Alberta Health Services

EMS Mobile Integrated Healthcare

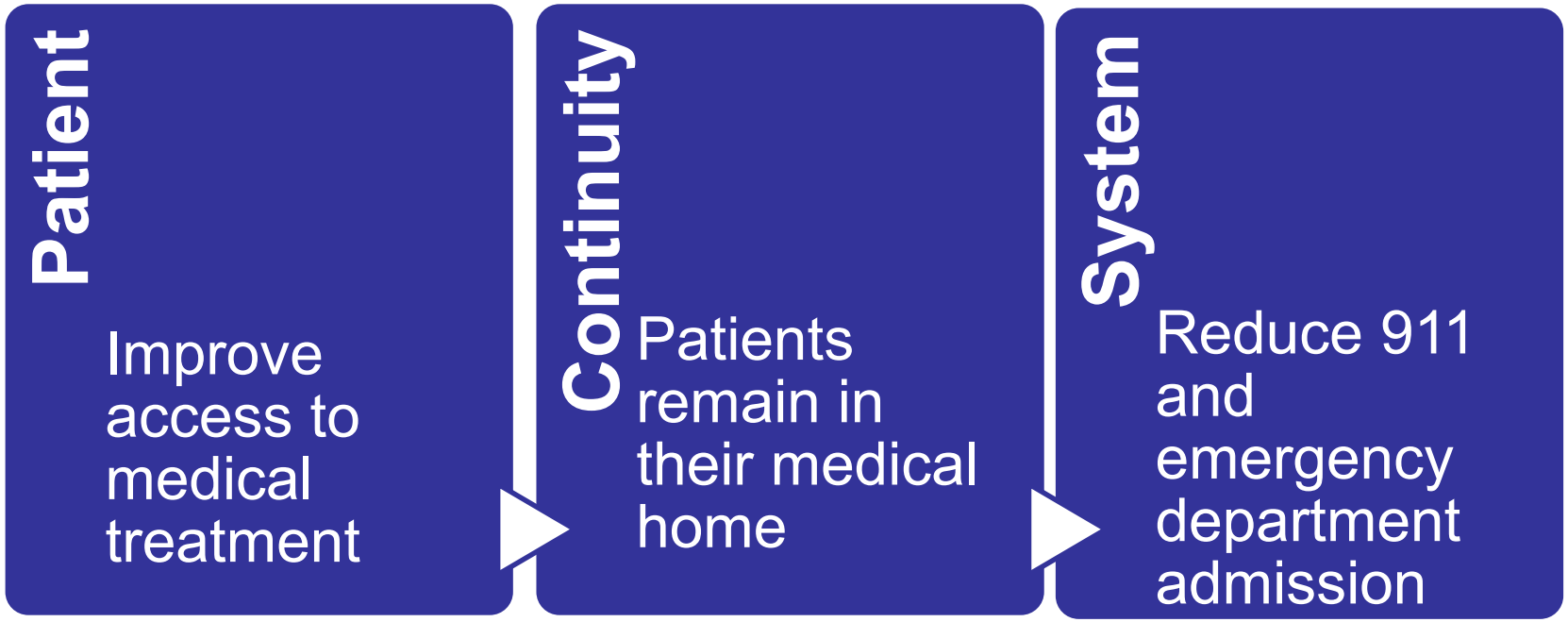
Presentation Objectives

1. Understand EMS Mobile Integrated Healthcare (MIH) Model
   - Community Paramedic and other MIH Teams

2. Understand the Collaborative Practice Model between Community Paramedics and Primary Care

Alberta Health Services

Mobile Integrated Healthcare Program Goals



Barriers to Accessing Care

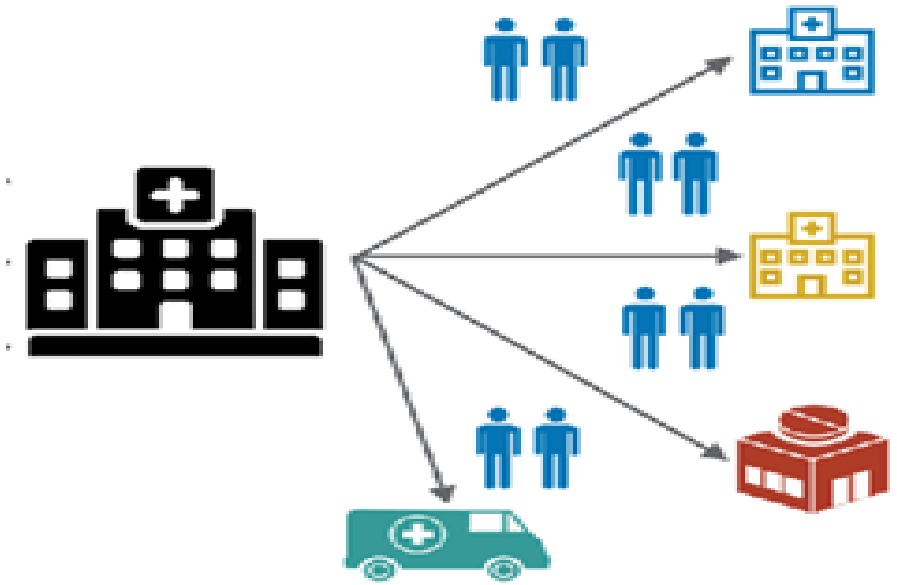
EMS and Emergency Department Impact

"Joyce, how do you spell 'juggling'?"

- ED wait times are up 11% from 2016 and 17% from 2011
- 48% of ED patients are classified as low acuity and 1% are admitted
- 83% of ED visits are discharged home
- 43% of EMS transports are for people >65yrs
- Older adults are vulnerable to adverse outcomes related to ED visits

Opportunity

Anywhere, Anytime, Access to non-emergent hospital level medical care



- ✓ Moving patient care outside of the hospital
- ✓ Using the success and proven ability of paramedics to provide mobile medical treatment
- ✓ Re-frame the Paramedic scope of practice

Community Paramedicine

…is an innovative health care delivery model that applies the paramedic scope of practice to non-emergent medical

