



CREMS OVERVIEW

The purpose of this document is to provide an overview of the CREMS pilot and next steps in program rollout to the rest of the Toronto Central LHIN and Toronto EMS catchment.

Issue

Many 911 calls require ambulance dispatch but do not warrant transport to hospital. Even when they do, the hospital ED is often an expensive substitute for other health delivery options. In both instances, there may be opportunity for intervention and support to (1) improve the health-related quality of life of consumers and (2) reduce the incidence of avoidable ambulance dispatch and ED presentation.

Pilot

Community Referrals by EMS (CREMS) is a Solutions¹ pilot launched in the spring of 2006 with the participants shown right.

The objectives were to (1) improve the range and responsiveness of support available to healthcare consumers and (2) reduce EMS calls, and ED presentations and representations, by making referrals to community-based healthcare organizations.

Provider	Organization
EMS	Toronto EMS
HOSPITAL	Toronto East General Hospital
CCAC	Toronto CCAC Now part of the East York CCAC Toronto Central CCAC
CSS	Community Care East York Senior Link/Neighbourhood Link Woodgreen Community Services
OTHER	COTA

The pilot received the first ever Minister's² Award in Innovation for Meeting Community Needs through Integrated Care in 2006.



¹Solutions is a voluntary healthcare collaborative. Member agencies include: Albany Clinic, Community Care East York, COTA, Flemingdon Health Centre, Neighbourhood Link/Senior Link, Nisbet Lodge, Partners for Health, SETO, Sherbourne Health Centre, South Riverdale Community Health Centre, Toronto East General Hospital, Toronto EMS, Toronto Public Health, Wellesley Central Health Corporation, Woodgreen Community Services, and the former East York and Toronto Community Care Access Centres (now both part of the Toronto Central Community Care Access Centre).

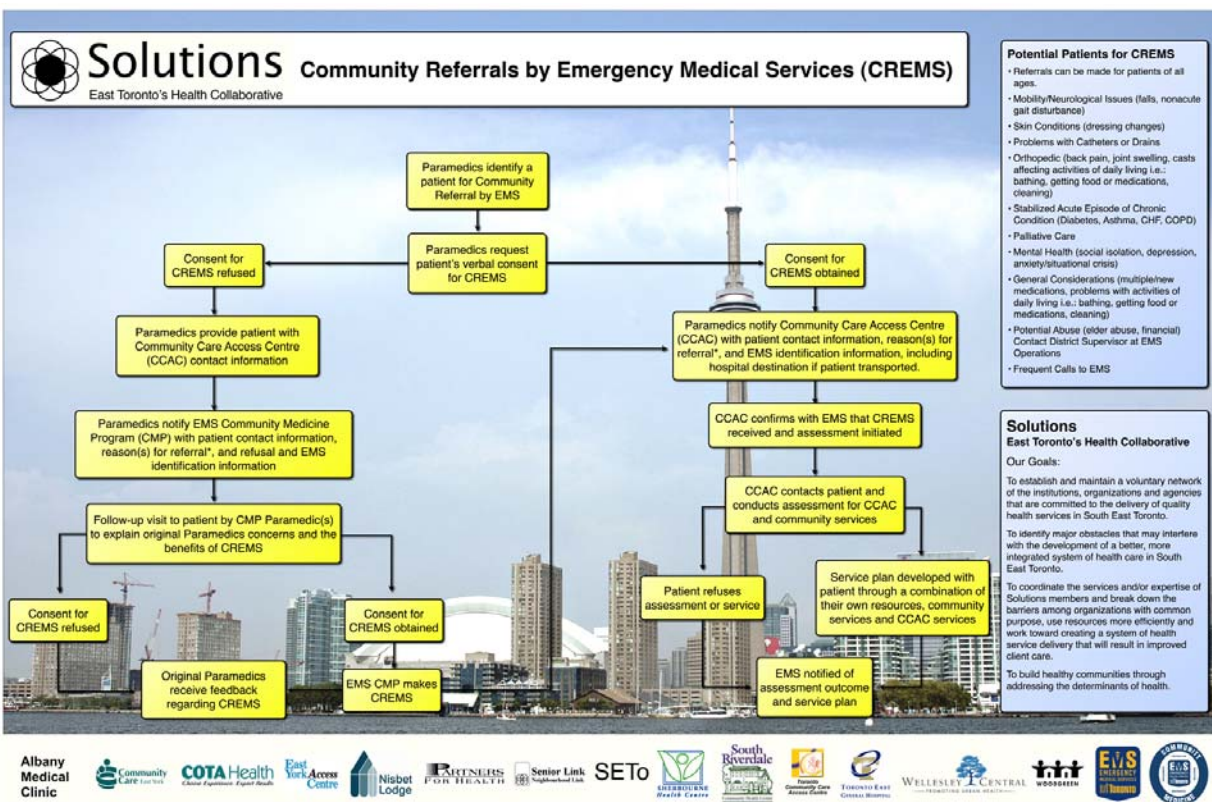
²The Innovations Expo was designed to highlight achievements, partnerships and innovations in Ontario that provide leading edge local solutions to specific health care delivery challenges. Minister Smitherman presented the award to the Solutions' Community Referrals by EMS (CREMS) project, which was selected from 600 submissions to receive the award.

