Accelerating Healthcare Improvement
Accélérer l'amélioration des services de santé

INSPIRED Approaches to COPD Care

Topic 5: Transition and Coordination Across Care Providers

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Nov 5th, COPD Policy Roundtable

Meet Frank

- 79-year-old widower
- COPD, CHF, Diabetes
- Anxious, breathless, can’t manage
- Often dials 911 & visits the ED
- Hospitalized 7 times over last year
- Keeps a packed suitcase by his chair

Without access to reliable alternative integrated models of care, many patients with advanced COPD:

- Resort to episodic or ED presentations to manage escalation of symptoms
- Remain caught in a repeating cycle of ED presentation, hospital admission and discharge back to the healthcare system that initially failed them, to await next exacerbation or dyspnea crisis

Listening to Patients

Advanced COPD: Most important elements of end of life care

Patients n=118	%
Not being kept alive on a ventilator when there's no meaningful hope of recovery	55%
Relief of physical symptoms	47%
An adequate plan of care & health services after discharge	40%

Source: Rocker G, Dodek P, Heyland D et al, Can Respir J 2008

Listening to Patients

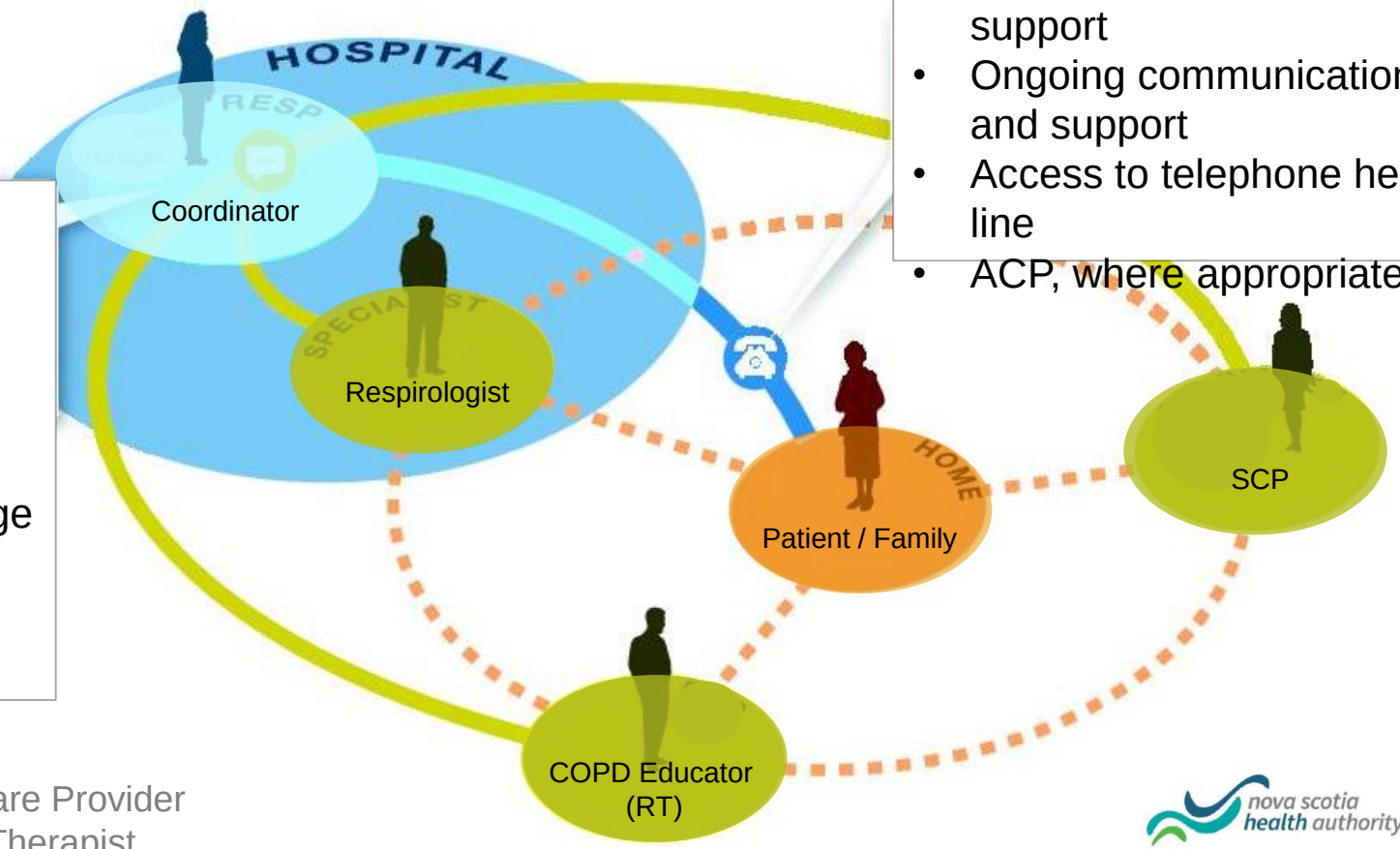
Advanced COPD Care: Top 3 opportunities for Improvement

