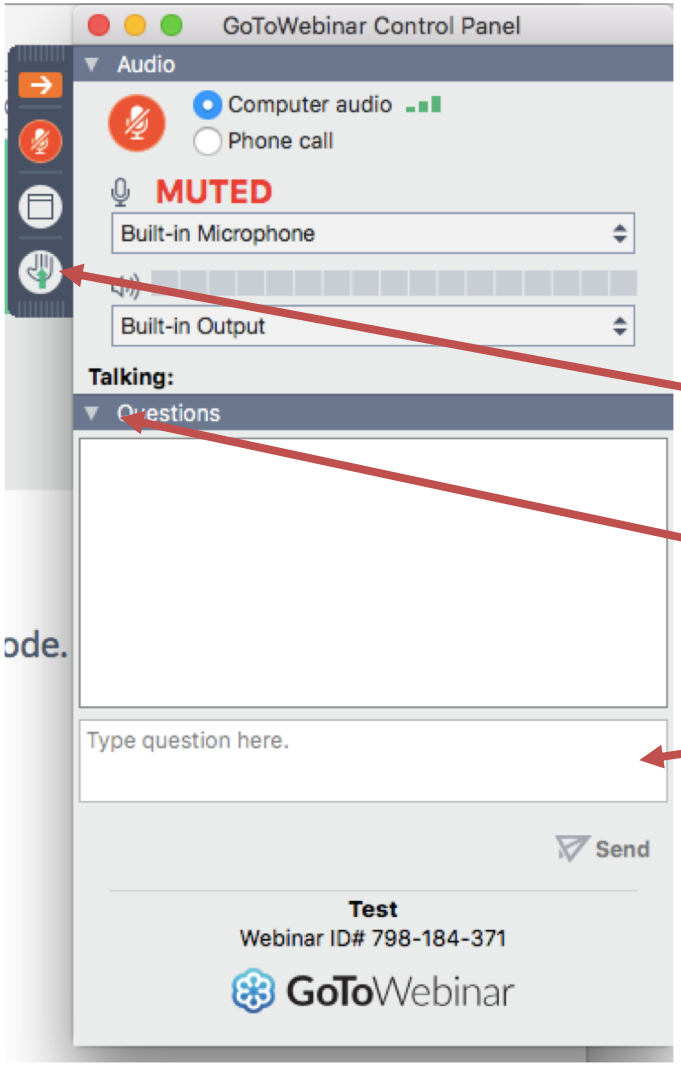
Welcome to the BOOST Collaborative!



Please familiarize yourself with the control panel. The webinar will begin at 1:00PM.

Click here to raise your hand

Click on the arrow to open the question box

Type your questions to the moderator

Contact us: boostcollaborative@cfenet.ubc.ca

Best-Practices in ORAL OPIOID AGONIST THERAPY Collaborative

Injectable Opioid Agonist Therapy

Christy Sutherland MD CCFP dABAM
Medical Director PHS Community Services Society
Physician Education Lead BC Center on Substance Use
@PHS_PrimaryCare

