Comprehensive Opioid Addiction Treatment (COAT) Clinic:
Integrated Care Approach to Medication-Assisted Treatment with Buprenorphine

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I have no conflicts of interest to report
1. Why buprenorphine?
2. Combining medication-assisted treatment (MAT) with primary care
3. Using shared medical visits
4. The big picture: chronic care model
5. Comprehensive Opioid Addiction Treatment (COAT) clinic at IU Health Arnett
How did we become interested in an integrated care approach to treating opioid use disorders?

- IU Health Arnett has an existing integrated behavioral health program serving about 90,000 patients.
- Traditional treatment approaches are brief, intensive, and expensive; aftercare is often an afterthought, and relapse rates are high.
- Chronic care models for management of other diseases, like diabetes, are well established.
**Why buprenorphine?**

* It is effective!
  
  * **MAT with opioid agonists** (buprenorphine or methadone) increases retention in treatment and reduces illicit opioid use and dangerous behavior, including the transmission of HIV (Mattick 2014 – Cochrane Review)
  
  * MAT with opioid agonists is **more effective than detox or psychological treatments** (Mattick 2014 and Nielsen 2016 – Cochrane Review)
  
  * **MAT with opioid antagonists** (ER Naltrexone) has high dropout rates and is associated with an increased risk of opioid overdose (Kjome 2011)
Why buprenorphine?

- Buprenorphine can be prescribed by qualified providers in traditional outpatient settings established by the Drug Addiction and Treatment Act of 2000
- Final rule in August 2016 allowed addiction medicine and addition psychiatry specialists to request expanded treatment limits up to 275 patients
Agency for Healthcare Research and Quality (AHRQ) completed scoping review of 12 representative MAT models of care for opioid use disorder in primary care

- 4 key components (Korthuis 2017)
  - Pharmacotherapy
  - Psychosocial services
  - Integration of care
  - Education and outreach
Combining MAT and primary care

* Practice-Based Model:
  * Office-based opioid treatment (OBOT)
    * Everything done in primary care office, typically with support of clinic staff member/ coordinator
    * Variable scope of psychosocial services
    * Similar retention in treatment and opioid use to methadone clinics
    * Support available through PCSS-MAT (PCSS-B) online system
Combining MAT and primary care
Combining MAT and primary care

* Systems-Based Models:
  * **Hub and Spoke**
    * Developed in Vermont, financed as a Medicaid waiver project
    * Triage to 2 levels of care:
      * “Hub” mostly regional opioid treatment programs care for complex patients, taper when appropriate, consultation
      * “Spoke” mostly primary care offices with embedded social services
Combining MAT and primary care

- **Systems-Based Models:**
  - **Hub and Spoke**
    - “Care connector” coordinate transitions between Hubs and Spokes
    - Incentivized provider buprenorphine training
    - Rate of treatment increased from 3.76 to 10.56 per 1000 from 2012 to 2016 (Brooklyn 2017)
    - 64% increase in waived physicians from 2012 to 2016 (Brooklyn 2017)
Combining MAT and primary care
* Systems-Based Models:
  * Project Extension for Community Healthcare Outcomes (ECHO)
    * First developed in New Mexico
    *Links rural primary care clinics with university health system support and training primarily online
    * Emphasis on building capacity, including both an increased number of buprenorphine waivered providers and psychosocial support

Combining MAT and primary care
Combining MAT and primary care

* Systems-Based Models:
  * Project Extension for Community Healthcare Outcomes (ECHO)
    * Is NOT telemedicine, as no direct relationship between consultant and de-identified patient
    * Often are CME/CEU associated with consultation
    * Project ECHO has been a possible contributor to the relatively large number of buprenorphine waived providers in New Mexico (Komaromy 2016)
Combining MAT and primary care

* **Summary**
  * Several models of combining MAT (primarily buprenorphine) and primary care have been piloted
  * Many started as state Medicaid waiver projects
  * Likely there is not a single best practice model, but rather local needs/conditions will shape development
  * **MAT linked to primary care** may increase access to care in rural areas with limited subspecialty treatment programs
* What is a shared medical visit?
  * Used to treat chronic medical conditions
  * 6-12 patients
  * 60-120 minutes
  * All components of an individual exam are completed
  * Additional time for providing education and facilitating peer support
Using shared medical visits

* Shared medical visits with buprenorphine have been used extensively at West Virginia University Medicine, and now being pioneered at other sites
* Telepsychiatry shared medical visit as effective as face to face (Zheng 2017)
* Evidence for effectiveness of shared medical visits and buprenorphine MAT published in 2 small observational studies from Massachusetts, both from Cambridge Health Alliance (Roll 2015, Suzuki 2015)
Using shared medical visits