- ✓ Support acute episodic illness - usually one to five days
- ✓ New medical treatment options for people in the community

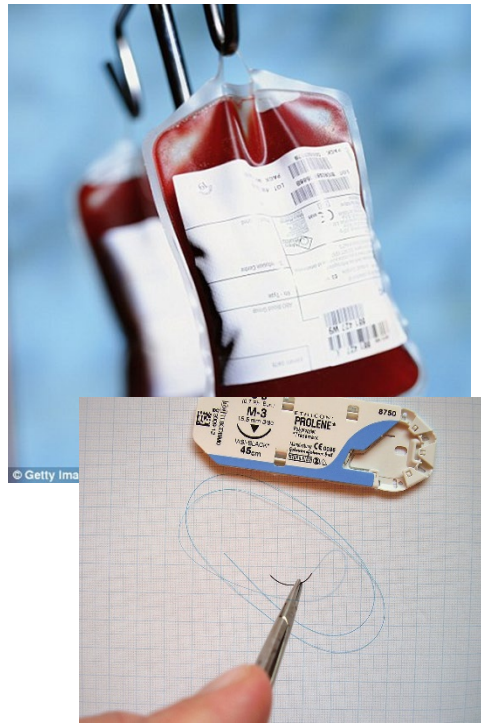
Mobile Integrated Healthcare Teams

- ✓ Single or Paired Community Paramedic and/or Nurse Practitioner
  - Community Response Teams
  - Crisis Response Unit
  - City Centre Teams
- ✓ Supported with direct physician of NP consultation
- ✓ Paramedics are provided with community health education and clinical rotations – 8 weeks
  - New Community Paramedic program with Mount Royal University
- ✓ No cost to the patient

"Urgent Health Center on Wheels"
90 Minute Benchmark Response

Clinical Services / Interventions

- CVC & IV rehydration
- IV, SQ, IM, PO, PORT & PICC medication administration including IV antibiotics
- Specimen collection (blood, urine, wound)
- Arterial blood gases
- Orthopedic splinting, slabbing and casting
- Blood transfusions
- Extensive medication formulary available (60 + stocked)
- Urinary catheterization
- Wound closure & care (tissue adhesive, sutures, dressings, staples)
- Prescription facilitation
- Facilitated DI transports
- Coordination of healthcare resources



