JOHNS HOPKINS
MEDICINE
JOHNS HOPKINS
HEALTH SYSTEM

CoOP: Integrative buprenorphine delivery – Increasing treatment access and quality to address Maryland's overdose epidemic

Kenneth Stoller, M.D.
Johns Hopkins University School of Medicine
Department of Psychiatry and Behavioral Sciences

Disclosures

- No relevant financial relationships with commercial interest over the past year.
- No discussion of unapproved uses of a commercial product, or investigational use of a product not yet approved for this purpose

Discussion Points:

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

1. Buprenorphine Treatment Access
2. Buprenorphine Treatment Quality
3. Role of Opioid Treatment Programs
4. CoOP – an model of coordinated care
5. Case example
6. Lessons learned / Summary

Buprenorphine (DATA 2000) Waivers are Under-utilized.

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

- Few waivered physicians…
- Who often do not prescribe at all, and…
- Prescribing physicians are typically treating far fewer than 100 patients

Buprenorphine Waivers are Under-utilized

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

National study of 545 waivered MD's (Kissin et al., 2006):

- Only 58% had prescribed
- Barriers: Induction logistics, poor compliance, limited counseling

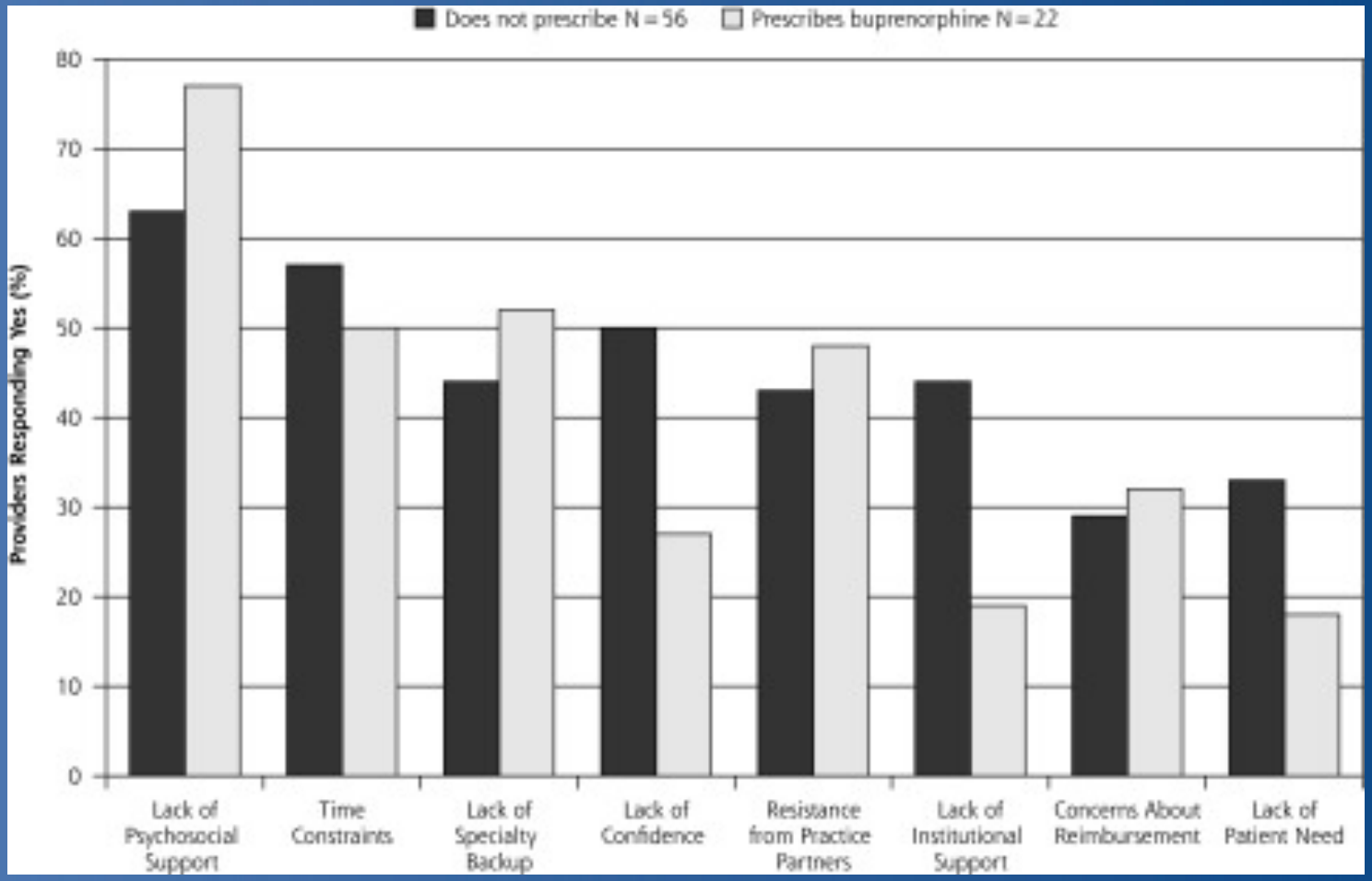
Study of 330 waivered MD's (Center for a Healthy MD, 6/2007):

- Only 50% were prescribing
- Barrier: Perceptions that effective treatment of addiction is difficult and time-consuming.

