INSPIRED Approaches to COPD Care

MARIA JUDD
Vice-President, Programs, Canadian Foundation for Healthcare Improvement
CAROL ANDERSON
Executive Director, Continuing Care, Edmonton Zone at Alberta Health Services

CHCA Summit, October 30, 2017

Our time together today:

1. CFHI: identifying and supporting the spread of INSPIRED

   Table discussion 1: identifying innovations in homecare

2. INSPIRED: Evolution of INSPIRED in Alberta

   Table discussion 2: *spreading innovation in homecare*

3. What's next: care at home & in the community

   How might CFHI help?

Let's make change happen

The Canadian Foundation for Healthcare Improvement works **#shoulder2shoulder** with you to improve the health and care of all Canadians.

Identify proven innovations

Spread across Canada

SCALE UP throughout health systems

Canadian Foundation for Healthcare Improvement

Our strategy

Our aim

Accelerate healthcare improvement.

Patient & family experience of care

Health of populations

Value-for-money

Our focus 2017-2018

Build improvement capacity and provide on the ground support to spread and scale proven innovations.

Appropriate care closer to home

Frail elderly

Palliative care

Mental health and addictions

Indigenous health

Northern and remote

Population health

What we do

We work shoulder-to-shoulder with you to improve health and care for all Canadians.

Enable patient, family and community engagement

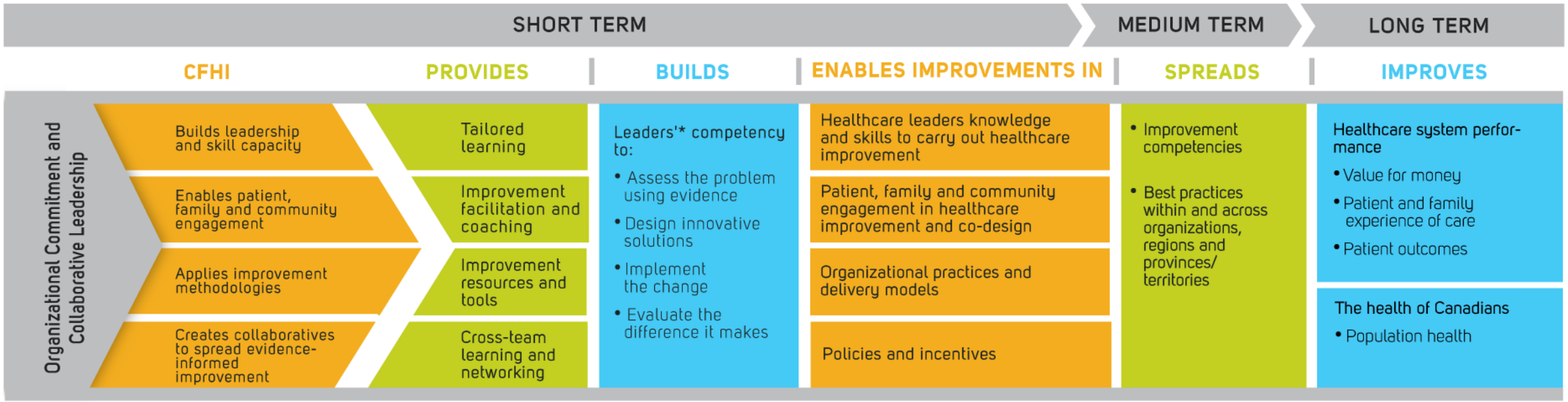
Build leadership and skill capacity

Apply improvement methodology and coaching

Create collaboratives to spread evidence-informed improvement

Canadian Foundation for Healthcare Improvement

CFHI Improvement Approach



* Leaders include healthcare executives, managers and providers.

IMPROVEMENT PRINCIPLES

Improvement requires engaging stakeholders in a process of change based on six assumptions.

- Healthcare delivery should be patient-centred and population-based
- Strategy should be informed by evidence and experience
- Design and implementation should engage a wide range of stakeholders
- Design and implementation should take a participative approach
- Large scale improvement can be achieved through an incremental process
- Improvement is a collective learning process that builds on carefully evaluated experimentation and critically assessed potential solutions

ACTION LEVERS TO ACCELERATE HEALTHCARE IMPROVEMENT

Improvement in healthcare requires initiative in the following six areas:

- Promoting evidence-informed decision-making
- Engaging patients and citizens
- Building organizational capacity
- Creating supportive policies and incentives
- Engaging healthcare executives, providers and managers in creating an improvement culture
- Focusing on population health needs

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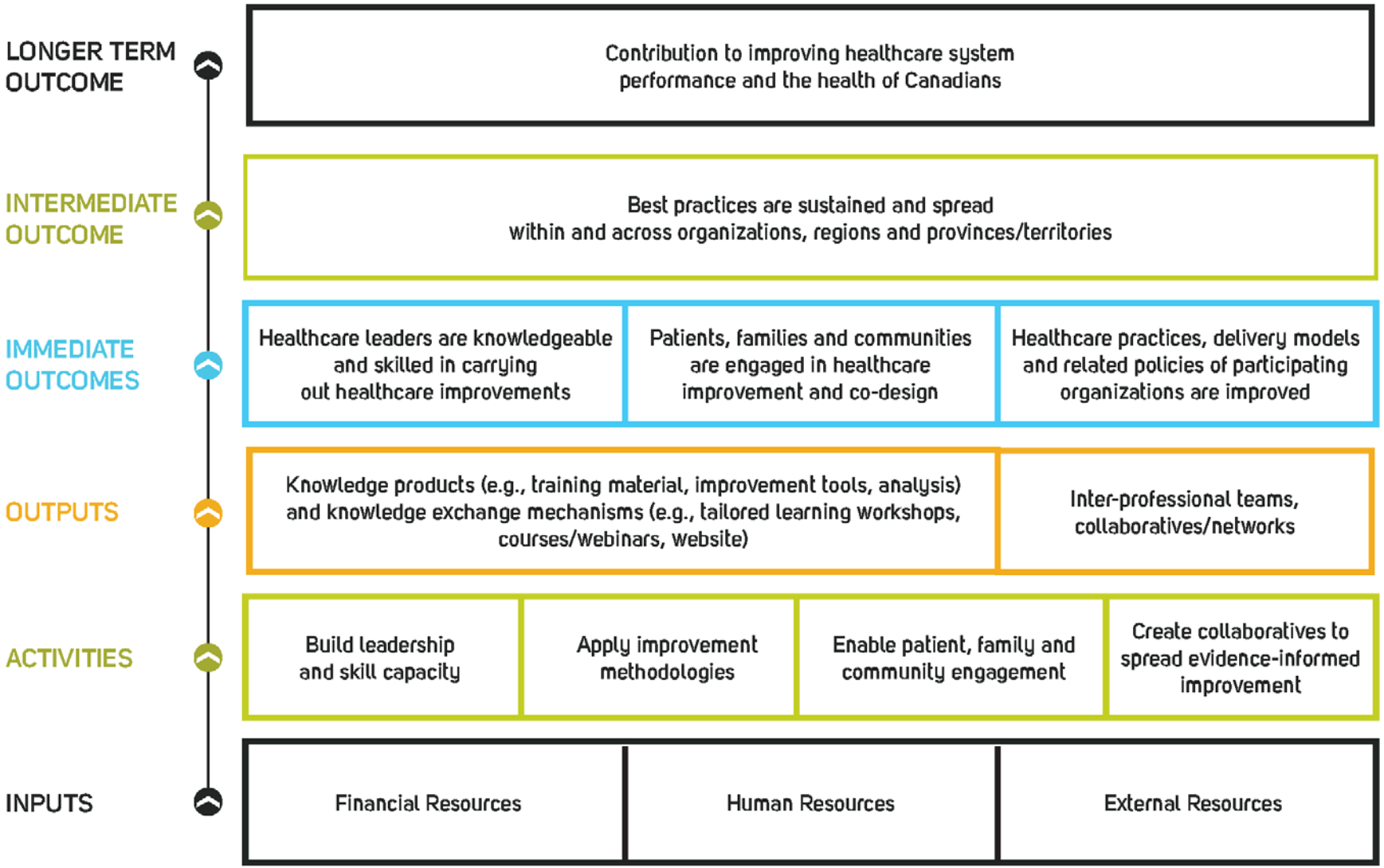
Logic Model