Target Populations

- ✓ High users of acute care with medical co-morbidities
- ✓ Vulnerable seniors and individuals with cognitive impairment or physical disabilities
- ✓ Stable patients who require expedited work-up / short-term interventions

Common Patient Care Presentations

Top 3 Clinical Presentations:

1. Respiratory (dyspnea, cough, pneumonia, COPD exacerbation)
2. Cardiovascular (hypertension, CHF exacerbation)
3. GU / GI (nausea / vomiting, UTI, dehydration)

Other Common Clinical Presentations:

4. Behavioural (delirium, confusion)
5. Neurological (headache, vertigo, weakness, chronic pain)
6. Musculoskeletal (pain, swelling)
7. Skin / wound care (lacerations, rash, infections)

Provincial Community Paramedic Coverage

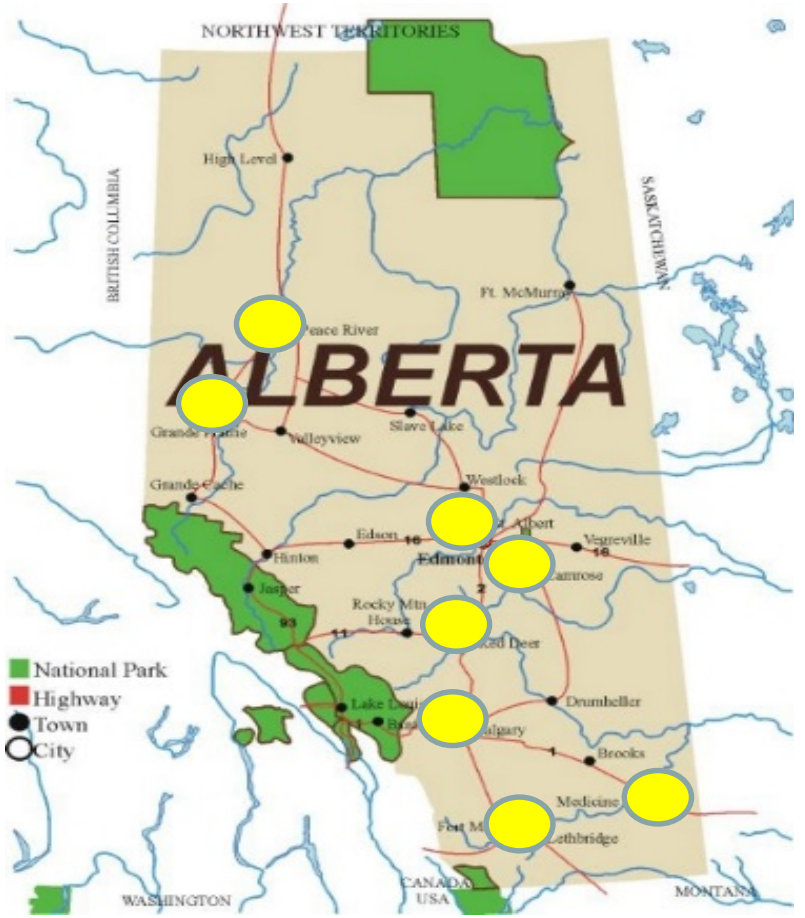
2013 - Calgary Zone – *8 units*

2014 - Edmonton Zone – *7 units*

2018 - Central Zone (Red Deer & Camrose) – *5 units*

