REDUCING HEALTHCARE INEQUITIES: THE USE OF DIGITAL PLATFORMS AND VIRTUAL CARE

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- All parties involved in the creation of the following presentation are in no way affiliated with, are representatives for, or financially or otherwise compensated from any pharmaceutical companies that manufacture or distribute opioid agonist medications. The information presented reflects a comprehensive literature review, and the **collective expertise** and **experiences** from the authors.

OVERVIEW

- Substances of concern
- Healthcare inequities
- The Alberta Model
- External Collaboration
- Virtual Opioid Dependency Program (VODP)
- Virtual and digital healthcare's role
- Benefits vs drawbacks
- Recommendations

SUBSTANCES OF CONCERN

- Fentanyl
- Prescribed opioids
- Methamphetamine
- Crack/Cocaine
- Alcohol
- Nicotine
- Cannabis
- Tranquilizers

FENTANYL AND PRESCRIBED OPIOIDS

Prescription of opioids is declining due to college and government regulations; diversion to the streets is declining, and will be replaced by other illicit opioids

Fentanyl and its derivatives (Alfentanil, Sufentanil, Remifentanil and Carfentanil) are used as anesthetics and analgesics in both human and veterinary medicine (Carfentanil), they vary in strength and concentration, are far more potent than those available by legitimized means[1]

Fentanyl analogs, including fentanyl-laced heroin go by various street names such as white heroin, Perc-O-Pops, Chiclets, Apache, China Girl, White China, Dance Fever, Jackpot, Murder 8, TNT, Tango and Cash, Friend, Goodfella, and Redrum

The sheer variety of the drug, including emerging combinations, make toxicology testing and accurate death reporting extremely challenging

STRENGTH OF FENTANYL ANALOGUES

Fentanyl Analog Potencies Relative to Morphine

Fentanyl Analogs	Compared to Morphine
Fentanyl	80 to 100x
Acetylfentanyl	15x
Valerylfentanyl	<20x
Furanylfentanyl	20x
Butyrylfentanyl	20 to 25x
Acrylfentanyl	100x
3-Methylfentanyl	400x trans and 6000x cis isomers
Carfentanil	10000 to 100000x

1Table1

FENTANYL ADDITIVES

- Have been difficult to discover from routine testing, evolving strategies have allowed us to rapidly identify illicit drug formulations that account for overdose deaths; these emerging substances cause patients not responding to traditional rescue treatments
- Xylazine (veterinary tranquilizer)
- Protonitazene
- Etizolam
- Other synthetic benzodiazepines
- Their role in overdoses…