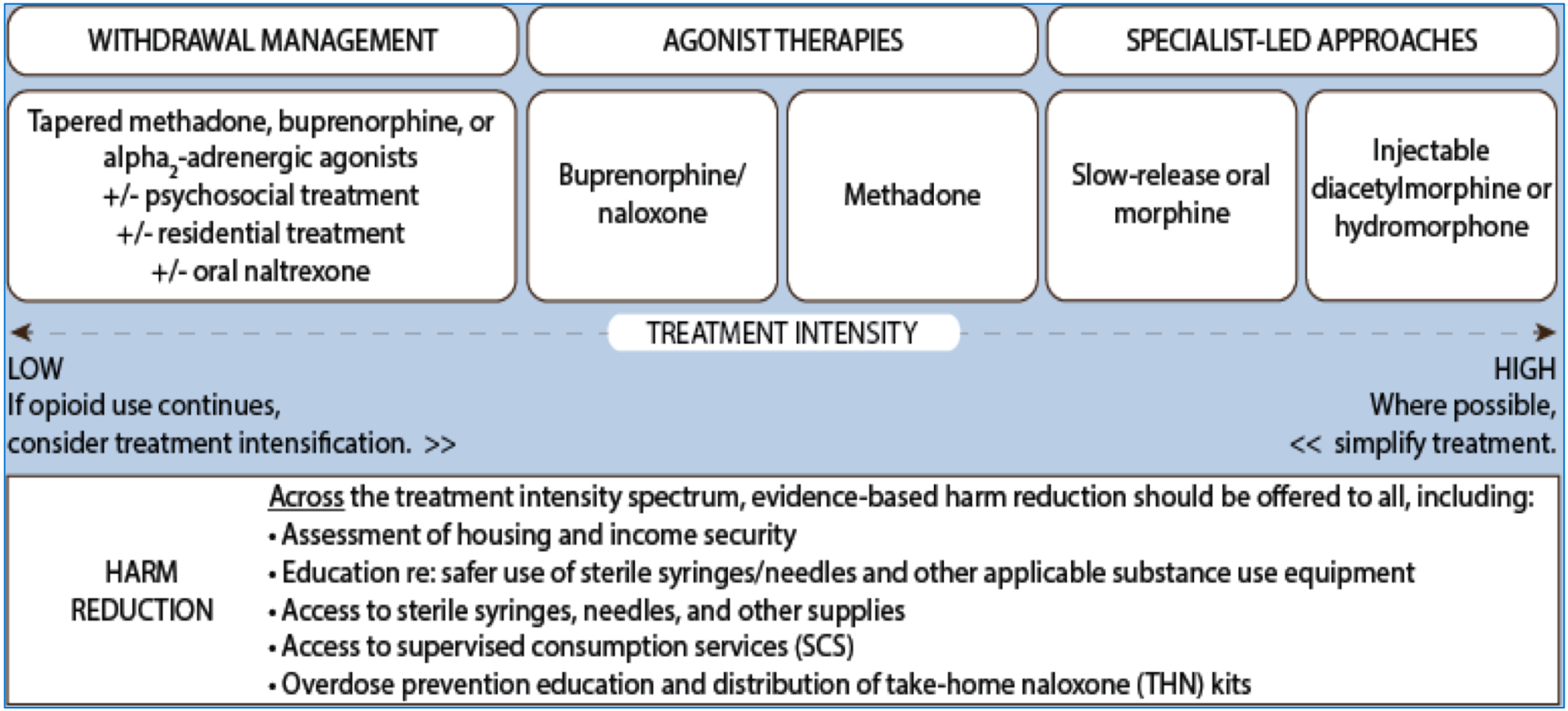
“For every complex problem there is an answer that is clear, simple, and wrong.”

