Rapid Access Addiction Medicine (RAAM) clinics: An innovative approach to addiction medicine

Meldon Kahan MD
11th Annual Addiction Day
Edmonton, AB
June 7, 2019

METAPHI
MENTORING, EDUCATION, AND CLINICAL TOOLS FOR ADDICTION: PRIMARY CARE – HOSPITAL INTEGRATION

1

Conflict of interest statement

- Meldon Kahan MD has no conflicts of interest to declare.

2

State of addiction medicine

- Canada is experiencing an opioid crisis, with rising death rates and declining life expectancy from overdose
- Alcohol use disorder continues to be a major cause of morbidity and mortality
- Only a small minority of patients are prescribed buprenorphine and anti-craving medications in the general health care setting
- 2017 study: Only about 0.3% of Ontario patients discharged from hospital with an AUD diagnosis were prescribed naltrexone or acamprosate in the subsequent year (1)
- Hospital patients with overdose or other complications of OUD are rarely prescribed buprenorphine or given naloxone

3

Silos of addiction and health care

- Psychosocial programs are hard to get into and usually don't prescribe buprenorphine or anti-craving medications
- OAT not available in many smaller communities
- Majority of Ontario patients on OAT are cared for in high-volume clinics, which…
  - Offer minimal counselling
  - Have high treatment drop-out rates
  - Have excessive program requirements: one urine drug screen and one clinic visit every 4–5 days on average
  - Don't provide or connect patients with primary care
  - Have very low rates of screening and chronic disease management (2)

4

Integration of care

- Patients treated in primary care for addiction have outcomes at least as good as those treated in specialized clinics (3)
  - Patients often have strong relationship with care provider
  - They are more likely to attend for long-term follow-up
  - Primary care has easier access and carries less stigma
  - FPs can prescribe anti-craving medications
- FPs should be part of the **addiction care pathway:**
  - Patients should have substance use concerns addressed **wherever** they present (FP, ED, psychiatry, withdrawal management, rapid access addiction medicine clinic) and should be able to access addiction care easily

5

META:PHI: INTEGRATING ADDICTION CARE

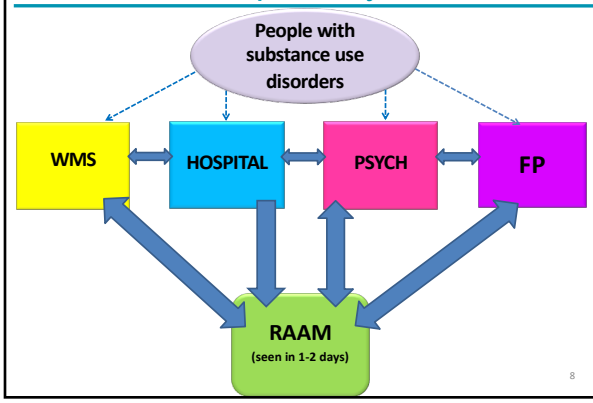
6

Background

- Mentoring, Education, and Clinical Tools for Addiction: Primary Care–Hospital Integration **(META:PHI)**
- Model goals:
  - Facilitate immediate access to addiction treatment to patients at all points of the health care system
  - Facilitate integration and communication between different health care settings
  - Support clinicians serving these patients in all health care settings
- Initially funded as a seven-site pilot to set up integrated care pathways for addiction (including rapid access addiction medicine clinics), the META:PHI model has expanded across Ontario over the past few years

7

META:PHI care pathway



8

META:PHI supports

- Resources for clinicians, including educational videos, handbooks, and materials for patients (www.metaphi.ca)
- Community of practice: E-mail listserv with 475 clinicians and administrators
- Monthly clinical teleconferences for prescribers, nurses, and counsellors/case managers

9

ABOUT RAAM CLINICS

10

What's a RAAM clinic?

- Low-barrier clinic for substance use disorder treatment
- Open 2–5 days per week
- No referrals or formal appointments necessary
- Treat all substance use disorders
- Anti-craving medications, buprenorphine, methadone, psychiatric medications prescribed when indicated
- Patients transferred to primary care when stable (usually takes at least several months)
- Care pathways built between RAAM clinics and primary care, hospital departments, withdrawal management services, supervised injection sites