Service Model

The CREMS service model is predicated on the fact that referrals are a critical component of the health care system. While paramedics are an integral part of that system, they traditionally have not been recognized as a point of referral for the at-risk and in-need people who call 911 for EMS assistance.

The basic EMS response protocol is to administer medical treatment or provide some other type of assistance (i.e. a lift assist) and then either: 1. transport the individual to hospital or 2. leave them in their home.

This protocol was expanded in the pilot to include a third option: community referral if appropriate. The referral is made to the CCAC which coordinates an assessment of need and linkage to service (CCAC and/or community services). The pilot process is shown in the following poster created for Solutions by Toronto EMS.



The referral criteria was broad, and indicated that referrals could be made for people of all ages.

- Mobility/neurological issues (falls, non-acute gait disturbance)
- Orthopedic (back pain, joint swelling, casts affecting activities of daily living)
- Stabilized acute episode of chronic condition (diabetes, asthma, CHF, COPD)
- Skin conditions (dressing changes)
- Mental health (social isolation, depression)
- Frequent calls to EMS
- Problems with catheters, drains
- Palliative care
- Potential abuse
- General considerations: multiple/new meds, problems with activities of daily living (bathing, taking medications, preparing food, etc)

Pilot scope

The pilot catchment was Victoria Park Ave. to the east, the Don River to the west, Eglinton Ave. East to the north and Lake Ontario to the south; however, CREMS referrals made outside this area were accepted and included.

Pilot results

One key pilot indicator was to be a decrease in calls by frequent callers (as measured by a 6 month period before and after). Another important indicator was a decrease in time on task, ie time expenditure by EMS.

Duration	Indicator	PRE-CREMS	POST-CREMS	Decrease
6 MONTH RESULTS	# Calls	215	162	25%
	Transports	147	110	25%
	Non-transports	68	52	22%
	Time on task	445h 15m 40s	244h 19m 28s	40.3%
12 MONTH RESULTS	# Calls	360	294	18.3%
	Transports	217	163	24.8%
	Non-transports	143	131	8.4%
	Time on task	662h 5m 11s	433h 10m 11s	34.6%

Call volume and time on task data provided by Toronto EMS

The reasons for the referrals were:

- 20 Mobility issues (frequent falls or fall safety concerns)
- 16 Failure to thrive
- 15 Substance abuse, social or psychiatric issues
- 6 Dementia, confusion
- 5 Frequent EMS calls
- 3 Longterm care placement needed
- 12 Other

CCAC coordinators developed service plans for these individuals which included nursing, personal support, occupational therapy and physiotherapy as appropriate.

Service	%
Nursing	39
Occupational therapy	26
Rehabilitation	18
Physiotherapy	13
Personal support	4

The clients who received nursing services had a variety of clinical profiles with diagnoses ranging from trauma (fracture shoulder) and malignancies (CA Pancreas) to diabetic ketoacidosis and congestive heart failure. Clients who were provided with occupational therapy had conditions associated with trauma, mental illnesses and diseases of the central nervous system (cerebro-vascular accidents). Most of the rehabilitation clients had conditions arising from trauma and other conditions like Parkinson's disease. Physiotherapy services were mostly provided for clients post non-surgical and surgical trauma.

Challenges

There were challenges in data collection and the feedback loop to EMS. However, participating partners are very positive about the results and the working relationships established, and believe the pilot demonstrated a successful referral model for expansion and enhancement across the province.

Next steps

1. Deploy CREMS across the rest of the Toronto Central LHIN and EMS Toronto catchment areas on January 7, 2008.

In this next phase, the Toronto Central CCAC will act as the conduit for referrals to adjacent CCACs:

- Mississauga/Halton
 - Central West
 - Central
 - Central East
2. Enhance CREMS in the Toronto Central LHIN by leveraging CCAC referral coordination to:
 - a. Ensure explicit linkage with other identification and intervention initiatives such as ED notification which is being implemented in hospital emergency departments, to form a consistent LHIN-wide outreach framework which will help community networks of healthcare organizations provide more targeted support to the vulnerable and at-risk.
 - b. Engage other community providers in the referral network and increase linkage of the vulnerable and at-risk to a range of services and support from mental health agencies, RGP for specialized geriatric services and outreach, community support services for seniors, non-traditional providers, etc.
 - c. Further analyze and test referral criteria to improve effectiveness in targeting high frequency repeaters.
 - d. Provide quarterly reporting.

Key contacts

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