HEALTHCARE INEQUITIES IN NEWFOUNDLAND & LABRADOR

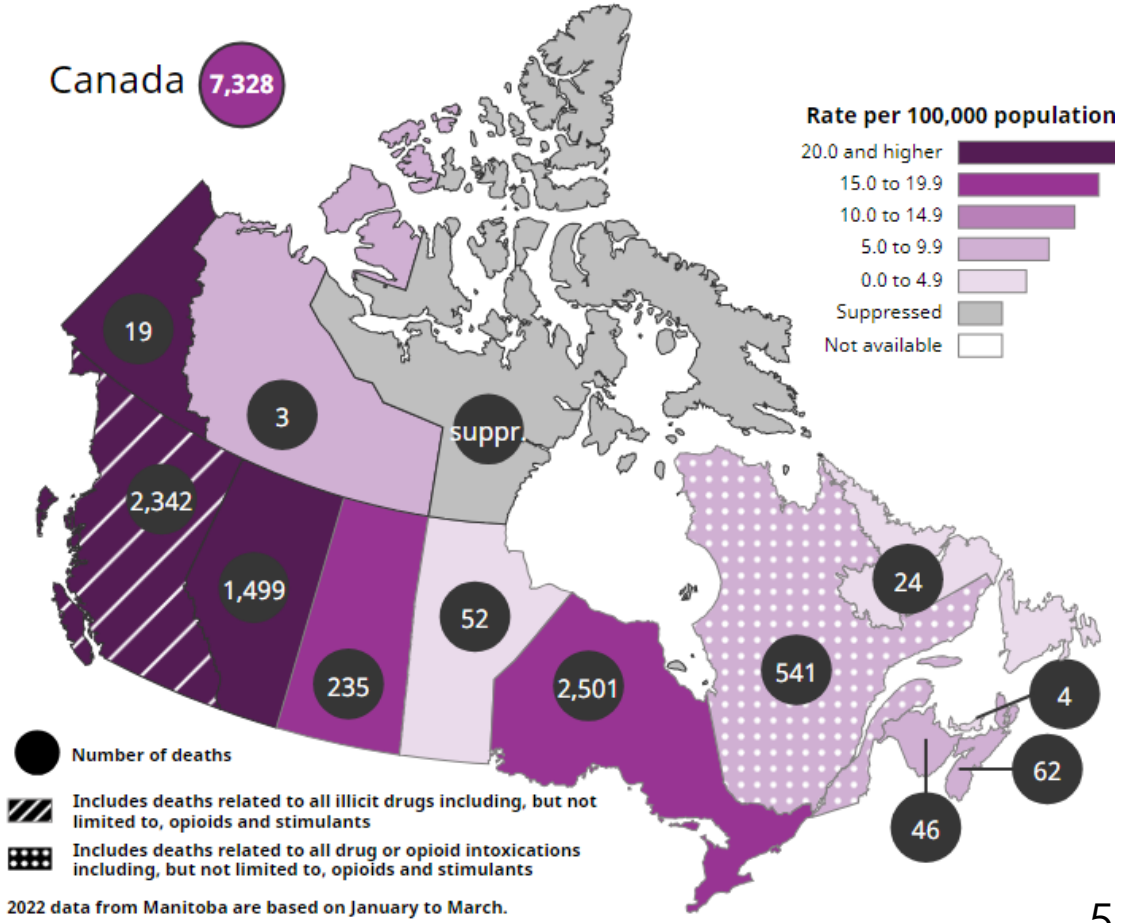
Canada has a large rural population; Newfoundland & Labrador has Canada's lowest population density[2]
Large aging population, low birth rate, migration out of province and chronic diseases are prevalent[2]
Inequities of social determinants of health negatively impacts patient and population health[2]
Access in urban vs rural areas is inequitable
Timely physician and health care provider access is an ongoing a crisis[2]
Varied medical fields require specialists
Staff recruitment and retention is an ongoing barrier to care particularly in rural and remote areas[2]
Addiction and mental health is a growing concern and equitable access to services require enhancement[2]

