Canadian Foundation for Healthcare Improvement

Fondation canadienne pour l'amélioration des services de santé

INSPIRED Scale Collaborative

Final Evaluation

Summary Report

July 2021

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About CFHI

The Canadian Foundation for Healthcare Improvement (now Healthcare Excellence Canada) is a not-for-profit organization funded by Health Canada. CFHI identifies proven innovations and accelerates their spread across Canada by supporting healthcare organizations to adapt, implement and measure improvements in patient care, population health and value for money.

INTRODUCTION

INSPIRED is a hospital-to-home model of care for patients with moderate to severe Chronic Obstructive Pulmonary Disease (COPD). INSPIRED stands for Implementing a Novel and Supportive Program of Individualized care for patients and families living with Respiratory Disease. The INSPIRED COPD Outreach Program™ provides patients living with COPD, and their families, the information, tools and support they need to better manage their illness in their home.

The Canadian Foundation for Healthcare Improvement (now Healthcare Excellence Canada) has run two improvement collaboratives to spread and scale INSPIRED-like programs across the country.

INSPIRED Spread Collaborative

In the INSPIRED Spread Collaborative (2014–2015), the INSPIRED approach was implemented by 19 teams from healthcare organizations in every province in Canada. It realized gains in healthcare improvement at the micro level, changing COPD care processes; and at the meso level, changing the model of care for patients with moderate to advanced COPD.

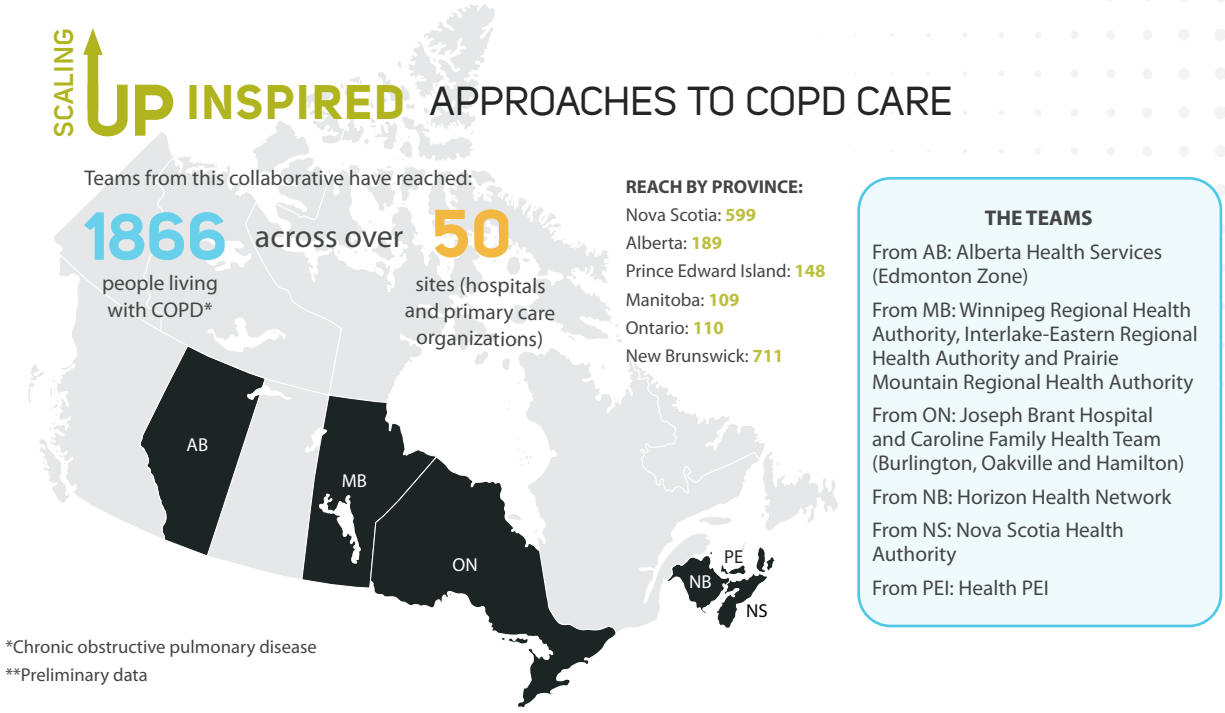
INSPIRED Scale Collaborative

The INSPIRED Scale Collaborative (2017–2019) supported six of the original spread teams to expand their existing INSPIRED-like programs which had demonstrated improvements, to reach even more patients, providers and organizations within their jurisdictions.

