

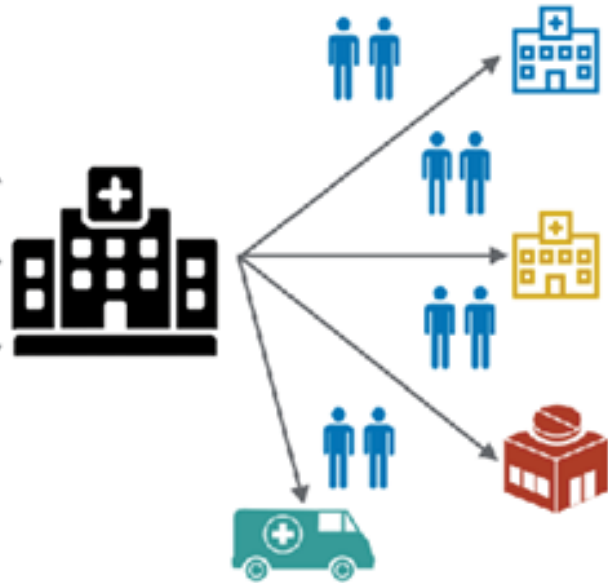
## EMS Mobile Integrated Healthcare (MIH) City Center Team (CCT)



# Mobile Integrated Healthcare (MIH) Model

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**Access – Anywhere! Anytime! –**  
to urgent hospital level medical care



- ✓ Navigate vulnerable (complex, fragile, high needs) patients away from an overreliance on acute care resources by reducing their barriers to primary and specialty care
- ✓ Leverage the proven ability of EMS to provide mobile medical treatment
- ✓ Increase health equity, improve health outcomes

# Mobile Integrated Healthcare Teams

- ✓ Single or Paired Community Paramedic and/or Nurse Practitioner Units
  - Community Response Teams (urgent low acuity illness)
  - Crisis Response Unit (mental health)
  - City Centre Teams (mental health and addiction)
- ✓ Supported with direct physician or NP consultation
- ✓ Paramedics are provided with community health education and clinical rotations – 8 weeks
  - New Community Paramedic program with Mount Royal University
- ✓ Urgent Health Center on Wheels



# Homelessness and Healthcare

Homelessness is a complex, chronic medical condition -

- Higher incidence of illness.
  - **Addiction**
  - **Mental health disorders**
  - **Premature Deaths**
- Lower likelihood of accessing primary care
  - **Traps individuals in homelessness**



# Homelessness and Healthcare

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## Deliver Health Equity

- Institutional and organizational barriers  
Traditional resources may lack flexibility, availability, and responsiveness.
- Social determinants of health  
Traditional resources may lack understanding and compassion.
- Inappropriate reliance on acute and urgent care.  
Episodic, often ineffective, further stigmatizes, traumatizes and disconnects from resources

## Calgary Recovery Services Task Force

To improve health equity for people living with homelessness they require:

- Mobile outreach
  - Multidisciplinary collaboration
  - Increased continuity of care
1. Right care
  2. Right time
  3. Right place
  4. Right provider
  5. Right patient



# Homelessness in Calgary

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## Calgary

### HOMELESSNESS

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Total number of people experiencing homelessness:	2911 (2018)
Unsheltered:	125 (2018)
Emergency Sheltered:	1374 (2018)
In transitional housing:	903 (2018)
In provincial corrections and health facilities:	575 (2018)
In provisional accommodations:	1478 (2018)
Experiencing chronic homelessness:	68% (2018)

### Overview

#### POPULATION

1,246,337 (2017)

#### UNEMPLOYMENT RATE

7.9% (November 2018)

#### MINIMUM WAGE

\$15/hr (as of October 1, 2018)

#### TOTAL NUMBER OF SHELTERS

12 (2016)

#### TOTAL NUMBER OF BEDS

1949 (2016)

# Trapped in Homelessness, Disconnected from Care

## “Jay”

Encountered with severe  
frostbite in shelter.

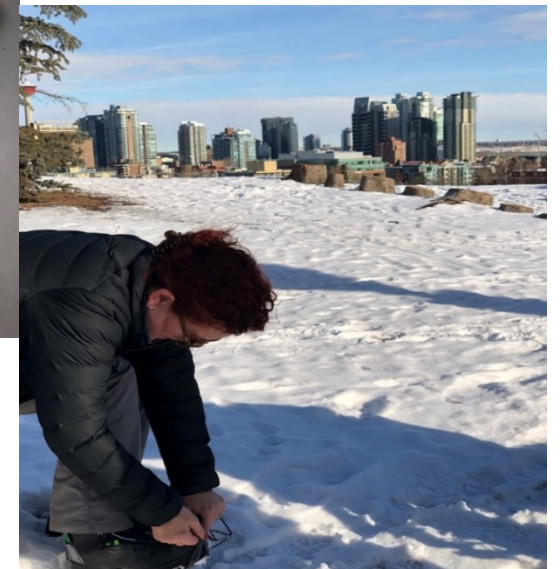
- 28 year old man
- Untreated schizophrenia
- Substance use disorder
- Malnutrition
- Poor dentition
- Chronic homelessness



# The Mobile Urgent Care

CCT provides interventions typically only available in hospital or clinic setting:

- Comprehensive medical assessment
- Physician or Nurse Practitioner directed care
- IV medication and fluid administration
- Prescription facilitation and oral medication administration
- Withdrawal management
- Initiation of Opiate Agonist Treatment (OAT) and connection to Addiction Medicine
- Urgent mental health crisis management and connection to Mental Health resources
- Specimen collection, including Point of Care Testing
- Wound closure and care
- Palliative care support
- Facilitation of urgent diagnostic imaging
- Follow-up care and connection to family and specialty medicine.