NEWFOUNDLAND & LABRADOR TRENDS FOR OVERDOSES AND DEATHS FROM DRUG-TOXICITY

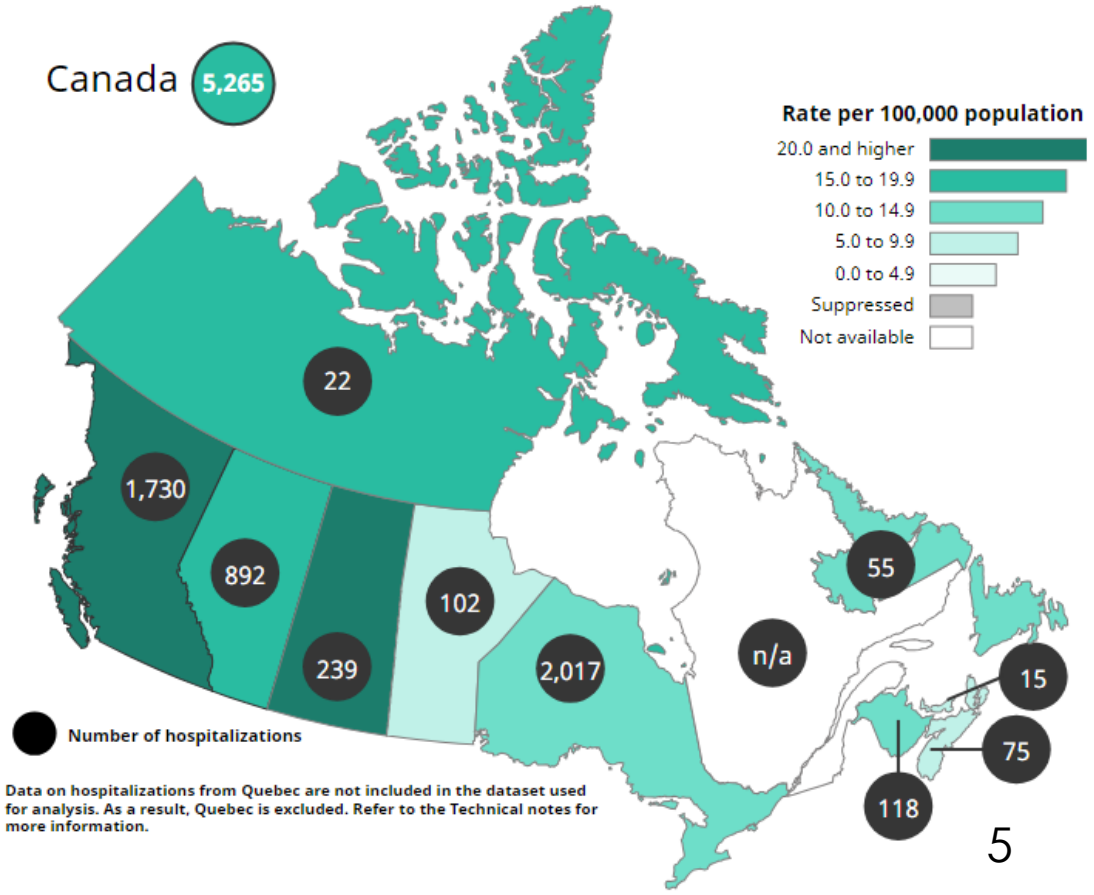
Overdose and deaths due to drug-toxicity has continued to rise since 2018[3]
The Chief Medical Examiner's office reported 35 deaths in 2018, and rose to 55 deaths by September 2022[3]
July 2023 saw 11 overdose deaths in one month[4]
Males have a higher rate of death secondary to drug-toxicity and typically range in age from 27-35[3]
Fentanyl-laced cocaine is a growing trend of concern among other adulterated substances[3]
Drug addiction is often concurrent with mental health concerns
Individuals prescribed Opioids often turn to fentanyl if they can no longer receive or afford prescriptions

CANADIAN TRENDS 2022 OPIOID OVERDOSES

- Typical street drug supplies are tainted with fentanyl
- Fentanyl's potency coupled with low tolerance means many unsuspecting people who use have increased rates of overdose and death
- No province, territory or population is "safe" from the risk
- Typical age of overdose or death is between 18-40



CANADIAN TRENDS 2022 OPIOID-RELATED HOSPITAL VISITS



- Hospitalization rates will rise with the tainted drug supply
- Undue burdens will be placed on ED staff and first responders
- Increased wait times will occur
- Less resources will be available for health crises that are non-overdose related
- Increased overall health care costs will be incurred

THE ALBERTA MODEL

- Address addiction and mental health through a variety of platforms
- Expansion of treatment centers
- Numerous safe consumption sites
- Narcotic Transition Services
- OUD treatment for incarcerated individuals
- Individuals can access in-person ODP facilities if they live in 10 urban areas
- Rural residents can access ODP services virtually
- All pharmacies and EDs across Alberta stock OAT
- Virtual care has removed access barriers for patients
- Virtual care ensures specialists are available and removes issues with staff recruitment and retention in rural areas

EXTERNAL COLLABORATION

- College of Physicians & Surgeons
- College of Pharmacists
- College of regulated professionals (RNs, Social Workers, etc.)
- First Nations
- Rural pharmacies
- Laboratory Services
- Provincial Prison system
- Government

ALBERTA'S VIRTUAL OPIOID DEPENDENCY PROGRAM (VODP)

