

PLANNING FOR THE APPROPRIATE USE OF

# **PRESCRIPTION DIACETYLMORPHINE IN ONTARIO**

## **PROJECT SUMMARY**



Addictions &  
Mental Health  
Ontario

Dépendances &  
santé mentale  
d'Ontario

# ACKNOWLEDGEMENTS

- This project was managed by Addictions and Mental Health Ontario (AMHO), with funding from Health Canada's Substance Use and Addictions Program (SUAP). AMHO contracted an independent consulting firm, VIRGO Planning and Evaluation Consultants Inc. (owned and operated by Dr. Brian Rush and supported by April Furlong) to lead the work.
- The project was supported by an expert Advisory Committee comprised of a broad range of experts, including individuals with lived/living experience, health system planners, and representatives from public health, addiction treatment services and other relevant sectors, as well as other key stakeholders in Ontario.
- The project also built upon the work of the **Canadian Research Institute in Substance Misuse (CRISM)**, which has been focused on facilitating and supporting the successful delivery of injectable Opioid Agonist Treatment (iOAT) in Canada.

# iOAT PROJECT

## RATIONALE

- Ongoing (and increasing) harms associated with opioid crisis
- Limited availability of iOAT in Ontario despite strong research evidence and need
- Changes in federal regulations to increase access to iOAT medications
- Expansion of iOAT offered in jurisdictions outside of Ontario



**5000+ deaths**  
related to opioid use  
between 2016  
and 2019  
in Ontario

## GOALS



- Provide information to provincial governments and health authorities to determine need to expand iOAT in Ontario
- Support implementation of iOAT programs in Ontario, as applicable, by documenting supportive system-level processes



# COVID-19 AND OPIOID USE

According to a report from the Office of the Chief Coroner of Ontario, the province recorded 2167 opioid related deaths from January to November 2020—a 59% increase over the same period in 2019.



- ... the prevalence of opioid-related harms\*
- ... a tainted drug supply
- ... isolation
- ... barriers to effective treatment

\* Source for graph: The Ontario Drug Policy Research Network; The Office of the Chief Coroner for Ontario/Ontario Forensic Pathology Service; Public Health Ontario; Centre on Drug Policy Evaluation (2020). *Preliminary patterns in circumstances surrounding opioid related deaths in Ontario during COVID-19 pandemic.* [www.publichealthontario.ca/-/media/documents/o/2020/opioid-mortality-covid-surveillance-report.pdf?la=en](http://www.publichealthontario.ca/-/media/documents/o/2020/opioid-mortality-covid-surveillance-report.pdf?la=en)

