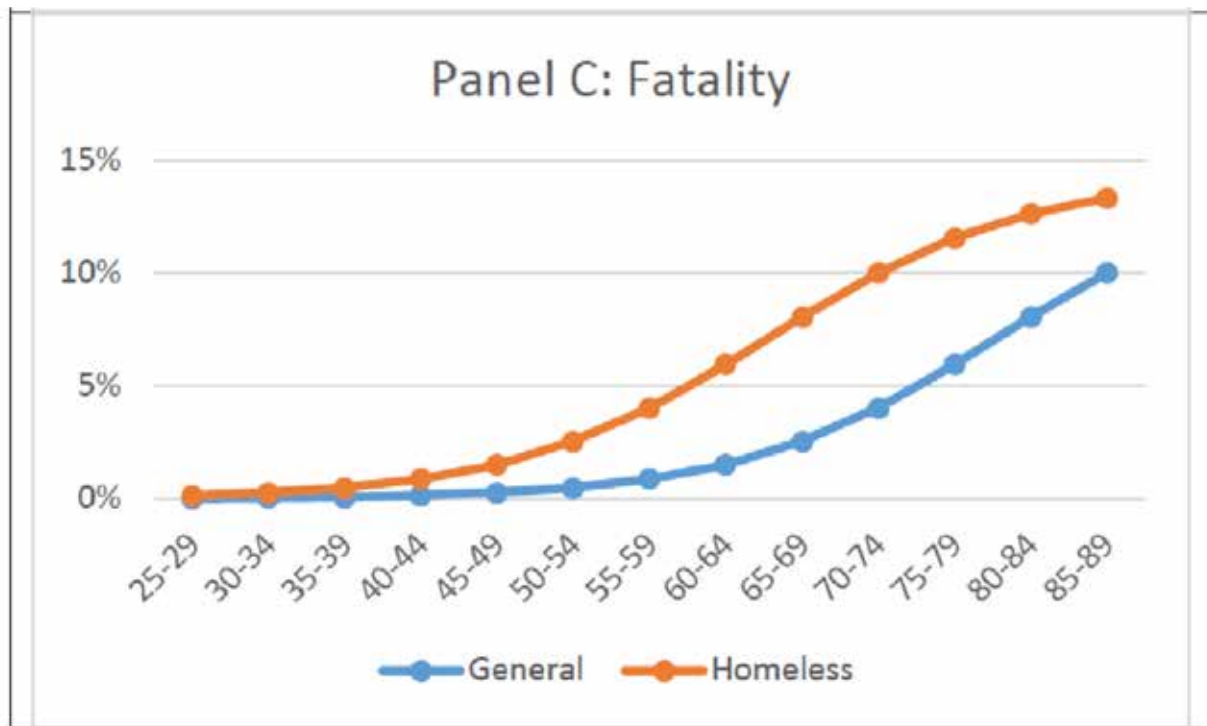




Safer Supply in the context of COVID19



Dennis Culhane, Dan Treglia & Ken Steif
University of Pennsylvania
Randall Kuhn
University of California Los Angeles
Thomas Byrne
Boston University
March 25, 202