# The Collaboration – Physicians and Nurses

- ✓ Health equity can **only** be achieved collaboratively
- ✓ NO! to hot potato medicine
- ✓ Interdisciplinary/Diversity
- ✓ Must “take care” of each other
- ✓ Communication & availability
- ✓ Ongoing learning together
- ✓ CPs optimize health resources
- ✓ CPs = avatars (or a Swiss Army knife)



# Healthcare and Housing

While addressing health needs CCT is able to connect clients with housing advocates and other social and financial supports. Healthier can mean more easily housed. Removing distress helps improve likeliness to:

- ✓ Meet application deadlines
- ✓ File taxes
- ✓ Attend appointments
- ✓ Get housed!



# Community of Practice



Alberta

Calgary Homeless  
FOUNDATION



CHH | Collaborative for  
Health and Home

Calgary



UNIVERSITY OF CALGARY  
O'Brien Institute for Public Health

# A Home or a House of Cards?



Keep healthy to help keep housed and be there as a team to stabilize and support a return to housing.



# The City Center Team – Evaluation

## Patient and care provider surveys

- Non-stigmatizing, compassionate care that increased ability & willingness to be connected with further support
- Reduced barriers to appropriate care.
- **“CCT went above and beyond caring for me.”** - person living with homelessness

## Data

- 2700 patient events/year.
- Average 225 patient events/month.
- 145 patient events involving suboxone for 47 discreet patients.



# Opioid Replacement Therapy

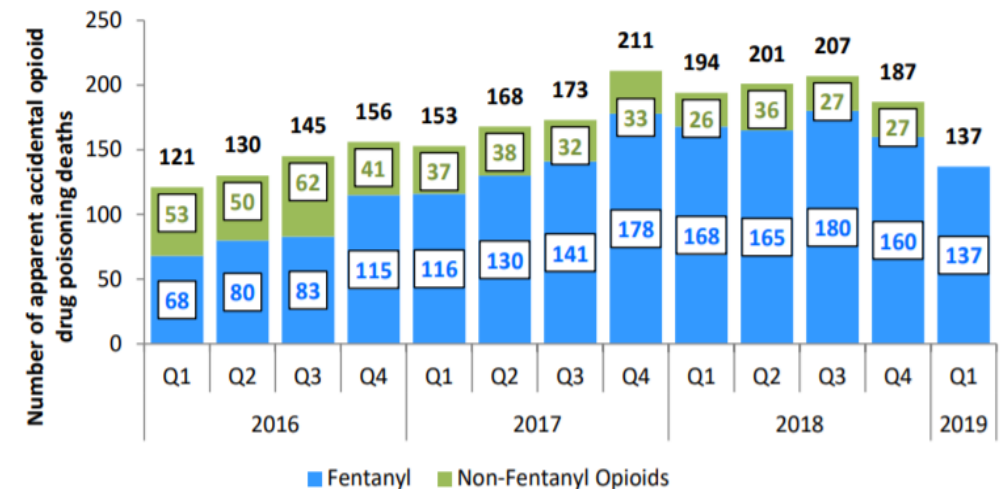
## Immediate access to Opiate Substitution Treatment

- ✓ In Oct 2017 CCT in Calgary started connecting OUD patients with suboxone in community.
- ✓ Partnership with AHS Virtual Opioid Dependency Program
- ✓ Connection to other programs i.e. Methadone

## Mortality data: Accidental opioid related poisoning deaths (includes apparent cases)

### Fentanyl and non-fentanyl opioid related poisoning deaths

Figure 1: Number of accidental opioid related poisoning deaths, by quarter. January 1, 2016 to March 31, 2019.



\*Only fentanyl related poisoning deaths are available for most recent quarter

- Since January 1, 2016 **2,183** individuals have died from an accidental opioid related poisoning in Alberta.

