Medication-assisted Treatment for Alcohol and Opioid Use Disorders: Lessons from META:PHI

Family Medicine Forum

November 9, 2017

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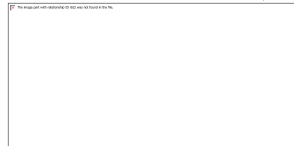
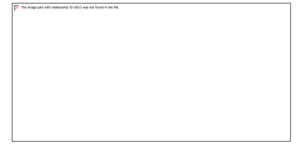


Presenter Disclosure



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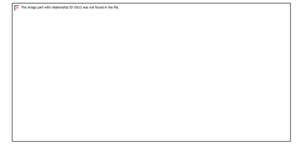
- I have no relationships with commercial entities to disclose
- The META:PHI project was made possible through the support of the Adopting Research to Improve Care (ARTIC) program, funded by the Council of Academic Hospitals of Ontario (CAHO) and Health Quality Ontario (HQO)

Learning Objectives

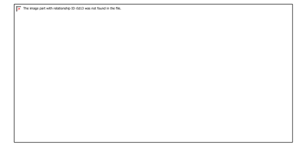


By the end of this session, participants will be able to:

1) Describe the indications and prescribing protocols for anti-craving medications for alcohol use disorder (naltrexone, acamprosate, gabapentin, and disulfiram)

2) Explain and apply protocols for managing opioid use disorder in primary care:
   - Opioid tapering
   - Buprenorphine prescribing
   - Take-home naloxone

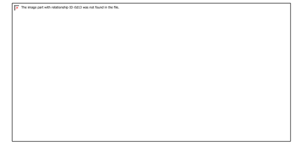
3) Knowhow to access clinical tools developed by META:PHI:
   - A handbook designed for primary care clinicians
   - A pocket card on essential clinical skills for opioid prescribers
   - A safety bulletin on safe opioid prescribing for community practitioners
   - Two online training modules for managing AUD and OUD in primary care



Current and alternative approaches to care

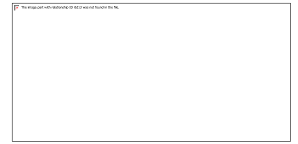
CONTEXT

Background



- Opioid-related morbidity and mortality on the sharp incline
  - At least **2,816 Canadians died** from opioid-related causes in 2016 – 865 of them in Ontario (Gov. Canada, 2017)
  - April - June 2017 saw **1,898 opioid-related ED visits** in ON — a **76% increase** from same time period 2016 (PHO, 2017)
- No. of alcohol-related deaths in Canada remains high
  - Estimated 4258 deaths in 2002 (Gov. of Canada, 2015) and estimated **5082** deaths in 2015 (CIHI, 2017)

Current Treatment System



Disjointed and inconsistent care:

Methadone clinics

- Often don't treat co-occurring substance use or mental disorders
- Often don't provide counselling or primary care

Emergency departments/hospitals

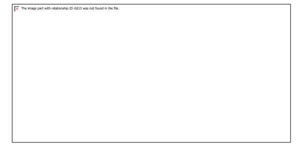
- Seldom use evidenced-based treatment of alcohol or opioid withdrawal
- Rarely initiate long-term treatment

Psychosocial programs

- Often prohibit addiction medications during residential stay
- Publicly-funded spaces/beds have long wait times

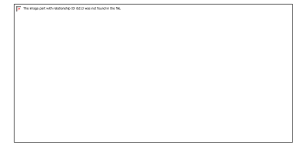
Primary care

- Family doctors not trained on prescribing addiction medications
- Are reluctant to take on patients with substance use disorders



THE META:PHI PROJECT

Addressing Key Issues: A System Solution



META:PHI aims to:

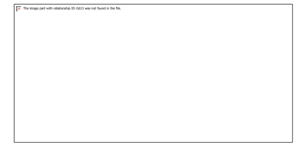
1) **Improve quality of care** for patients with an opioid use disorder (OUD) or an alcohol use disorder (AUD) in the emergency department (ED), primary care, withdrawal management services (WMS), and community agencies