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COPD in Canada

1st

Cause of hospital admissions among chronic illness

4th

Leading cause of death

1 in 4
>35yrs

In Ontario,

12%

of population,

24%

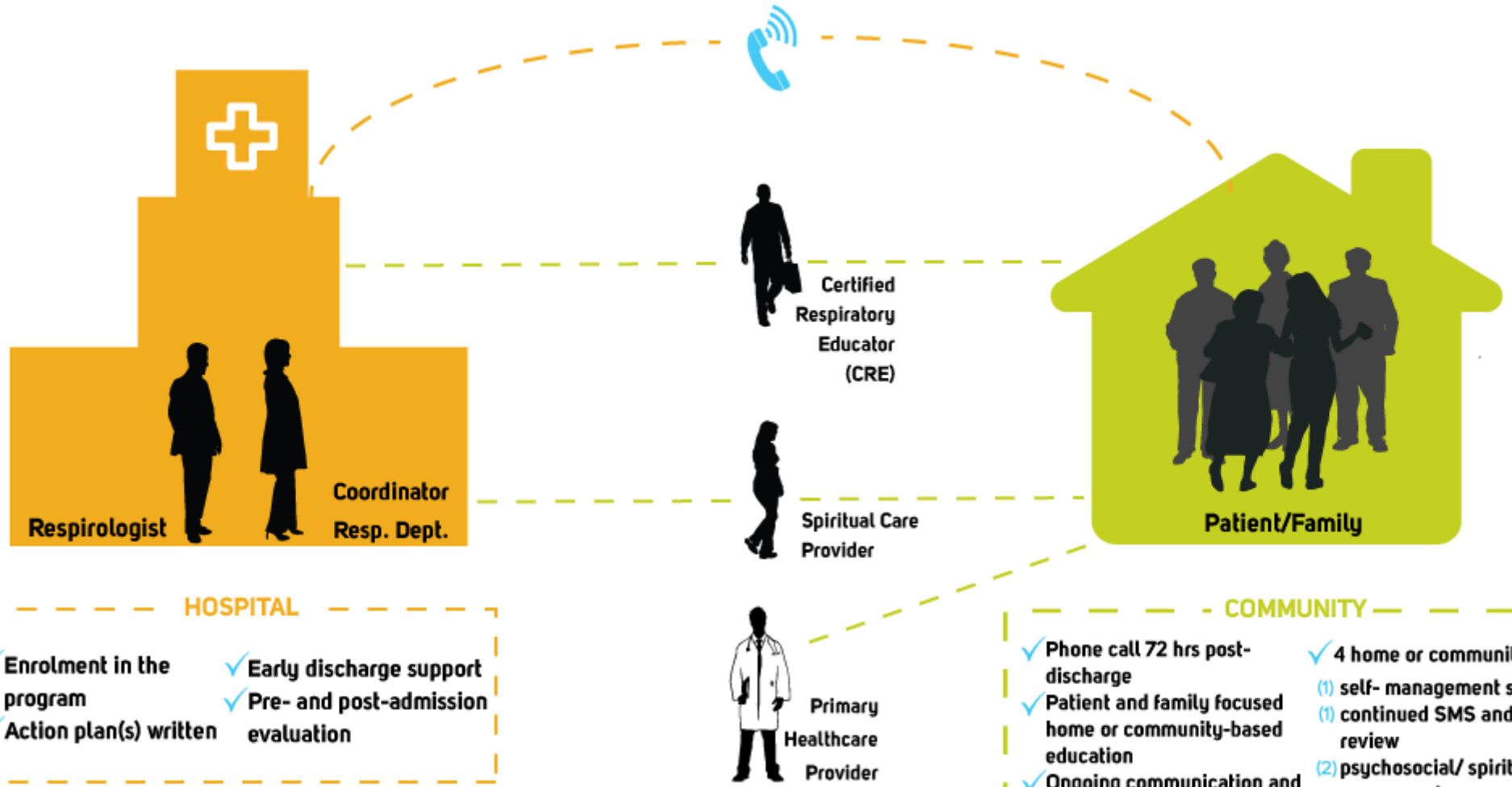
hospital admissions

$750,000,000

annually in healthcare costs

Gershon et al. (2010); CIHI (2008); Mittman et al. (2008) [8]

INSPIRED COPD Outreach Program™



HOSPITAL

- ✓ Enrolment in the program
- ✓ Action plan(s) written
- ✓ Early discharge support
- ✓ Pre- and post-admission evaluation

COMMUNITY

- ✓ Phone call 72 hrs post-discharge
- ✓ Patient and family focused home or community-based education
- ✓ Ongoing communication and support
- ✓ Access to help line
- ✓ Follow-up calls (1 month, 3 month, then as required)
- ✓ 4 home or community visits for:
  - (1) self- management support (SMS)
  - (1) continued SMS and action plan review
  - (2) psychosocial/ spiritual needs assessment, support & advance care planning when needed

INSPIRED COPD Outreach Program™

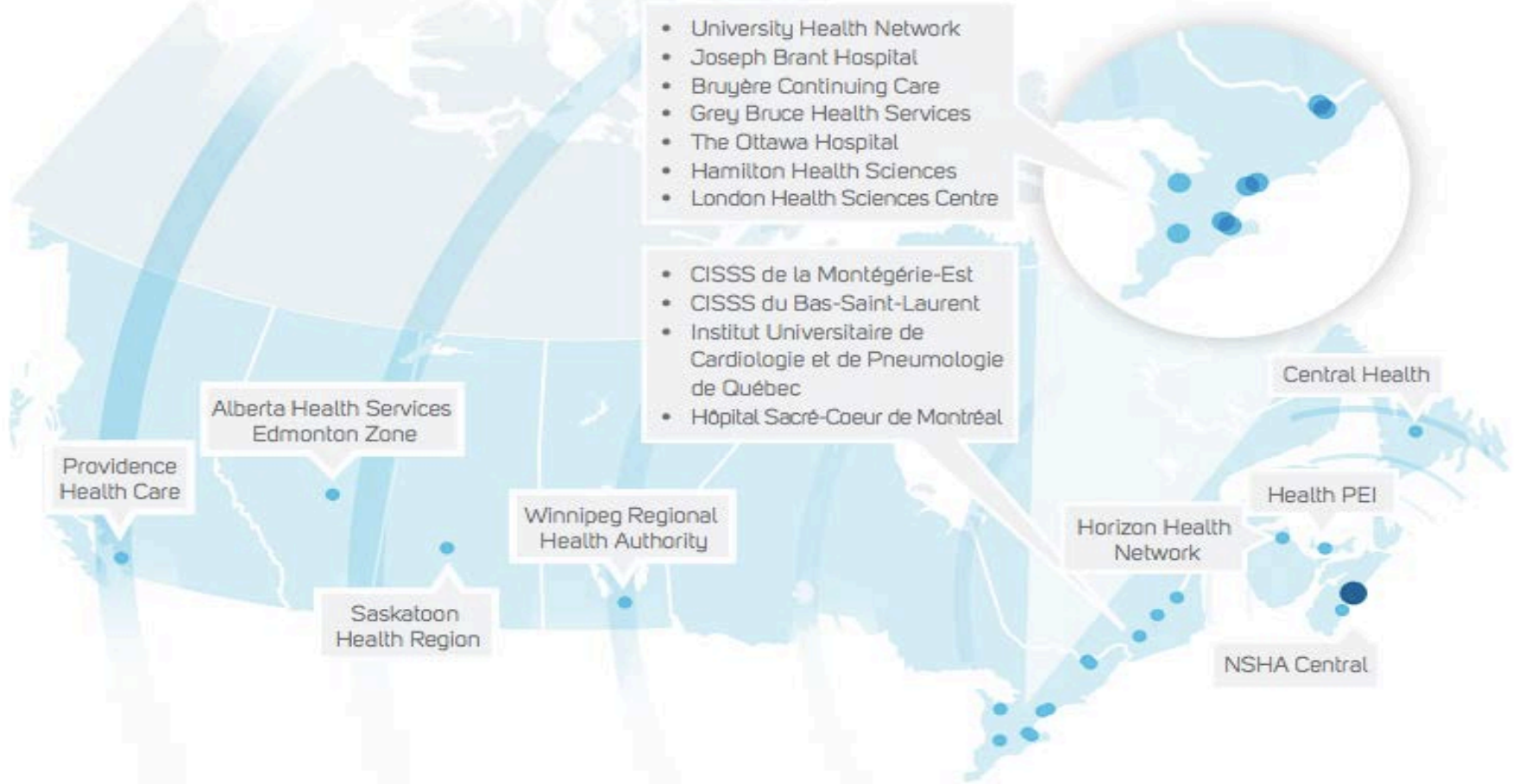
Implementing a Novel and Supportive Program of Individualized care for patients and families living with REspiratory Disease

