



# **INSPIRED COPD Outreach Program**

## **... How It Makes People Breathe Easier**

# COPD

Is the chronic disease most responsible for hospital admissions in Canada



It is also the leading cause for morbidity and mortality in Canada

(according to CIHI in 2012-2013 report)



**NOVA SCOTIA HAS THE 2<sup>ND</sup> HIGHEST  
PREVALENCE FOR PEOPLE AFFECTED WITH COPD  
ACROSS CANADA AT 13.12%**

(ACCORDING TO THE GOVERNMENT OF CANADA PUBLIC HEALTH INFOBASE IN 2012)



the population in Nova Scotia is approximately 922 000  
therefore approximately

**121 000**

**Nova Scotians have COPD**

# History of the INSPIRED COPD Outreach Program™

2010- Initiated in Halifax, NS at the QEII Health Sciences Center

- Cofounders :

- Dr. Graeme Rocker- medical Director
- Dr. Cathy Simpson – advanced care planner facilitator (ACPF)
- Joanne Young – RRT/ CRE

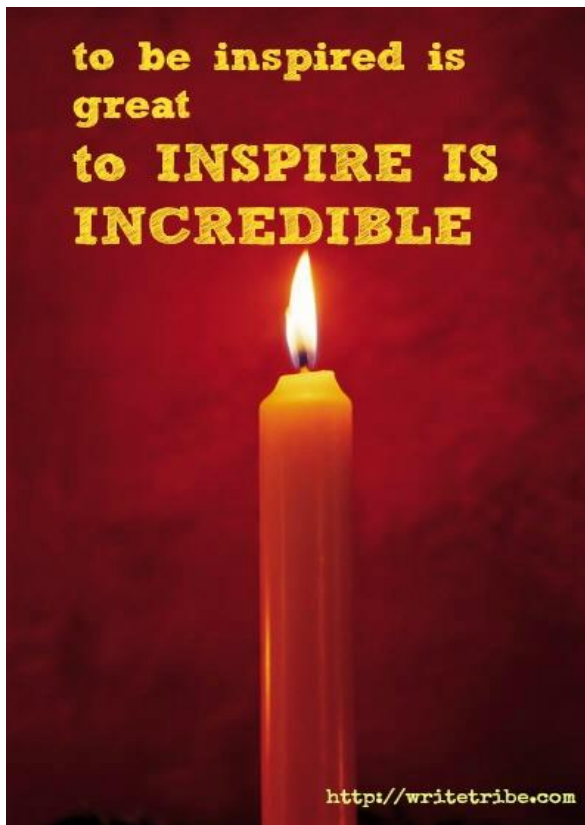
2012 – Nova Scotia Health Authority (NSHA) funds INSPIRED Program in Central Halifax

2014-2015 – pan- Canadian Quality Improvement Collaborative (QIC) supported the program to spread into 10 provinces with 19 teams


2017- March 2019 – Canadian Foundation for Health Initiatives (CFHI), a non-profit organization, joined the INSPIRED program to do a “Scaling Up”  
(this allowed the program to reach 6 jurisdictions in NS)



# INSPIRED COPD Outreach Program™



Implementing  
a  
Novel  
and  
Supportive  
outreach  
Program  
of  
Individualized  
care for patients and families living with  
REspiratory  
Disease



# **the INSPIRED COPD Outreach Program™ requires these 4 components**

- 1) Self management, education and support
- 2) Help navigating the healthcare system and gaining access to services that can support them at home (ie home care, Pulmonary Rehabilitation, EHS SPP)
- 3) COPD Action Plans (when appropriate) and access to a helpline that should improve the early care of a flare up of COPD
- 4) Psychosocial/ spiritual support with an opportunity to consider advance care planning and document goals of care/ treatment preferences through to the end of life.

# Nova Scotia Criteria for Enrolment

- ❖ Lives in catchment area
- ❖ Does not live in long term care or residential care unit
- ❖ Willingness to be enrolled
- ❖ Has had at least one admission to the hospital within the last year with AECOPD

PLUS

Greater than 1 ER visit in the last year for an AECOPD  
(for Halifax, Eastern Shore and Windsor)

- ❖ Has a confirmed, pending or suspected diagnosis of moderate to severe COPD
  - Moderate: Stops for breath after walking 100 meters  
Walks slower than others or has to stop to breath when walking at own pace
  - Severe: Too breathless to leave the house  
Breathlessness after dressing/ undressing  
Chronic respiratory failure ( $\text{PaCO}_2 > 45$ )  
Clinical signs of right heart failure