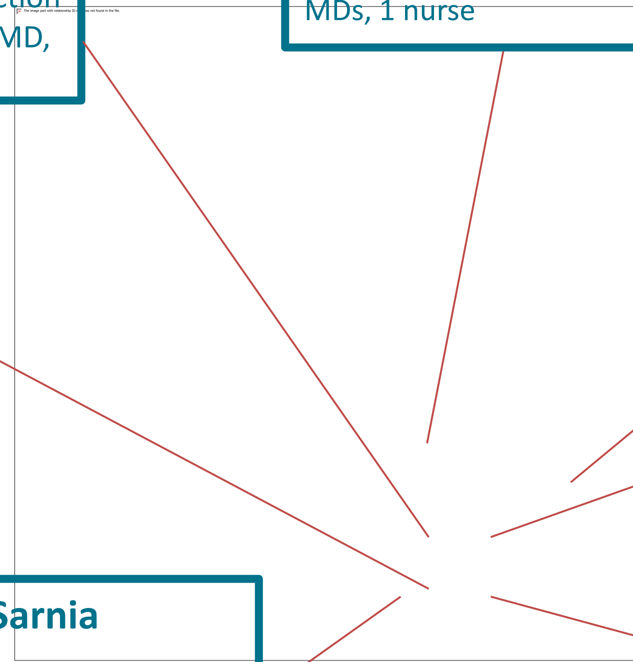
2) **Increase access** to evidence-based treatment and medications for addiction through the establishment of rapid access addiction medicine (RAAM) clinics

3) **Establish an integrated care pathway** between the ED, RAAM, WMS, and primary care

4) **Provide addiction medicine training and support** to health care providers in these settings, in particular primary care which has the greatest capacity to screen, assess, and manage addiction patients

Our Project Partners





Owen Sound

RAAM clinic site: Grey Bruce Health Services (Owen Sound site), WMS
RAAM Clinicians: 1 addiction psychiatrist, 1 addiction MD, 1 counsellor

Sudbury

RAAM clinic site: Health Sciences North, WMS

RAAM Clinicians: 3 addiction MDs, 1 nurse

Ottawa

RAAM clinic site: Sandy Hill CHC
RAAM Clinicians: 2 addiction MDs, rotating nurses and counsellors on-site

London

RAAM clinic site: Canadian Mental Health Association

RAAM Clinicians: 1 addiction MD, 1 psychiatrist, 15 rotating counsellors

Newmarket

RAAM clinic site: Southlake Regional Health Centre & Addiction Services York Region
RAAM Clinicians: 1 addiction MD, 1 nurse, 1 counsellor

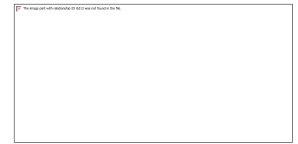
Sarnia

RAAM clinic site: Bluewater Methadone Clinic

RAAM clinicians: 5 addiction MDs, 1 nurse, 2 counsellors

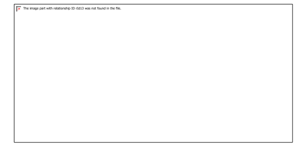
Niagara

RAAM clinic site: Niagara Health System (St. Catharines site), Mental Health Dept.
RAAM clinicians: 1 addiction MD, expedited entry to psychosocial program



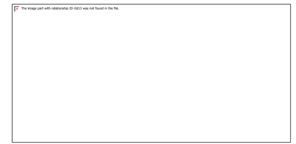
MANAGEMENT OF OPIOID USE DISORDER IN PRIMARY CARE

Family doctors have key role to play in treating opioid crisis



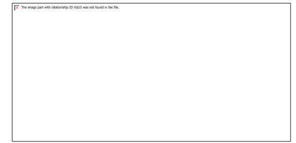
- Far more accessible than methadone clinics
- Controlled trials show buprenorphine treatment in primary care settings is safe and as effective as specialized
- Patients receive better quality of care in many cases:
  - Primary care
  - Treatment for concurrent medical and psychiatric conditions

1) Safe Opioid Prescribing



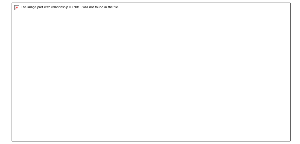
- Only prescribe potent opioids for patients with **severe biomedical pain conditions** impairing daily life
- **Do not prescribe** for fibromyalgia, low back pain, headaches, or other common, benign pain conditions
- Use **caution** when prescribing to high-risk patients (i.e. current anxiety or depression; current or past history of addiction)
- Always begin with an **adequate trial** of non-opioid treatments
- Warn patients to keep their opioids safely stored, and not to give any opioid medications to relatives or friends
- See patient frequently during initiation and titration
- Always initiate opioid treatment with "weak" opioids, i.e., oral preparations of codeine, tramadol (e.g., Tramacet®, Ultram®, Zytram XL®), or buprenorphine patch (BuTrans®)
- Keep maintenance dose at 90 mg MED or less