North Zone (Grande Prairie & Peace River) - *4 units*

South Zone (Medicine Hat and Lethbridge) *6 units*



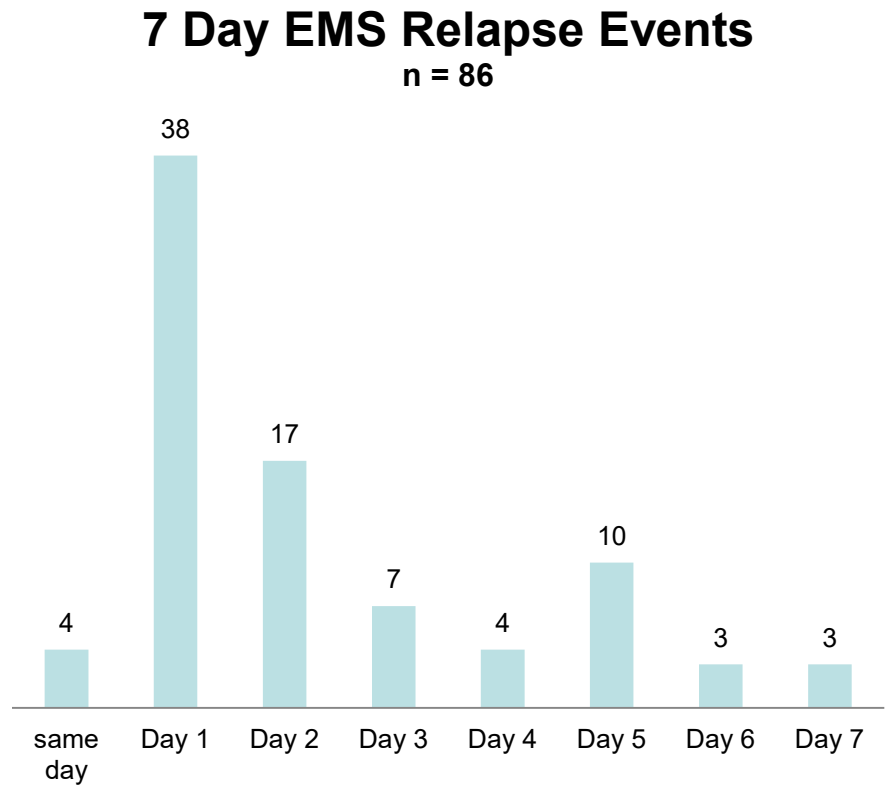
Includes smaller communities within a 50km geographical distance

Building System Capacity

There were 11,522 patients care events in 2017 helping Albertans avoid unnecessary EMS usage and emergency departments visits

Health Outcomes

- Each patient was assessed to determine if there was an EMS event within 7 days of being seen
- **95%** of patients treated in place improved
- **5%** still required an ED or acute care admission
- No reported adverse outcomes or increase rates of mortality or morbidity



Estimated Cost Benefit

Cost compared to an EMS/ED admission

$1100.00 per event

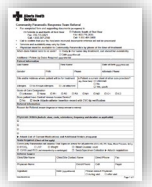
$4.8 million annual cost avoidance or cost capacity building

Accessing MIH 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 (fall 2018)