- ✓After in patient consent - contact 72 hours after discharge
- ✓Four home visits: *Self-management support: home-based education based on need (patient and family focused)
- ✓Help line (business hours)
- ✓*Written action plans (per CTS) for COPD exacerbations
- ✓In-home psychosocial/spiritual needs assessment and support, and advance care planning

* Lenferink *et al* Cochrane Database 2017

INSPIRED Spread Collaborative

19 teams | **214** healthcare professionals | **78** organizations | **10** provinces



Summary of Key Results aggregated from the Spread Collaborative

Patients and Families:

1,011 patients enrolled

Patients reported

- greater self-confidence in **symptom management**
- return to daily **activities**
- enhanced **functional status**

Teams:

Optimized patient care
in developing action plans, self-management support, psychosocial support, advance care planning, and coordinated community partnerships with allied health professionals.

System:

Reduction in ED visits and hospitalizations

with **early reductions** as high as **80%**

lowering in the 6–12 month period **post-collaborative** to **40-50%**

Testing to Spreading to Scaling INSPIRED

Extend the reach to all those who stand to benefit

Make part of routine operations

Test under a variety of conditions

Theory and Prediction

2017–19
INSPIRED scales up in (up to) 6 jurisdictions supported by INSPIRED Scale Collaborative

2014–15
INSPIRED spreads to 19 healthcare delivery organizations across Canada supported by INSPIRED Approaches to COPD Care Collaborative

2012
INSPIRED becomes a core-funded program at NSHA (Halifax)

2010
NSHA (Halifax) develops INSPIRED COPD Outreach Program™ (INSPIRED)

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Potential Return on Investment of Scaling INSPIRED

Risk Analytica. (2016). Modelling the INSPIRED COPD Outreach Program™ National and Provincial Analysis Final Report.

SCALE UP would provide better care for 14,000 Canadians with advanced COPD

REDUCE

68,500 ED visits

44,100 hospitalizations

400,000 bed days

SAVE $688 millions over 5 years

Testimonial from an NSHA INSPIRED client

"I used to feel so alone with my illness. Now people check on me and I know there's someone I can call if I'm having a problem. I would feel so much more isolated, frustrated and apprehensive without this support."

Testimonial from an NSHA INSPIRED family caregiver

"There were times when panic was setting in.. It was a tremendous relief to know that I wasn't alone and that there was someone who cared that I could turn to… You handled Mum with such dignity and respect that I can never thank you enough!"

Innovation:

- a **model, program, approach and/or tool** that is improving, or has the potential to improve, the **experience, health outcomes/quality of life and value for money** provided by homecare for people and their families

- can be a new way of delivering care that shows **promising results for clients and families** or one that **outperforms** current practice.

Part 1: At your tables…1-2-4-All

› Identify an innovation* that addresses a problem in home care

- 2 mins: 1 - individually
- 4 mins: 2- pairs
- 8 mins: 4-table
- 10 mins (optionally) All

*to better organize and provide home care
* that addresses a quality issue in home care (e.g. access, safety, appropriateness, efficiency, effectiveness, equity, continuity)

INSPIRED COPD Program/Chronic Disease Management

Carol Anderson
Executive Director, Continuing Care, Edmonton Zone
October 2017

Innovation and Practice

Helen Bevan, 2015

Edmonton Zone INSPIRED COPD Program

- Spring 2014 – The Canadian Foundation for Healthcare Improvement (CFHI), invited applications from across Canada to participate in a **Quality Improvement Collaborative** focused on clients living with a diagnosis of COPD MRC 4-5

- July, 2014 - The Edmonton Zone, Home Living Program was 1 of 19 projects chosen from across Canada and the only program from AHS to participate in the CFHI INSPIRED collaborative

- The AHS proposal was based on the assumption that clients want to be cared for at home

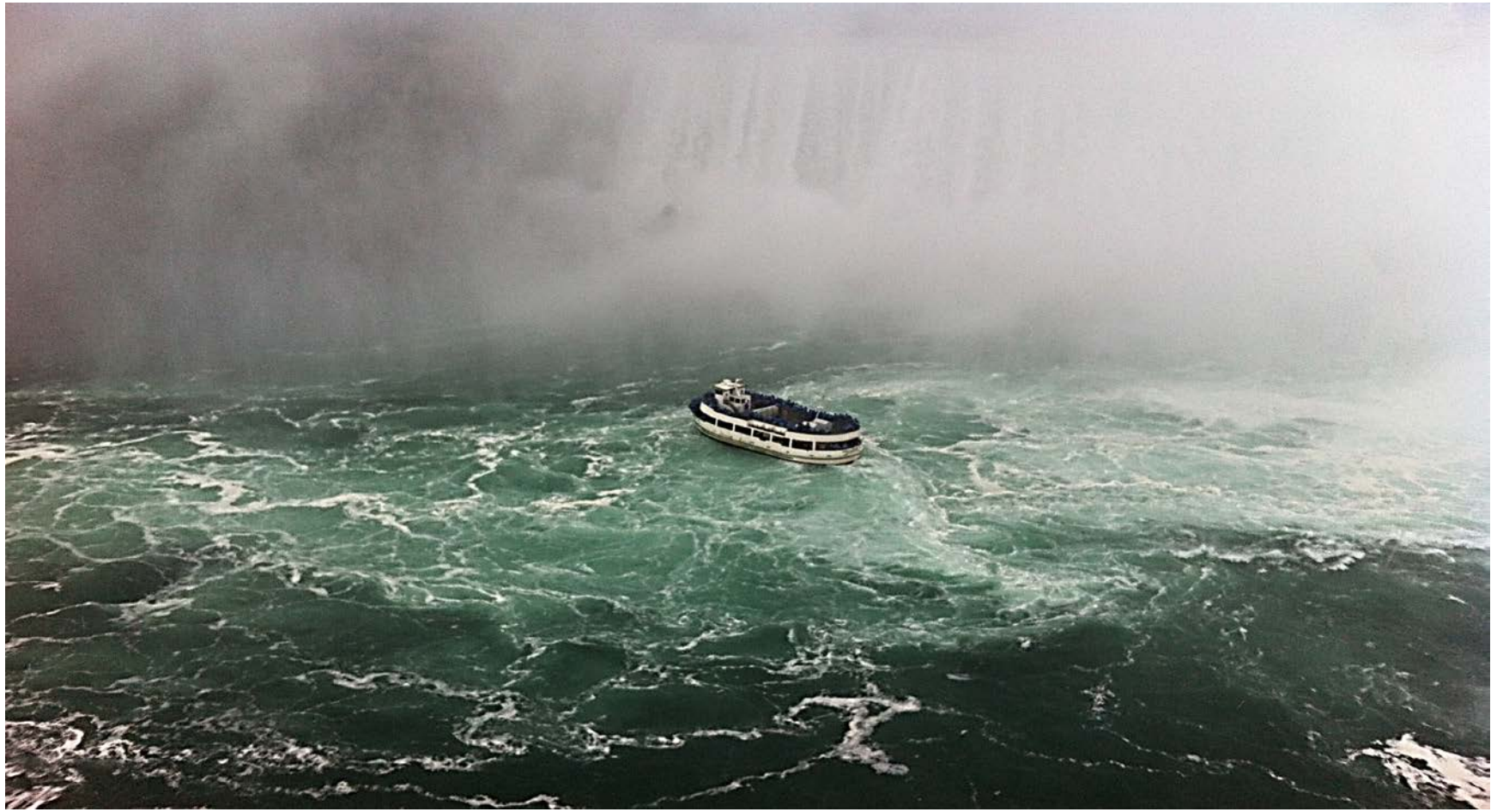
What We Know About COPD

- A chronic, progressive, incurable, but treatable lung disease with uncomfortable breathing or dyspnea as the predominant symptom
- A profound burden of illness for clients, caregivers and the health care system (Rocker & Cook, 2013)
- A chronic, life-limiting disease with an uncertain prognosis (Curtis, 2008)
- COPD is an under diagnosed disease