Consistent with review in the 2015 Jones report

- 44% to 66% of waivered MD's actually prescribe

Barriers to PCP Prescribing Buprenorphine



Eliza Hutchinson, et al., Annals of Family Medicine, 2014

Quality of OBB (not just Access) should be optimized

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

J Addict Med • Volume 9, Number 6, November/December 2015 *Buprenorphine Medicaid Patterns and Quality*

Patterns and Quality of Buprenorphine Opioid Agonist Treatment in a Large Medicaid Program

Adam J. Gordon, MD, MPH, Wei-Hsuan Lo-Ciganic, PhD, Gerald Cochran, PhD, Walid F. Gellad, MD, MPH, Terri Cathers, PharmD, David Kelley, MD, and Julie M. Donohue, PhD

Methods:

- Data from 17,189 Medicaid enrollees with buprenorphine claim
- Claims and encounter data, and Rx drug claims
- Examined enrollee characteristics, quality of care

OBB Quality: Gordon, et al. 2015

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

Major findings:

- Bup Rx fills increased 2007-2012: 2,985 →12,691
- 26% - 32% each year had no documented diagnosis of opioid use disorder
- 40% had no urine drug screen claim
- 59% had no BH treatment claim (inpt, outpt, profee)
- Wide range of mean daily dose across counties: (9.5 - 18.4 mg/d in 2012)
- Other prescription claims same year as bup Rx: 35% opiates; 38% benzos

Opioid Treatment Programs (OTPs)

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

- **Medication component:** Historically methadone. *Buprenorphine now allowed*.
- **Challenge**: *Few linkages* to other SUD, medical, and MH clinics (stigma).
- **Opportunity**: Can fill a critical need for supporting office-based buprenorphine (OBB) prescribers. *Role as an Integration Hub*

Reluctance to obtain or use buprenorphine waivers

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

OTPs can encourage waivers and support physician practice, by addressing concerns:

- Initial assessment: time-consuming
- Induction: initially intimidating
- Instability (relapse, diversion, nonadherence): How to intervene to avoid consequences to office, community, patients?

Collaborative Opioid Prescribing ("CoOP") model*

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

Aim:

Increase access to and effectiveness of OBB through concurrent OTP-based counseling, case management, collaborative stepped care, and expert consultation.

*Stoller, K.B., 2015. A collaborative opioid prescribing (CoOP) model linking opioid treatment programs with office-based buprenorphine providers. *Addiction Science & Clinical Practice* 10, A63 (published abstract).

What is “CoOP”?

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

Adaptive Stepped Care, Multi-Provider, Multi-Site System for Buprenorphine Treatment

Critical components:

- Opioid Treatment Program (OTP)
- Office-Based Buprenorphine (OBB) Prescriber
- Adaptive stepped care evidence-based model

CoOP: Collaborative Care - OTP + OBB's

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

OBB prescribers

OTP hub

Scope of Possible Services in OTP hub

Typical services:
- Comprehensive SUD evaluation
- Buprenorphine induction, maintenance
- Methadone maintenance
- Counseling (group, individual)

Examples of wrap-around services:
- Case management
- Mentorship of collaborating buprenorphine prescribers
- Peer recovery advocate services
- Links to recovery/transitional housing
- Psychiatric evaluation/treatment
- Co-manage chronic medical disorders
- Occupational therapy
- Vocational training/placement
- Family engagement

CoOP's Adaptive Stepped Care System

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

Adherence and tox screens determine:

- Counseling intensity
- Prescription duration
- Periods of OTP dispensing

- Changes based on ongoing data
- Consistent nonresponders or poorly-engaged are offered treatment plan change

*Adapted from Brooner, R.K., et al. (2004). J Subst Abuse Treat 27, 223-232.

Collaborative Opioid Prescribing ("CoOP") model

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

Potential options for treatment plan changes at highest step:

- Switch to methadone
- Referral to higher (e.g., partial or ICF) level of care
- Mandatory pro-recovery activity
- AMA buprenorphine taper (reversible) if refuses to engage, with offer for readmission.