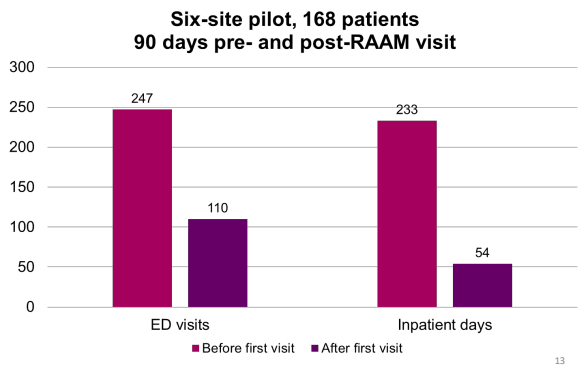
11

Spread of RAAM clinics

- Seven RAAM clinics created during the pilot
- Province now supports **50 clinics** across Ontario
- Another **20 clinics** are funded locally

12

Impact on health care utilization (1)



13

Impact on health care utilization (2)

- **Royal Ottawa Hospital (Ottawa, Ontario)**
  - 82% reduction in 30-day revisits and 10% overall reduction in ED visits (4)
- **Lakeridge Health (Oshawa, Ontario)**
  - 30-day revisit rate for opioid overdoses in the ED dropped from 21.15% pre-RAAM clinic to 9.1% post-RAAM clinic, a reduction of 56.8%
  - Only 3 (2.2%) of 137 RAAM patients with opioid use disorder attended the ED with an opioid overdose in the eight-month period after their initial RAAM visit (5)

14

Cost-saving potential

- 2014 Ontario substance use–related health care spending ≈ **$119 million** (6)
  - $274/ED visit × 62,336 visits ≈ $17 million
  - $1024/inpatient day × 99,738 days ≈ $102 million
- Cohort from META:PHI pilot showed a **55.5%** decrease in ED use and a **76.8%** decrease in inpatient use
- These decreases applied to the health care costs of substance use in 2014 would result in a cost savings of over **$85.9 million**
  - **$7.6 million** in ED savings
  - **$78.3 million** in inpatient savings

15

RAAM CLINICAL PRACTICES: ALCOHOL

16

Withdrawal management (1)

- ED management of withdrawal often suboptimal
  - Dosing not aggressive enough
  - Patients discharged before withdrawal is resolved, often with a large prescription for benzodiazepines
  - No treatment offered for underlying AUD
- Withdrawal management centres in Ontario not equipped to treat withdrawal or AUD pharmacologically
- RAAM clinics can treat alcohol withdrawal electively as a therapeutic intervention:
  - Heavy drinkers often experience daily withdrawal symptoms and drink to avoid these symptoms
  - Elective treatment of withdrawal will increase the effectiveness of anti-craving meds and counselling

17

Withdrawal management (2)

- Indications:
  - Reports withdrawal symptoms in AM or early afternoon: tremor, anxiety, quickly relieved by alcohol
  - Not on methadone or high doses of opioids
  - No cirrhosis/liver disease or respiratory disease
  - Willing to attempt abstinence and engage in treatment after treatment of withdrawal

18

Withdrawal management (3)

- Protocol:
  - Advise patient to have last drink the night before
  - Give benzodiazepines according to CIWA-Ar or SHOT (diazepam for healthy younger patients, lorazepam for patients who are older, on sedating drugs, have respiratory disease or liver dysfunction)
  - On discharge, advise patient they no longer need to drink for withdrawal relief, prescribe anti-craving medication, and arrange follow-up within a couple of days
  - If still in mild withdrawal when clinic closes, transfer to WMS – they can give scheduled benzodiazepine treatment with MD/NP order
  - Refer to ED if still in severe withdrawal

19

Anti-craving medications

- RAAM clinics offer anti-craving meds routinely and on the first visit
- Controlled trials (7-11) have shown that they:
  - Reduce alcohol use
  - Reduce ED visits, hospitalizations
  - Can safely be prescribed by non-specialists
  - Are cost-effective
  - Improve participation in psychosocial treatment
- Choice of medication based on individual considerations

20

Naltrexone

- Competitive opioid antagonist (like naloxone)
  - Blocks attachment of endorphins to mu receptor, blunting euphoric and reinforcing effect
- Improves drinking outcomes, especially intensity and duration of binges (NNT = 12)
- Monthly IM depot of naltrexone is expensive
- Can be effective for mild to severe AUD, and those with reduced drinking or abstinence as drinking goal
- Probably works best for those who drink for its reinforcing effects (vs. anxiety relief) and those with a strong family history

21

Acamprosate

- NMDA antagonist which reduces and modulates glutamate
- This relieves subacute withdrawal symptoms: insomnia, dysphoria, cravings
- Of comparable effectiveness to naltrexone
- Patient must stop drinking for at least a few days before starting
- Best for patients with moderate to severe alcohol use disorder who have abstinence as a treatment goal
- Should be routinely offered to recently abstinent patients who have insomnia