The Opioid Overdose Crisis

The Largest Public Health Crisis of a Generation



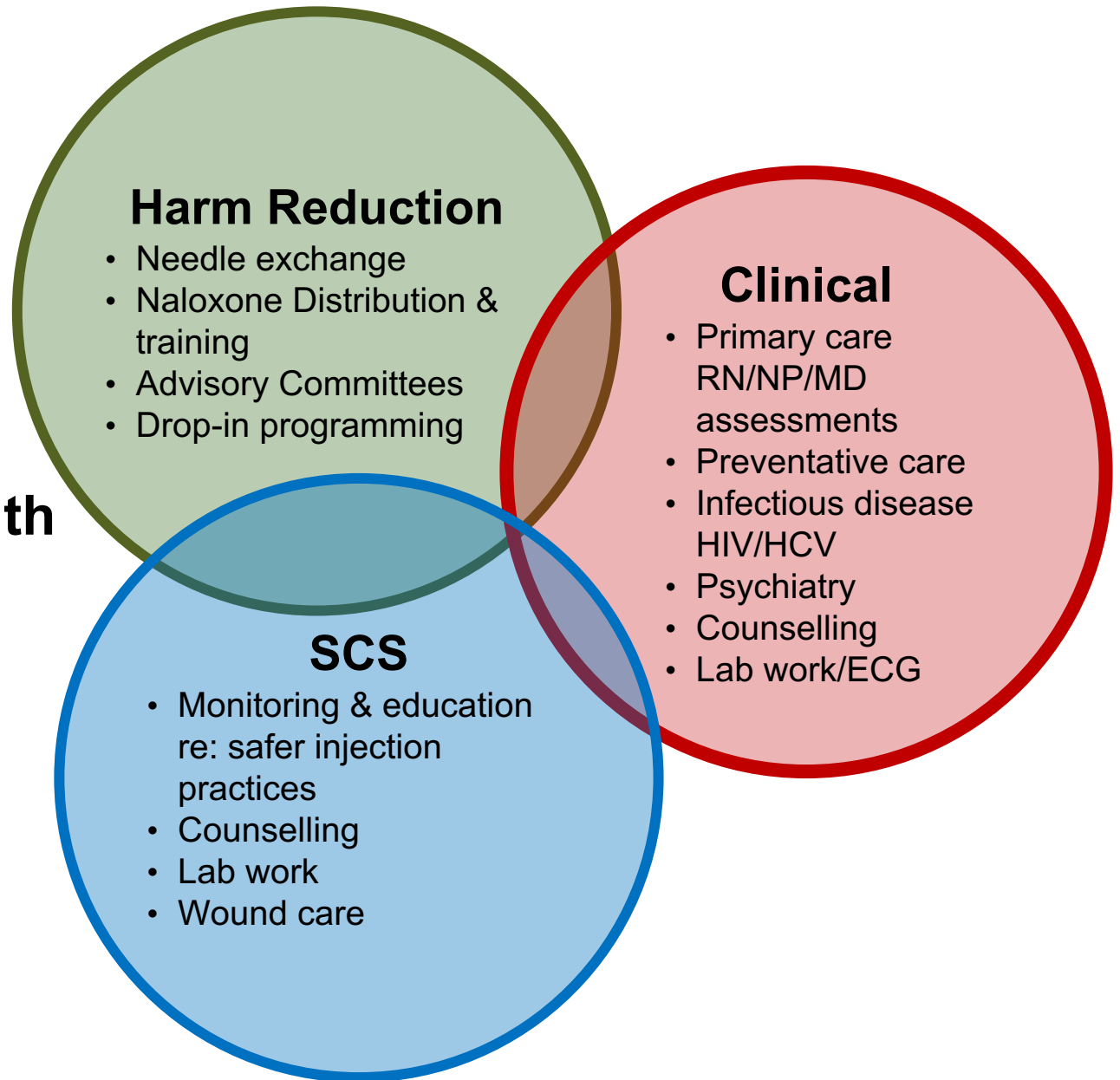
London Intercommunity Health Centre Safer Opioid Supply

- Our program began in 2016 as a natural extension of hospital based prescribing to mitigate withdrawal symptoms
- Informed by evidence from NAOMI and SALOME studies
- Grown with input and direction from PWUD

Guiding Principles of SOS

- **Harm reduction** focused (not addiction treatment)
- **Patient determined and directed** outcomes
- **Voices of People Who Use Drugs are prioritized**
- **Low barrier** care
- **Assertive** engagement/creative persistence
- **Non-oppressive** medical care
- **Open door back into healthcare**

