>Top barrier</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Few/no available outpatient clinics</td>
<td>23%</td>
</tr>
<tr>
<td>Few/no X waived providers</td>
<td>20%</td>
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<tr>
<td>Inconsistent providers</td>
<td>13%</td>
</tr>
<tr>
<td>Lack of expert consultants</td>
<td>8%</td>
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<tr>
<td>Safety concerns</td>
<td>5%</td>
</tr>
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<td>Time limitations</td>
<td>5%</td>
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Needs Assessment: Methadone

- Not on formulary: 23
- Used for pain: 4
- Only for patients who are on it outpatient: 4
- Offer low dose/taper: 2
- Can initiate maintenance: 6

Legend:
- Blue: Not on formulary
- Grey: Used for pain
- Orange: Only for patients who are on it outpatient
- Yellow: Offer low dose/taper
- Green: Can initiate maintenance
## SHOUT Outcomes

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<td>Organizations working to implement</td>
<td>6 8</td>
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Average daily doses of methadone

Location | New Starts 10-12/2017
---|---
Med-Surg | 62
ICU | 5
OB | 2
ZSFG: Inpatient

Average daily doses of buprenorphine

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<th>Location</th>
<th>New Starts 10-12/2017</th>
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<tbody>
<tr>
<td>Med-Surg</td>
<td>8</td>
</tr>
<tr>
<td>ICU</td>
<td>3</td>
</tr>
<tr>
<td>OB</td>
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ZSFG: Linkage to Care

Current state
• 37% of methadone starts (n=53) referred to on-site methadone clinic had intake
• 79% buprenorphine starts (n=14) over 3 mo had at least one MAT visit in 90 days
  • Includes buprenorphine or methadone
  • 4 through a facility (SNF, jail)

Next steps
• EHR order sets
• Consult service
• Linkage navigator
Key Points

• Inpatient initiation is within scope of non-specialists

• Project SHOUT can help build capacity

• MAT exposure can prevent AMA discharge, increase linkage to care
Questions?

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