Caregivers n=37	Need to fix	Patients n=37
Know which doctor is the main doctor in charge of your family member's care		That you not be a physical or emotional burden on your family
Family member has relief of physical symptoms		An adequate plan of care & health services available to look after me at home after discharge
An adequate plan of care & health services available to look after him/her at home after discharge		To have trust & confidence in the doctors looking after you

Source: Young J, Allan DE, Simpson AC, Heyland DK, Rocker GM. What maters to family carers of patients with advanced COPD. Am J Respir Crit Care Med 2008:A665

INSPIRED COPD Outreach Program™

- Home visits (4) every 2 wks
- Individualized action plan, self-care and psychosocial/spiritual care support
- Ongoing communication and support
- Access to telephone help line
- ACP, where appropriate



- Consent
- Optimize treatments
- Link with staff
- Action plan(s) written
- Early discharge support
- Pre- + post-evaluation

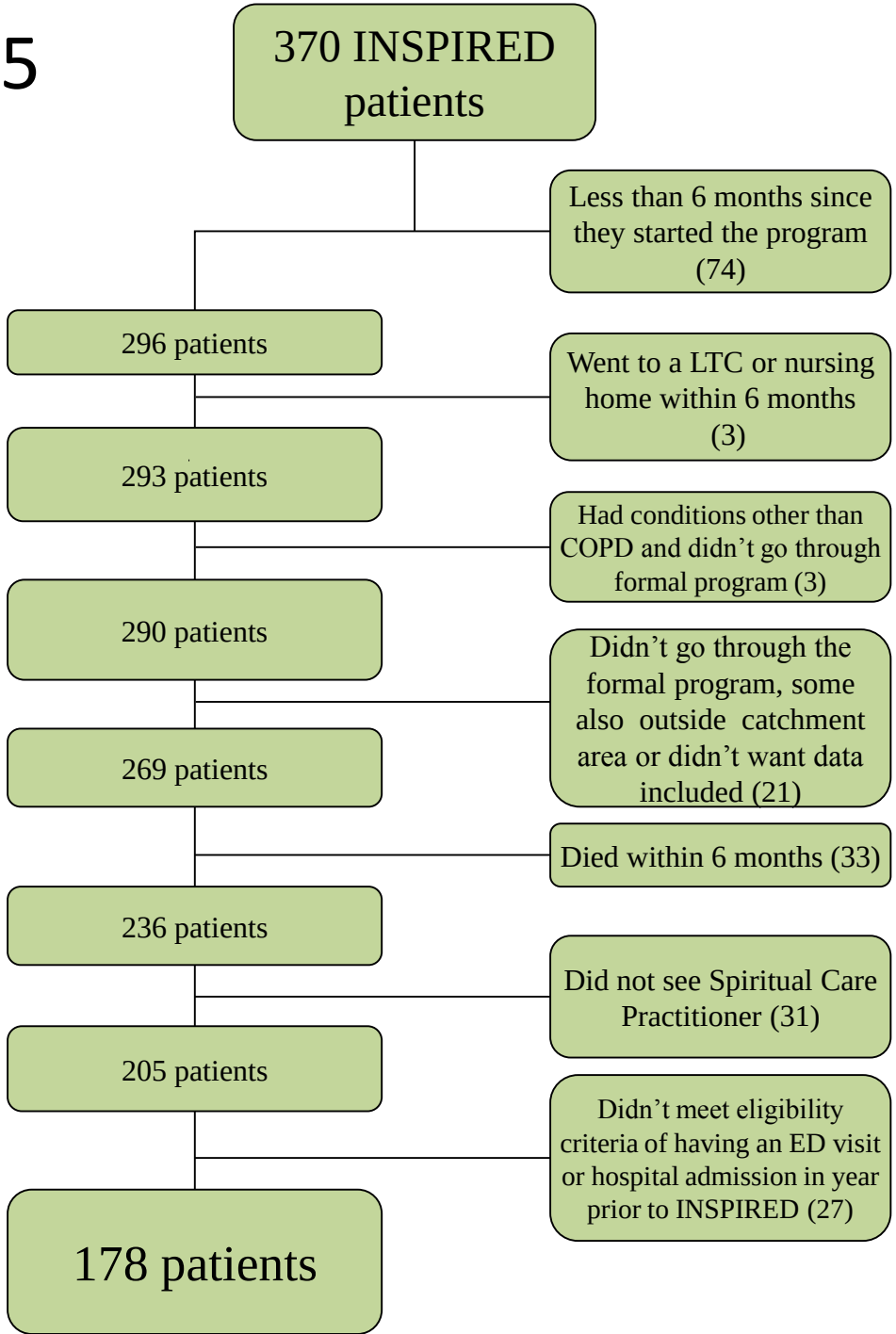
SCP: Spiritual Care Provider
RT: Respiratory Therapist
RESP: Respirology Department
ACP: Advanced Care Plan