"CoOP": An Adaptive Stepped Care System for buprenorphine Tx

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

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 *or other tx plan change*	Consider Methadone	OTP dispensary	Daily dispensing	Intensive

Stoller, K.B., 2015. A collaborative opioid prescribing (CoOP) model linking opioid treatment programs with office-based buprenorphine providers. *Addiction Science & Clinical Practice* 10, A63 (published abstract).

Collaborative Opioid Prescribing ("CoOP") model

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

	OTP	OBB practice
Ongoing primary or psychiatric care		✓
Comprehensive SUD/psychosocial evaluation	✓	
Decide which (if any) MAT to use	✓	
Buprenorphine dispensing, (induction, stabilization)	✓	
Counseling, case management	✓	
Ongoing buprenorphine Rx's		✓
Maintain communication	✓	✓
Mentorship activities	✓	✓

CoOP: Aligning Incentives

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

Why would OTP's want to do this?

- Wider spectrum of services
- Individualized to patient needs
- Generates volume / revenue
- Increased access to waivered physicians
- ***Collaboration with medical providers regarding complex co-occurring conditions***

CoOP: Aligning Incentives

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

Why would primary care clinics want to do this?

- Addiction is finally addressed
- Free expert support for buprenorphine provision
- Help in managing behaviorally challenging cases
- ***Improve medical adherence, morbidity***

FQHC's benefit from providing buprenorphine

Journal of Urban Health: Bulletin of the New York Academy of Medicine, Vol. 92, No. 1
doi:10.1007/s11524-014-9924-1

Buprenorphine Maintenance Treatment Retention Improves Nationally Recommended Preventive Primary Care Screenings when Integrated into Urban Federally Qualified Health Centers

Marwan S. Haddad, Alexei Zelenev, and Frederick L. Altice

Buprenorphine in FQHC's - Haddad et al:

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

- Observational cohort study at a Connecticut FQHC network
- 266 buprenorphine initiates from 2007-2008
- Buprenorphine maintenance improved engagement in primary care, boosted Quality Health Care Indicator scores
- HIV+ patients on buprenorphine longer were more likely to be prescribed ART, achieve viral suppression
- HIV+ prison releasees on buprenorphine were more likely to maintain viral suppression
- Each month retained on buprenorphine associated with a 17% reduction in emergency department use

Collaborative Buprenorphine Maintenance at our OTP

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

Prior to July 2009:

- Discharge if buprenorphine is Rx'd externally

2011-2014:

- 81 patients treated under CoOP model
  - Demographics:

    61% Af-Am, 39% Cauc; 64% male, 36% female

    Ages: 18-24: 5% 25-44: 48% 45-64: 47%
- 26 OBB prescribers
- 83% patients were newly inducted

CoOP: Case Example

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

Adm

Present

54 y.o. woman admitted to OTP for opioid, cocaine use. HTN, COPD, sarcoid, DJD, disk herniations. Inducted onto buprenorphine, assigned IOP counseling.

Step:	Medication	Bup, Meth location	Med frequency	Counseling intensity
1: Stable OBOT	Bup/Nal	PCP script	1 mo Rx	Low
2: Intensive OBOT	Bup/Nal	PCP script	*1 wk Rx*	*Intensive*
3: Intensive OTP	Bup/Nal	*OTP*	*Daily onsite*	*Intensive*
4: Methadone OTP	*Methadone*	*OTP*	*Daily onsite*	*Intensive initially*

CoOP: Case Example

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

Adm

Present

Coordinated care with PCP, and within 2 weeks PCP took over prescribing.

Step:	Medication	Bup, Meth location	Med frequency	Counseling intensity
1: Stable OBOT	Bup/Nal	PCP script	1 mo Rx	Low
2: Intensive OBOT	Bup/Nal	PCP script	*1 wk Rx*	*Intensive*
3: Intensive OTP	Bup/Nal	*OTP*	*Daily onsite*	*Intensive*
4: Methadone OTP	*Methadone*	*OTP*	*Daily onsite*	*Intensive initially*

CoOP: Case Example

Adm

Present

Later that month OTP counseling intensity was reduced due to continued stability while receiving Rx's from PCP

Step:	Medication	Bup, Meth location	Med frequency	Counseling intensity
1: Stable OBOT	Bup/Nal	PCP script	1 mo Rx	Low
2: Intensive OBOT	Bup/Nal	PCP script	*1 wk Rx*	*Intensive*
3: Intensive OTP	Bup/Nal	*OTP*	*Daily onsite*	*Intensive*
4: Methadone OTP	*Methadone*	*OTP*	*Daily onsite*	*Intensive initially*

CoOP: Case Example

Adm

Present

At 6 months, cocaine+ tox at OTP. “My housemate put it in my ice tray.” Started missing OTP counseling.
Move to IOP.