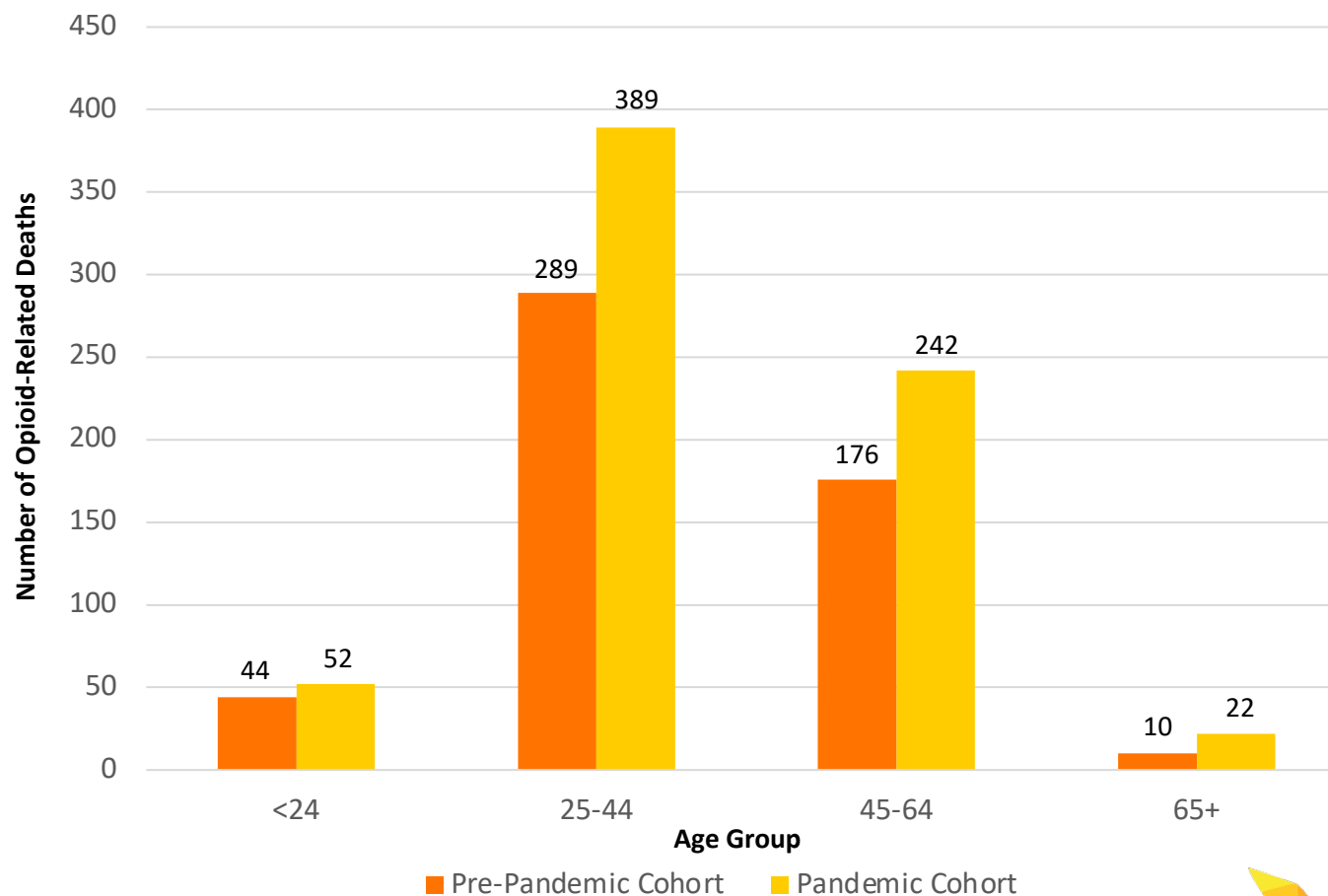
## DISTRIBUTION OF OPIOID-RELATED DEATHS BY AGE



**Pre-Pandemic Cohort**  
December 1, 2019 – March 15, 2020  
(n=519)



**Pandemic Cohort**  
March 16, 2020 – June 30, 2020  
(n=705)



# INJECTABLE OPIOID AGONIST TREATMENT (iOAT)

- Involves **supervised self-injection** of a prescribed opioid medication (either diacetylmorphine or hydromorphone)
- Is an evidence-based, high intensity, cost-effective treatment option
- Is recommended for individuals with severe opioid dependence and/or individuals with ongoing illicit injection opioid use
- Goals
  - Primary:* to improve the health of the individual
  - Secondary:* to engage individuals in addiction treatment and/or other supports

*Source:* Canadian Research Initiative in Substance Misuses (CRISM). (2019). National injectable opioid agonist treatment for opioid use disorder clinical guideline. Author.



# iOAT IS ONE OF SEVERAL OPTIONS\* FOR PEOPLE WHO USE OPIOIDS

## OPIOID AGONIST TREATMENT (OAT)

- Oral administration of medications:
  - Buprenorphine/ naloxone (also known as Suboxone®)
  - Methadone
- Generally considered first line treatment for opioid dependence

## INJECTABLE OPIOID AGONIST TREATMENT (iOAT)

- For those individuals who have not responded to opioid agonist treatment (OAT); for whom OAT is not appropriate; and/or who have ongoing illicit injection opioid use

## PSYCHOSOCIAL TREATMENT INTERVENTIONS AND SUPPORTS

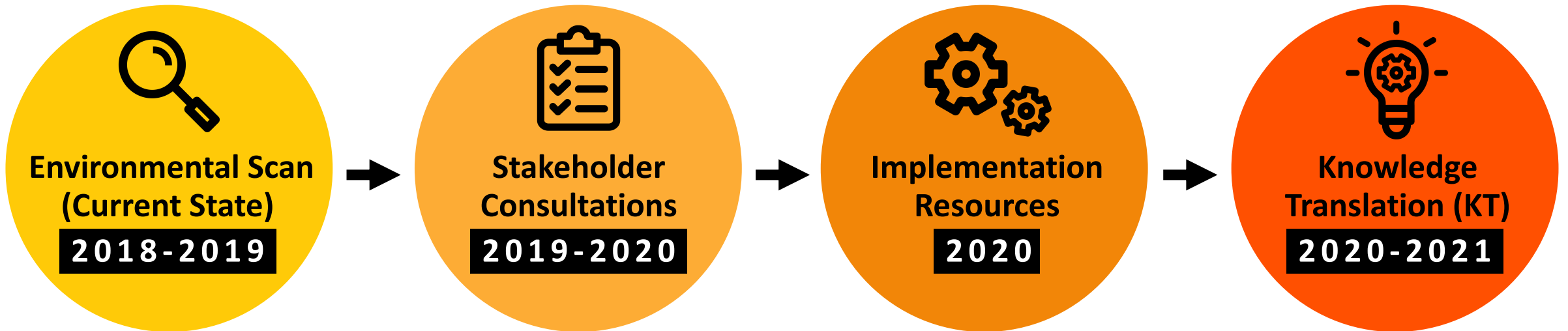
- To be offered in conjunction with medications