# How to Refer a Patient



## INSPIRED COPD Outreach Program™

Implementing a Novel and Supportive Outreach Program of Individualized care  
for patients and families living with REspiratory Disease

<input type="checkbox"/> West Hants (Windsor)	Ph: (902) 792-2061	Fax: (902) 798-5107
<input type="checkbox"/> Cumberland County (Amherst)	Ph: (902) 667-5400 x 6110	Fax: (902) 667-1882
<input type="checkbox"/> South Shore (Bridgewater)	Ph: (902) 523-3880	Fax: (902) 527-5099
<input type="checkbox"/> CBRM (Sydney)	Ph: (902) 567-0378	Fax: (902) 563-7920

A patient is eligible for INSPIRED if s/he has **ALL** of the following:

- |   |
|---|
| <ul style="list-style-type: none"><li>• A confirmed, pending or suspected diagnosis of moderate to severe COPD (<i>see reverse for details</i>)</li></ul> |
| <ul style="list-style-type: none"><li>• <math>\geq 1</math> admission to the hospital for AECOPD in the past year</li></ul>                               |
| <ul style="list-style-type: none"><li>• Not in long-term care or a residential care facility</li></ul>  |
| <ul style="list-style-type: none"><li>• Lives in catchment area (<i>see reverse</i>)</li></ul>  |
| <ul style="list-style-type: none"><li>• Is willing to be referred</li></ul>   |

Referral Date: Day/Month/Year: \_\_\_\_/\_\_\_\_/\_\_\_\_

Referral Source (please print): \_\_\_\_\_ Contact number: \_\_\_\_\_

☐ Please cc correspondence to referring clinician. Fax: \_\_\_\_\_

Notes: \_\_\_\_\_

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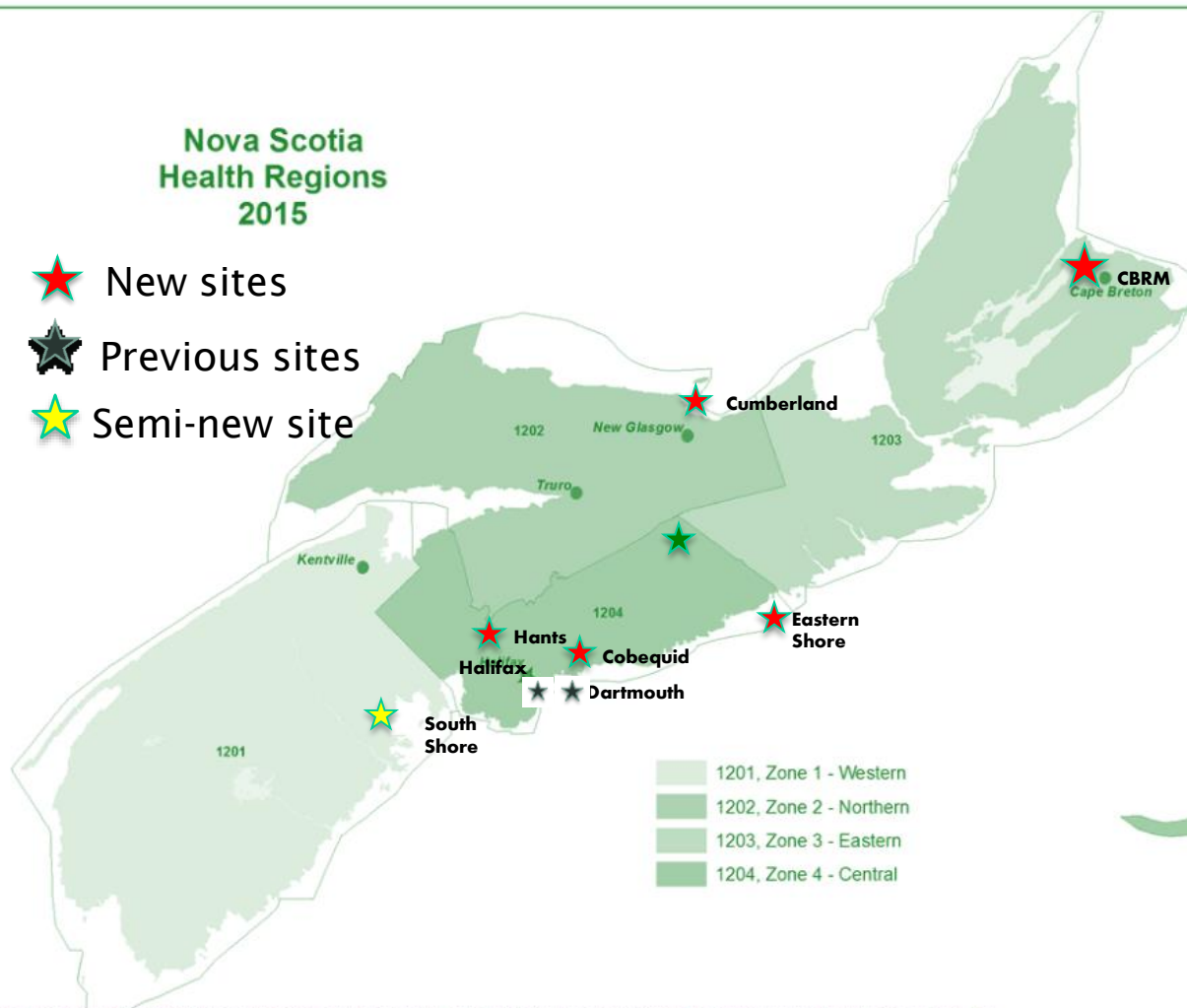
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## Nova Scotia Health Regions 2015