Opioid Addiction in Pain Patients: Clinical Features



- Risk factors (current anxiety or mood disorder; current or past problematic alcohol or drug use)
- High dose of opioids for underlying pain condition
- Severe pain and pain-related disability despite high dose
- Strong resistance to switching or tapering opioid
- Withdrawal and withdrawal-mediated pain
- Social isolation and deteriorating functioning
- Aberrant drug-related behaviours:
  - Runs out of medication early
  - Accesses opioids from other sources
  - Alters route of delivery (snorting, injecting)

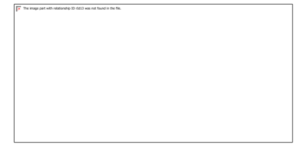
Diagnosis



- Patients often deny defining symptoms and behaviours of opioid addiction, making OUDs hard to diagnose
- Both patients and MDs view pain and addiction as mutually exclusive – often this is not the case
- Even specialists often lack knowledge about diagnosing OUDs

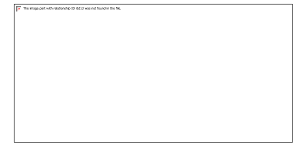
Buprenorphine treatment of opioid use disorder

What is Buprenorphine?



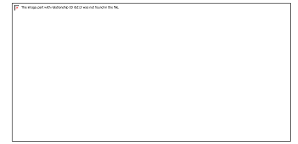
- Sublingual tablet, with long duration of action
- Partial opioid agonist with a ceiling effect
  - Doses beyond 24 mg - 32 mg do not have any additional opioid effects
  - Bup/nx is therefore much less likely to cause overdose than methadone or other potent opioids
- Binds very tightly to receptor
  - Displaces other opioids (displacement of fentanyl is slower and less complete)
  - Can precipitate withdrawal when taken shortly after opioid use

Who can prescribe buprenorphine?



Province	Training	Methadone exemption
BC	Recommended	Not required
Alberta	Required	Not required
Saskatchewan	Required	Required
Manitoba	Required	Required
Ontario	Recommended	Not required
Quebec	Required	Not required
NS	required	Not required
NL	Not required	Not required
NB	Not required	Not required
Yukon, NWT	Not required	Not required

Methadone clinics



Advantage:

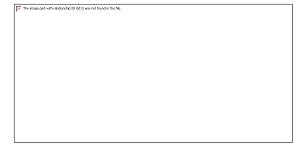
Experienced prescribers

Close monitoring with urine drug screens

Disadvantages:

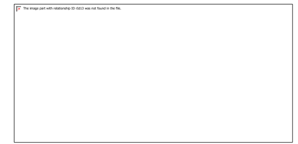
- Often not available in rural communities
- At least in Ontario, often don't provide primary care or management of mental disorders or other substance use disorders
- Program rules - frequent urine drug screens, office visits may not be necessary or acceptable to some patients
- Overall, methadone clinics have high drop out rates

When should family physicians prescribe buprenorphine?



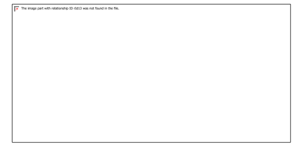
- Methadone clinic not available, long waiting list, or patient refuses to attend
- Patient requires regular primary care, eg chronic medical or psychiatric illness
- Patient may not need daily observed therapy or frequent urine drug screens:
  - Not an injection user, doesn't crush oral tablets
  - Doesn't misuse other drugs
  - Only uses oral prescription opioids, acquired from one physician

What if patient refuses buprenorphine?



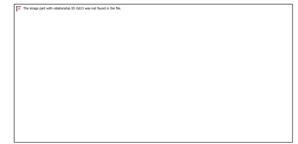
- Explain that:
- You will experience **improved mood, reduction in pain, and an improvement in function and social relationships**
  - Buprenorphine is a good analgesic
  - Resolution of withdrawal-mediated pain and opioid-induced dysphoria
  - Patient becomes more active, reclaims life
    - No longer a slave to the drug – cycle of withdrawal and craving
- If patient still refuses, explain that:
  - I cannot continue to prescribe a medication that is harming you
  - I will slowly taper the medication while you look for another prescriber