## HARM REDUCTION SERVICES

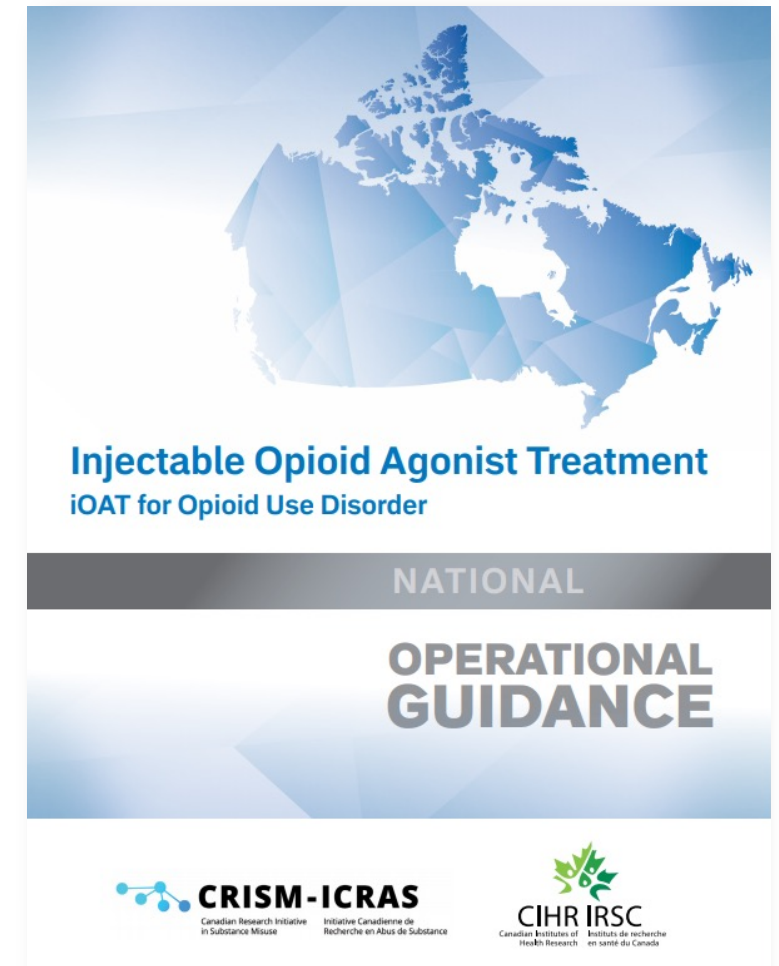
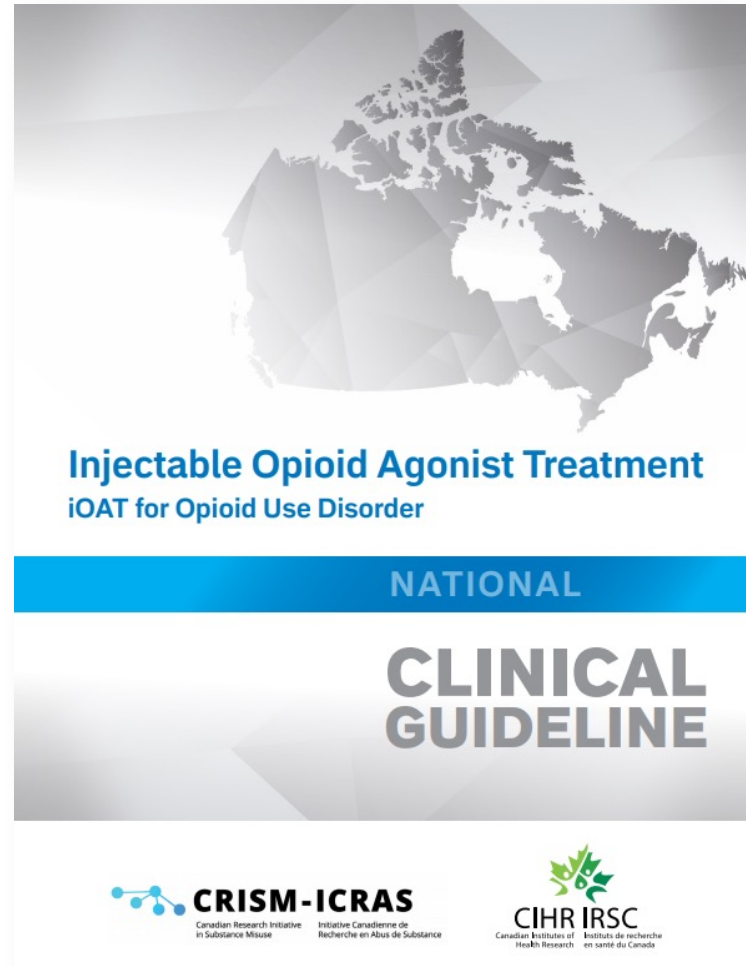
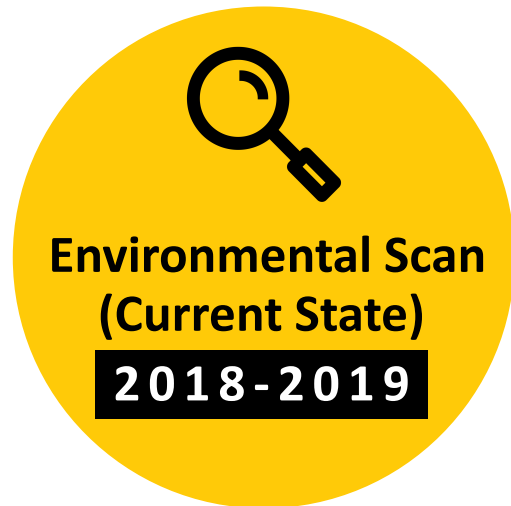
- To reduce adverse health, social and economic consequences of substance use and to promote treatment engagement
  - Take-home naloxone/injection supplies
  - Supervised injection, consumption and safer supply services

\* This presentation is focused exclusively on iOAT that is delivered according to national guidelines (i.e., supervised, self-injection of either prescribed diacetylmorphine or hydromorphone).