Alberta Context

- Approximately 90,000 Albertans were living with COPD in 2013
- Hospitalizations and health care costs are the higher than the national average
- 5% of patients are responsible for 2/3 health care costs and these costs are largely amassed in ED and Acute Care
- Identifying community based approaches for the care of complex and frail patients is key (Lewanczuk, Feb 2017)
- “Shifting Care to the Community” will require innovation, critical appraisal of programs and services, new/renewed partnerships, transcendent solutions and commitment

A Client's View of Breathlessness



Home is Home (Brooklyn, 2016)

Edmonton Zone Home Living Program:

~ 17,000 clients/month

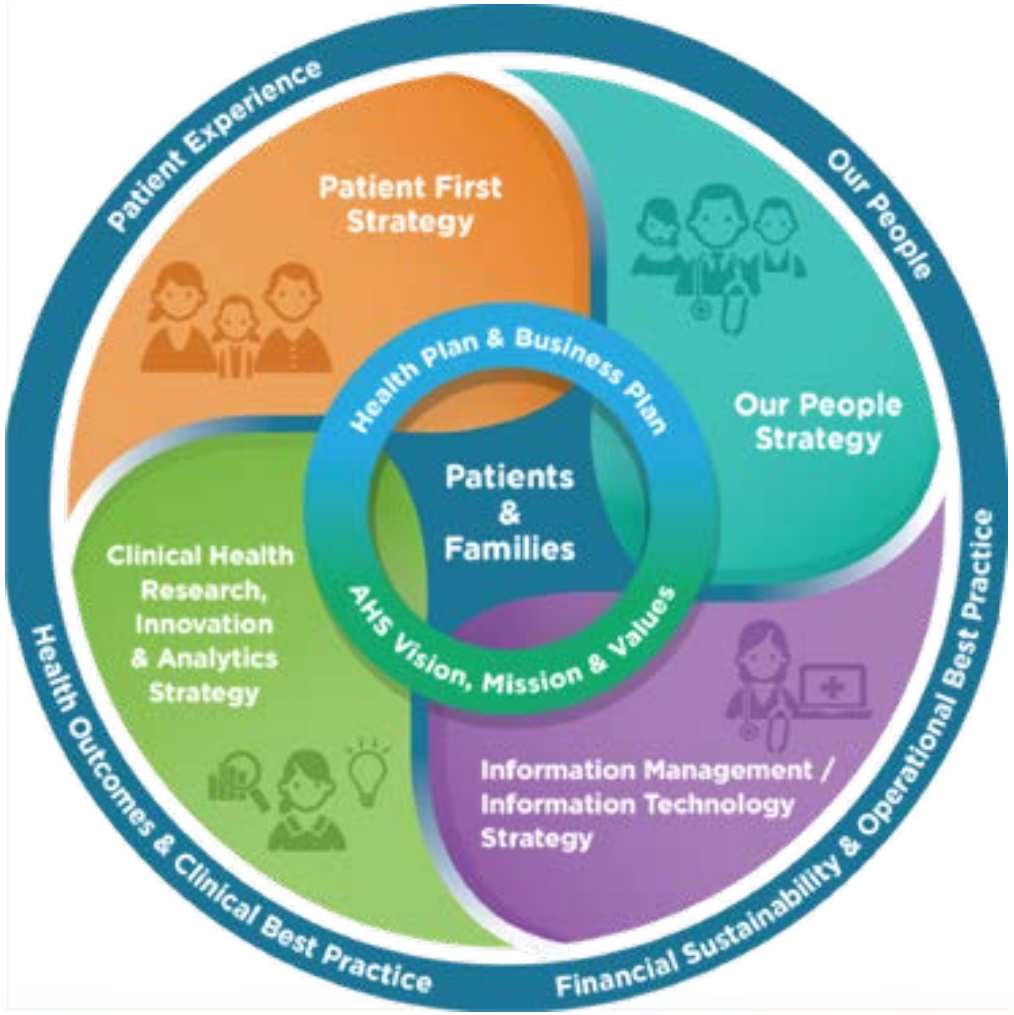
~ 36,000 clients/year

> 55,000 professional visits in one network annually (not including non-prof. staff visits)

Mandate of Home Living:

1) Maintain independent living in the community
2) Prevent admission to AC
3) Support early discharge from AC
4) Preserve & support care by families & communities

Quadruple Aim Approach



AHS - INSPIRED 1.0

Where we started from:

- No standardized and collaborative model of care for the high risk COPD population based on best practice guidelines
- Home Living was unable to identify clients with COPD (MRC 4-5) through the electronic medical record
- Chose to advance the INSPIRED 1.0 with Advanced Nurse Practitioners (ANP) and Respiratory Therapists (RRTs), working with Home Care Case Managers (CMs) with minimal impact for staff and no additional resources

INSPIRED 1.0 Aim Statement

Utilizing a collaborative and client-centered approach, standardization and optimization of Home Living processes and resources for the target population of individuals with advanced COPD (MRC 4-5) will be achieved through:

- identification of clients with advanced COPD in Home Living
- increased client/caregiver satisfaction
- decreased Emergency Department visits and Acute Care admissions and readmissions
- increased percentage of clients who have tracked Advance Care Planning (ACP) conversations
- increased % of clients with an Action Plan for COPD
- increased % of clients offered smoking cessation counseling
- Increased % of clients with immunization screening

INSPIRED 1.0 Interventions

- Standardizing referral processes, care and education
- Individualizing COPD action plans
- Tracking all advance care planning conversations by the team
- Collaborating for client/caregiver follow-up
- Providing resources for home-based pulmonary rehab
- Increasing self-management for clients and their caregivers
- Optimizing population health approaches to the COPD population
- Delivering informed and responsive COPD care for clients in the Home Living Program

Quadruple Aim Team Approach

- Changing patient demographics
- “High needs”
  - Functional and behavioural health/cognitive limitations
  - Social needs (food insecurity, homebound, isolation, etc.)
- Rates of acute care use/health resource use are significantly higher in “high needs” groups
- Despite higher utilization and costs, unmet needs prevail
  - Encounters are poorly coordinated, inefficient and expensive
- No “one-size-fits-all” approach to support complex needs
- High needs patient care is complex
  - Demands more than one set of skills or knowledge

Benefits of a Quadruple Aim Team

ID teams provide:

- More than one set of skills or knowledge
- Ability to engage in patient-centered care
- Mix of generalists and specialists contributing recommendations from differing areas of expertise
- Facilitates shift in emphasis from acute, episodic care to long-term preventive care and chronic disease management
- Maintains continuity of care
- Empowers patients and caregivers as active partners
- Maximises resources for more efficient delivery of care
  - For patients
  - For care providers
  - For healthcare system (financial and operational best practice)
  - Health outcomes and clinical best practice

INSPIRED 1.0 Team Members

- Clients and Family Members
- Case Managers
- Nurse Practitioners
- Registered Respiratory Therapists and the Professional Practice Lead
- Clinician Scientist
- Clinical Nurse Specialists
- Physiotherapists
- Community Respirologist
- Pharmacists
- Family Physicians
- Pulmonary Specialists
- Business Intelligence Team
- Continuing Care Leadership and Managers

INSPIRED 1.0

Referral Data Jan 19/15 - July 21/15

- 50 met the INSPIRED 1.0 criteria (those that did not meet the criteria had appropriate referrals acted upon by the NP team including clients with lung cancer, Interstitial lung disease, etc.)
- 58% male 42% female
- Age Range: 55 and older with the largest group between 75 – 84 yrs
- Functional Disability Due To Breathlessness: 52% MRC 4 and 48% MRC 5
- Smoking Status: 100% current or previous smokers. Of those that were current smokers none accepted the smoking cessation counseling
- 92% of clients were homebound
- 64% of clients had no informal care support in the home
- 90% of clients were seen within 1 week of referral