H. L. Mencken

Financial Disclosures

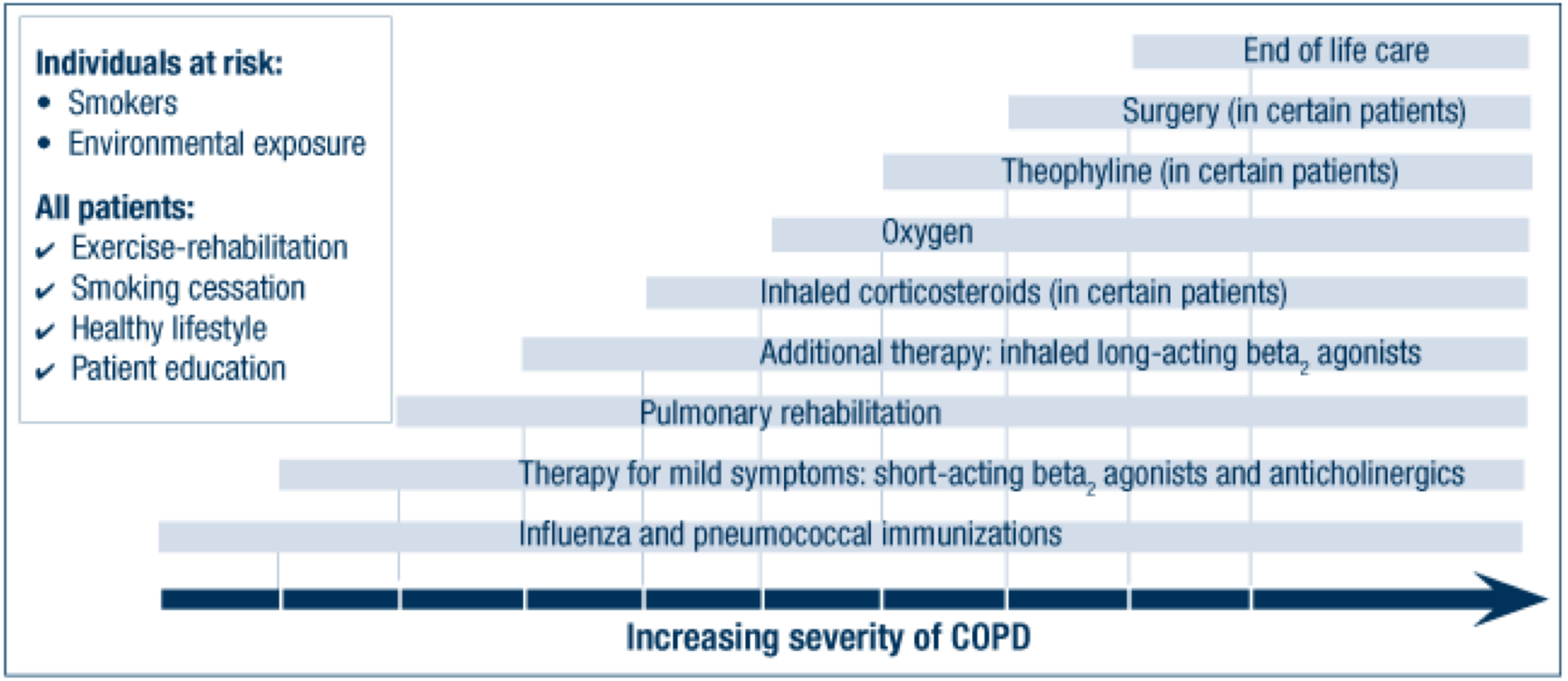
- None

iOAT in the Continuum of Care for OUD



1. Amato et al. 2013
2. Gowing et al. 2009
3. Gowing et al. 2014
4. Amato et al. 2011
5. Minozzi et al. 2011
6. Mattick et al. 2014
7. Mattick et al. 2009
8. Faggiano et al. 2003
9. Ferri et al. 2013

The Continuum of Care for Chronic Disease



Role of iOAT in the Continuum of Care

- Patients may not benefit from first-line medications (oral OAT) for a variety of reasons. Examples include:
  - Cravings despite optimal OAT dosing
  - Being unable to reach a therapeutic dose
  - Opting not to initiate oral OAT due to previous poor experience (e.g., side effects)
- Individuals who do not benefit from first-line medications are at increased risk for harm, including premature death, non-fatal overdose, blood-borne infectious diseases, violence, and arrest

Non toxic drug consumption in a safe space

Known substance, known dose, clean supplies

Role of Injectable Opioid Agonist Treatments in the Continuum of Care

- The role of iOAT is to attract and retain in care a small but significant number of people with OUD who continue to inject illicit opioids despite access to oral OAT
- iOAT should be understood as one part of a continuum of care in the treatment of opioid use disorder
- Similar to other chronic conditions, people with opioid use disorder may need to try multiple approaches of varying intensities along the care continuum

Continuum of Care

The Continuum of Care Should Include:
Fully functioning referral pathways to addiction, recovery, and substance use treatment (e.g., psychosocial treatment, in/outpatient treatment, primary care)
Mechanisms to support appropriate movement along the continuum of care
Linkages to primary care
Increased access to psychosocial treatment interventions and supports
Decreased barriers to oral OAT

A bit of history

In the UK they have been prescribing heroin for opioid use disorder for more than a century as take home doses.

Swiss National Clinical Study

- First trial started in Switzerland in 1994
- Has been standard treatment for opioid use disorder in Switzerland since 1998
- This is in the context of a very robust methadone system of care – very low barrier and available.

Cochrane Review 2011

"Heroin maintenance for chronic heroin-dependent individuals"

Marica Ferri, Marina Davoli, Carlo A. Perucci

Objectives:

To compare heroin maintenance to methadone or other substitution treatments for opioid dependence regarding: efficacy and acceptability, retaining patients in treatment, reducing the use of illicit substances, and improving health and social functioning.

Main Results

- Eight Randomized Control Studies involving 2007 patients met the inclusion criteria.
- Previous treatment failure for opioid use disorder
- Five studies compared supervised injected heroin plus flexible dosages of methadone treatment to oral methadone only and showed that heroin helps patients to remain in treatment

Main Results

- Social functioning improved in all the intervention groups with heroin groups having slightly better results.
- If all the studies comparing heroin provision in any conditions vs any other treatment are pooled the direction of effect remain in favour of heroin.