The INSPIRED scale collaborative aimed to help healthcare organizations identify patients, and move towards reaching all patients, within their jurisdiction who could benefit from the INSPIRED approach. It also aimed to ensure all providers who could deliver INSPIRED had the capacity and skills required to do so. Scaling-up was designed to create more equitable access to improved quality of care for patients living with advanced COPD and their families. At the macro level it was an opportunity to generate even greater change and facilitate healthcare system transformation.

CROSS-COLLABORATIVE RESULTS

The six teams that took part in the INSPIRED scale collaborative together reached 1,866 people living with COPD across more than 50 hospitals and primary care organizations.



» It became clear during the collaborative that **scaling an innovation involves different strategies than those required for spread.** For example, the regular workarounds became much more difficult when expanding the number of patients being seen.

» Teams became more aware of the **system and policy issues** impacting their respective programs.

  » Enablers to change included: funding for dedicated staff; dedicated time to help set up the program; enhanced primary care infrastructure enabling more effective chronic disease management; and alignment of INSPIRED with government/regional health priorities.

  » Barriers to change included: challenges in health technology infrastructure and integration; different accountability mechanisms; and funding model issues.

» **As teams expanded to a larger group of patients and providers, they moved away from the early champions and therefore encountered greater resistance to change.** The ability to form partnerships across the entire pathway helped to alleviate some of this resistance.

Lessons learned through regional roundtables

Four regional roundtables were hosted in the fall of 2018 by CFHI (now HEC) in partnership with Boehringer Ingelheim Canada. The roundtables brought together 225 participants representing 62 different organizations including INSPIRED scale team members and other stakeholders from Ontario, Alberta, Prince Edward Island, New Brunswick, Nova Scotia and Manitoba.

A number of cross-cutting themes, enablers and barriers to scale emerged from sharing learning at the roundtables:

Patient, family and caregiver engagement

Patients and caregivers emphasized the need for continued support and resources for patients and families, not only in managing their illness but in navigating the system.

Adequate resources

In particular, having the appropriate staff to deliver INSPIRED-like approaches to care (an acute need in rural areas); other resource restraints mentioned were a lack of spirometers or supportive programs such as pulmonary rehab.

Adaptation

Collaborative teams' programs were based on Nova Scotia's INSPIRED COPD Outreach Program™, but local changes were necessary to work towards scale goals, reflecting the need to use the resources available or to integrate the program into other health sectors such as primary care.

Efficient use of resources

Many teams repurposed existing programs and resources rather than start from scratch (for example, using existing chronic disease management nurses to deliver INSPIRED programming or sharing space/resources with other chronic disease management programs).

Integration of services

Challenges included communication barriers across sectors, siloed budget and planning cycles, and the need for better management of co-morbidities and integration between chronic disease management programs.

Culture change

Teams acknowledged difficulties in moving from "INSPIRED early champion" providers to those needing more convincing, and in shifting providers' focus from acute care to a more preventative approach. Significant scaling progress was difficult in some of the new sites, given the time required to establish the programs, train staff and foster necessary provider engagement and culture change.

Physician engagement

This was challenging both in motivating physicians to participate in the program (issues related to payment and fee codes were barriers) and ensuring consistent application of all INSPIRED elements and interventions.

Data collection and management

Considerations included defining the right metrics to measure, ensuring collection mechanisms are not overly burdensome, measuring outcomes meaningful to patients and physicians, ensuring consistent data across sectors when different systems are in place and sites have different program inclusion criteria in place.

Reducing stigma

Many roundtable participants mentioned the need to create awareness about and reduce stigma related to COPD.

TEAM RESULTS

The teams collected information on hospital admission rates, as well as emergency department (ED) visit rates, where applicable. HEC partnered with the Canadian Institute for Health Information (CIHI) to analyze administrative data linked to enrolled patients identified by each team. For each team, measures for INSPIRED patients were calculated one year before their index date (home visit date or hospitalization discharge date) and one year after. COPD specific and all cause (hospital admission for any reason including COPD) hospitalizations were calculated for 30, 90, 180 and 365 days pre and post index date.