Client Data: Multi-morbidity

The population presents with far more than COPD

A random review of 25 INSPIRED 1.0 client charts revealed the depth and breadth of client medical complexity:

Co-morbidities:

- 12% had 1 – 4
- 36% had 5 – 9
- 52% had 10 – 20

Most common issues: hypertension, osteoporosis and fractures, coronary artery disease, depression, hypothyroidism, anxiety, arrhythmias, and diabetes

Additional Factors Relating to Complexity

- **Social Determinants of Health**
- **Integration of a chronic disease management model** in the Home Living Program
- Time, energy and commitment needed to build partnerships and understanding for the **shift of more complex care from acute care to the community**

What was Accomplished

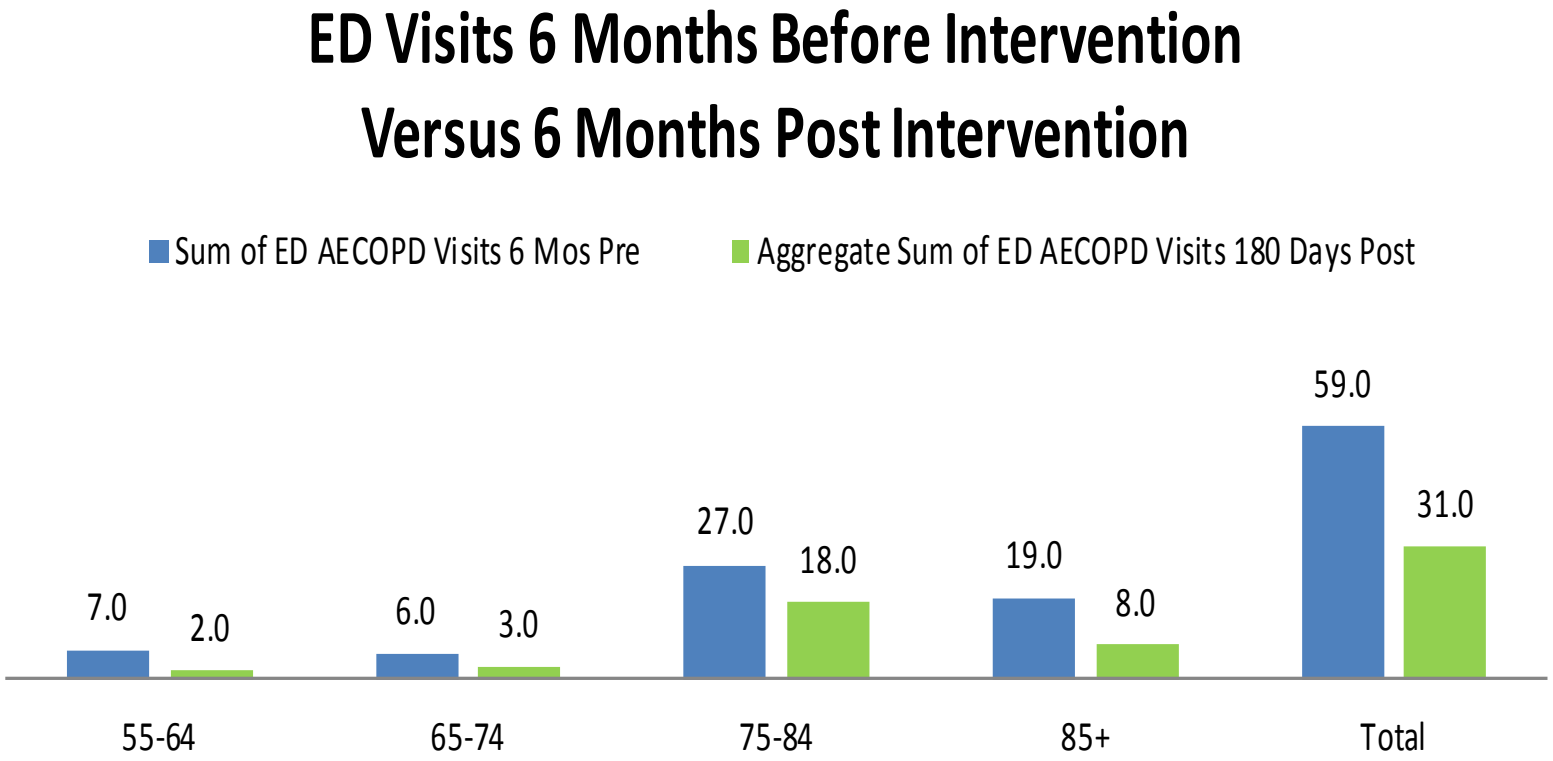
- 100% of the clients received education with the Living Well with COPD materials
- 98% of the clients had a Lung Information Needs Questionnaire (LINQ) completed
- 100% of the clients had a COPD Assessment Tool (CAT) completed
- 70% of the clients had an Action Plan (AP) completed including Goals of Care
- 100% of the clients were screened and offered immunizations as needed
- 100% of the clients were offered smoking cessation materials
- Developed and implemented a Complex Respiratory Algorithm to facilitate earlier referrals to Home Living

What Was Accomplished (cont'd)

- Optimal COPD therapy based on CTS Guidelines:
  - Individualized Action Plans
  - Spiriva, Advair, Ventolin and inhaler therapy reviewed
  - Antibiotics as ordered
  - Crisis dyspnea plans in place and medications in the home (low dose opioids)
  - Build upon previous pulmonary rehab education taken 1 year ago
  - Supplemental oxygen for resting hypoxemia approved through AADL
  - Vaccinations up to date
  - Goals of Care Documented and Advance Care Discussion documented in EMR
  - Interdisciplinary team confers and collaborates for client well-being
  - Home based pulmonary rehab completed in home by client daily
  - Consistent client and family education with Living Well with COPD Materials

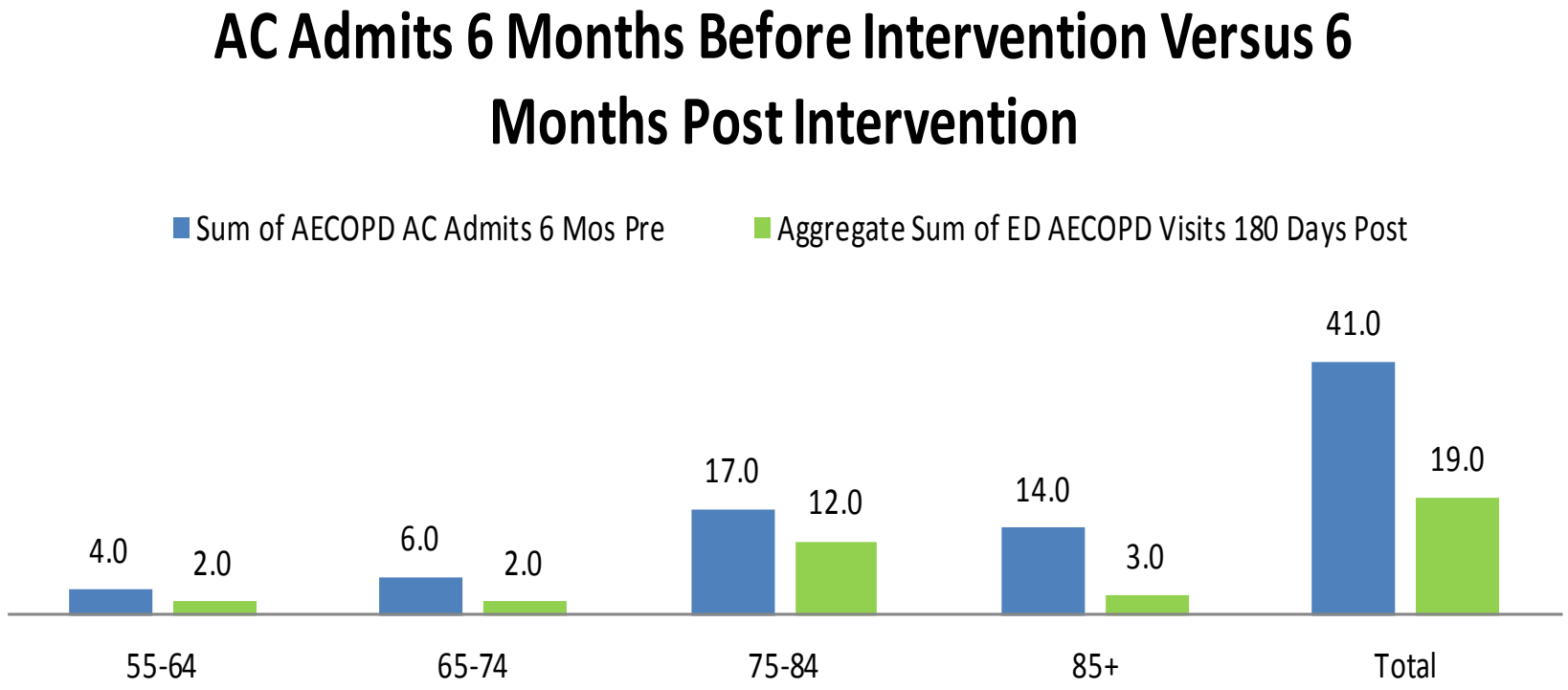
- Timely interventions for all medical conditions as one will trigger another and this inevitably will lead to client transitions