1

2

3

Assess Treat and Refer Coordination Centre

Medical Consultation

1. Most Responsible Physician – Family Physician, Specialist, On-Call Facility Physician
2. MIH OLMC Physician

First Pathway

Second Pathway

CARE CUSTOMIZATION

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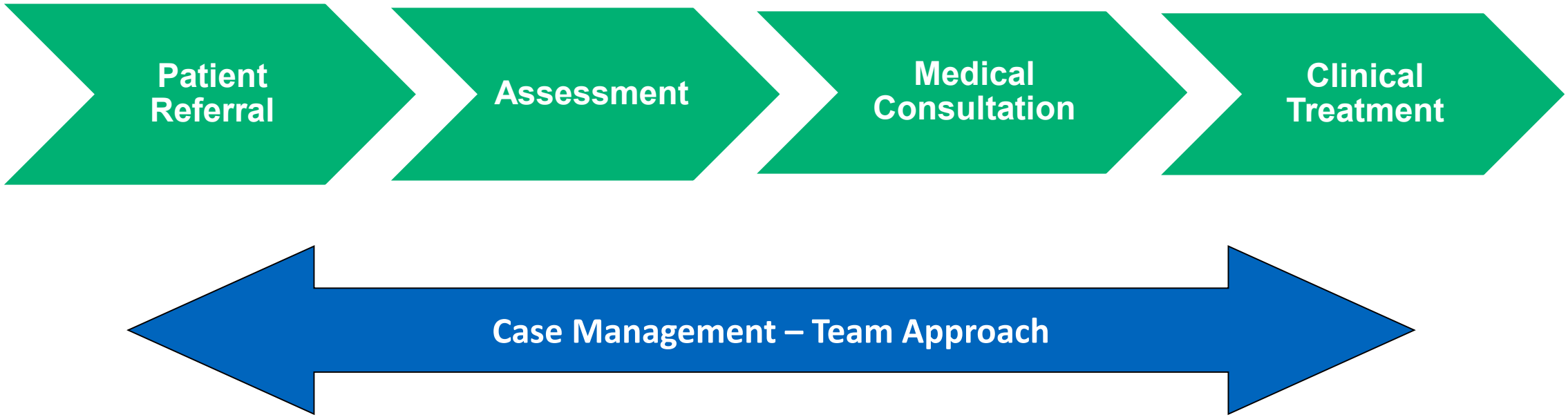
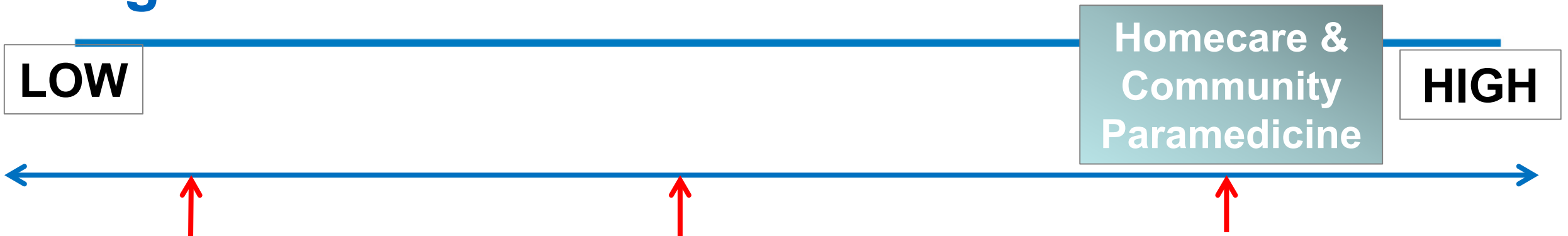
MIH Model of Care Continuum



Program Partnerships

- Home Care
- Continuing Care
  - Supportive Living (3/4/4D)
  - Long Term Care Sites (LTC)
  - Personal Care Homes (PCH)
- Contract Service Providers
- Complex Chronic Disease Management Clinic (CCDMC)
- Cardiac Function Clinics (CFC)
- Family Care Clinics (FCC)
- Primary Care Networks (PCN)
- Community Shelters
- Emergency Medicine
- Internal Medicine
- Rapid Access Unit (RAU) at South Health Campus
- Lab Services (CLS)
- Diagnostic Imaging (DI) Department
- AHS EMS & Inter-Facility Transport (IFT)
- Palliative Services
- Public Health Cancer Care
- Anticoagulation Clinic
- Transfusion Medicine
- Mental Health and Addictions
- Urgent Care Centres

Integration Continuum



Simple cooperation
- Services linked through referrals
- Client/patient is the main link

Coordination of services
- Multi-disciplinary network
- Separate structures
- Separate goals