- In primary care clinic population (Roll 2015)
  - 60% learned more about HCV
  - 43% received hepatitis vaccines
  - Of 32% with unsuitable housing 80% had improvement
  - 35% increased time working
  - Increase in outside recovery groups from 30% to 80%
Using shared medical visits

* In a subspecialty program (Suzuki 2015)
  * 52% retention at 6 month, and 52% retention at 6 weeks
  * Depression, anxiety, and craving scores decreased significantly
* Bottom Line: Similar outcomes to MAT with opioid agonists in traditional formats, generally liked by patients, and more efficient delivery
The big picture: chronic care model

In Treatment ~ 2,300,000

"Substance Abuse / Dependence"
~ 23,000,000

12% more eligible for coverage under Medicaid expansion

"Medically Harmful Use"
~ 40,000,000

Little / No Use

No Substance Use Problem

Adapted from “Broadening the Base of Treatment for Alcohol” National Academy of Sciences, Institute of Medicine, 1990.

Fig. 1. Prevalence of substance use disorders in US adults. Note: Estimates include alcohol, illicit and non-prescribed illicit drugs – but not cigarettes – for US population 12 years of age or older. Adapted from “Broadening the Base of Treatment for Alcohol” National Academy of Sciences, Institute of Medicine (IOM), 1990.

(McLellan 2014)
What are three key practices to adopt in developing a chronic care model for substance use disorders? (McLellan 2014)

1. **Implement screening and brief intervention**
   - Use of EHR to facilitate screening
   - Brief counseling interventions (reimbursable)
   - Washington state pilot program showed reduction in Medicaid costs $185-192 per month (ONDCP 2012)
2. Expand and restructure the healthcare team
   • “Behavioral care manager” for screening/brief interventions, linkage to resources, and teaching patient self-management skills

3. Collaboration with local addiction specialists
* Our early conception of MAT sought to incorporate key elements:
  * **Screening and Brief Intervention** using embedded behavioral health counselors in primary care
  * **Hub and Spoke** adaptation with centralized location for buprenorphine inductions/ early treatment
  * **Shared medical visits** with mandatory group therapy and behavioral interventions
  * Available psychiatric consultation/ management of **co-occurring mental health disorders**
  * **Chronic care model** where primary care providers offer long-term management
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“First napkin drawing”:

“Hub” – Buprenorphine induction and early management in psychiatric clinic

Ob/Gyn

ER

Pain Clinic

“Spokes” – Primary care clinics (90k+ patients) – screening, brief intervention, brief therapy extended management

Indiana University Health
Early lessons learned:
* Primary care providers had limited awareness of patients with opioid use disorders and felt uncomfortable treating them
* Specialists (Ob/Gyn, ER, Pain Clinic) had little training and support in engaging patients with opioid use disorders
* Hospitals (3 in regional network) lacked an effective intervention system for managing patients after an overdose
* Significant stigma in our local communities towards MAT
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“Second napkin drawing:”

Criminal Justice

Public Health

Advocates

“Hub” – Buprenorphine Clinic

Ob/Gyn*

ER*

Pain Clinic*

“Spokes” – Primary care clinics*

*Specific protocols and increased support

*Identify “local champion providers”
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* Too many directions! (We have very little staff.)
* So, we decided to engage an academic partner with more experience.
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* **West Virginia (COAT) Model**
  * Highly structured and efficient approach to office-based buprenorphine
  * Extensive use of shared medical visits, with on-site group therapy and case management
  * Patients in beginner and intermediate groups must attend 4 outside support meetings every week
  * Eligible for advanced (monthly) groups after 1 year of sobriety
  * Random drug screen and routine medication monitoring
  * Co-occurring disorders managed separately
Future directions:
* Adopting COAT model for our “hub,” and with ongoing formal assistance in WVU ECHO program
* Develop a comprehensive marketing strategy to reach patients, as well as engage key members of the community
* Train other providers to obtain DEA waiver for buprenorphine
* Create relationships in the community to develop a full continuum of care
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“Third napkin drawing:”

“Hub” – COAT model providing assessment, beginner, intermediate, and advanced groups

Comprehensive marketing plan

“Spokes” SBIRT and a few advanced groups
Review

- MAT with opioid agonists has the best evidence for treatment of opioid use disorder
- Several models of combining MAT with primary care have been piloted nationally
- Shared medical visits may be a more efficient and equally efficacious way of prescribing MAT
- Improved screening and early intervention in primary care will reduce the future need for expensive subspecialty addiction services
IU Health Team
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