To enhance the rigour of the measurement and evaluation of the collaborative and account for the pre/post study design and it's potential bias towards showing a reduction in hospitalization, CIHI undertook a matched control analysis. Post-hospitalization and ED visit rates for INSPIRED patients were compared to rates of similar patients with COPD who were not enrolled in the INSPIRED program (matched controls). All jurisdictions had reductions in hospital admissions for patients enrolled in the INSPIRED program: 4% to 56% reduction in all cause admissions, 11% to 69% reduction in COPD admissions. However, among the matched control group that reduction was higher: 50% to 67% in all cause admissions, 50% to 73% in COPD admissions.

Despite being the gold standard for such analyses the matched control did have some limitations that may affected these results including:

Some limitations with the selection of patients for the matched controls.

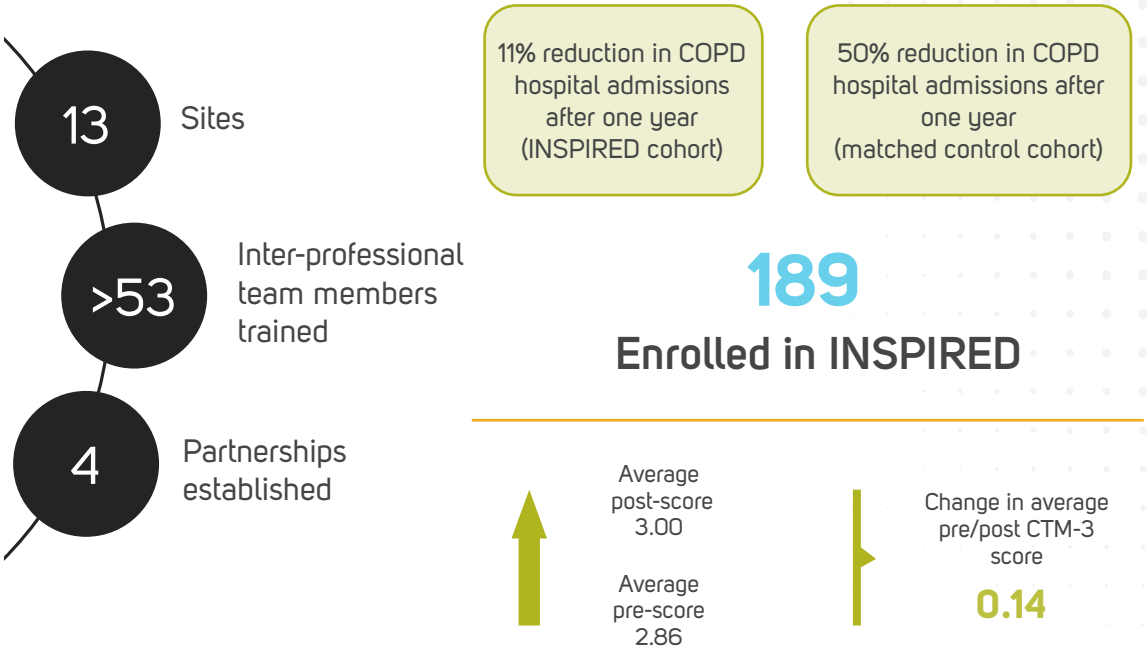
CIHI did not have access to patients' MRC1 scores, and confirmation of COPD diagnosis was not done through pulmonary function tests or spirometry, so relied on a time matched COPD hospitalization and a similar profile of all-cause hospital use in the past year as a proxy for severity of illness. Also, patients who were previously assessed and considered ineligible for INSPIRED may have been included in this group.

The matched control group included patients from the same hospitals as INSPIRED patients.

As a result, patients not enrolled in INSPIRED could still have benefited from institutional improvements from INSPIRED implementation, such as improved understanding of the disease among healthcare providers as well as the application of some INSPIRED protocols for all patients regardless of enrolment.

To measure patients' perspectives on the transition from hospital to home, the teams used the CTM-3 (care transitions measure) – a three-question survey. Higher scores reflect greater satisfaction with the transition process, or – in the case of primary care patients – their care before and after being enrolled in INSPIRED. All teams reported improvements in their CTM-3.