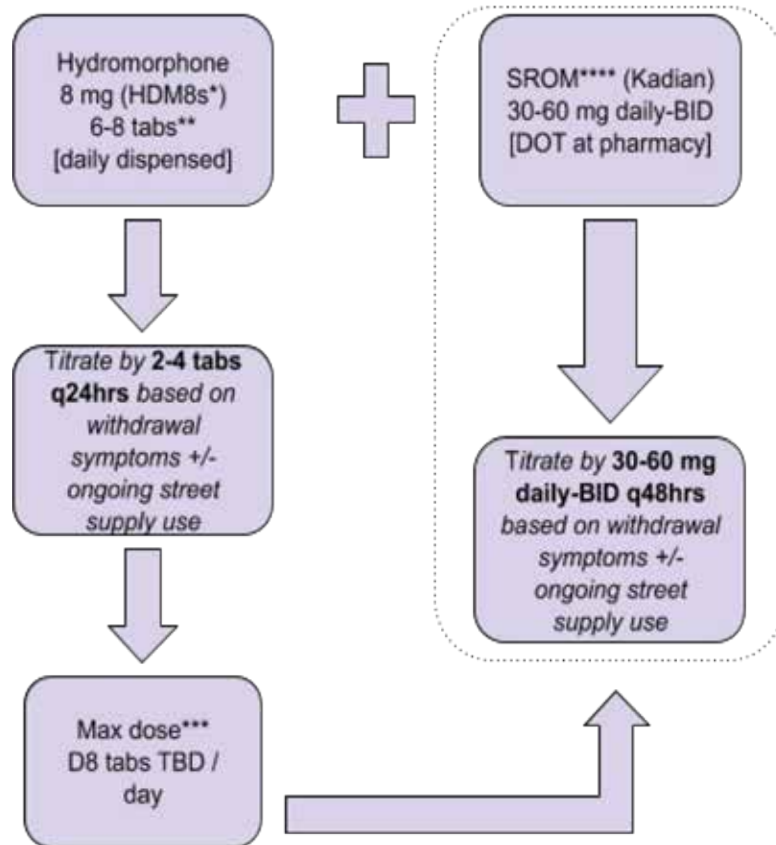
**LIHC
Community Health
Centre Model**



Key Features of Safer Supply

- PWUD who have failed/not interested in OAT
- New paradigm
 - not expected to stop doing drugs, recognize value of euphoria, non-carceral
- Hydromorphone IR chosen due to lowest known infection risk
- Intensive Harm Reduction Education
 - Cook Your Wash, Sterile injection equipment, CTS/don't use alone/virtual peer witnessing

Safer Supply Intake Protocol



- Patients are seen **daily** during initiation phase (first 1-2 weeks)
- Seen by MD at minimum once weekly thereafter
- Frequent check-ins with NP, RN, SCS, Harm reduction outreach

Program Doses

- **Hydromorphone**
 - Dose range: 2-30 tabs D8
 - Avg dose: 116mg = 14.5 tabs
 - Median dose: 128mg = 16 tabs
- **DOT Kadian:** 38 patients (33%)
 - Dose range: 20-1000mg
 - Avg dose: 270mg
 - Median dose: 300mg

Safer Opioid Supply

- 118 patients
- 4 years of experience and follow-up
- 90% retention rate
- Weekly clinic visits
- Hydromorphone IR +/- DOT Kadian (SROM)
- Hydromorphone is daily dispense, take-home doses

Safer Opioid Supply

Patient Characteristics at Intake

- **Intractable chronic IVU (5-10 years)**
 - $\geq 50\%$ use fentanyl by choice
 - All had fentanyl exposure through contaminated supply
 - At least 40% IVU > 10 years, with half of those 20+ years
- **Gender split** – 39M, 75F, 34%M, 66%F
- **Age range** – 18-60 years
- **Failed trial(s) of methadone/suboxone** – 85%

Safer Supply

Patient Characteristics at Intake

- Homeless on intake: 70 (62%)
- Experience of homelessness: 100%
- Poverty – 117/118 on social assistance
 - OW 45 (39%), ODSP 68 (61%)
- Engagement in sex work to pay for drugs – total: 51 (45%), 68% of women, 1 male
- Criminal activity to pay for drugs – 55 (48%)

Safer Supply

Patient Characteristics at Intake

- **Drug of choice** – opioids, supplemented by crystal meth
- **Route of choice** – 100% IDU
- **Initial utox**
 - 100% opioid pos
 - 83% crystal meth

Safer Supply

Patient Characteristics at Intake

- **Infectious Complications**
 - Any: 87 (77%)
 - Endocarditis: 29 (26%)
 - Sepsis: 15 (13%)

- **HCV positive: 89 (79%)**

Safer Supply

Patient Characteristics at Intake

- HIV positive: 30 (27%)
- Taking NO treatment: 4, 13%
- Non-suppressed viremia: 14 (47%)
- CD4 < 200: 5 (16%)
- CD4 zero: 3 (10%)

RESULTS

Impact on Drug Use

- **Reduction in more harmful drug use habits**
 - reduction in IDU from 100% to...
 - 27 (24%) oral only, 15 (13%) oral/IV combo
- **Reduction in FYL**
 - 30% positive in last 30 days
- **Reduction in crystal meth 83% to 70%**

Impact on Mortality

ZERO Fatal overdose

Review of Deaths

- 3 deaths
- 1 unrelated to IDU
- 2 deaths from infectious complications
 - both hospitalized patients
 - both had decrease in admissions/number of infections
 - both eventually succumbed

Mortality among PWID

Supervised injection facility use and all-cause mortality among people who inject drugs in Vancouver, Canada: A cohort study.