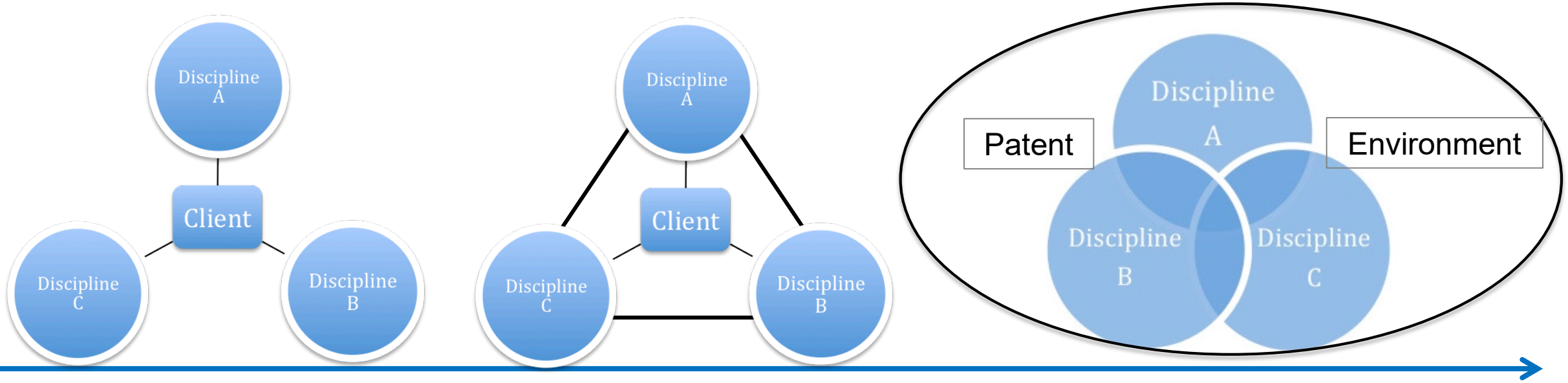
Full integration
- Multi-disciplinary teams
- Within a single organization
- Pooling services at all points in a community
- Single care plan addressing health and social needs of client/patient

Three Multi-Professional Models

Multi-disciplinary

Inter-disciplinary

Trans-disciplinary



LOW

"Integration Continuum"

HIGH

Key Elements of Collaborative Care

- ✓Common Vision
- ✓Clear Communication
- ✓Understanding Roles
- ✓Trust and Respect
- ✓Process and Organizational Structure
- ✓Sharing of Information