# PROJECT PHASES



The summary of the current state of iOAT in Canada was largely based on the work of CRISM (particularly its **clinical and operational guidelines** and 2018 environmental scan of iOAT programs in Canada).



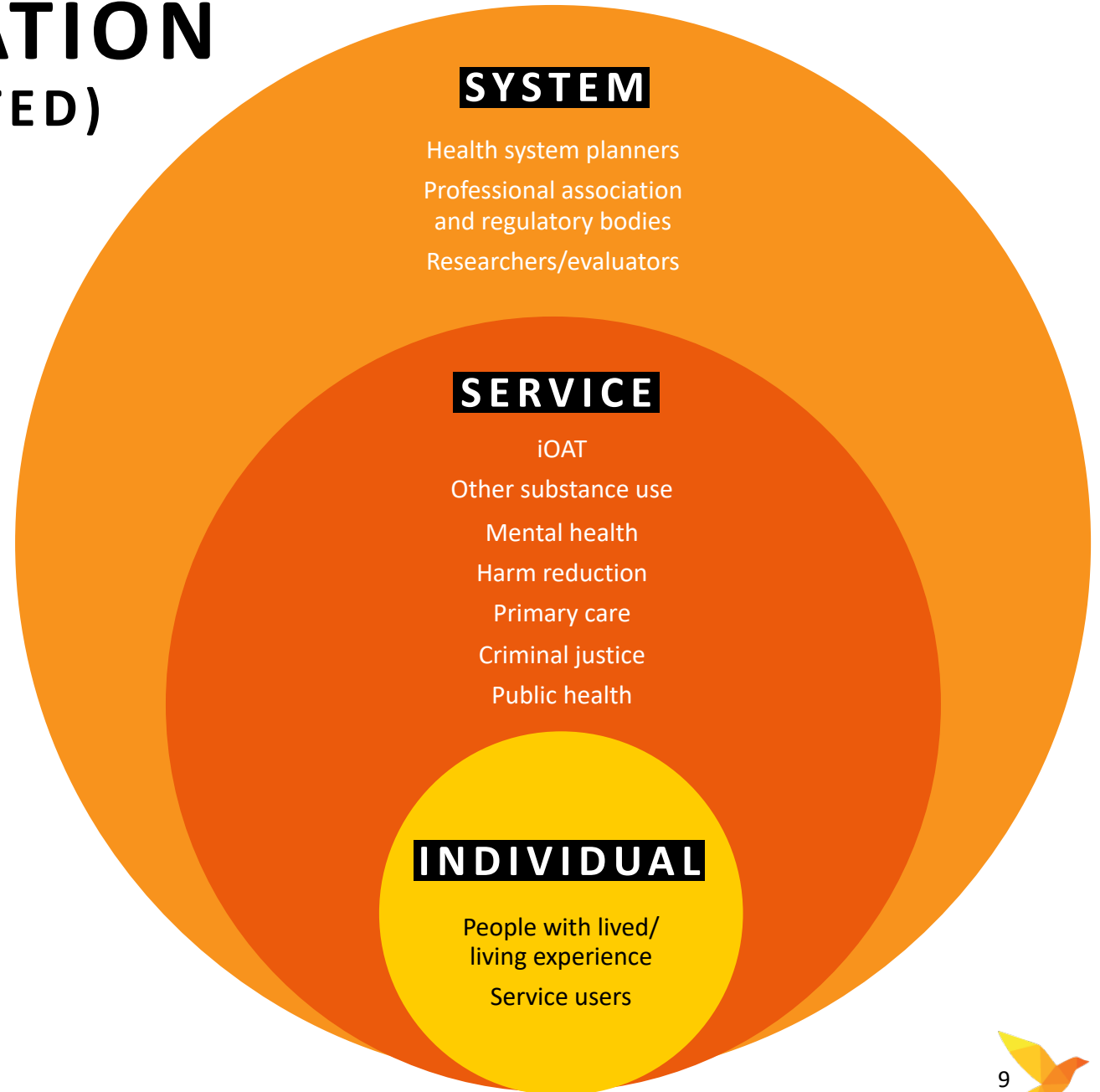