22

Gabapentin

- Several smaller trials have shown effectiveness in reducing alcohol use (12, 13)
  - Evidence weaker than for naltrexone and acamprosate
- Works by enhancing GABA
- Relieves subacute withdrawal (insomnia, anxiety, craving)
- May also reduce anxiety in some patients
- A drug of abuse in some communities

23

Disulfiram

- Aversive medication
- Binds to acetaldehyde dehydrogenase, causing rapid accumulation of acetaldehyde when alcohol consumed, resulting in vomiting, headache, flushed face
- Patient should remain abstinent for 24–48 hours before starting disulfiram, and for 7–10 days after stopping disulfiram
- Most effective when dispensed by spouse or pharmacist, or when patient faces immediate severe consequences from continued drinking

24

Topiramate

- Has been shown to reduce alcohol consumption in several RCTs
- May also reduce hyperarousal symptoms in PTSD
- May help with 'automatic', ritualistic drinking and obsessive thoughts about alcohol

25

Combined pharmacotherapy

- Research suggests combinations can be more effective than single agents (14):
  - Gabapentin and naltrexone
  - Naltrexone and disulfiram
- Add another agent if minimal effect from first agent

26

RAAM CLINICAL PRACTICES: OPIOIDS

27

About buprenorphine

- Partial opioid agonist with slow onset, long duration of action
- In appropriate dose, relieves withdrawal symptoms and cravings for 24+ hours without causing euphoria or sedation
- Very low risk of respiratory depression and overdose, much lower than methadone and other potent opioids
- Controlled trials have shown that buprenorphine reduces opioid use, retains patient in treatment, and prevents overdose death
- Recommended as first-line medication, switching to methadone if ineffective
- First day's dose is 12 mg maximum
- Maximum dose is 24 mg

28

Avoiding precipitated withdrawal

- Buprenorphine has a high affinity for the mu receptor and will displace other opioids still attached to the receptor, precipitating withdrawal
- It should only be started when the patient likely has no opioids in their serum
- RAAM clinics usually start buprenorphine as an office procedure:
  - Patients comes to the office after 12+ hours of abstinence from opioids
  - Buprenorphine is administered if the patient is in moderate to severe withdrawal, according to the COWS (Clinical Opioid Withdrawal Scale)

29

Alternatives to office induction

- **Home induction**
  - Give six to ten 2 mg tabs and advise to take first dose when they go into withdrawal
  - 2–4 mg q 2H, maximum dose 8-12 mg on day 1
  - Provide **careful instructions** on how and when to take the tabs
- **Microdosing**
  - Buprenorphine is taken concurrently with patient's usual opioid, e.g., bup 0.5 mg/day (1/4 of a 2 mg tab) x 3 days, then 1 mg/day x 3 days, then 2 mg, then switch to usual protocol
  - Buprenorphine gradually displaces the opioid from the receptor, avoiding withdrawal

30

RAAM CLINICAL PRACTICES: COUNSELLING

31

Counselling in early recovery

- Counselling in early recovery tries to help patients:
  - Overcome guilt and shame
  - Overcome their fear of stopping their drug of choice
  - Have hope for the future

32

Counselling themes (1)

- **Guilt and shame**
  - Many patients experience tremendous guilt and shame over their substance use
  - On the first visit, review the causes of SUD: Childhood trauma, anxiety and depression, genetics, difficult social circumstances, etc.
  - Emphasize that addiction is not the patient's 'fault'; many patients show courage in their struggle to maintain job and family

33

Counselling themes (2)

- **Fear of stopping their alcohol or drug**
  - Many patients use alcohol or drugs to cope with an underlying anxiety disorder; their anxiety becomes unbearable when they stop drinking or drug use
  - Explain how, with treatment, most patients have reduced anxiety and improved mood and function after a few weeks of abstinence
- **Hopelessness**
  - Patients often feel frustrated and hopeless because have tried and failed many times to stop
  - Explain that medication-assisted treatment often works, with marked and rapid improvements in mood and function – but it requires commitment and persistence

34

Counselling tips

- Arrange frequent follow-up and/or shared care
- Connect patient to AA, hospital or community recovery groups, mindfulness programs, day programs run by withdrawal management, psychosocial addiction programs, and other community services
- Assist with practical issues
- Acknowledge and reinforce all progress
- Encourage patient to…
  - Reconnect with family and friends
  - Stick with it – slips/relapses are common in early recovery
  - Spend time on meaningful and enjoyable activities
- Teach patient strategies how to cope with cravings

35

BUILDING A COMMUNITY OF CARE

36

Engaging primary care

- Important to ensure that stable RAAM clinic patients get directed back to primary care (so that new patients can access the RAAM)
  - Phone or send a letter to PCP to share details of patient's treatment (including medication dose and schedule)
- PCPs often **reluctant** to take over addiction pharmacotherapy:
  - Lack of understanding of and experience with OAT and anti-alcohol medications
  - **Stigma:** PCPs think patients with addictions are "too much work"
- Challenging to develop this part of the integrated care pathway!

