Increasing Office-Based Buprenorphine Availability and Efficacy through Coordination with Opioid Treatment Programs

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ABSTRACT

Background:
Although medication-assisted therapies (MAT) improve treatment efficacy for opioid use disorder, they remain underutilized. Opioid treatment programs (OTPs), historically utilizing only methadone pharmacotherapy, can now use buprenorphine as an alternative. Collaboration between OTPs and office-based physician prescribers in primary care or psychiatric practices can create a cohesive delivery model providing access to comprehensive services across settings and pharmacotherapies. Support of prescribers by the OTPs may also encourage office-based buprenorphine, increasing access.

Methods:
A "Collaborative Opioid Prescribing" ("CoOP") model links our OTP with nearby office-based buprenorphine (OBB) prescribers in Baltimore City. The OTP provides assessment, buprenorphine induction to stable dosing, and ongoing counseling, while the OBB sites provide primary or psychiatric care and ongoing buprenorphine prescribing. An adaptive stepped care model adjusts scheduled counseling intensity, and medication prescribing/dispensing (setting, duration), based on response to treatment. Pharmacotherapy may be shifted between OBB prescribing and OTP dispensing, and conversion to methadone is possible. CoOP is now being disseminated nationally through a AAAP/PCSS mini grant project that provides OTP's with information and resources, while collecting feedback on their efforts.

Results:
Between 2011 and 2014, 81 patients at the Johns Hopkins Hospital outpatient addiction treatment program in Baltimore, MD received office-based buprenorphine from 26 providers, under the CoOP model. 83% of these patients were newly inducted onto buprenorphine at the program. Based on the increased availability and efficacy of office-based buprenorphine maintenance associated with this experience at one OTP, this model has been disseminated to 16 OTP's nationally as an attempt to reproduce its success and determine barriers and alternative models.

Conclusions:
Increasing access and support for OBB providers, such as through the CoOP model, is a compelling strategy for increasing the availability of MAT while also improving its effectiveness. This model has been used to coordinate office-based buprenorphine treatment by primary care and psychiatric providers, as well as at an HIV clinic. It might also be extended to other provider types who could fill the need to increase MAT, such as pain treatment and obstetric providers. Providing patients with the full spectrum of medical, social, and recovery support services through coordinated care is necessary for improving health outcomes and addressing a critical but mostly unmet need for effective opioid use disorder treatment.

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BACKGROUND

National study of 545 waivered MD's *(Kissin et al., 2006)*:
- Only 58% had prescribed
- Barriers: Induction logistics, poor compliance, limited counseling

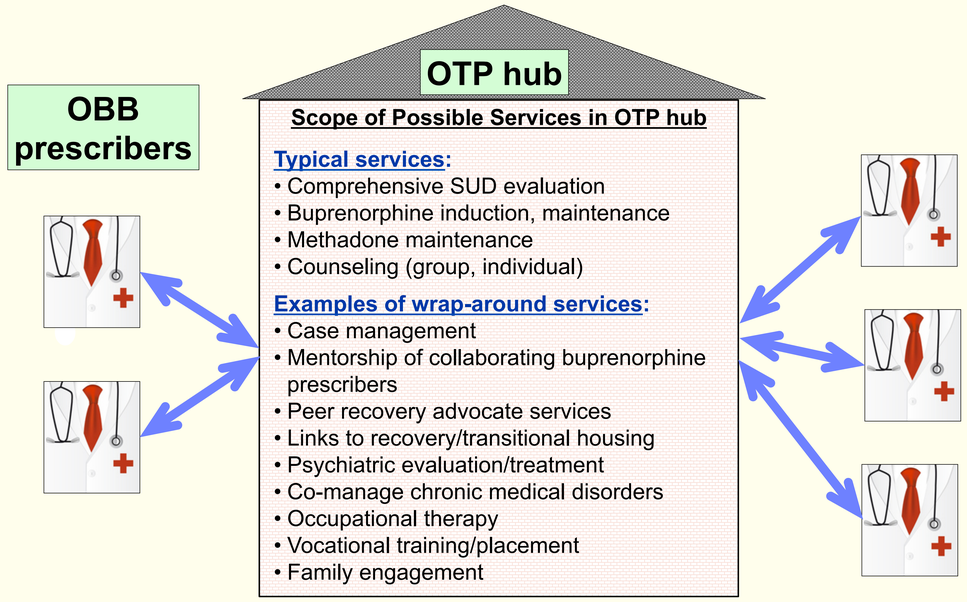
Maryland study of 330 waivered MDs *(Center for a Healthy Maryland, 2007)*:
- Only 50% were prescribing
- Barrier: Addiction treatment perceived as difficult and time-consuming.

DATA 2000 buprenorphine waivers are underutilized despite opioid overdose epidemic

METHODS

"CoOP" model: Collaborative Opioid Prescribing

Goal: To increase the availability and effectiveness of office-based buprenorphine (OBB) prescribing through the support of prescribers by opioid treatment program (OTP) hubs



- Concurrent OTP enrollment while receiving OBB (typically from PCP or psychiatrist).
- Comprehensive evaluation and individualized treatment plan at OTP.
- Buprenorphine induction/stabilization at OTP, then prescribed by OBB prescriber.
- Ongoing communication between OTP and OBB about adherence and response.
- **Adaptive stepped care** model adjusts (based on toxicology and adherence):
  - OTP counseling intensity
  - Medication source (OBB vs. OTP) and schedule
- Nonresponders offered change like switch to methadone, or residential admission.
- Continued availability of medication is ultimately contingent on good engagement.

Adaptive Stepped Care

Step	Opioid Agonist **Medication**	Prescribing or Dispensing **Location**	Prescribing or Dispensing **Frequency**	OTP **Counseling Intensity**
1. Stable OBB	Buprenorphine	OBB office prescription	1 month prescription	Low
2. Intensive OBB	Buprenorphine	OBB office prescription	1 week prescription	Intensive
3. Intensive OTP	Buprenorphine	OTP dispensary	Daily dispensing	Intensive
4. Methadone OTP	Methadone	OTP dispensary	Daily dispensing	Intensive

Toxicology and adherence determine counseling intensity, and medication location (OBB, OTP), frequency

RESULTS

Experience at Johns Hopkins

- 81 patients (2011-2014) treated under CoOP model
- 26 OBB prescribers
- Successful partnerships formed and maintained
- More physicians seeking waivers to use buprenorphine
- Greater use of waivers
- Coordination of medical and psychiatric care facilitated
- Rapid, effective management of relapse

PCSS-Supported Implementation Project

- Created a "toolkit" to assist participating OTP's in designing and implementing the CoOP model.
- 16 OTP's in 7 states agreed to participate so far.
- Initial feedback is mixed. Enthusiasm of OTP's tempered by some reluctance of office-based physicians.

CONCLUSIONS / IMPLICATIONS

- CoOP successfully implemented in a hospital-based OTP.
- The model can increase both the availability and effectiveness of office-based buprenorphine.
- Early attempt to disseminate is ongoing.
- May be springboard for further innovations, research
- Potential to extend to other settings (e.g., obstetrics, pain treatment, hepatology, HIV medicine)