Buprenorphine: Initial dose



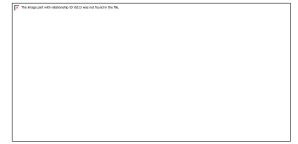
- To avoid precipitating withdrawal, don't give bup/nx until **at least 12 hours have elapsed since last opioid use *and* patient has definite withdrawal symptoms:**
  - Anxiety, craving, dysphoria etc
  - Myalgias
  - GI (nausea, cramps, diarrhea)
  - Yawning, watery eyes, sniffles
- A score of 12 or more on the **Clinical Opioid Withdrawal Scale (COWS)** indicates that it is safe to administer bup/nx

Induction: Office protocol



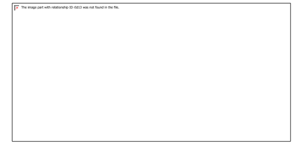
- Initial dose: 4 mg SL (takes several minutes to dissolve)
  - 2 mg SL if patient is elderly, on a high benzodiazepine dose
- Reassess in 1-2 hours
  - If substantial improvement, give 2-4 mg SL to take-home for later in day, plus an outpatient script
  - If still in significant withdrawal, give another 4 mg SL in and reassess again in 1-2 hours
- Treatment complete when 4-12 mg dispensed and withdrawal symptoms are minimal
- Prescribe total day's dose as a single morning dose for the net day

Induction: Home protocol



- Patients often find it easier to take first dose at home
- Prescribe six-ten tabs 2 mg to take home
- Warn patients to wait for 12+ hours and be in withdrawal before taking first dose
- The next day, prescribe previous day's dose as a single morning dose

Dose titration



- Increase by 2-4 mg SL each visit until:
  - No or minimal cravings
  - No or minimal withdrawal symptoms
  - No opioid use
  - Therapeutic dose range 8-16 mg
  - Maximum dose 24-32 mg

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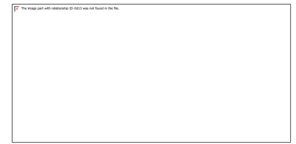
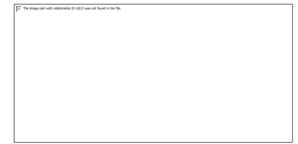
- Similar to other opioids
- Sedation, nausea etc.
- Can also cause headaches
- ***Switch to methadone if ongoing opioid use or side effects***

Take-home doses and monitoring



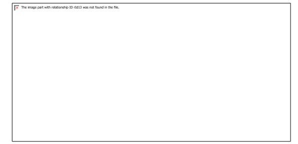
- **Take-home doses**
- Depends on patient's likely compliance and reliability
- Buprenorphine can be injected and diverted
- ON treatment initiation, Injection drug users should have daily supervised dosing
- Patients who take oral opioids only may have once-twice per week dispensing
- If patient stops using unauthorized opioids and other drugs, take-home doses may be increased
- **Urine drug screens**
- Collect UDS at each office visit
- Discuss results with patient

Take-home naloxone



- Remarkably safe
- Buys time until EMS arrives
- Available in most provinces without a prescription
- Advise all high risk patients to have a kit:
- Opioid use disorder, especially injection opioid users
- On high opioid doses, especially if also on benzodiazepines or heavy drinker
- Friends or peers who use illicit drugs
- Probably useful for cocaine users as well (fentanyl sometimes added to cocaine)

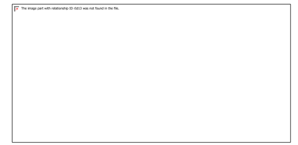
Overdose prevention advice



- Avoid all illicit drugs – safer to use prescription drugs
- Always use with others
- Never leave a friend who may have overdosed to ‘sleep it off’
- Don’t combine drugs with benzodiazepines or alcohol
- Use the smallest amount possible
- Adjust dose for tolerance – if you haven’t used in a few days, tolerance goes down
- May need multiple naloxone doses for fentanyl overdose
- **Best way to prevent overdose is to get treatment**

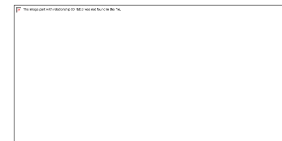
Opioid tapering

Opioid Tapering - Indications



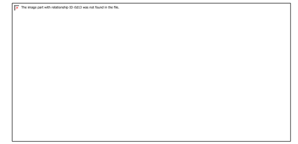
- *Opioid failure*: Persistent severe pain and pain-related disability despite an adequate opioid dose (e.g., 60 mg/d MED), and patient has already failed on a trial of at least one opioid previously
- *Complications* (e.g., sleep apnea, sedation, dysphoria)
- *Very high dose* (eg > 200 mg MED) with no clear medical need
- *Opioid use disorder* (although many patients with OUD find it very difficult to taper)
- If patient reluctant:
- Explain that usually, tapering improves mood and function, while pain remains stable or improves