HAT (heroin assisted therapy)

- For people with severe opioid use disorder who have tried oral treatment and had ongoing drug use or negative consequences
- The patient attends clinic 2-3 times per day for a supervised injection of heroin
- They are given a dose of methadone at night in order to avoid withdrawal overnight between doses

How the research addressed my concerns

- Average time in HAT is 3 years
- In general, patients stabilize on a dose and remain on that dose for the duration, or taper their dose
- On average, this maintenance dose is about half of the program maximum
- Patients usually transition to oral treatment, but many successfully taper to achieve no opioid use

Public safety

- There have been no detrimental effects on public safety, or disorder from HAT

- People enrolled in HAT decrease criminal behaviour

Why give people free heroin?

- This is just one end of the continuum of care for opioid use disorder
- The cost of not treating addiction is almost always more than the cost of treating it.
- Cost benefit analysis of HAT have shown it to be more economical than no treatment

HAT

- Provides connection to primary care
- Multiple interactions with nurses each day
- Can be embedded in a interdisciplinary team with social work, pharmacist, nurse, and addiction specialist
- Decreases the illicit market of opioids

NAOMI study

- HAT in the Canadian context
- Published 2009 NEJM
- Randomized Control trial
- IV heroin vs oral methadone
- 251 participants in Vancouver and Montreal

NAOMI Study Results

- Retention to treatment:
  - Diacetylmorphine arm (88%)
  - Methadone (54%)
- Decrease in illegal activities:
  - Diacetylmorphine (67%)
  - Methadone (47.7%)
- The amount spent on drugs both decreased by almost half. In fact, participants once spending on average $1,200 USD per month on drugs reported spending between $320-$400 USD per month by the end of the treatment phase.

NAOMI Study Results

- A small portion of the NAOMI patients received injectable hydromorphone rather than injectable diacetylmorphine .

- At the end of the trial – people were not able to identify the substance they had been using during the trial

The Study to Assess Longer-term Opioid Medication Effectiveness (SALOME)

- A non-inferiority study looking at hydromorphone and diacetylmorphine
- Double blind RCT with 202 participants in Vancouver, BC
- Two phases – an oral hydromorphone stage that was abandoned due to futility

SALOME

- Outcomes:
  - Drug use (self report and urine)
  - Retention to care (about 80% for both)
- IV hydromorphone was found to be non-inferior to diacetylmorphine

- **CONCLUSIONS AND RELEVANCE** This study provides evidence to suggest **non-inferiority of injectable hydromorphone** relative to diacetylmorphine for long-term opioid dependence.

Adverse Events

Pooled data:

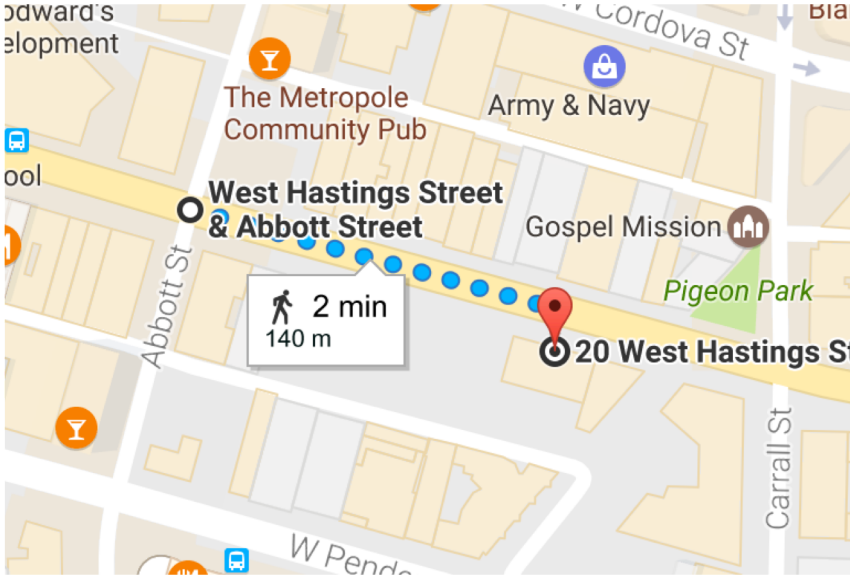
- Respiratory depression
  - 1:6000 injections
- Cellulitis or abscess
  - 18:85,451 injections