INSPIRED Impact on ED Visits



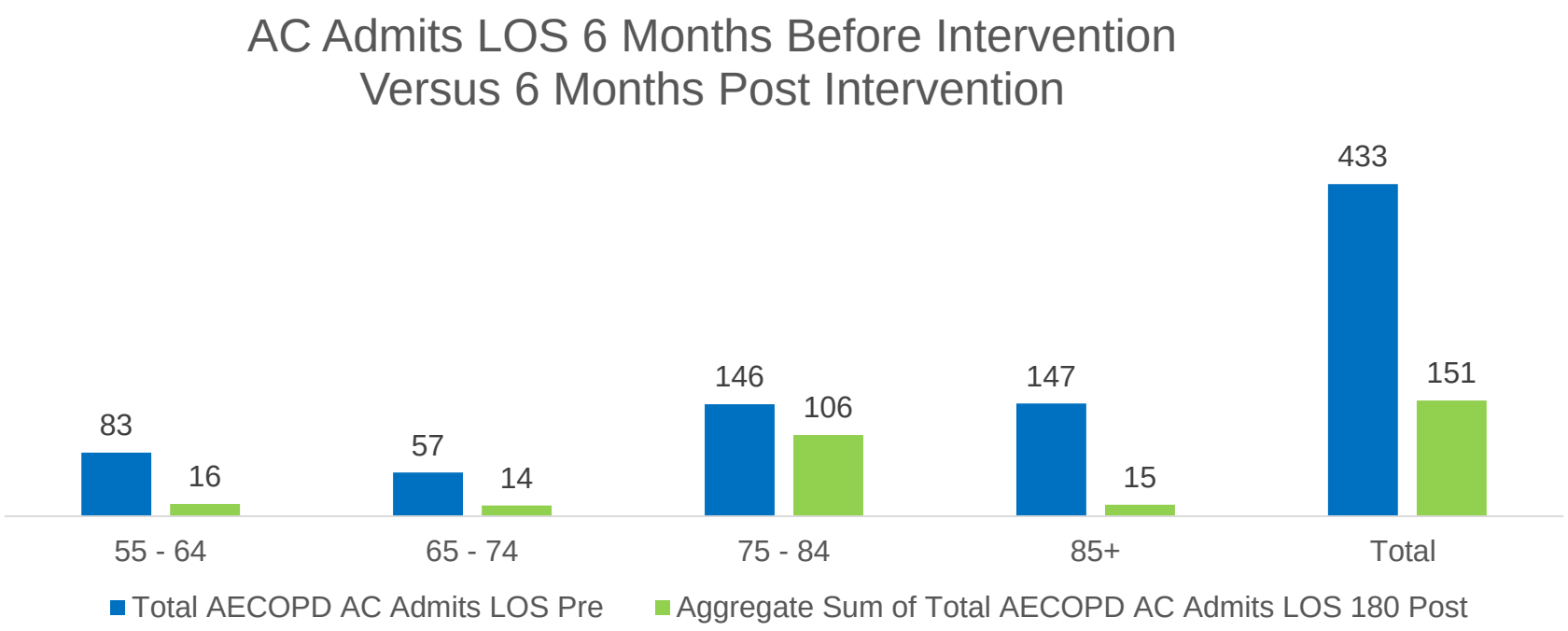
*Please note that these aggregate totals are from the 40 patients with 6 months data before and after intervention. There was a 47% decrease in the total number of ED Visits when comparing 6 months pre and post intervention.

INSPIRED Impact on AC Admissions



*Please note that these aggregate totals are from the 40 patients with 6 months data before and after intervention.
There was a 54% decrease in the total number of AC Admits when comparing 6 months pre and post intervention.

INSPIRED Impact on LOS Data



* Please note that these aggregate totals are from the 40 patient with 6 months data before and after intervention. There was a 65% decrease in the LOS of AC admits when comparing 6 months pre and post intervention.

Financial Sustainability

Estimated Cost Avoidance:

- Chart reviews: 77 Acute Exacerbation of COPD (AECOPD) that were managed in the community:
- EMS Transport $385/person = $ 53,900
- Emergency Department visit cost of $950/visit = $ 73,150
- IP cost of 12,039/stay (LOS uncertain) = $927,003
- **Total Cost Avoidance for 77 AECOPD = $1,054,053**

* Note: does not include other acute medical issues managed by the Home Care team.

Staff Experience

- 50 Continuing Care staff have completed the COPD RESPTREC module
- Formation of the Edmonton Zone Integrated Respiratory Care Steering Committee in 2016
- Engaging staff in quality improvement initiatives which directly impact clients
- Raising the awareness of the role of Home Care both in AHS and with the INSPIRED 1.0 collaborative partners
- Optimizing the full potential of the Home Living Electronic Medical Records for population health initiatives; a process which will require ongoing knowledge and resources
- Increasing the Quality Initiative knowledge and capacity of health care teams through participation in the INSPIRED COPD pan-Canadian Collaborative

Staff Voices Regarding INSPIRED 1.0

Compassion (for all those times when the team went above and beyond to support the clients)

Visionary leadership, engaged partnerships and collaborative care.

Collaboration, consistency compassion Understanding and improving the client experiences, full scope of practice

Tenacity, sense ownership, insightful, exciting, partnerships team

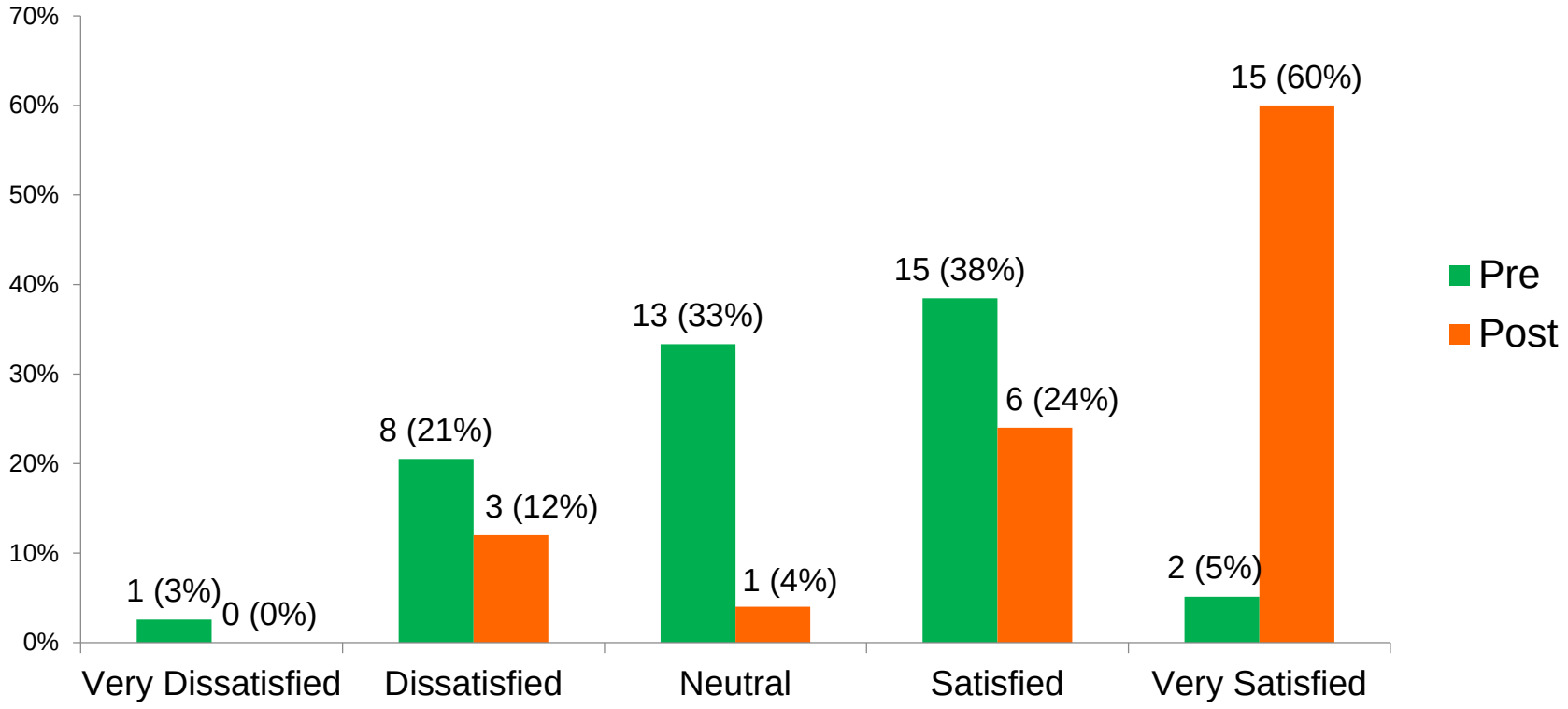
Acute Care is a sprint, community care is a marathon, we are with them for the long haul, what made this endeavor fruitful was the learning. Learning by and about other health disciplines, learning the resources we have inside and outside our program and most importantly learning side by side with our clients.