- ★ New sites
- ★ Previous sites
- ★ Semi-new site



Source: Statistics Canada, Health Regions: Boundaries and Correspondence with Census Geography, (62-402-X). Produced by the Statistical Registers and Geography Division for the Health Statistics Division, 2015.

## Jan 2018- March 2019

- CBRM 274
- Cobequid 33
- Cumberland 46
- Eastern Shore 41
- Hants 17

**Total new sites = 411**

### Previous Sites

- Halifax 71
- Dartmouth 67
- (South Shore 22)

**Total all sites =  
571**

## Does INSPIRED actually work?

Covering 01/01/18 – 26/03/19	Cape Breton (N=71)	Hants (N=6)	Eastern Shore (N=8)	Cumberland (N=18)	Cobequid (N=12)	Dartmouth (N=17)	Halifax (N=18)
ED visits	-76%	-47%	-58%	-54%	-43%	-81%	-91%
Admissions	-82%	-63%	0	-83%	-67%	-70%	-91%
LOS (bed days)	-87%	-52%	-26%	-69%	-66%	-71%	-90%
Enrolled (referred/%)	274 (352/78%)	17 (20/85%)	41 (53/77%)	46 (65/71%)	33 (37/89%)	67 (75/89%)	71 (90/79%)
Target	190	24	17	40	36		

\*only patients surviving at least 6 mon post & with admissions/ED visits within 6 mon prior to 1<sup>st</sup> RT visit

Mean enrolment rate across sites = **81.14%**; predicted rate (MOU) = **80%**



## INSPIRED Statistics for Cape Breton

98 patients	6 months Pre INSPIRED	6 months Post INSPIRED	% change
ER Visits	226	50	<b>-78.8%</b>
Admissions	144	25	<b>-82.6%</b>
Bed Days	1720	225	<b>-88.7%</b>

@ approximately \$1000/day= **\$1,495,000.00**

January 2018- June 2019



# **What Do We Do To Help People Breathe Easier?**

# Home Visits

within 2 weeks of discharge the patient will be contacted to arrange the first visit