- Created in 2017 out of an identified gap in opioid addiction care and a large rural population suffering with OUD
- Started with 6 staff members, a 6 day wait-time and served 40 communities
- Has since grown to over 100 staff members, no wait-time, and now serve 370 communities
- Partner with First Nation communities to collaboratively provide care from specified community needs
- Can start individuals on OAT if they are in police custody
- Asynchronized virtual assessment for OUD and OAT treatment for incarcerated individuals within 24 hours

VODP PROGRAM OVERVIEW

- No waitlist, immediate access to OAT
- Offered entirely virtually
- Multidisciplinary
- Multiple service streams to address various patient needs
- Short-term access or long-term maintenance

PATIENT ACCESS

Self-referral

- Call 1-844-383-7688 8am-8pm 7days/week, 365 days/year
- Intake completed with staff
- Methadone start requires Zoom with on call physician
- Buprenorphine start requires phone call with on call physician
- Rx provided same day of call

Health professional referral

Police cell starts

Incarceration

OPIOID AGONIST THERAPY (OAT)

- Buprenorphine
  - XR
  - Sublingual
  - Buccal
- Methadone
- Kadian
- Supportive medications for withdrawals

VODP SERVICE STREAMS

Same Day Start	Transitions Care	Intake Team	Low Barrier Team/Police Cell Starts	Ongoing Care
yVODP	First Nation Communities	Narcotic Transition Service - Physicians only	RAAPID Consultation - Physicians only	Incarcerated Population - Physicians only

VODP STAFF

- Physicians
- RNs, RPNs & LPNs
- Social Workers
- Addictions Counselors
- Therapy staff
  - Counselors/ Mental Health Therapists
  - Recreation Therapists
  - Peer Support Workers
- Clinical Supervisors
- Management
- Administration Support Staff
- Program Planning & Evaluation
- Support student learning via practicums