# LEVELS OF CONSULTATION (100+ STAKEHOLDERS CONSULTED)



Stakeholder  
Consultations

**2019-2020**

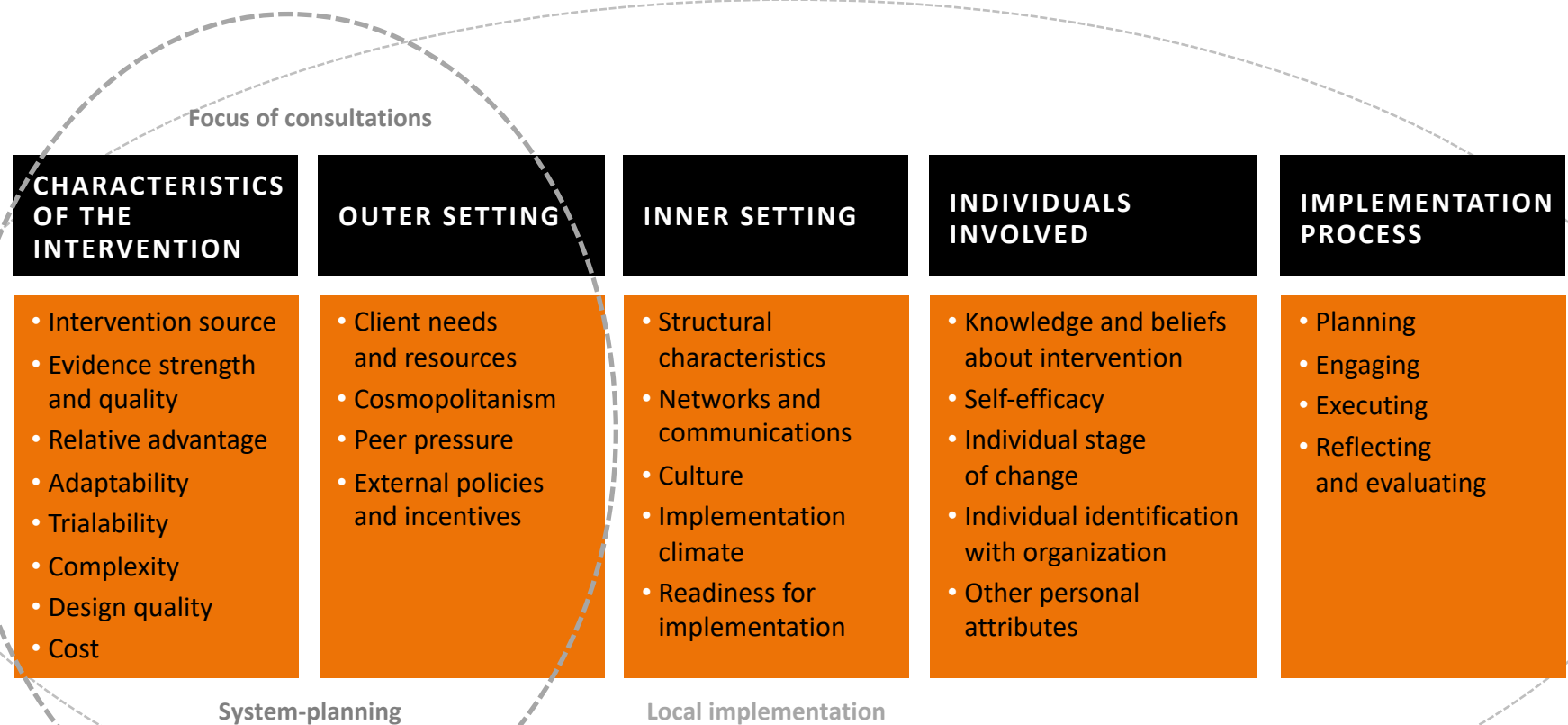


# APPLICATION OF THE CONSOLIDATED FRAMEWORK FOR IMPLEMENTATION RESEARCH (CFIR)



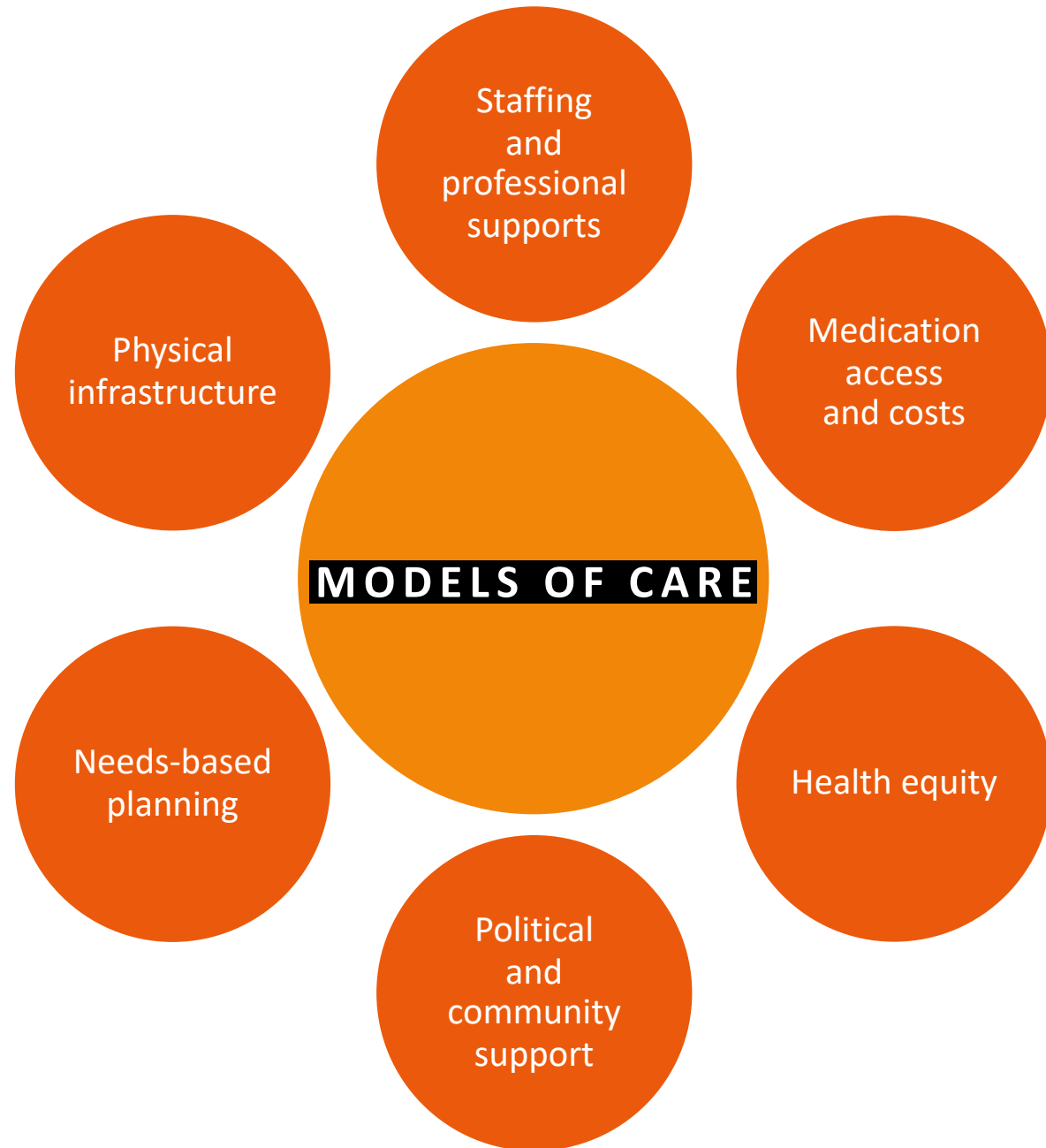
**Stakeholder Consultations**  
**2019-2020**