2+ RRT visits

2+ ACPF visits

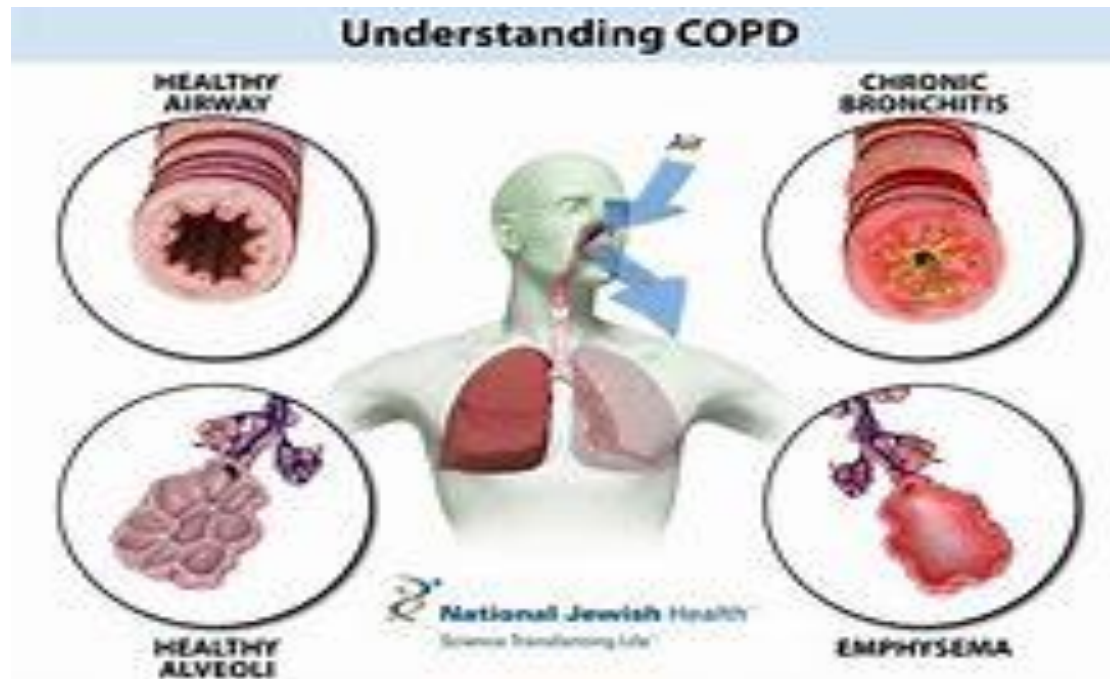


- Our clients have moderate to severe COPD therefore leaving their home can be challenging to most
  - Visits can range from 1-2hours each
  - Patients are more at ease in their own environments
  - Other family members are available to be at the visits as well
- Can visualize how they are coping with their limitations caused by COPD

# Patient Education

(Spirometry and PFT review)

Arrange for Spirometry if need confirmed diagnosis



## Dyspnea Cycle & PLB



### Pursed-Lip Breathing




slows expiration  
prevent collapse of lung units

helps client control  
rate and depth of  
respiration.

qd nurses

# Exercise Tolerance

- Diaphragm & air trapping
- Accessory muscle use
- SOB with minimal activity
- SOB Scale
- Exercises to strengthen muscles
- Pulmonary Rehab referrals

Perceived exertion in function of breathlessness and fatigue	
	0 Nothing at all
	0.5 Very, very light
	1 Very light
	2 Light
	3 Moderate
	4 Somewhat hard
	5 Hard
	6
	7 Very hard
	8
	9 Very, very hard
	10 Maximal

*Adapted from the Borg scale<sup>1</sup>*



# Medication Review



Ensure proper technique

In-Check Dial

Aerochamber education

Puffers vs Aerosols

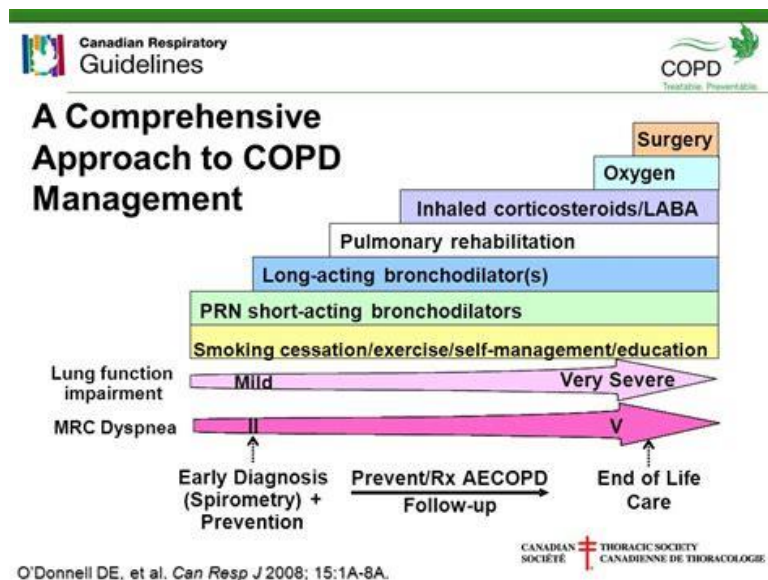
Pharmacare/ Funding

Compassion programs

Medication reviews

formulary meds while in hospital vs home  
meds

# Recommendations to Dr using CTS Guidelines



**Recommendations for optimal pharmacotherapy in COPD**

MILD	MODERATE	SEVERE
	Infrequent AECOPD (<1year)	Frequent AECOPD (≥ 1year)
SABD prn ↓ Persistent Dyspnea ↓ LAAC + SABA prn or LABA + SABD prn	LAAC or LABA + SABA prn ↓ Persistent Dyspnea ↓ LAAC + LABA + SABA prn ↓ Persistent Dyspnea ↓ LAAC + ICS/LABA* + SABA prn	LAAC + ICS/LABA + SABA prn ↓ Persistent Dyspnea ↓ LAAC + ICS/LABA + SABA prn ± Theophylline