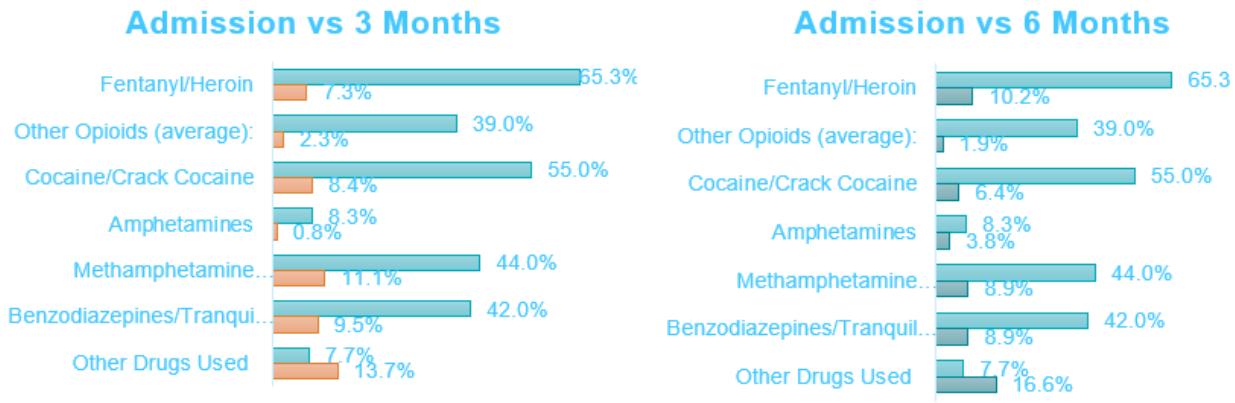
VODP STATISTICS

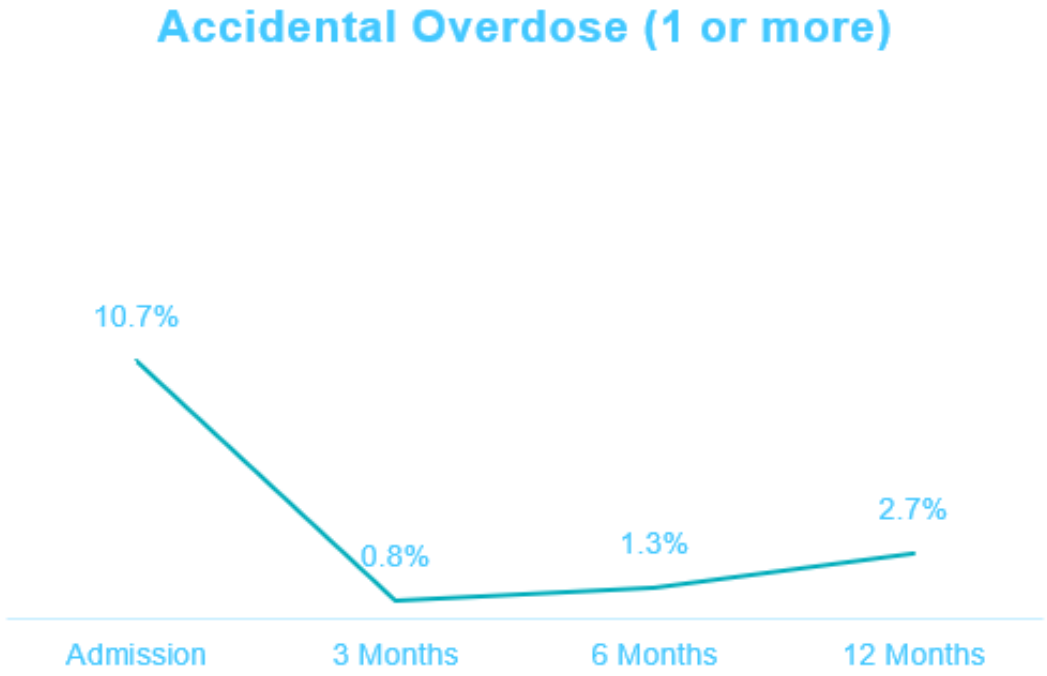
2017/2018 Central Zone	2018/2019 Central & South Zones	2019/2020 All AHS Zones	2020/2021 All AHS Zones & Corrections	2021/2022 All AHS Zones & Cross Sector	2022/2023 All AHS Zones & Police Detention Sites
Unique active clients = 201 Median wait time = 6.0 days	Unique active clients = 528 Median wait time = 4.0 days	Unique active clients = 1225 Median wait time = 0.0 days	Unique active clients = 2123 Median wait time = 0.0 days	Unique active clients = 3491 Median wait time = 0.0 days	Unique active clients = 7036* Median wait time = 0.0 days
Over 40 home communities served	Over 100 home communities served	Over 175 home communities served (869 Same Day Starts)	Over 219 home communities served (1,395 Same Day Starts)	Over 249 home communities served ***(331 total)*** (2,911 Same Day Starts)	Over 244 home communities served ***(369 total)*** (4,727 Same Day Starts)

*November 6, 2022: Launch 5 Connect Care

VODP STATISTICS

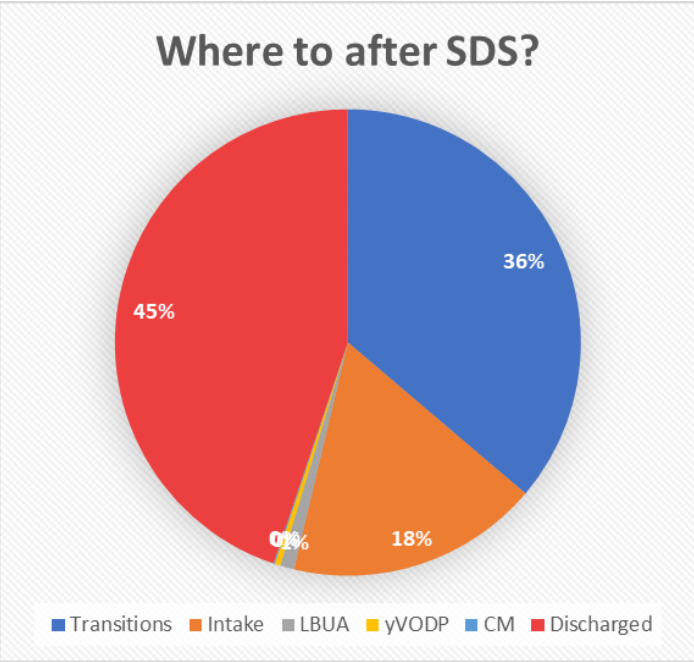
Outcomes that Matter: Reduced Drug Use & Overdoses *(2021/2022)*