Kennedy MC^{1,2}, Hayashi K^{1,3}, Milloy MJ^{1,2}, Wood E^{1,2}, Kerr T^{1,2}.

[+ Author information](#)

Abstract

3% per year in non SIF users

1.7% per year for SIF users

Safer Supply

All-cause mortality: 1.7%

Mortality due to infectious complications: 1.1%

Health outcomes

Management of Infectious Diseases

- **HIV management**

- rate of positive viremia: 47% at intake to 10%
- Engagement with HIV team... 100%
- No new HIV diagnoses

- **Hepatitis C treatment**

- 31 (26%) engaged with HCV team
- 16 (13%) treated
- 15 (13%) work-up to start treatment

Health Outcomes

Infectious Complications

- **Epidural abscess**

- 5 since program inception
- all were supplementing with long acting preparations or fentanyl street supply

- **Rate of endocarditis**

- ZERO new endocarditis
- 1/113 (0.08%) recurrent endocarditis

Health outcomes

Engagement with Primary Care

- **Routine care**
 - 100% !!
 - pre-intake most had no FP or didn't see FP
- **Chronic disease mgmt.**
 - 27% now see allied health care
- **Cancer screening**
 - 50 (44%) age appropriate screening like pap, mammo, CRC
- **Mental Health care**
 - SW, outreach and psychiatry
 - connection to outreach teams – 67 (60%)

*Rebuilding
Trust*

Social outcomes

- **Reduction in homelessness**
 - 62% to 38%
- **Social Assistance**
 - 74% now on ODSP (60%)
- **Reduction in sex work**
 - 68% to 20%
 - Only man...no longer doing sex work
- **Reduction in crime** – 48% at intake to → 12%

Next Steps

Research Collaborations

1. ICES data for LIHC Safer Supply program

- Funded & in progress

2. London Health Sciences Centre

- ED use & admissions study
- Retrospective chart review

3. Ivey Business School

- Cost-effectiveness of ESSP

4. University of Toronto

- Mixed methods research ESSP programs in 3 cities
- Focus on impacts of ESSP (i.e. diversion)



Every
One
Matters.

Questions and Discussion



Questions and Discussion

- Do you have any questions about the new guidelines?
- What are communities experiencing during COVID-19?
- How can the community mobilize to help people access safe supply?
- How can we support peers who are in self-isolation and unable to have in-person face to face connections?



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please mute your phone



Please do not place the call on
hold. If receiving another call,
hang up and dial back in

Resources

- **Community Resources for Working with Vulnerable Populations**
<https://sneezesdiseases.com/covid-19-community-resources>
- **Risk Mitigation in the Context of Dual Public Health Emergencies (BCCSU)**
www.bccsu.ca/covid-19
- **List of Resources for COVID-19 and Substance Use by BCCSU**
<https://www.bccsu.ca/resources-substance-use-and-covid-19/>
- **Safe Supply Concept Document by CAPUD**
<http://www.capud.ca/sites/default/files/2019-03/CAPUD%20safe%20supply%20English%20March%203%202019.pdf>

SOS Guidance document

<https://bit.ly/3dR3b8m>

Inclusion criteria

- Opioid use disorder (DSM 5 defined)
- Opioid use consistent with opioid use disorder during the past 12 months
- Self reported regular illicit toxic drug use
- Previous unsuccessful MMT, buprenorphine or SROM only or currently not interested in attempting MMT, buprenorphine, or SROM only
- Urine drug screen positive for opioid(s) and especially heroin, fentanyl analogues, carfentanil or other substances in toxic street supply
- Have the capacity to consent

6000 PWID
in London

Why hydromorphone IR?