\* Refer to lower dose inhaled corticosteroid/long-acting beta<sub>2</sub>-agonist (ICS/LABA)

AECOPD: Acute exacerbations of COPD; ICS: Inhaled corticosteroids; LAAC: Long-acting anticholinergic; LABA: Long-acting beta<sub>2</sub>-agonist; prn: As needed; SABA: Short-acting beta<sub>2</sub>-agonist; SABD: Short-acting bronchodilator

## Reference:

- O'Donnell DE, Hernandez P, Kaplan A, et al. Canadian Thoracic Society recommendations for management of chronic obstructive pulmonary disease – 2008 update – highlights for primary care. Can Respir J. 2008 Jan-Feb; 15(Suppl A): 1A–8A.

**eDucate™**  
www.educatehealth.ca

# Action Plans

**My COPD Action Plan** \_\_\_\_\_ Date \_\_\_\_\_  
Patient's Copy (Patient's Name)



This is to tell me how I will take care of myself when I have a COPD flare-up.

My goals are \_\_\_\_\_

My support contacts are \_\_\_\_\_ and \_\_\_\_\_  
(Name & Phone Number) (Name & Phone Number)

My Symptoms	I Feel Well	I Feel Worse	I Feel Much Worse <b>URGENT</b>
I have sputum.	My usual sputum colour is: _____	Changes in my sputum, for at least 2 days. Yes <input type="checkbox"/> No <input type="checkbox"/>	My symptoms are not better after taking my flare-up medicine for 48 hours.
I feel short of breath.	When I do this: _____	More short of breath than usual for at least 2 days. Yes <input type="checkbox"/> No <input type="checkbox"/>	I am very short of breath, nervous, confused and/or drowsy, and/or I have chest pain.
My Actions	<b>Stay Well</b>	<b>Take Action</b>	<b>Call For Help</b>
	I use my daily puffers as directed.	If I checked "Yes" to one or both of the above, I use my prescriptions for COPD flare-ups.	I will call my support contact and/or see my doctor and/or go to the nearest emergency department.
	If I am on oxygen, I use _____ L/min.	I use my daily puffers as usual. If I am more short of breath than usual, I will take _____ puffs of _____ up to a maximum of _____ times per day.	I will dial 911.
Notes:		<b>Important information:</b> I will tell my doctor, respiratory educator, or case manager <b>within 2 days</b> if I had to use any of my flare-up prescriptions. I will also make follow-up appointments to review my COPD Action Plan twice a year.	



## “Flare Up” Prevention

Hand Hygiene  
Oral Hygiene  
Sinus Infections  
Vaccinations  
Avoidance  
Acid Reflux



# Smoking Cessation



Discuss NRT

Champix- pharmacare funding

Addiction Services “Quit Smoking Program”

Discuss:

- increased cough= normal

- Managing withdrawal symptoms

- Avg 15-30 attempts



# Oxygen Alert

Review ABG and discuss CO<sub>2</sub> retention  
EHS SPP enrolment

**Oxygen Alert Card**

Name \_\_\_\_\_

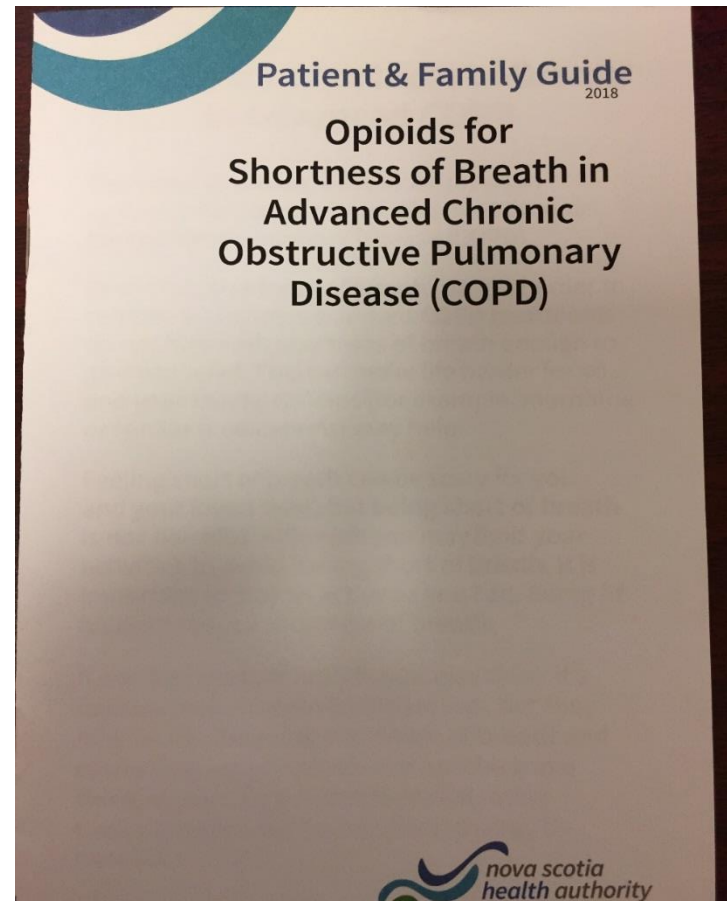
I am at risk of type II respiratory failure with a raised CO<sub>2</sub> level. Please use my Venturi mask to achieve an oxygen saturation of 88% to 92% during exacerbations.

Use compressed air to drive nebulizers (with nasal oxygen) and same target saturation.

Physician Signature \_\_\_\_\_

# Opioids for Chronic Dyspnea

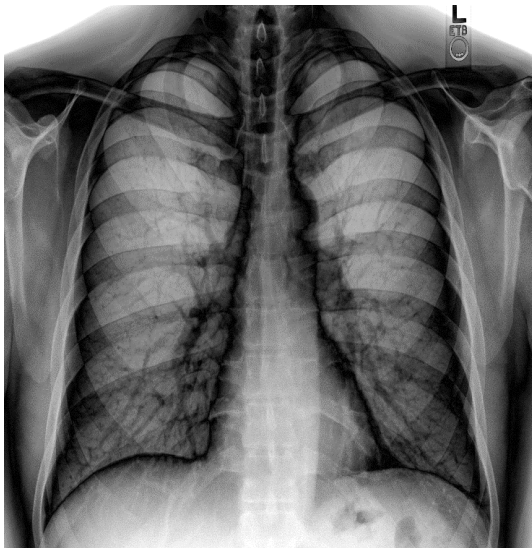
- Opioids affect the parts of the brain that deal with emotions like fear and anxiety.
- They can change the way a patient experiences SOB.
- This can be done with opioid doses that are much lower than what is needed to control pain. (For example, 1 mg of morphine syrup is similar to 1/4 of a Tylenol® with Codeine No. 3).
- Opioids may help a patient feel SOB less often and make the feeling less intense.





## Access to Hospital Resources

Lab results (ABG/ sputum/ etc.)  
Imaging results (CT/ x-ray)  
Dr reports







# Referrals to other resources

- Expedite Respiriology Referrals
- Pulmonary Rehabilitation Program
- Home Care
- Home Oxygen
- Palliative Care
- Dietary Consults
- Community based physiotherapy and occupational therapy consults
- **EHS Community Paramedic Program (CPP)-  
CBRM**

# Advance Care Plan Facilitator Visit

Typically consists of 2 visits where we discuss:

- Strategies to cope with stress and anxiety
- Provide supportive and resource counselling
- Discuss/complete Advanced Care Plan
  - Copies to family physician
  - Copy to medical records
  - Copy to patient & whoever else the patient requests
  - Enrole patient with EHS Special Patient Program



# How does the INSPIRED team offer continued support after routine home visits are completed?

- The patient and family have access to team support during work hours (Mon-Fri 8-4)
- Routine phone follow-ups for the first year (can lead to extra home visits)
- If the patient has an **ED visit or** is readmitted they will receive a phone call &/or a home visit





“Out of all the resources & programs, this is the one that was most helpful and understood what was needed for my father”

“Why have I never been told this before”

*“What all healthcare should be”*

*Just knowing I have your support has made my breathing feel easier*

“YOU ARE MY ANGEL”

“Best thing that has ever happened to me!”

*“thank you for finding me in the cracks of the healthcare system”*

*“A life saver! I would have been in & out of hospital without it”*

# Questions or Clarification