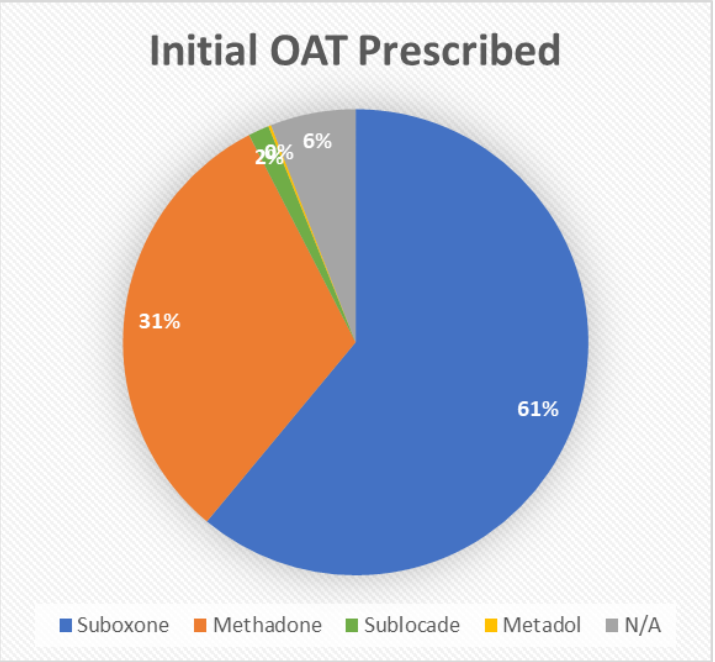




VODP STATISTICS

- Approximately 85% total volume of OUD individuals accessing ODPs across the province access VODP to initiate OAT
- Same Day Start Team cross sectional timeframe from November 2022 to February 2023:
  - 1094 assessments completed with 55% retention rate into other areas of the program





TREATMENT AND RECOVERY FOCUS

- Biopsychosocial approach
- Treatment orientation; medical stabilization is a key outcome
- Utilization of all tools available to engage and retain patients
- Multidisciplinary case management model
- Patient-centered care
- Utilizing OAT in different facets: harm reduction, treatment, and rescue

WHY ACTION IS NEEDED NOW

- Drug toxicity is on the **rise**; overdose rates will inevitably rise
- Significant **negative impact** to working age and birthing age populations and First Nation communities
- Implementing infrastructure now will allow the health care system to adequately **prepare** for the influx of overdose and death rates that is imminent secondary to synthetic opiates
- A predominant aging population with chronic conditions will cause **increased** health expenditures and stress current health care systems
- An explosion of drug toxicity and its associated outcomes will **overtake** existing services and infrastructure and make access to health care scarce for older populations experiencing non-addiction related health crises

VIRTUAL AND DIGITAL HEALTHCARE PLATFORMS

This is the action needed to mitigate the growing crisis of addiction and mental health conditions among an already **scarce** demographic of 18-40-year-olds

The age demographic most likely to require these services are working, have families, multiple responsibilities and require services to meet them where they are at so they can remain **contributing** members of society

They are versed in utilizing digital and virtual health care platforms with ease

Requires **collaboration** across service streams, health care zones, health professionals, professional regulatory bodies, and governments

Enhances **continuity of care**

Can **decrease** overall health care expenditures and staff burdens

ISSUES WITH IMPLEMENTATION OF NON-VIRTUAL CARE

- Staffing issues in rural areas
- Lack of skillset in dealing with addiction and mental health
- Management of continuity of care; siloed systems
- Integrating a biopsychosocial model in a rural population
- Coordination between allied health professionals
- Management of high-risk, high-needs opioid dependent patients in rural populations/taking pressure off existing GPs
- Lack of patient attendance due to chaotic lifestyles