The project focused on the first two domains of the CFIR given their relevance to system-level planning for iOAT in the province.



# iOAT IN ONTARIO

## KEY CONSIDERATIONS



# MAIN FINDINGS

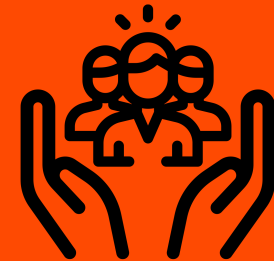
# 3 THINGS TO KNOW ABOUT iOAT



iOAT is a life-saving  
and life-enhancing  
medical intervention



iOAT is safe



iOAT is cost effective  
and good for  
communities

# iOAT IN ONTARIO

## CURRENT STATE

There is a substantial number of people in Ontario that could be saved by iOAT...



...but there is only one formal iOAT program available in the province (with a capacity to serve ~40 clients) and the waiting list to get into it is full

### How does this compare to other jurisdictions?

**British Columbia:** There are at least eight formal iOAT programs currently available in the province with a combined capacity to serve ~300+ clients at any given time. Three more programs are expected to be implemented in 2021. These programs are still largely pilot initiatives and dependent on federal funding. More work is needed to integrate and publicly fund iOAT as part of the provincial continuum of care. The province is also much further ahead in terms of easing regulatory restrictions to address the worsening opioid crisis during the COVID-19 pandemic.

**Europe:** The UK has provided unsupervised prescribed heroin treatment for over a century. It is now a standard treatment in Denmark, Germany, and the Netherlands. In Switzerland, iOAT is publicly funded and integrated into local addiction service networks.





**Comprehensive  
and dedicated iOAT  
program**



**Pharmacy-based  
iOAT  
program**



**Integrated  
or embedded iOAT  
program**

**THERE ARE SEVERAL  
iOAT SERVICE MODELS  
AVAILABLE TO MEET  
THE UNIQUE NEEDS  
OF COMMUNITIES  
ACROSS ONTARIO**



**Hospital-based  
iOAT  
program**

*Source:* Canadian Research Initiative in Substance Misuse (CRISM). (2019). National Injectable Opioid Agonist Treatment for Opioid Use Disorder Operational Guidance.



Both physicians and nurse practitioners have the authority to administer iOAT in Ontario. Much of the training and professional regulations needed to support this are already in place.

**More work may be needed to support medical practitioners so that they can offer iOAT.**



**SO...**

**WHAT'S HOLDING  
ONTARIO BACK?**

“

The only significant barrier to implementing iOAT programs in Ontario is the lack of coverage for people insured by the ODB [Ontario Drug Benefit program].

**Open letter to the government of Ontario signed by 410 service providers and researchers in 2019**  
[listhmonodb.wordpress.com](http://listhmonodb.wordpress.com)



# EFFECTIVE iOAT MEDICATIONS ARE NOT AVAILABLE IN ONTARIO

## DIACETYLMORPHINE (DAM)

- ... can be more effective than methadone for severe opioid dependence
- ... is currently not produced in Canada
- ... has been difficult to import to be used for iOAT in Ontario

## HYDROMORPHONE (HDM)

- ... is as effective as DAM (and can be more effective than methadone) for severe opioid dependence
- ... is approved for iOAT...
- ... is covered by some publicly-funded drug programs across Canada
- ... but not funded in Ontario at the concentration needed to offer iOAT widely

# OPTIONS TO INCREASE ACCESS TO iOAT MEDICATIONS IN ONTARIO

## SUPPORT DOMESTIC PRODUCTION OF DAM

- Domestic production makes it accessible in Ontario (because of lowered costs and no import caps)
- Canadian pharmaceutical companies are already interested



## LIST iOAT MEDS ON THE ONTARIO DRUG BENEFIT (ODB) PROGRAM

- Requires more and higher concentrations on ODB:
  - HDM: 50, 75 & 100 mg/mL options
  - DAM: 100, 150, & 200 mg/mL options