# CCT's Collaboration with Calgary SCS

## Sheldon M. Chumir – SCS

- May 28, 2018 – August 29, 2019
- **204** patient care events
- **57** discrete patients

## Primary Clinical Impression

Infection	71
Substance Use Disorder	44
MSK	24
RESP	20
WOUND	12
Not documented	10
GI/GU	9
Palliative, Neuro, Other	7

# Medical Direction

1. Most Responsible Provider – Family Physician, Specialist, On-Call Facility Physician, Nurse Practitioner
2. Dedicated MIH On-Line Medical Control (OLMC) Physician



**First  
Pathway**



**Most  
Responsible  
Physician**



**Second  
Pathway**



**MIH  
OLMC**



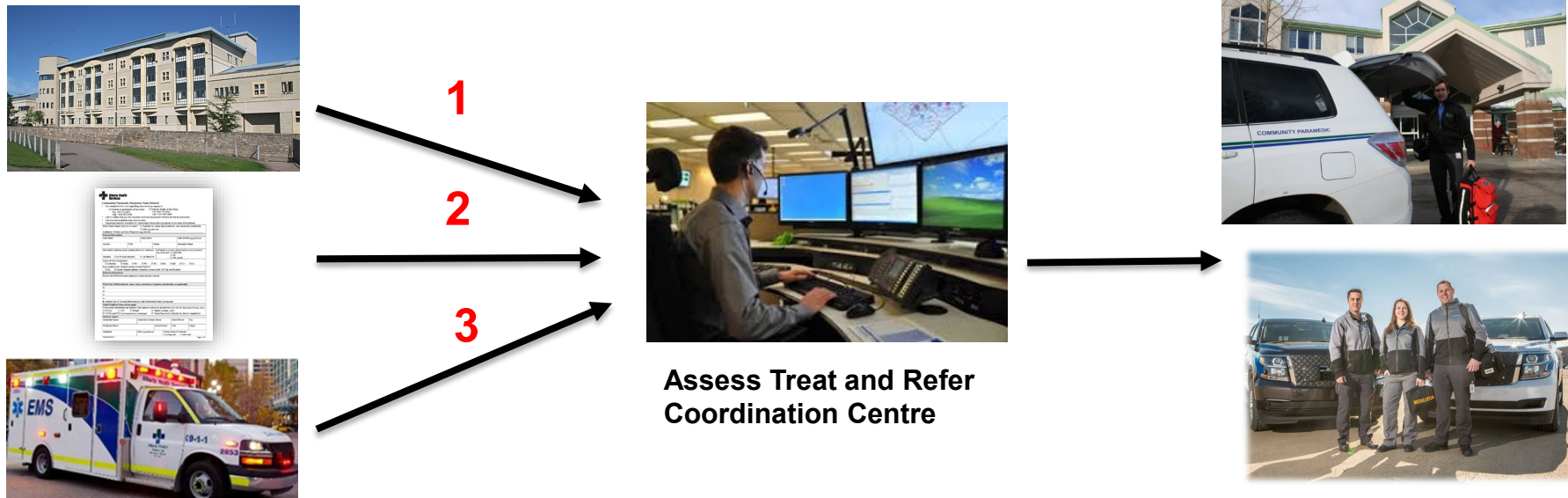


# Accessing MH Services

**Access Point 1** – Community healthcare staff directly request Community Paramedic services via phone

**Access Point 2** – Physician or clinics request services via referral form

**Access Point 3** – EMS crew referral via phone



# Assess Treat and Refer (ATR) Program

- ✓ Provide EMS and Community Health staff with real-time solutions for non-emergent patients
- ✓ Opportunity to connect patients with community health services when they choose not to be transported
- ✓ Coordination centers – Edmonton (North Sector) and Calgary (South Sector)
- ✓ Provincial Coverage
- ✓ Interface with existing dispatch services



# Provincial Mobile Integrated Healthcare Coverage

Calgary Zone 8 units

- *City Center Team (CCT)*

Edmonton Zone 7 units

- *City Center Team (CCT)*
- *Crisis Response EMS (CREMS)*

Central Zone (Red Deer & Camrose) 5 units

North Zone (Grande Prairie Peace River) - 4 units

South Zone (Medicine Hat and Lethbridge) 6 units

*Includes smaller communities within a 50km geographical distance*



# Crisis Response EMS (CREMS) Team

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In collaboration with AHS Addictions and Mental Health, the CREMS team includes a Paramedic and a Mental Health Therapist. This team provides timely mental health and crisis intervention, providing referrals and access to extended health services, thereby keeping patients in the community.

- Edmonton – Connected to 911 EMS calls and the Distress Line
  - Targets high frequency EMS users
- Can provide additional case management and immediate connection with existing Mental Health and Addiction
- Higher utilization from individuals with a fixed address than CCT

# Community Response Team (CRT) Hybrid

Community Response Teams provide medical assessments, diagnostics and treatments for health concerns that are not currently being managed because of the difficulties association with homelessness, mental health issues and addiction. Expansion of services beyond continuing care, family physicians and acute care referrals.

- Central Zone (Red Deer)
- South Zone (Lethbridge & Medicine Hat)
- Non-dedicated resource limits volume, follow up, settings



## The Future? Combined CCT & CREMS Unit

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Provides mobile urgent clinical care in any community setting with enhanced ability to address mental health crises and provide better connection to mental health resources and urgent case management.

- Staffed by one Community Paramedic and one Mental Health Therapist/Clinician
- Opportunity in MIH locations without dedicated CCT units currently
- Coverage would be 12 hours/day, 7 days/week.

# Thank You

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