

COPD Outreach Program

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COPD Outreach Program
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Disclaimer:

The Canadian Foundation for Healthcare Improvement (CFHI), in partnership with Boehringer-Ingelheim (Canada) Ltd. (BICL), is providing seed funding as well as participation in a unique 12-month, pan-Canadian all teach, all learn quality improvement collaborative



Background

- Chronic obstructive pulmonary disease (COPD) is caused primarily by smoking and affects approximately 750,000 Canadians¹
- In the Champlain LHIN region an estimated 23,561 individuals have a COPD diagnosis²
- Studies demonstrate that patients enrolled in a **respiratory outreach service** comprising early discharge care, education, telephone support and rapid-access to respiratory outpatient clinics, experience **fewer emergency department presentations** and **hospital readmissions** for acute exacerbations of COPD than prior to enrolment³

¹ (O'Donnell et al., 2008)

² (CIHI, 2012-2013)

³ (Lawlor et al., 2009)



COPD Outreach Program

PROBLEM

Patients with Chronic Obstructive Pulmonary Disease (COPD) have a high rate of readmission to The Ottawa Hospital (TOH) within 30 days of discharge.

OUTCOME MEASURE

- Reduce 30-day readmission rate by 25%

PROCESS MEASURES

- 80% of patients who smoke, will receive smoking cessation counseling
- 80% of patients will receive self-management education, including an AP
- 80% of patients will receive a follow-up appointment with their Primary Care Provider
- 25% of patients will be referred to a PR Program (national average 1.2% patients with COPD have access to PR)



Program Criteria

- Have a confirmed or pending single pulmonary diagnosis of COPD (by spirometry)
- Live within 25 km from TOH and are community dwelling (e.g., not LTC, RH)
- Are willing to be referred

AND

- Have at least **ONE** of the following:
 - Moderate to severe COPD (Medical Research Council (MRC) 3-5):
 - Chronic respiratory failure (PaCO₂ greater than 45 mmHg or PaO₂ less than 55 mmHg)
 - Clinical signs of right sided heart failure
 - Admission to ICU due to acute exacerbation of chronic obstructive pulmonary disease (AECOPD) in the past year
 - Admission to hospital with AECOPD more than once in the past year (this admission and at least one other)
 - Four or more Emergency Department visits for AECOPD in the past year (with or without in-patient admission)



Enrollment process

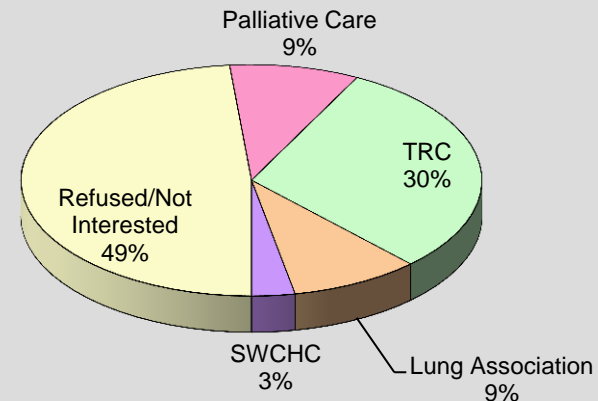
- Referral
 - Self-referral via admission reports
 - Physician Referral (Respirology, Medicine) by page, fax, voicemail or email
- Criteria
- Recruit
- Assess
 - Info line # to patient
 - On-line documentation to PCP, Community Respirologist and Attending
- Referral to RT/CRE
- Referral to CCAC RRN
- 24-48 hour phone follow-up by APN/CRE or RN (COPD Educator)
- Home visit by CCAC RRN (24-48 hour)
- Home visit by APN/CRE
- Phone follow-up monthly x 3 months and at 12 months



Pulmonary Rehabilitation

Patients enrolled in the COPD Outreach Program represent the moderate to very severe COPD population with multiple co morbidities. Subsequently, these patients often require an inpatient PR program, surrounded by the support and expertise of an interdisciplinary team in a structured environment.

- Inform patients about PR options in the Champlain LHIN
- Assess appropriateness of referral to various programs
- Facilitate referral process as appropriate





Effectiveness and Efficiency

Effectiveness

- **Certified Respiratory Educator essential** to optimize delivery of self-management education including medication review
- **Experience in Pulmonary Rehabilitation and knowledge about community resources**
- **Prevented up to 6 ED visits** (Dr. Bourbeau – Montreal CHEST Clinic)
- **PR within one month of an acute exacerbation** – collaboration with TOHRC to facilitate this goal
- Engage patients **motivated** to learn and self-manage

Efficiencies

- **Leverage the expertise of key internal and external stakeholders**
- Leaders locally, provincially and nationally- leader in CFHI collaborative
 - **greatest results with least amount of resources** (1.0 FTE APN + 0.4 FTE RN)
 - **demonstrating effectiveness and efficiency**
 - Quality Improvement Initiative (REB – Research)

Better patient experience, better quality at less cost, healthier populations



Five year plan

Develop and Implement a COPD Outreach Program



- Develop best practice clinical pathway
- Build capacity for best practice in hospital COPD care in Emergency Department; Medicine units, and in community settings through knowledge transfer
- Develop a COPD Educator Program



First Quarter Results

38 patients enrolled and **28 patients have reached the 30-day threshold**

COPD-related healthcare utilization	Pre-program (%) (n=28)	Post-program (%) (n=28)
Patients that were discharged from ED, revisited ED within 30 days	7.14	0
Patients that were discharged from ED, were admitted within 30 days	7.14	0
Patients that were discharged from acute care, were readmitted within 30 days	17.86	*3.57

* Patient readmitted within 24 hours - did not have opportunity to receive follow-up phone call or home visit from COPD Outreach Team

(2012-2013 - 30 day COPD-related readmission rate was 10.1%)



References

- Canadian Institute for Health Information (CIHI) (2012-2013).
- Criner, G.J., et al. (2014). Prevention of Acute Exacerbation of Chronic Obstructive Pulmonary Disease: American College of Chest Physicians and Canadian Thoracic Society Guideline. *CHEST*.
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- O'Donnell et al. (2008). Canadian Thoracic Society recommendations for management of chronic obstructive pulmonary disease – 2008 update – highlights for primary care. *Canadian Respiratory Journal*