# Alternate Level of Care Prevention Pathway Pilot for Seniors with COPD and/or CHF

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## BACKGROUND

Addressing unprecedented hospital capacity pressures and high alternate level of care (ALC) volumes are a priority within the Mississauga Halton LHIN. This project aims to better understand the likelihood of seniors with chronic disease going to the hospital and becoming an ALC.

A clinical pathway was developed as a test of change to better support individuals living in the community and reduce hospital utilization. Forty-two patients were recruited between December 2018 and May 2019. The pilot was completed in August 2019.

## OBJECTIVES

- Identify seniors in the community or hospital with high hospital use and chronic disease
- Leverage the Detection of Indicators and Vulnerabilities for Emergency Room Trips (DIVERT) Scale
- Develop strategies to better support seniors at home with chronic disease through care planning to avoid emergency department (ED) use
- Strengthen interdisciplinary care, including linkages with primary care

## METHODS

### Population Sample

**N** 42 (THP=9, HCC=33)

**AGE** 82.9

**GENDER** 55% F 45% M

**DISEASE CHRONICITY** 98% reported comorbid chronic diseases

| | |
|---|---|
| **Inclusion Criteria** | • Patients chronic or complex with COPD and/or CHF over 65 years old living at home or are in hospital (acute care or ED) at Trillium Health Partners (THP)<br>• High DIVERT Scale score (between 4-6)<br>• Patients from hospital without an existing interRAI HC with two hospitalizations within the last six months<br>• Patient or caregiver able to direct and follow care<br>• East and North West Mississauga |
| **Exclusion Criteria** | • Unmanaged diagnosis of mental illness and addictions<br>• Cognitive impairment that would impact learning new strategies<br>• Patients who are stable, able to self-manage their condition and independent<br>• Currently attending an outpatient cardiac/pulmonary rehabilitation program |

### Alternate Level of Care Prevention Work Stream: COPD and CHF

Care pathway was guided by Self-Management Approaches to Chronic Disease

Ontario Chronic Disease Prevention Management Framework[1]
Expanded Chronic Care Model[2]
Chronic Care Model[3]

→ Educational resources used with patients

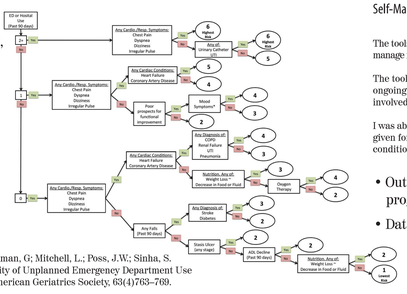
**For patients with CHF**: Living with Heart Failure (Heart and Stroke Foundation, 2017)

**For patients with COPD**: Living Well with COPD: A Plan of Action for Life: Summary Guide (McGill University Health Centre, February, 2016)

**Source:** [1]MOHLTC, (2007). Preventing and managing chronic disease: Ontario's framework. 1-50 [2]Barr, V. et al. (2003). The expanded chronic care model. An integration of concepts and strategies from population health promotion and the chronic care model. Hospital Quarterly, 7, 1, 73-82; [3]Wagner, E. (1998). Chronic disease management. What will it take to improve care for chronic illness? Effective Clinical Practice, 1, 1, 2-4

### Use of the DIVERT Scale

- Evidence-based tool within the InterRAI HC, identifies individuals at high risk for future, unplanned ED visits (scale from 1-6)
- Risk-stratifies patients and informs decision-making for additional monitoring, assessment and preventative interventions
- Interventions can be targeted to manage chronic disease
- Used to better support patients, reduce ED visits and enhance population health




**Source:** Costa, A.P; Hirdes, J.P.; Bell, C.; Bronskill, S.; Heckman, G; Mitchell, L.; Poss, J.W.; Sinha, S. (2015) The DIVERT Scale: A Method to Identify the Probability of Unplanned Emergency Department Use among Frail Community Dwelling Seniors. Journal of the American Geriatrics Society, 63(4)763–769.

## CARE PATHWAY INTERVENTION

### Regular Screening Calls

- Preliminary safety questions
- Completed by personal support worker
- Green/Yellow/Red based on self-reported symptoms

### Team-Based Home Visits

- Rapid Response Nurse, Occupational Therapist, Physiotherapist
- Ad hoc Nurse Practitioner
- Symptom management, medication management, exercise capacity
- Nurses on team connect with family doctor in symptom management cases

### Bi-Weekly Patient Rounds

- Rapid Response Nurse
- Personal Support Worker Supervisor
- Occupational Therapist
- Physiotherapist
- Ad hoc Nurse Practitioner
- Care Coordinator

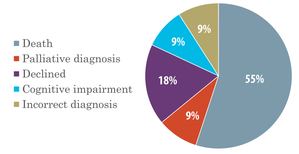
**Pathway is 12 weeks in duration, focused on chronic disease management based on Living Well with COPD or Living with Heart Failure**

## HIGHLIGHTS OF RESULTS

### Completion Rate

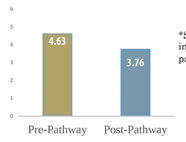
The pathway was completed successfully by 31 patients; 26 from community and 5 from hospital