Follow Up and Transition Care Planning

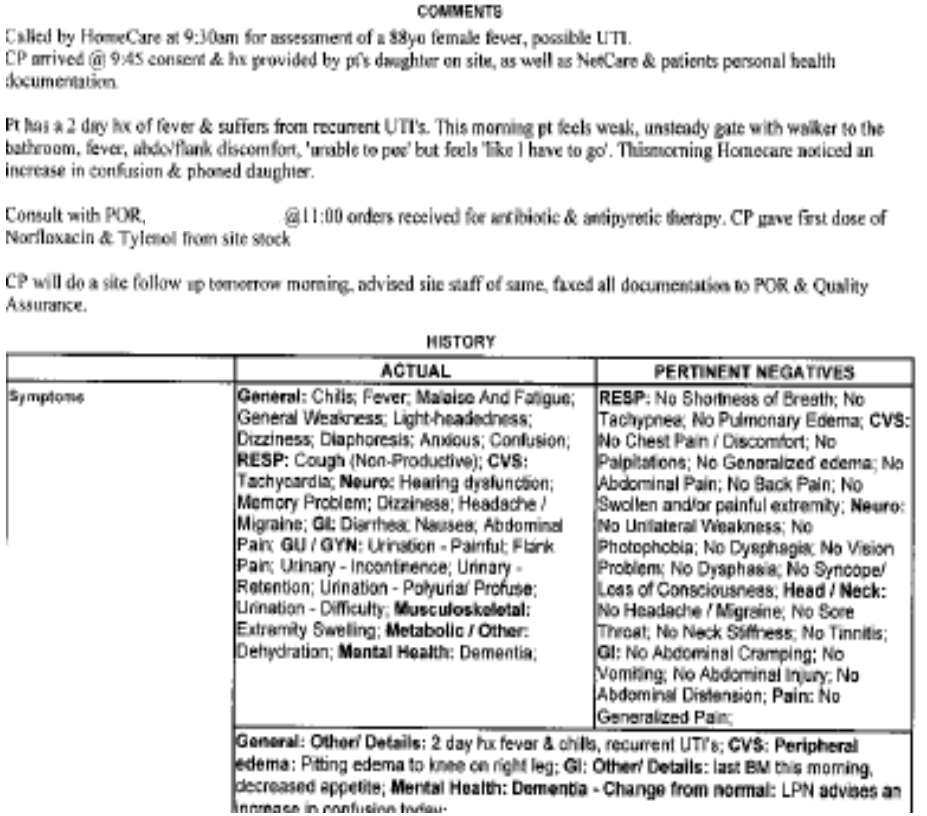
Team Based Approach

Communication and Consultation

- ✓ Homecare Case Manager
- ✓ Family Physician, Nurse Practitioner or Specialist
- ✓ Site Staff
- ✓ Family
- ✓ Mental Health Therapists
- ✓ Social Workers

Documentation – Information Sharing

- Electronic patient card record states all recommendations and summarizes the management of the client's health in collaboration with other members of the health care team
  - ✓ Faxed to homecare case manager
  - ✓ Faxed to primary care provider
  - ✓ Placed in consultation section at site
  - ✓ Document in shared electronic patient care record (when applicable)



COMMENTS

Called by HomeCare at 9:30am for assessment of a 88yo female fever, possible UTI.
CP arrived @ 9:45 consent & hx provided by pt's daughter on site, as well as NetCare & patients personal health documentation.

Pt has a 2 day hx of fever & suffers from recurrent UTI's. This morning pt feels weak, unsteady gate with walker to the bathroom, fever, abdo/flank discomfort, 'unable to pee' but feels 'like I have to go'. Thismorning Homecare noticed an increase in confusion & phoned daughter.

Consult with POR, @11:00 orders received for antibiotic & antipyretic therapy. CP gave first dose of Norfloxacin & Tylenol from site stock

CP will do a site follow up tomorrow morning, advised site staff of same, faxed all documentation to POR & Quality Assurance.

HISTORY

	ACTUAL	PERTINENT NEGATIVES
Symptoms	**General:** Chills; Fever; Malaise And Fatigue; General Weakness; Light-headedness; Dizziness; Diaphoresis; Anxious; Confusion; **RESP:** Cough (Non-Productive); **CVS:** Tachycardia; **Neuro:** Hearing dysfunction; Memory Problem; Dizziness; Headache / Migraine; **GI:** Diarrhea; Nausea; Abdominal Pain; **GU / GYN:** Urination - Painful; Flank Pain; Urinary - Incontinence; Urinary - Retention; Urination - Polyuria/ Profuse; Urination - Difficulty; **Musculoskeletal:** Extremity Swelling; **Metabolic / Other:** Dehydration; **Mental Health:** Dementia;	**RESP:** No Shortness of Breath; No Tachypnea; No Pulmonary Edema; **CVS:** No Chest Pain / Discomfort; No Palpitations; No Generalized edema; No Abdominal Pain; No Back Pain; No Swollen and/or painful extremity; **Neuro:** No Unilateral Weakness; No Photophobia; No Dysphagia; No Vision Problem; No Dysphasia; No Syncope/ Loss of Consciousness; **Head / Neck:** No Headache / Migraine; No Sore Throat; No Neck Stiffness; No Tinnitis; **GI:** No Abdominal Cramping; No Vomiting; No Abdominal Injury; No Abdominal Distension; **Pain:** No Generalized Pain;
	General: Other/ Details: 2 day hx fever & chills, recurrent UTI's; **CVS: Peripheral edema:** Pitting edema to knee on right leg; **GI: Other/ Details:** last BM this morning, decreased appetite; **Mental Health: Dementia - Change from normal:** LPN advises an increase in confusion today.	

Patient and Provider Experience

- **“not certain now what we would do without this program**. It alleviates so much stress on the patient and family. It also **relieves the stress on the health care facilities**.”

- “beneficial for patients who wait until they are so ill and then present in ED and **get admitted”**

“ a hospital emergency visit is extremely difficult on her. Having needed to access 911 a couple weeks prior with my mom, I can personally speak to the benefits of the Community Paramedic experience.”

Thank You

Contact Information:

ryan.kozicky@ahs.ca
www.ahs.ca/communityEMS