Effective Team-Based Care for OUD (with focus on Nurse-led model) + Care Coordination and Addressing Social Determinants of Health

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Disclosures

Colleen LaBelle has nothing to disclose
Learning Objectives

• Understand the barriers to prescribing buprenorphine.
• Understand Boston Medical Center’s Nurse Care Model for Office Based Addiction Treatment.
• Understand Complex Care Management Model for opioid use disorder treatment.
A New Law
Drug Addiction Treatment Act (DATA) 2000

- Amendment to the Controlled Substances Act
- Allows physician to prescribe scheduled medications (schedules III, IV or V), FDA approved for maintenance or detoxification treatment
  - Prior 10/2002 no medication existed
  - Methadone does not qualify
Collaborative Care of Opioid-Addicted Patients in Primary Care Using Buprenorphine
Five-Year Experience

Daniel P. Alford, MD, MPH; Colleen T. LaBelle, RN; Natalie Kretsch, BA; Alexis Bergeron, MPH, LCSW; Michael Winter, MPH; Michael Botticelli, MEd; Jeffrey H. Samet, MD, MA, MPH

BMC’s Office Based Addiction Treatment (OBAT) Model

- Collaborative Care / Nurse Care Manager Model developed at Boston Medical Center (BMC)
  - Nurse care managers (NCMs) work with physicians to deliver outpatient substance use treatment with buprenorphine and injectable naltrexone
- More recently dubbed the “Massachusetts Model”
Boston Medical Center (BMC) OBOT
in General Internal Medicine

- 5/2003 – Began OBOT
- 7/2010
  - 425 patients (3-6 admissions per week)
  - 9 physicians
    - 1 medical director
    - 3 ABAM certified
    - Part-time clinical practices: on average, 3 sessions/week (range 1-6)
  - 3 RNs (3 FTE)
  - 1 medical asst (1 FTE)
  - 1 program coordinator (1 FTE)
  - 1 program director (.4 FTE)
7/2016

- 7 new admissions per week
- 17 waivered physicians
  - 12 ABAM certified
  - Part-time clinical practices: on average, 3 sessions/week (range 1-6)
- RNs (5.5 FTE)
- medical assistant (1 FTE)
- program coordinator (.2 FTE)
- program director (.1 FTE)
Table 2. Treatment Outcomes at 12 Months of 382 Opioid-Dependent Patients Entering Office-Based Opioid Treatment in Primary Care

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Patients, No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Successful treatment</strong></td>
<td></td>
</tr>
<tr>
<td>Treatment retention</td>
<td>187 (49.0)</td>
</tr>
<tr>
<td>Successful taper after 6 months of adherence</td>
<td>9 (2.4)</td>
</tr>
<tr>
<td><strong>Unsuccessful treatment</strong></td>
<td></td>
</tr>
<tr>
<td>Lost to follow-up</td>
<td>113 (29.6)</td>
</tr>
<tr>
<td>Nonadherence despite enhanced treatment</td>
<td>46 (12.0)</td>
</tr>
<tr>
<td>Administrative discharge due to disruptive behavior</td>
<td>2 (0.5)</td>
</tr>
<tr>
<td>Adverse effects of buprenorphine hydrochloride</td>
<td>1 (0.3)</td>
</tr>
<tr>
<td>Transfer to methadone hydrochloride treatment program</td>
<td>24 (6.3)</td>
</tr>
</tbody>
</table>

Buprenorphine was approved in 2003 and 12 years later there are only 34,000 waivered providers on average 2-4% per State. As of Nov 2015, there were 34,140 buprenorphine waivered physicians. 

Source: Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration. 2015.
Office-Based Management of Opioid Dependence with Buprenorphine: Clinical Practices and Barriers

Alexander Y. Walley, MD, MSc, Julie K. Alperen, DrPH, Debbie M. Cheng, ScD, Michael Botticelli, Carolyn Castro-Donlan, Jeffrey H. Samet, MD, MA, MPH, and Daniel P. Alford, MD, MPH

### Barriers to Prescribing Buprenorphine in Office-Based Settings

N=156 waivered physicians; 66% response rate among all waivered in MA as of 10/2005

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insufficient Nursing Support</td>
<td>20%</td>
</tr>
<tr>
<td>Insufficient Office Support</td>
<td>19%</td>
</tr>
<tr>
<td>Payment Issues</td>
<td>17%</td>
</tr>
<tr>
<td>Insufficient Institutional Support</td>
<td>16%</td>
</tr>
<tr>
<td>Insufficient Staff Knowledge</td>
<td>12%</td>
</tr>
<tr>
<td>Pharmacy Issues</td>
<td>8%</td>
</tr>
<tr>
<td>Low Demand</td>
<td>7%</td>
</tr>
<tr>
<td>Office Staff Stigma</td>
<td>5%</td>
</tr>
<tr>
<td>Insufficient Physician...</td>
<td>3%</td>
</tr>
</tbody>
</table>

Only DEA WAIVERED physicians can prescribe BUPRENORPHINE. (Not for long!!!!)