nova scotia health authority

INSPIRED: Funding and milestones

2007-2010 Pre INSPIRED	2010 INSPIRED Pilot	2012	2013	2014	2015
Research Funding	Hybrid Funding for pilot phase	CDHA core program	CDHA core program CFHI appointment for GR as CIA	QEII Foundation TRIC grant (evaluation of move to the ED) Leading Practice (Accreditation Canada)	CFHI –BICL Pan-Canadian INSPIRED 19 teams
CIHR MRFNB NELS at DAL Various community based studies to understand burden of COPD in Rural NB and NS	ACCP Award (GR) $10,000 QEII Foundation $10,000 Rocker $10,000 CDHA Innovation $25,000 GSK, $60,000	GSK On going support (expansion to DGH)	CDHA approves 0.5 FTE RRTs x 2 (expansion to the ED) On-going support GSK	March 2014 RTs x2 appointed for ED expansion CFHI-BICL Pan-Canadian INSPIRED 19 teams	4 regional round tables Ontario (7) Atlantic (4) Western (4) QC (4) ~ 650 enrolled

June 2015


370 INSPIRED patients
Less than 6 months since they started the program (74)
296 patients
Went to a LTC or nursing home within 6 months (3)
293 patients
Had conditions other than COPD and didn't go through formal program (3)
290 patients
Didn't go through the formal program, some also outside catchment area or didn't want data included (21)
269 patients
Died within 6 months (33)
236 patients
Did not see Spiritual Care Practitioner (31)
205 patients
Didn't meet eligibility criteria of having an ED visit or hospital admission in year prior to INSPIRED (27)
178 patients

ER, admission data, length of stay

6 month pre/post data (June 2015)

	Pre-INSPIRED N=178	Post-INSPIRED N=178		
	6 /12	6/12	6 /12 (n, % reduction)	Cost Aversion
ER visits	365	154	-211 (58%)	-
Admissions	210	79	-131 (62%)	-
Bed Days	2044	813	-1231 (60%)	$1,230,000 @$1000/day

Cost aversion at 6 months ≈ 3x annual program costs

Change in ER, admission data, length of stay during scale-up

	June 2015 n=178	June 2014 n=131	June 2013 n=46
ER visits	-53%	-60%	-72%
Admissions	-62%	-63%	-72%
Bed Days	-60%	-62%	-72%

Change in patients (n,%) with 2+ admissions in 6-mos pre-post INSPIRED

June 2015 n=178	June 2013 n=46
37/178 (21%)	10/46 (22%)
↓	↓
16/178 (9%)	2/46 (4%)

Care Transition Measure (CTM)

15 questions, Scored 1-4, scaled to a percentage, max score 100%

Label	Median	Min.	Max.	N
Pre INSPIRED CTM	71.00	25.00	96.00	27
Post INSPIRED CTM	83.00	69.00	100.00	27
	12.00	-3.00	75.00	27

No change in CRQ, HADS, Herth Hope index

$p<0.0001$

Spreading INSPIRED Across Canada

Canadian Foundation for Healthcare Improvement | Fondation canadienne pour l'amélioration des services de santé

Boehringer Ingelheim

Sustaining and Scaling Improvement in Canada…

"…even practical and definitive findings do not spark widespread innovation in the absence of winning conditions in the healthcare system. The frustrating reality is that many excellent ideas or inventions are never translated into saleable or scalable innovations."

- Naylor et al; UNLEASHING INNOVATION: Excellent Healthcare for Canada Report of the Advisory Panel on Healthcare Innovation, August 2015

Barriers to Scaling Up Innovation

- System fragmentation
- Inadequate health data and information management capacity
- Lack of effective deployment of digital technology
- Barriers for entrepreneurs
- A risk-averse culture
- Inadequate focus on understanding and optimizing innovation

Naylor et al 2015

What We're Learning…

- 74% of the teams are incorporating all of the INSPIRED interventions
- Enrolling patients (654 as of Sep 24)
- Some teams reporting 30-day readmission reductions
- Testing Care Transitions Measure (CTM) as a predictor of early return to hospital
- Exploring use of Number Needed to $ave (NN$) concept

Provider Adaptations of INSPIRED

Self-management Support

18/19 teams

- Nurse, Registered Respiratory Therapist (RRT) or Certified COPD Educator (CRE) (14 teams)
- Social Worker (2 teams)
- Physiotherapist (2 teams)

Psychosocial/Spiritual Support

16/19 teams

- Social Worker (7 teams)
- Nurse or CRE (5 teams)
- Spiritual Care Provider (4 teams)

Monitoring and Evaluation

All 19 teams

- Nurse, RRT or CRE (8 teams)
- Measurement Lead (5 teams)
- Utilization Specialist/ Quality Improvement Staff (4 teams)
- Research Assistant (2 teams)
- Pulmonary Rehabilitation (1 team), Master's Student (1 team) or Social Worker (1 team)

What Patients and Families Report…

"Now, I am able to think about what my possibilities are and the smart way to do it. I have even gone back to work. You sent me an angel."

"'Attending my daughter's wedding was the best day of my life."

Wife: "No, it was the best day of all our lives."

"I have been able to enjoy a quality of life I never thought I would have again."

Thank you

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