During the Salome trial:

- Seizure
  - 11 in the diacetylmorphine arm
- Overdoses
  - 3 in hydromorphone arm, 11 in diacetylmorphine arm

My own practice

- Salome was published in May 2016
- The researcher came by my clinic and asked if I would consider prescribing iOAT
- I was interested, but nervous



iOAT = injectable opioid agonist therapy

Updated terminology from HAT (Heroin assisted therapy)

Can use diacetymorphine or hydromorphone

September 2016 I began an iOAT program that was embedded in one of our low barrier housing projects.

And my patient got better

PHS current iOAT

- Embedded in housing – 8 people
- Embedded in our overdose response room – 30 people
- With a community pharmacy partner – 50 people

- 240 iOATs start this past year

Some things to think about for Canada

- This research was done before widespread buprenorphine or SROM use for opioid use disorder.

- This research can’t be applied to the issue of drug policy and law

Patient selection for iOAT

- Are they an IV drug user?
- Are they a daily user?
- How long have they been using?
- What oral treatments have they tried?
- Benzodiazepine use
- Alcohol use

History

- Age at first use, route, and current use for:
- Opioids
- Alcohol
- Benzodiazepines
- Marijuana
- Crack/cocaine/crystal med
- Cigarettes
- E, GHB, LSD
- Anything else?

History

- HIV
- Hepatitis C
- Infections? Hospitalizations?
- Overdoses
- Housing
- Money
- Safety
- Where do you go to use drugs? Alone?

Collateral

- Discuss with the MRP
- Social workers, outreach workers
- Family
- ER

Selecting Patients

- What is a trial of oral?
  - Getting to a therapeutic dose?
  - Attempts to start someone?
  - In or out of jail?

- For me, what it comes down to is asking myself: “is this person at risk of death?”

- How much risk?

PHS iOAT program

- 2 IV/IM doses per day
- Titrations done at the clinic or the Molson program
- Most patients are also on a long acting oral
- Patient driven transitions across care
- Low barrier iOAT restarts

Cost

ADDICTION

SSA SOCIETY FOR THE STUDY OF ADDICTION

Research Report

Cost-effectiveness of hydromorphone for severe opioid use disorder: findings from the SALOME randomized clinical trial

Nick Bansback, Daphne Guh, Eugenia Oviedo-Joekes, Suzanne Brissette, Scott Harrison, Amin Janmohamed, Michael Krausz, Scott MacDonald, David C. Marsh, **... See all authors**

https://doi.org/10.1111/add.14171

Cost

Conclusions

In patients with severe opioid use disorder enrolled into the SALOME trial, injectable hydromorphone provided similar outcomes to injectable diacetylmorphine. Modelling outcomes during a patient's life-time suggested that injectable hydromorphone might provide greater benefit than methadone alone and may be cost-saving, with drug costs being offset by costs saved from reduced involvement in criminal activity.

iOAT Study: PURPOSE

Prospective, observational evaluation of iOAT clinical service provision across British Columbia

- Monitor and evaluate iOAT as it is expanded in real life settings within a Canadian practice-based framework
- Generate new practice-based evidence to guide Ministry & Health Authority service provision of iOAT within the continuum of care for opioid use disorder
- Provide timely data on the impact of iOAT as a component of the overdose crisis response

iOAT Study: DESIGN

- All patients currently on or starting iOAT in BC are eligible
- Semi annual study visits
  - interviewer administrated questionnaire
  - urine drug screens
- Semi annual administrative data linkages
  - e.g. Pharmanet, Discharge Abstract Database, MSP
- Five year follow up (regardless of iOAT status)
- Subset of cohort invited to participate in qualitative interviews & ethnographic fieldwork

To Summarize

- Opioid Use Disorder is a chronic relapsing remitting disorder
- People who have opioid use disorder need good treatment
- However, right now in BC all people who use drugs are at risk of overdose
- Buprenorphine/Naloxone and Methadone both have wealth of evidence to support them as a treatment for Opioid Use Disorder
- Injectable Opioid Agonist Treatment is an evidence based tool to use to treat opioid use disorder

BC Center on Substance Use OAT Course

http://www.bccsu.ca/provincial-opioid-addiction-treatment-support-program/