# MORE WORK IS NEEDED TO BETTER UNDERSTAND

- Effective implementation models and strategies
- How to effectively integrate iOAT within the broader continuum of health and social service supports
- Health equity considerations and impacts
- Impacts of policy decisions on clinical care
- Alternative forms of service delivery
- Needs-based planning
- Cost effectiveness in Ontario









**BUT** these gaps in knowledge should NOT be a reason to delay increasing access to iOAT.










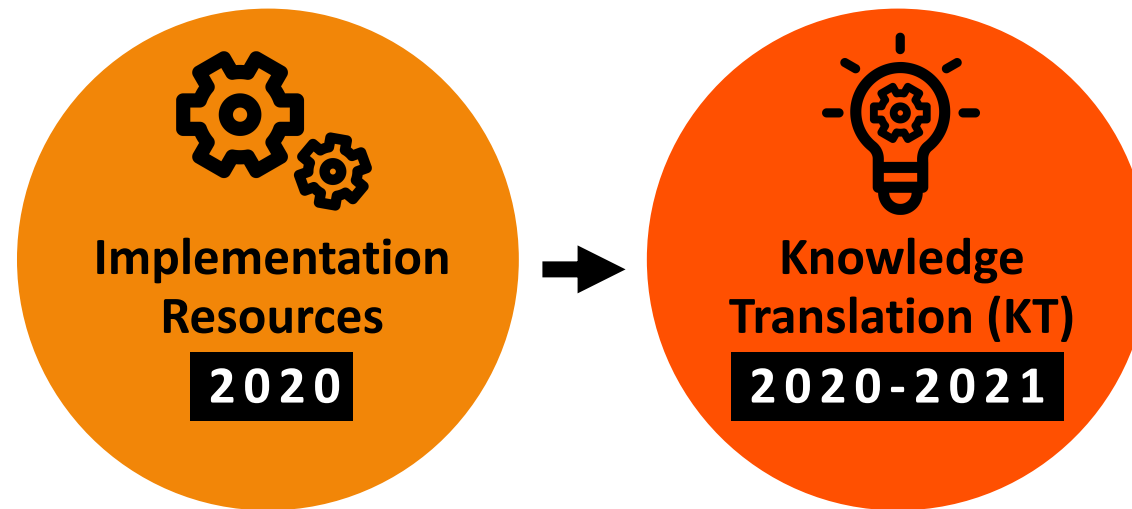
# BRINGING IT ALL TOGETHER:

## WHAT DOES IMPLEMENTATION SCIENCE SAY?

### Characteristics of the intervention

Evidence strength & quality	iOAT is safe and effective.	
Relative advantage	Studies have found iOAT may be better than methadone for many people with severe opioid dependence.	
Adaptability	There are multiple models available for adaptation in different communities and contexts.	
Complexity	iOAT requires some unique implementation infrastructure, some of which is already in place within potential services provider organizations. There are unknowns regarding how best to ensure equitable access to services, including in rural and remote regions. <b>Proceed, but with attention to ensuring equitable access.</b>	
Cost	iOAT is cost-effective.  Scale up is constrained by lack of access to medications through the Ontario Drug Benefit Program (ODB). Medication costs can be further reduced through domestic production of iOAT medications. <b>THIS IS A MAJOR BARRIER.</b>	  

Outer setting		
Client needs and resources	The need for iOAT is well established and increasing in the context of the COVID-19 pandemic. <b>More work is needed to effectively partner with individuals who use opioids to plan and implement iOAT more broadly in Ontario.</b>	 
Cosmopolitanism (extent to which services are well networked)	iOAT programs need fully functioning referral pathways to primary care, social services, and other recovery-oriented substance use and harm reduction treatment and supports. Existing programs such as Rapid Access to Addiction Medicine (RAAM) clinics, community health centres (CHCs) and harm reduction programs may be viable options to embed iOAT given their already established referral pathways. <b>Consideration needs to be given to regions where these services are limited (e.g., rural regions).</b> <b>Proceed, but increase appropriate services alongside increasing access to iOAT.</b>	 
Peer pressure	Ontario is behind other jurisdictions relative to the level of need for iOAT and there is a long history of advocacy work in the province to scale up iOAT (together with harm reduction services). There are no apparent reasons why Ontario shouldn't scale up iOAT given the experiences of other jurisdictions and the federal government's support of safer supply pilots.	
External policies and incentives	Many of the professional regulatory policies are already in place. This does not pose a major barrier. <b>More work may be needed to support medical professionals to overcome barriers and offer iOAT as part of their work.</b>	 



# KNOWLEDGE TRANSLATION (KT) PLANNING

## PRIORITIES/GOALS

 Advocate for central role of people with lived/living experience in planning, development, implementation and evaluation of iOAT programs

 Broaden support for iOAT in Ontario

 Advocate for appropriate listing of iOAT meds on the Ontario Drug Benefit (ODB) formulary

 Support efforts for a domestic producer of diacetylmorphine


 Support prescriber engagement in iOAT

 Support the development and implementation of evidence-based iOAT programs

 Influence research priorities related to iOAT



# KNOWLEDGE TRANSLATION RESOURCES



## Injectable Opioid Agonist Treatment (iOAT) in Ontario

In the four years between 2016 and 2019, more than 15,400 people died from opioid use, making it the most enduring public health crisis in recent Canadian history! The COVID-19 pandemic has intensified the opioid poisoning crisis in Ontario. Effective treatment for opioid dependence is one of several key strategies to address this crisis. Like other conditions, there are different forms of treatment available, depending on individual needs, the severity of issues, and how individuals respond to treatment. For individuals with severe dependence, injectable opioid agonist treatment (iOAT) has been shown to be effective and safe. Despite this evidence, and the increasing harms from the opioid crisis and the COVID-19 pandemic, iOAT is not widely available in Ontario. This snapshot describes what we know about iOAT and focuses in on its availability in Ontario.