BENEFITS AND DRAWBACKS OF VIRTUAL CARE

Benefits

1. Virtual and digital platforms are becoming more common place (e.g. Zoom)
2. Patients are **favorable** to these platforms because of convenience
3. Assists in removal of access barriers; increases **equity**
4. **Reduces** first responder and hospital burdens
5. Can **utilize** existing infrastructure
6. **Increases** continuity of care
7. **Meets** patients where they are at

Drawbacks

1. Can take extensive collaboration across service streams to close gaps
2. Physical assessments, routine or urgent, can be problematic
3. May require enhanced funding for initial start up phase
4. Older patients may have more difficulty navigating virtual platforms

CLINICAL IMPLICATIONS

Cannot physically assess patients – is this a concern?
Patient buy-in….. a change of perspective
Poor communication between agencies, limited technology hampers patient care, EMR updates, prescribing and dispensing discrepancies
As the supply becomes more toxic, **the less we prescribe the problem will escalate**
On the other hand,… treatment can be extended to managing concurrent disorders, mental health issues, alcohol, methamphetamine, etc.
Dedicated Psychiatrist added to team

ACCESS THROUGH ED

- EDs are often **first, and only, point of contact** for people with OUD, they can be started on OAT in ED
- Will **prevent** withdrawals and cyclical use of opioids to manage withdrawals upon discharge
- Provides **immediate, safe and effective** evidence-based treatment for OUD
- Potential for shortened hospital stays and early discharge, **enhances** cost-savings strategies
- **Shorter stays** of OUD patients increases access to ED beds for other patients with emergent medical concerns
- Stabilization on OAT prior to discharge helps **mitigate further overdoses**, cyclical re-admissions to EDs, burden on first responders and increases updated of ongoing care in the community[7-9]
- Provide appropriate patient **follow up** with virtual or other out-patient ODPs

WHAT WE'VE LEARNED IN ALBERTA

- Buprenorphine as the **gold standard** for OUD treatment
- Initiation on buprenorphine through micro-dosing is problematic
- Patients take longer to stabilize with methadone
- Methadone has higher risk to community safety if diverted, and patient safety in case of an overdose if they continue to use illicit drugs
- Virtual care is easily **accessible** for patients and is highly regarded
- Services can be **merged** through first responders, EDs, cells and prison systems, and First Nation communities through virtual care to provide continuity of care

UTILIZING EXISTING INFRASTRUCTURE

Virtual care can be incorporated into existing infrastructure

Telehealth is restrictive and not superior to organizing in person appointments

Improves access to supports within rural communities

Allows rapid access to Buprenorphine

Working with the existing Hub and Spoke Model

A central location of excellence and services; a central phone number for referral as outpatients, ED, and self referral all managed via central pool

Dedicated provincial on-call service

SUMMARY

OUD is a **public health emergency** and requires immediate action

OUD can **affect any age and status** demographic, urban and rural; virtual OAT and OUD care can provide timely access for those who do not live, or access in-person ODPs

The typical age demographic requiring ODP services (age 18-40) are highly versed in accessing technology vital for virtual care

Newfoundland & Labrador has a sparce population widely distributed, requiring the implementation of virtual care

Virtual care in Alberta **has reduced access barriers and increased equity**; this model can be mirrored with great success

RECOMMENDATIONS

- Provincial government will need to be involved from the beginning to expedite and in some cases enforce collaboration
- Specialized fee for service structure that allows physicians to work in virtual care exclusively will enhance physician recruitment and retention
- Experienced Addiction Medicine leadership familiar with digital healthcare
- Addiction medicine physicians who are both experienced, qualified and innovative
- Management/Directorate skilled with a **goal-oriented focus** and **flexible style of delivery**
- Allied health care staff are integral, and must be passionate and aligned with the philosophy of the program
- Develop as you go, **flexibility is essential to be responsive to the needs of the population**

QUESTIONS

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