Daunting, visionary, valuing of QI work

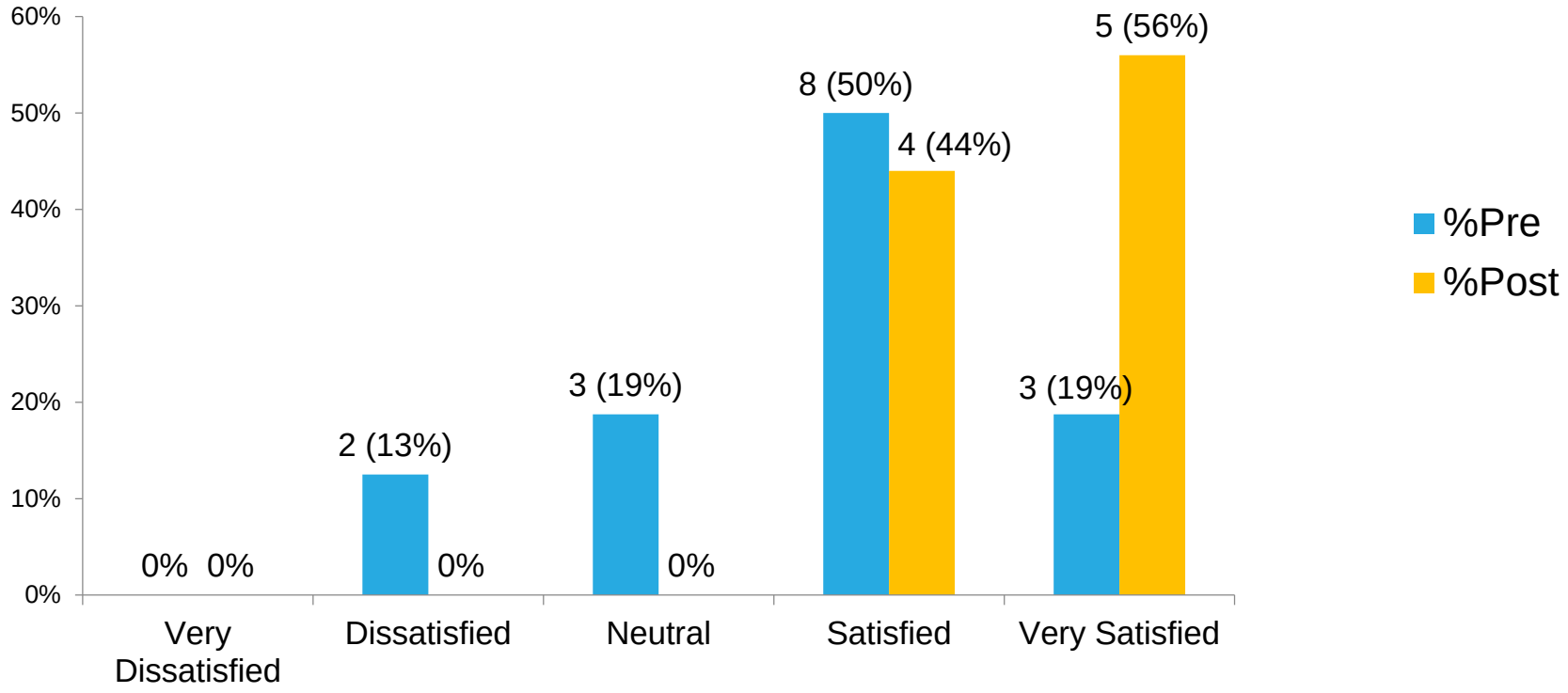
Humbling, privileged to be part of our client's journey living with COPD – they have taught us the meaning of courage and resilience

Client and Caregiver Experience

Client Satisfaction Survey (Pre/Post)



Caregiver Satisfaction Survey (Pre/Post)



"We learned a good deal about COPD, life, crisis, ourselves, family, caring strangers that enter your life and help you life, rather than endure and exist."

"The quality of care and my experiences in living with COPD changed significantly with the INPSIRED approach to care."

"I can tell you that while that INSPIRED team was involved things were much better."

"I was glad to discuss my END of LIFE DECISIONS when I was not in a crisis. That is not the time for many reasons."

"Thank you for taking the time to call and speak to me about my COPD; I didn't know that AHS was so concerned."

Client: "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."

Next Steps: INSPIRED 2.0

- Since July 2015, criteria/referrals for complex respiratory care have expanded to include clients with advanced respiratory disease diagnosis. Approximately 564 referrals have been received.

- Scale, Spread and Sustainability: INSPIRED 2.0 partnering with ED, Acute Care, pulmonary rehab, EMS, Primary Care Networks and the Respiratory Health Strategic Clinical Network

- INSPIRED 2.0 informs the development of a comprehensive Chronic Disease Management (CDM) Model i.e. Heart Failure, Dementia

Alberta Health Services

INSPIRED 2.0 will enable the first phase of the AHS vision for Enhancing Care in the Community

Nationally INSPIRING Outcomes

- More than 1,000 clients have been enrolled in the 19 INSPIRED programs nationally
- Many of these individuals have seen their 3 month hospitalization rate decreased by 80%
- People reported greater self-confidence, symptom management and improvement in functional ability
- Clients say the INSPIRED program gave them their lives back
- For every $1 invested in the program, $21 in hospital-based costs can be prevented (CFHI, 2016)

From INSPIRED to INSPIRING QI Initiatives

"These…results are for one chronic disease – COPD. If the same approach were taken for other chronic illnesses such as congestive heart failure, it could save Canada's healthcare system billions of dollars each year…The proof is in the results – with patients, providers of care and hospital budgets seeing real benefits from this program."

Samis, June 21, 2016.