Tapering Protocol



Formulation	CR preferred (until low dose reached)
Dosing interval	Scheduled doses rather than PRN Keep dosing interval the same for as long as possible Advise patients not to skip doses
Rate of taper	Taper slowly (eg 5-10 mg MED every office visit) Let patient choose which dose is decreased (AM, PM, or HS) Hold the taper if patient going through stressful time
Dispensing interval	If patient runs out early, increase frequency to weekly, alternate day, or daily
Endpoint of taper	≥ 60 mg MED (suggested watchful dose in elderly; controls pain with minimal side effects)
Frequency of visits	If possible, see patient prior to each dose decrease
Approach	Ask about withdrawal symptoms and benefits of tapering: more alert, less fatigued, improved mood, improved pain

Failure of opioid tapering

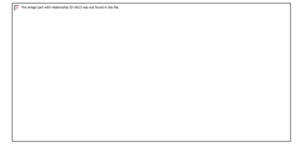


- Marked increase in pain, withdrawal symptoms
- Anxiety, dysphoria
- Decrease in daily functioning
- Strong resistance to further tapering

Management

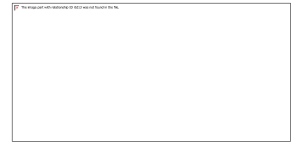
- Leave dose the same (but patient will still suffer opioid-related harms)
- Refer to pain specialist (if reasonable waiting list)
- *Switch to buprenorphine:*
  - Often easier and more effective than tapering
  - Can be used even if the patient does not have a clear opioid use disorder

Cautions re tapering

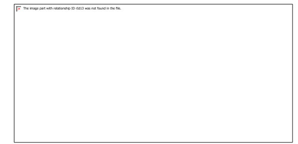


- Canadian Guideline: taper everyone over 90 mg MED
- Patients on somewhat high dose (eg 120 mg MED) are a low priority for tapering if they report analgesic benefit, are functioning well, and have no major side effects
- **Rapid tapering or abrupt cessation can be dangerous, especially in patients with opioid use disorder:**
  - Patient will quickly lose tolerance
  - Will experience severe withdrawal, forcing him/her to seek illicit sources
  - At high risk for overdose death, because of loss of tolerance and contamination with fentanyl

Avoiding harms of tapering

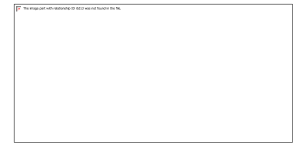


- Taper slowly with careful monitoring
- Patients whose opioid source has been cut off (eg family doctor retired, or admitted to hospital) are at very high risk for overdose death
- They must be given bridging script until they can be started on buprenorphine or opioid prescribing has been resumed



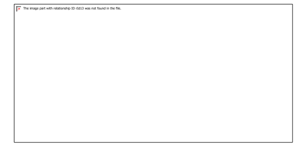
ANTICRAVING MEDICATIONS FOR ALCOHOL USE DISORDERS

Alcohol use disorder are best treated in a primary care setting



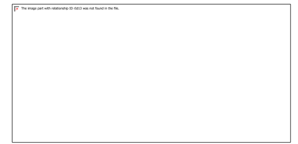
- Naltrexone + FP management more effective than trained counsellor in reducing drinking and retaining patients in treatment
  - Oslin DW, J Gen Int Med, 2014
- Patients have strong relationship with care provider
- Less stigma, many reasons for attending
- Easy access, long term follow up
- FPs can prescribe anticraving medications

Anti-Craving Medications



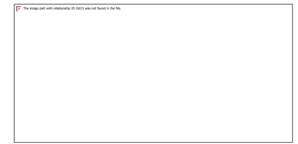
- Should be **routinely offered** to patients with alcohol use disorder
- Controlled trials have shown that anti-craving meds (especially naltrexone, acamprosate):
  - Reduce alcohol use
  - Reduce ED visits, hospitalizations
  - Can safely be prescribed by MDs who are not addiction specialists
  - Are cost effective
  - Improve participation in psychosocial treatment
- Choice of medication based on individual considerations

When discontinue medication?