Pathway Cancellation Reasons (n=11, 7 from community; 4 from hospital)




### 1. DIVERT Scale Score*: Positive change in average DIVERT score may be due to a multitude of factors (see scale in 'Methods')

Pre- and Post- Prevention Pathway:
ALC DIVERT Scale Scores (30 patients)

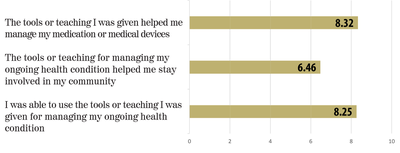



*Score consists of patients who received interRAI HC at pre- and post-pathway (30/31 patients, as one interRAI HC still in progress)

- Positive change in Divert Score in patients who underwent pathway intervention

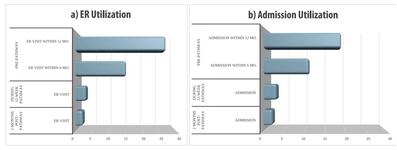
### 2. Patient Self-Efficacy Scores

Self-Management Patient Survey (Reported by 28 discharged patients up to Aug. 7, 2019)




- Outcomes indicate positive scores and areas for future program revisions
- Data collection still in progress

### 3. a) Patients with an Unplanned, Less Urgent ED Visit* and b) Patients with an Unplanned Admission to Hospital*



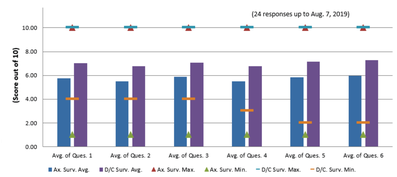

- Preliminary results show reduction in hospital utilization with pathway intervention

* Patients successfully discharged from pathway >2 months ago (by May 31) (n=16 patients)

### 4. Self-Efficacy for Managing Chronic Disease 6-Item Scale

At Assessment (Ax) and Discharge (D/C) patients are asked "how confident are you that you can":

1. Keep the fatigue caused by your health condition(s) from interfering with the things you want to do?
2. Keep the physical discomfort or pain of your disease from interfering with the things you want to do?
3. Keep the emotional distress caused by your disease from interfering with the things you want to do?
4. Keep any other symptoms or health problems you have from interfering with things you want to do?
5. Do the different tasks and activities needed to manage your health condition to reduce your need to see a doctor?
6. Do things other than just taking medication to reduce how much your illness affects your everyday life?

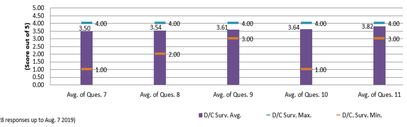



- Improvements in confidence noted across all questions
- Data collection still in progress

### 5. CIHR Community Based Primary Health Care 12 Teams Survey

At discharge, patients are asked "does your health care team":

7. Help you feel that your everyday activities (i.e. diet and lifestyle) make a difference in your health?
8. Help you feel that you could prevent some health problems?
9. Give you a sense of control over your health?
10. Help you feel that sticking with your treatment would make a difference?
11. Help you feel confident about your ability to take care of your health?




(28 responses up to Aug. 7 2019)

- Positive scores with areas identified for continued focus in program development
- Data collection still in progress

*One discharge InterRAI HC still in progress

### 6. Patient and Family Testimonials

*"Made me realize I need to keep up with my exercises to keep on top of my condition"*

*"I am not a new patient with COPD, but I still learned new ways of dealing with my condition"*

*"Great experience. Something that should be continuing and ongoing"*

*"Very good input from the health care team"*

*"Encouraging and supportive for the patients. Good for the community"*

*"I think the program is really good, especially for new patients"*

*"It makes me feel good someone is talking to me and asking how I feel. If I didn't, I would have to go to the doctor"*

## LESSONS LEARNED AND RECOMMENDATIONS

### Lessons Learned

- Ensure patients receive the proper tools, materials and resources to facilitate a supportive transition into the community once discharged
- Target a larger geographical area, providing a larger sample of eligible individuals to be able to recruit in a shorter amount of time
- An interdisciplinary approach from those on the project team is important to determine patient assessment and evaluation
- Involve both community and hospital partners including primary care in the planning phase is important for success
- Ensure clinician capacity, including back-up coverage
- Regulated health professional involvement is important in determining when to escalate a concern for patient safety
- Pathway objectives should meet the needs of eligible patients with different health complexities

### Recommendations for Spread and Scale

- Leverage the Divert Scale for patient identification to assist with preventative care planning for individuals with chronic disease
- Use self-management approaches in care planning to promote health and patient self-efficacy
- Apply best practices in determining the right resources for community integration to meet individualized patients of different disease complexities
- Use an interdisciplinary approach at all phases of project, during assessment and intervention

## CONCLUSIONS

Patient self-management programs taught by health professionals have the potential to improve patients' health, confidence and to reduce hospitalization

Further opportunities for scale and spread may include:

- The potential for use of technology to reach patients quicker
- Other chronic conditions

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