37

Supporting primary care

- Offer ongoing support/consultations to PCP
- Agree to reassess the patient whenever necessary
- Provide shared care with nearby primary care clinic:
  - Half-day observerships for staff and trainees
  - On-site shared care sessions
  - On-site rounds
  - Access to telephone advice
- Develop relationships with other clinicians in order to create a feeling of **community** and **collaboration**

38

Support from META:PHI

- Use META:PHI resources (www.metaphi.ca) to provide outreach to clinicians:
  - PowerPoint presentation templates on clinical topics
  - Written materials for use in ED, primary care, community settings
  - Community of practice for clinical questions and discussion
  - Educational modules on treating patients with substance use disorders
  - Downloadable and printable patient pamphlets
- Monthly clinical/administrative calls

39

THANK YOU!

References (1)

1. Spithoff S, Turner S, Gomes T, Martins D, Singh S. First-line medications for alcohol use disorders among public drug plan beneficiaries in Ontario. Canadian family physician Medecin de famille canadien. 2017;63(5):e277-e83.
2. Spithoff S, Kiran T, Khuu W, Kahan M, Guan Q, Tadrous M, et al. Quality of primary care among individuals receiving treatment for opioid use disorder. Canadian family physician Medecin de famille canadien. 2019;65(5):343-51.
3. Oslin DW, Lynch KG, Maisto SA, Lantinga LJ, McKay JR, Possemato K, et al. A Randomized Clinical Trial of Alcohol Care Management Delivered in Department of Veterans Affairs Primary Care Clinics Versus Specialty Addiction Treatment. Journal of general internal medicine. 2013.
4. Corace K, Willows M. Engaging patients in care: Lessons learned from the Ottawa RAAM clinic. META:PHI Annual Conference; Toronto, ON2018.
5. Nijmeh L. Emergency Department Care in the RAAM Era: A Critical Partnership. META:PHI Annual Conference; Toronto, ON2018.
6. MHASEF Research Team. Mental Health and Addictions System Performance in Ontario: A Baseline Scorecard. Toronto, ON: Institute for Clinical Evaluative Sciences; 2018 March 2018.
7. Anton RF, O'Malley SS, Ciraulo DA, Cisler RA, Couper D, Donovan DM, et al. Combined pharmacotherapies and behavioral interventions for alcohol dependence: the COMBINE study: a randomized controlled trial. Jama. 2006;295(17):2003-17.

References (2)

8. Bouza C, Angeles M, Munoz A, Amate JM. Efficacy and safety of naltrexone and acamprosate in the treatment of alcohol dependence: a systematic review. Addiction (Abingdon, England). 2004;99(7):811-28.
9. O'Malley SS, Krishnan-Sarin S, Farren C, Sinha R, Kreek J. Naltrexone decreases craving and alcohol self-administration in alcohol- dependent subjects and activates the hypothalamo-pituitary- adrenocortical axis. Psychopharmacology. 2002;160(1):19-29.
10. Miller PM, Book SW, Stewart SH. Medical treatment of alcohol dependence: a systematic review. International journal of psychiatry in medicine. 2011;42(3):227-66.
11. Jonas DE, Amick HR, Feltner C, et al. Pharmacotherapy for adults with alcohol use disorders in outpatient settings: A systematic review and meta-analysis. JAMA. 2014;311(18):1889-900.
12. Furieri FA, Nakamura-Palacios EM. Gabapentin reduces alcohol consumption and craving: a randomized, double-blind, placebo-controlled trial. The Journal of clinical psychiatry. 2007;68(11):1691-700.
13. Mason BJ, Quello S, Goodell V, Shadan F, Kyle M, Begovic A. Gabapentin treatment for alcohol dependence: a randomized clinical trial. JAMA internal medicine. 2014;174(1):70-7.
14. Anton RF, Myrick H, Wright TM, Latham PK, Baros AM, Waid LR, et al. Gabapentin combined with naltrexone for the treatment of alcohol dependence. The American journal of psychiatry. 2011;168(7):709-17.