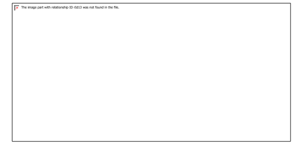
- Duration of medication six months or longer
- May discontinue when:
  - Patient has achieved drinking goal (abstinent or reduced drinking) for at least several months
  - Has minimal cravings
  - Has social supports and non-drug ways of coping with stress
  - Is confident that medication no longer needed
- Can be restarted if patient relapses

Medication coverage



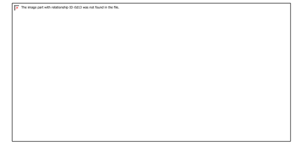
Province	Naltrexone	Acamprosate
BC	Limited coverage	Limited coverage
AB	Not covered	Not covered
Sask	Covered	Covered
ON	Exceptional status	Exceptional status
Quebec	Covered	Exceptional status
NB	Special authorization	Special authorization
NL	Not covered	Special authorization
NS	Exceptional status	Exceptional status
PE	Special authorization	Special authorization
NIHB	Covered	Covered

Naltrexone



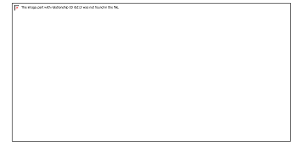
- Competitive opioid antagonist (like naloxone but oral)
- Alcohol releases endorphins, causing euphoria
- Naltrexone blocks attachment of endorphins to mu receptor
- This blunts euphoric and reinforcing effect
- Improves intensity and duration of binges
- Reduces health care utilization
- NNT = 12

Naltrexone (2)



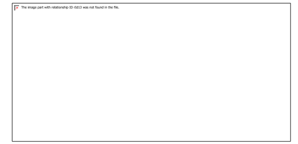
- Contraindicated in patients on opioids
- Can cause reversible elevations in LFT (but overall improves LFT by reducing drinking)
- Mild SE that resolve in couple of weeks – nausea, dizziness
- Starting dose 50 mg OD; maximum dose 150 mg OD

Acamprosate



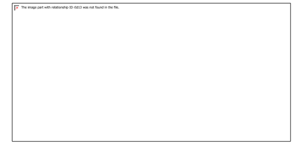
- Chronic heavy alcohol use causes compensatory changes in sympathetic nervous system:
- NMDA enhanced (NMDA = stimulating part of CNS)
- GABA suppressed (GABA = calming part of CNS)
- When alcohol stopped, overactive NMDA and underactive GABA cause withdrawal symptoms
- Acamprosate enhances GABA
- This relieves subacute withdrawal symptoms:
  - Insomnia
  - Dysphoria
  - Cravings

Acamprosate (2)



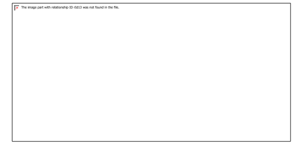
- Not effective until patient stops drinking for at least a few days
- Best for patients with moderate to severe alcohol use disorder who have abstinence as a treatment goal
- Dose 666 mg tid
- Well tolerated: Main SE = mild diarrhea

Gabapentin



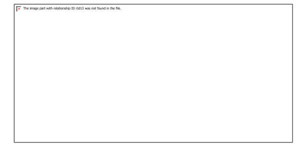
- Several smaller trials have shown effectiveness in reducing alcohol use
- Works by enhancing GABA – subacute withdrawal symptoms
- Well tolerated, covered as a general benefit in most provincial plans
- Initial dose 300 mg tid; optimal dose 600 mg tid
- RCT: Placebo < 900 mg/day < 1800 mg/day

Disulfiram



- Aversive medication
- Binds to acetaldehyde dehydrogenase, causing rapid accumulation of acetaldehyde when alcohol consumed
- Causes vomiting, headache, flushed face
- Most effective when dispensed by spouse or pharmacist
- Dose 125 mg -250 mg OD
- Contraindicated in major liver disease, pregnancy

For More Information …



- META:PHI lead team available to answer questions
  - Project Lead: meldon.kahan@wchospital.ca
  - For questions on META:PHI/rapid access clinics: kate.hardy@wchospital.ca
  - For clinical questions, join the META:PHI listserv: sarah.clarke@wchospital.ca

- Use our resources and/or adapt them to your local context

http://www.womenscollegehospital.ca/programs-and-services/METAPHI

Thank you!