However...

...it takes a **Multidisciplinary Team Approach** for effective treatment.
What MAKES THE BMC NCM OBAT Model SUCCESSFUL?

**NCMs increase patient access to treatment!**

- Frequent follow-ups
- Case management
- Able to address
  - positive urines
  - insurance issues
  - prescription/pharmacy issues
- Pregnancy, acute pain, surgery, injury
- Concrete service support
  - Intensive treatment, legal/social issues, safety, housing
- Brief counseling, social support, patient navigation
- Support providers with large case loads
EXPANSION of BMC OBAT MODEL to Massachusetts CHCs

In 2007 State Technical Assistance Treatment Expansion (STATE) OBAT Program created to expand BMC model to community health centers (CHCs) across MA

Federally qualified health centers mandated by Public Health Service Act to:\(^1\)
- Provide mental health and substance use treatment
- Provide direct services or by written contractual agreement
- Measure services for effectiveness and quality

Program started with 14 CHCs, BMC now provides capacity building to >30 community health providers

\(^1\) Public Health Service Act (PHS) 42 U.S. Code, Chap. 6A, § 254b
State OBAT INITIATIVE in CHCs: Project Goals

**ACCESS**  
Expand treatment & access to buprenorphine

- Increase number of waivered MDs
- Increase number of individuals treated for opioid use disorder
- Integrate addiction treatment into primary care settings

**DELIVERY**  
Effective delivery model for buprenorphine

- Modeled after BMC’s Nurse Care Manager Program
- Focus on high risk areas, underserved populations

**SUSTAINABILITY**  
Post-program funding

- Develop a long-term viable funding plan
- Collect & analyze outcomes data
Office-Based Opioid Treatment with Buprenorphine (OBOT-B): Statewide Implementation of the Massachusetts Collaborative Care Model in Community Health Centers

Colleen T. LaBelle, B.S.N., R.N.-B.C., C.A.R.N. a,b,* Steve Choongheon Han, B.A. b, Alexis Bergeron, M.P.H. L.C.S.W. a, Jeffrey H. Samet, M.D., M.A., M.P.H. a,b,c

BMC OBOT Became Known as Massachusetts Model of OBOT

- Program Coordinator intake call
  - Screens the patient over the telephone
  - OBOT Team reviews the case for appropriateness

- NCM and physician assessments
  - Nurse does initial intake visit and collects data
  - Waivered prescriber: PE, and assesses appropriateness, DSM criteria of opioid use disorder

- NCM supervised induction (on-site) and managed stabilization (on- and off-site (by phone))
  - Follows protocol with patient self-administering medication per prescription
Nurse Care Managers (NCM)

- Registered nurses, completed 1 day buprenorphine training
- Performed patient education and clinical care by following treatment protocols (e.g., UDT, pill counts, periop mgnt)
- Ensured compliance with federal laws
- Coordinated care with OBOT prescribers
- Collaborated care with pharmacists (refills management) and off-site counseling services
- Drop-in hours for urgent care issues
- Managed all insurance issues (e.g., prior authorizations)
- On average each NCM saw 75 patients/wk
Massachusetts Model of OBOT

- Maintenance treatment patient in care (at least 6 months)
  - NCM visits weekly for 4-6 wks, then q2 wks, then q1-3 months and as needed
  - Waivered provider visits at least every 4 months
- Medically supervised withdrawal considered based on stability if the patient requested to taper
- Transferred to methadone if continued illicit drug use or need for more structured care
- Discharged for disruptive behavior
UMass Study Findings in Massachusetts

- Studied 5,600 Mass Health Clients prescribed buprenorphine and methadone (2003-2007)
- Overall Mass Health expenditures lower than for those with no treatment
- Clients on Medications had significantly lower rates of relapse, hospitalizations and ED visits: no more costly than other treatments
- Buprenorphine attracting younger and newer clients to treatment

OBOT RN Nursing Assessment:

- **Intake assessment**
  - Review medical hx, treatment hx, pain issues, mental health, current use, and medications

- **Consents/Treatment agreements**
  - Program expectations: visits & frequency, UDT, behavior
  - Understanding of medication: opioid, potential for withdrawal
  - Review, sign, copies to patient and review at later date

- **Education**
  - On the medication (opioid), administration, storage, safety, responsibilities and treatment plan

- **UDT**

- **LFTs, Hepatitis serologies, RPR, CBC, pregnancy test**
OBOT Waivered Provider

- Review of history
  - Mental health, substance use, medical, social
- Physical Exam
- Lab and urine review
  - Assess contraindications, toxicology
- Confirm opioid use disorder diagnosis
  - DSM criteria
- Confirm appropriate for office treatment
- Signs the orders and prescription
- Develop treatment plan with OBOT team
OBOT RN Induction Preparation:

Review Program Requirements:

- Nurse/Physician appointments:
  - frequency, times, location
- Counseling:
  - weekly initially
- UDT:
  - at visits, call backs
- Abstinence:
  - from opioids is the goal
- Insurance verification:
  - prior authorizations, co-pays
- Safety:
  - medication storage (bank bag)
OBOT Team

Patient Instructions for Induction Day:

- Insurance verification
  - Prior authorizations, co-pays
- Dispose of paraphernalia, phone numbers, contacts
- Medication pick up: 2mg/8mg tabs
- No driving for 24 hours
- Plan to be at clinic or office for 2-4 hours
- Bring a support person if possible
- Discuss potential side effects (e.g. precipitated withdrawal)
OBOT RN Follow up Visits:

- Assess dose, frequency, cravings, withdrawal
- Ongoing education: dosing, side effects, interactions, support.
- Counseling, self help check in
- Psychiatric evaluation and follow up as needed
- Medical issues: vaccines, follow up, treatment HIV, HCV, engage in care
- Assist with preparing prescriptions
- Facilitating prior approvals and pharmacy
- Pregnancy: if pregnant engage in appropriate care
- Social supports: housing, job, family, friends
Hospital Admissions

Average Hospital Admissions Per OBOT Enrollment

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Prior 6 Months</th>
<th>Future 6 Months</th>
<th>Future 7 to 12 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>0.26</td>
<td>0.10</td>
<td>0.12</td>
</tr>
<tr>
<td>2009</td>
<td>0.23</td>
<td>0.12</td>
<td>0.12</td>
</tr>
<tr>
<td>2010</td>
<td>0.20</td>
<td>0.09</td>
<td>0.12</td>
</tr>
<tr>
<td>2011</td>
<td>0.26</td>
<td>0.10</td>
<td>0.08</td>
</tr>
</tbody>
</table>

Notes:
- Hospital data is only available through 9/30/2012
- Enrollments must have lasted at least 12 months
- Paid amounts are calculated using hospital specific pay to charge ratios

Prepared by Synthesis Health Systems, Inc.
**ER Visits**

**Average ER Visits Per OBOT Enrollment**

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Prior 6 Months</th>
<th>Future 6 Months</th>
<th>Future 7 to 12 Months</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1.53</td>
<td>0.58</td>
<td>0.54</td>
</tr>
<tr>
<td>2009</td>
<td>1.17</td>
<td>0.69</td>
<td>0.55</td>
</tr>
<tr>
<td>2010</td>
<td>1.17</td>
<td>0.65</td>
<td>0.62</td>
</tr>
<tr>
<td>2011</td>
<td>1.24</td>
<td>0.61</td>
<td>0.67</td>
</tr>
</tbody>
</table>

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Prepared by Synthesis Health Systems, Inc.
Social Determinants Health Substance Use Disorder (SUD)

- Health determinants contribute to biological, socio-economic and psycho-social status
- What determines our health
  - Environment: living conditions, shelter, homeless
  - Employment: economic disparities
  - Access to healthcare: insurance, emergency care
  - Social stressors: abuse, neglect, food insecurities
  - Educational disparities: occupation
  - Mental health issues
  - Cultural norms: attitudes, treatment settings, decision-making
Addressing the Causal Chain in SUD

Taking into account the patient’s cultural framework, address:

- Supportive housing: environment change
- Career development: schooling, job training
  - Increase economic opportunities
- Universal healthcare: Reinforce prevention, treatment
- Stressors: complex care management
- Supports: parenting, education, counseling, activities
- Prevention and education
  - Social connectedness
Complex Care Management in OUD

- Patient-level outcomes comparable to physician-centered approaches

- Allows efficient use of physician time to focus on patient management (e.g., dose adjustments, maintenance vs. taper)
  - Allowed physicians to managed > numbers of patients due to support of NCM

- Improved access to OBOT and daily management of complex psychosocial needs (e.g., housing, employment, health insurance)

Collaborative Care Models

Providers’ Clinical Support System
For Medication Assisted Treatment

What We Do
We are a national training and mentoring project developed in response to the prescription opioid misuse epidemic and the availability of pharmacotherapies to address opioid use disorder. The overarching goal of PCSS-MAT is to make available the most effective medication-assisted treatments to serve patients in a variety of settings, including primary care, psychiatric care, substance use disorder treatment, and pain management settings.

View Modules
The foundation for provider education on topics related to medication-assisted treatment for opioid use disorder.
Start Training>

Find a Mentor
The mentor program provides individualized support and mentoring for providers treating opioid use disorder.
Connect Now>

Watch Webinars
Webinars provide expanded education targeted at clinicians engaged in the treatment of opioid-dependent patients.
Watch Now>
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