### 3 THINGS TO KNOW ABOUT iOAT

- iOAT is a life-saving and life-enhancing medical treatment**  
For individuals with severe opioid dependence, iOAT is more effective than methadone (an oral opioid agonist treatment (OAT)) in reducing illicit drug use and connecting and keeping individuals in treatment.<sup>1</sup> Research has also shown that iOAT improves physical, psychological and social health and gives individuals stability and freedom to “organize, set goals, and plan for life... with a sense of hope and meaning.”<sup>2</sup>
- iOAT is safe**  
iOAT begins with a thorough medical assessment and self-injection of medication is done under supervision. Several large clinical trials in various countries have found iOAT to be a safe alternative to OAT, and it has been part of standard care in various European countries for decades.<sup>3</sup> iOAT is also a far safer alternative to dangerous illicit street drugs, which is currently a major driver of the opioid crisis in Canada and Ontario.
- iOAT is cost effective and good for communities**  
Without access to effective treatment, individuals with severe opioid dependence are at high risk of incredibly distressing and sometimes life-threatening withdrawal symptoms. Out of a desperation to avoid withdrawal, some resort to criminal activity to buy illicit drugs. By reducing the need to use illicit street drugs, iOAT also reduces criminal activity, making communities safer where iOAT programs are offered.<sup>4</sup> Because of these positive impacts, iOAT is also more cost effective than methadone.<sup>5</sup>

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Addictions & Mental Health Ontario | Dépendances & santé mentale d'Ontario

## Compendium of Resources to Support the Implementation of Injectable Opioid Agonist Treatment (iOAT) in Ontario

March 2021



Addictions and Mental Health Ontario  
1400-180 Dundas Street West  
Toronto, ON M5G 1Z8  
416-490-8900  
[www.amho.ca](http://www.amho.ca)



## Effective medications for severe opioid dependence are not available in Ontario

### Why that is and what needs to be done

**5000+ deaths related to opioid use between 2016 & 2019 in Ontario**

Injectable opioid agonist treatment (iOAT) is a safe and effective treatment option for individuals with severe opioid dependence. Currently, the medications used for iOAT are either not publicly funded in Ontario or are not funded at the required doses needed to be effective. Without access to these medications, an evidence-based, life saving, and cost-effective treatment is virtually unavailable to those who need it most. This snapshot focuses in on why that is and what steps are needed to fill this critical gap.

#### MEDICATIONS FOR INJECTABLE OPIOID AGONIST TREATMENT (iOAT)

**Diacetylmorphine (DAM)...**

- ✓ ...can be more effective than methadone for severe opioid dependence<sup>1</sup>
- ✗ ...is currently not produced in Canada
- ✗ ...is currently too difficult to import to be used widely for iOAT

**Hydromorphone (HDM)...**

- ✓ ...is as effective as DAM (and more effective than methadone) for severe opioid dependence<sup>2</sup>
- ✓ ...is approved and publicly funded for iOAT...
- ✗ ...but not at a sufficient dosage needed to be effective

*“Why wait until there’s irreversible damage? It’s like having life guards to prevent drowning. Don’t wait until they are at the bottom of the pool...”*  
— iOAT client

*“The only significant barrier to implementing iOAT programs in Ontario is the lack of coverage for people insured by the ODB (Ontario Drug Benefit program).”*  
— *Submitted by the researchers and recognized by all 10 service providers and researchers.*

#### OPTIONS TO INCREASE ACCESS

- Support domestic production of DAM**
  - Domestic production makes it accessible in Ontario (because of lowered costs and no import caps)
  - Canadian pharmaceutical companies are already interested
- List iOAT medications on the Ontario Drug Benefit (ODB) program**
  - Requires more and higher concentrations:
    - HDM: 50, 75 & 100 mg/mL options
    - DAM: 100, 150, & 200 mg/mL options

This snapshot was developed as part of a project led by Addictions and Mental Health Ontario (AMHO), with funding from Health Canada’s Substance Use and Addictions Program (SUAP). The goals of the project are to assist provincial governments and health authorities in determining whether iOAT programs should be expanded in Ontario, and, where the need for expansion is identified, to develop resources to support planning. For more information and resources regarding iOAT in Ontario visit [amho.ca/our-work/iOAT](http://amho.ca/our-work/iOAT).

<sup>1</sup> Oviedo-Joekes, et al. (2016). JAMA Psychiatry 73(5), 447-455.

Last updated February 2021

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“

Why wait until there's irreversible damage?  
It's like having lifeguards to prevent drowning.  
Don't wait until they are at the bottom  
of the pool...

**-iOAT client**

“

There's no neighbourhood too small  
or too privileged. People will be surprised  
how many of their own children, friends, parents  
are part of this situation...this opioid crisis.

**-iOAT client**