Successful Spread: Lessons Learned

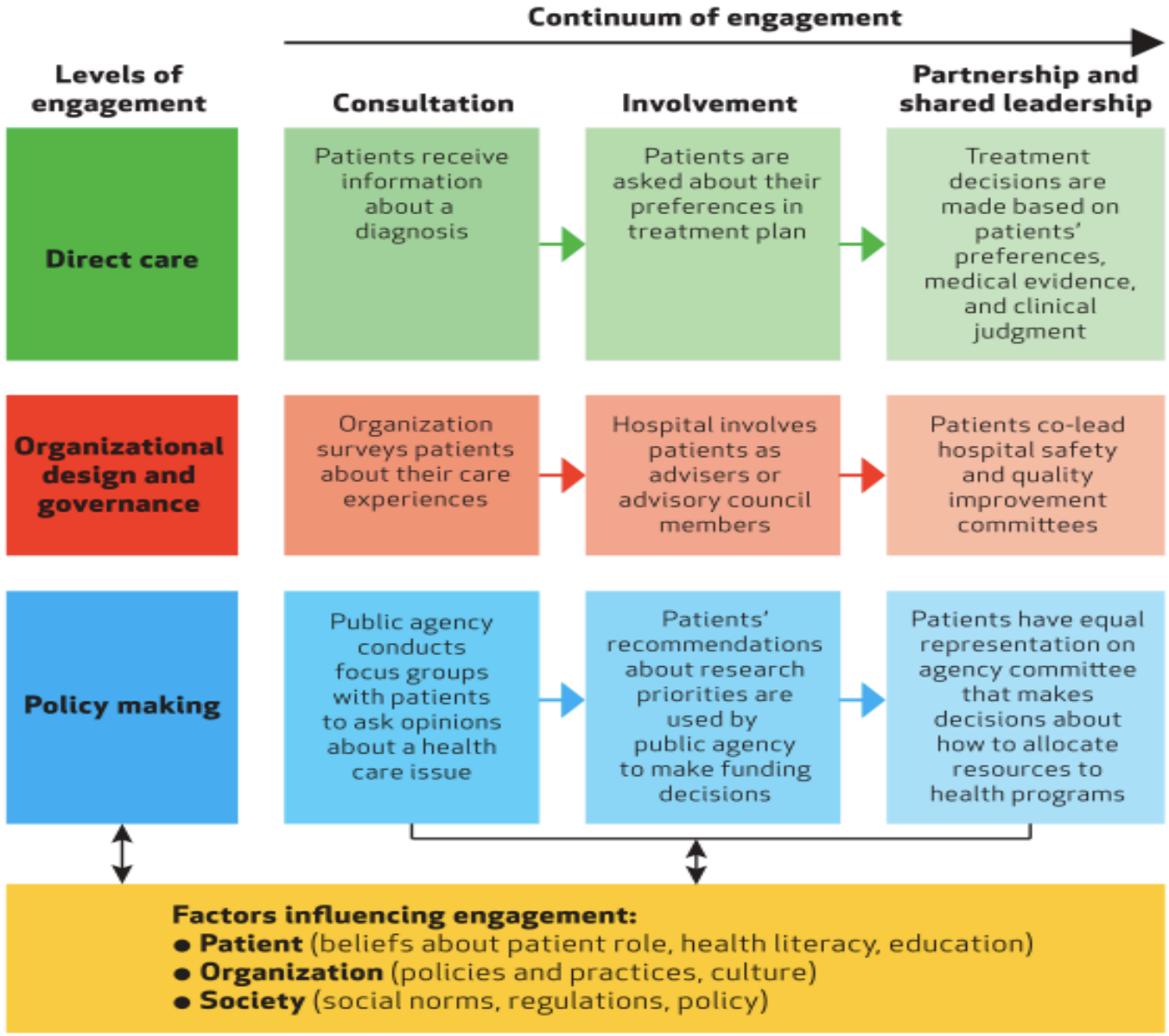
Change of any size takes time, capacity and dedicated resources.

Clients and families are critical for system transformation.

Measuring change in real time is critical to improvement and builds momentum to propel change.

Leadership, dedicated staffing time, and resources are critical.

Engaging Clients and Families in Improvement



Carman framework (Health Affairs Feb 2013)

CFHI Working Definitions

Spread	The transfer of a best practice from one site to another (from best to common practice). Spread goes beyond diffusion to actual implementation.	**it's happening**
Sustain	Holding the gains or cementing the improvements. It's not about the same things–it's about building upon existing improvements to continue to realize gains in health, care and value for money–well into the future.	**it's still happening**
Scale	Expanding the reach to all who stand to benefit (patients, providers) in a defined jurisdiction. Some might say we spread our way to scale. Doing so requires creating an enabling environment–beyond delivery to policy and system attributes that support optimizing reach.	**it's happening everywhere**

Part 2: To spread your innovation

- Leadership
  - Who (generic) would be important to have on board?
  - How would you engage leadership?
  - What role would/could they play
- Client and family engagement
  - Why would clients and family be important?
  - What role could clients and family play?
  - How would you involve them?
- Measurement
  - What is the SMART aim of your innovation?
  - What would be important to measure (think QUADRUPLE!)?
  - How would you measure these?

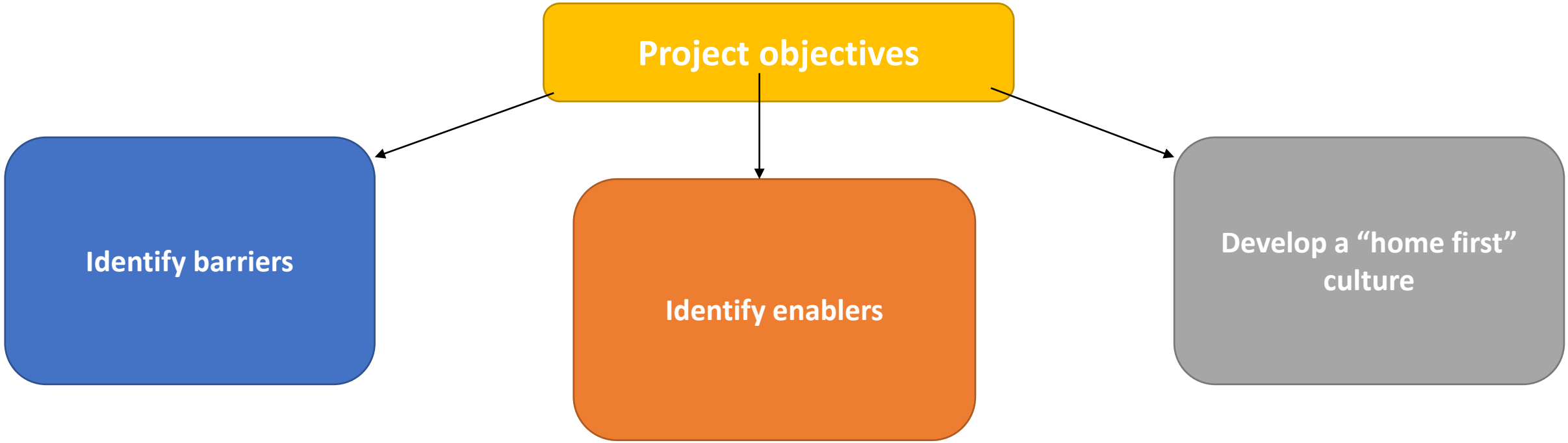
CFHI's EXTRA: Executive Training Program

Cohort 13 – NSHA Improvement Project

Building Capacity.
Enhancing Leadership.
Delivering Improvement.

There is No Place like Home: Building a Home First Philosophy in the Nova Scotia Health Authority and Beyond

This improvement project builds on the initiative launched in 2003-2004 in NS where more hospital patients were being discharged home with home care instead of to nursing homes. After some success in parts of the province, the NSHA is working to develop and support a comprehensive 'home first' culture across the province.



The Problem

Paramedics respond to many calls for patients with palliative goals of care (e.g., 1% of calls are from patients receiving palliative care in NS)[1]

Some are connected to home care, family physicians, and/or palliative programs…

…Some are not

Connected patients/families tell us[2] that they call 9-1-1 if:

Their usual supports are delayed or not available

They feel they need a rapid response

Emotional and stressful situation and they "panic"

1. NS EHS, 2014
2. Paramedics Providing Palliative Care at Home Program– Patient/Family Focus Groups, 2014

Innovation… A Closer Look (NS & PEI)

Pain & Symptom Management

Guideline to address the needs of patients receiving palliative care during a health crisis such as pain, dyspnea, nausea, psycho-social fear/distress

Non-Transport

The novelty of the palliative CPG is to provide palliative support without the need to transport to the emergency department

Medications

New medications introduced to better meet the needs of patients receiving palliative care e.g., hydromorphone, metoclopramide, haloperidol

EMS PALLIATIVE CLINICAL PRACTICE GUIDELINE

Questions? Suggestions?

Thank You!

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