Step:	Medication	Bup, Meth location	Med frequency	Counseling intensity
1: Stable OBOT	Bup/Nal	PCP script	1 mo Rx	Low
2: Intensive OBOT	Bup/Nal	PCP script	*1 wk Rx*	*Intensive*
3: Intensive OTP	Bup/Nal	*OTP*	*Daily onsite*	*Intensive*
4: Methadone OTP	*Methadone*	*OTP*	*Daily onsite*	*Intensive initially*

CoOP: Case Example

Adm

Present

Stabilized within 1 month (negative tox, good attendance). Reduce counseling. Still getting Rx's from PCP

Step:	Medication	Bup, Meth location	Med frequency	Counseling intensity
1: Stable OBOT	Bup/Nal	PCP script	1 mo Rx	Low
2: Intensive OBOT	Bup/Nal	PCP script	*1 wk Rx*	*Intensive*
3: Intensive OTP	Bup/Nal	*OTP*	*Daily onsite*	*Intensive*
4: Methadone OTP	*Methadone*	*OTP*	*Daily onsite*	*Intensive initially*

CoOP: Case Example

Adm

Present

2 months later: Positive tox screen. “People near me at a party smoked cocaine….also a man spilled heroin on me in a cab.” Increase to IOP counseling again.

Step:	Medication	Bup, Meth location	Med frequency	Counseling intensity
1: Stable OBOT	Bup/Nal	PCP script	1 mo Rx	Low
2: Intensive OBOT	Bup/Nal	PCP script	*1 wk Rx*	*Intensive*
3: Intensive OTP	Bup/Nal	*OTP*	*Daily onsite*	*Intensive*
4: Methadone OTP	*Methadone*	*OTP*	*Daily onsite*	*Intensive initially*

CoOP: Case Example

Adm

Present

1 month later: Took opiate for “neck pain. Failed med call-back; reported falling and crushing all tablets. Changed to OTP observed dispensing.

Step:	Medication	Bup, Meth location	Med frequency	Counseling intensity
1: Stable OBOT	Bup/Nal	PCP script	1 mo Rx	Low
2: Intensive OBOT	Bup/Nal	PCP script	*1 wk Rx*	*Intensive*
3: Intensive OTP	Bup/Nal	*OTP*	*Daily onsite*	*Intensive*
4: Methadone OTP	*Methadone*	*OTP*	*Daily onsite*	*Intensive initially*

CoOP: Case Example

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

Adm → Present

Toxicology cleared within 1 month. Transferred back to OBB prescribing. Successfully remained for many months.

Step:	Medication	Bup, Meth location	Med frequency	Counseling intensity
1: Stable OBOT	Bup/Nal	PCP script	1 mo Rx	Low
2: Intensive OBOT	Bup/Nal	PCP script	*1 wk Rx*	*Intensive*
3: Intensive OTP	Bup/Nal	*OTP*	*Daily onsite*	*Intensive*
4: Methadone OTP	*Methadone*	*OTP*	*Daily onsite*	*Intensive initially*

CoOP model:
Our early experience

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

- Successful partnerships formed and maintained
- Increased access to MAT
  - ✧ Physicians obtaining waivers
  - ✧ Greater use of waivers
  - ✧ Early positive response from trainees
- Coordination of SUD, medical care
- Rapid, effective management of relapse
- Challenges: 1) Convincing primary care leadership to try, and 2) Maintaining communication

CoOP model:
Our lessons learned - How to Succeed

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

1. Incentivize all parties ("win-win-win")
2. Involve leadership early
3. Keep lines of communication open
4. Assign single points of contact
5. Encourage progressive reimbursement systems
6. Dispel myths. Co-treatment of MAT and non-MAT patients is NOT problematic

For More Information…

JOHNS HOPKINS MEDICINE
JOHNS HOPKINS HEALTH SYSTEM

Kenneth B. Stoller, M.D. kstolle@jhmi.edu Phone: 410-614-0654

Links related to CoOP:

SAMHSA/AATOD White Paper on integrated service delivery models involving OTPs:
(email Dr. Stoller for the link; or soon to be posted at http://www.aatod.org/)

Addiction Science and Clinical Practices:
http://www.ascpjournal.org/content/10/S1/A63

ATTC Messenger September 2015:
http://www.attcnetwork.org/Botticelli%20-%20MAT%20Article%20for%20ATTC%20Messenger%2020150819%20COS%20Approved%20v3.pdf

Addiction Treatment Forum, August/September 2015
http://atforum.com/2015/10/otps-can-help-support-primary-care-buprenorphine-prescribers/

CoOP Toolkit: Soon to be posted on AATOD website at: http://www.aatod.org/

Other links:

SAMHSA-HRSA Center for Integrated Health Solutions: www.integration.samhsa.gov/

The National Council for Behavioral Health: www.thenationalcouncil.org/

Center for Health Care Strategies: www.chcs.org/