RESEARCH ARTICLE

A controlled-release oral opioid supports *S. aureus* survival in injection drug preparation equipment and may increase bacteremia and endocarditis risk

Katherine J. Kasper¹, Iswarya Manoharan², Brian Hallam³, Charlotte E. Coleman¹, Sharon L. Koivu⁴, Matthew A. Weir^{2,5}, John K. McCormick^{1,5}, Michael S. Silverman^{1,2,5,6*}

1 Department of Microbiology and Immunology, Western University, London, Canada, 2 Department of Medicine, Western University, London, Canada, 3 Department of Epidemiology and Biostatistics, Western University, London, Canada, 4 Department of Family Medicine, Western University, London, Canada, 5 Lawson Health Research Institute, London, Canada, 6 Division of Infectious Diseases, Western University, London, Canada

THE LANCET

Infectious Diseases

Available online 22 January 2020

In Press, Corrected Proof

Articles

Hydromorphone and the risk of infective endocarditis among people who inject drugs: a population-based, retrospective cohort study

Michael Silverman MD^a, Justin Slater MSc^c, Racquel Jandoc MSc^c, Sharon Koivu MD^c, Prof Amit X Garg MD^{b, d, e}, Matthew A Weir MD^{b, d, e}



Retrospective cohort study using health admin data from 2006-2015 in Ontario

Frequency of infective endocarditis:

- People on HDM: 2.8%
- People on non-HDM opioids: 1.1%
- aOR 2.5, 95% CI 1.8-3.7 (p<0.0001)

Frequency of infective endocarditis by HDM formulation:

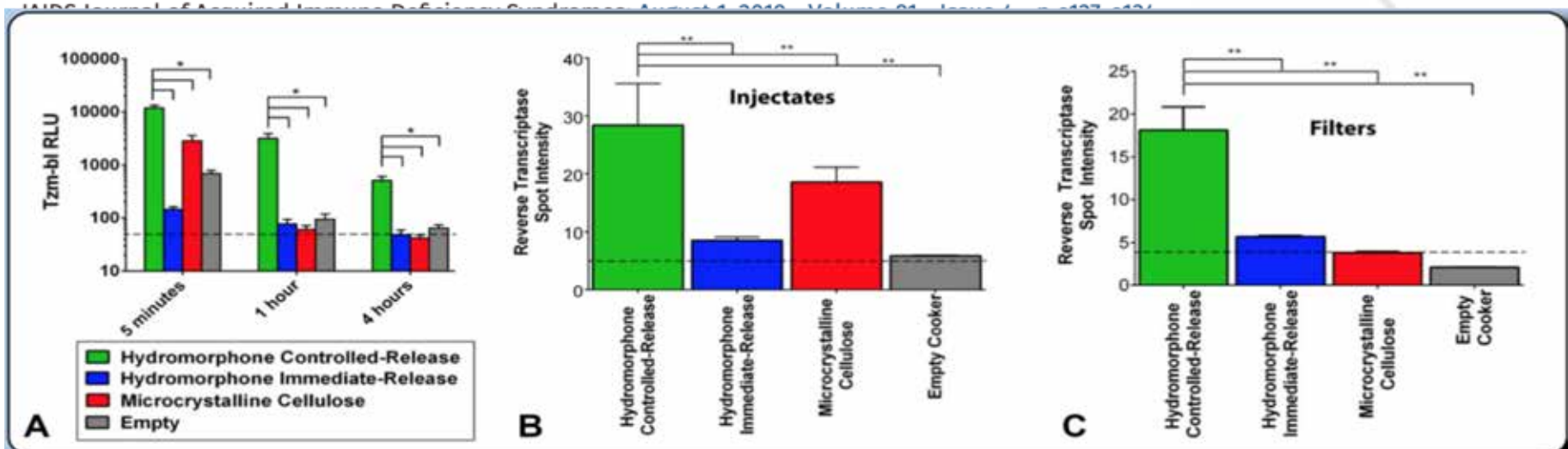
- People on controlled release HDM: 3.9%
- aOR 3.3, 95% CI 2.1-5.6 (p<0.0001)
- People on immediate release HDM: 1.8%
- aOR 1.7, 95% CI 0.9-3.6 (p=0.072)

Heating Injection Drug Preparation Equipment Used for Opioid Injection May Reduce HIV Transmission Associated With Sharing Equipment

Ball, Laura J. MD, MPH^a; Venner, Colin MSc^b; Tirona, Rommel G. PhD^a; Arts, Eric PhD^b; Gupta, Kaveri MD^a; Wiener, Joshua C. BHSc^c; Koivu, Sharon MD^d; Silverman, Michael S. MD, FACP, FRCP^a

[Author Information](#) ✓

[HIV Transmission Associated With Sharing Equipment Used for Opioid Injection: A Cohort Study](#) *Journal of Clinical Pharmacy and Therapeutics*, August 4, 2016, Volume 41, Issue 4, pp 487-492



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