Alberta Health Services (Edmonton Zone), Alberta



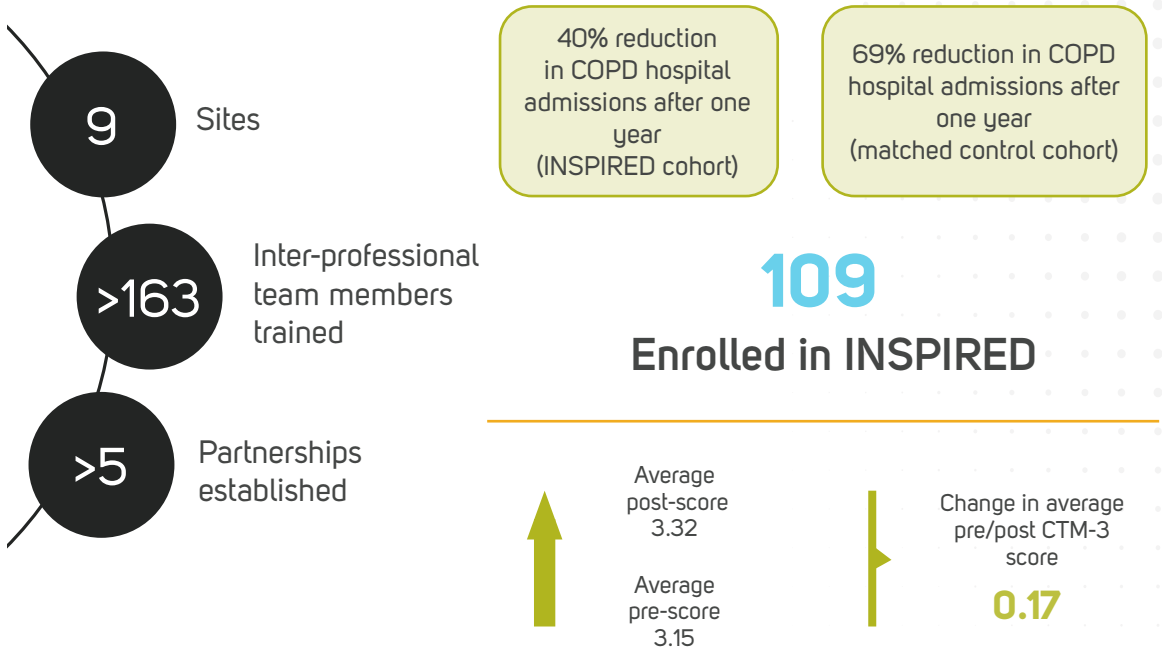
Key successes:

- Improved partnerships across the continuum.
- All program components are being delivered: self-management teaching (100%), action planning (45%), access to helpline (82%), advanced care planning (48%), access to psychosocial support (82%).
- The INSPIRED model is easily adapted and applied to patients living with a variety of other chronic conditions.

Key learnings:

- More of the target population could be successfully identified and enrolled, home care enrollment leads to better participation and there is substantial attrition after enrollment.
- Prioritization and assignment of accountabilities for key components need to be more clear for scale and spread.
- Demographic analysis suggests that this cohort was different than expected.

Interlake-Eastern Regional Health Authority, Prairie Mountain Regional Health Authority and Winnipeg Regional Health Authority, Manitoba



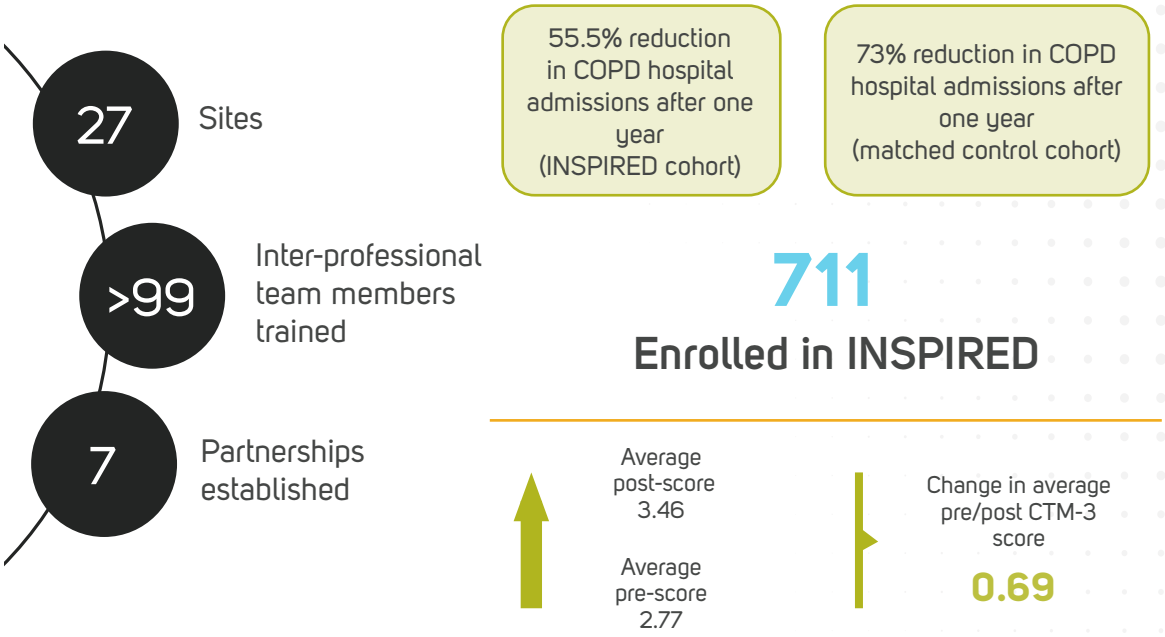
Key learnings:

- Having a common provincial vision.
- The provincial patient and caregiver advisory group.
- Silos were knocked down and relationships built with key players across the province, with interprofessional collaboration across sites and regions.
- More patients are now receiving enhanced care.

Key successes:

- System redesign takes more time but is more sustainable and leads to infrastructure that can be used for other patients with chronic/complex conditions.
- Some surprises: how few formal processes there were; the volume of people involved in the care; the interprofessional team's passion to find improvements; and difficulty with physician engagement, participation and practice change.

Horizon Health Network, New Brunswick



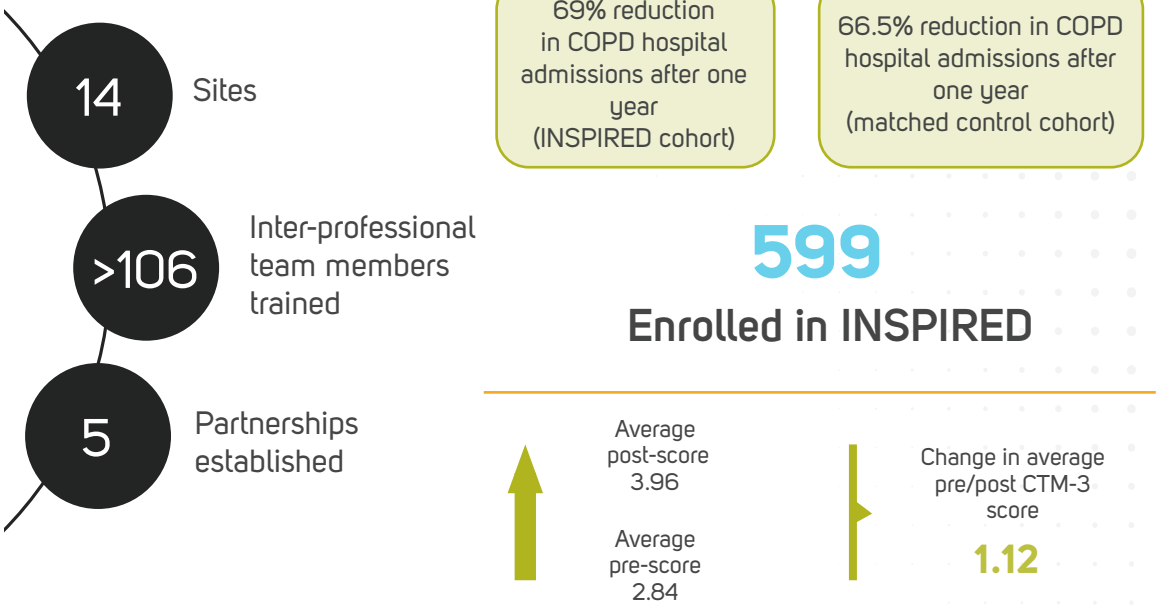
Key successes:

- Spreading the INSPIRED approach into the community through COPD diagnosis, education and support prior to first hospital admission; and actively identifying, recruiting and enrolling patients who have a previous admission.
- Forming a relationship with Telecare 8-1-1, enabling after hours support.
- Changing culture and expectations, including working between hospitals and primary care.
- Streamlining patient identification, which reduced clinician time, redirected time to patient education and increased the program reach.
- Implementing INSPIRED at all six target sites, plus eight "bonus" sites.
- Improving the Advance Care Planning.
- Expanded the reach of INSPIRED via the UPSTREAM program in primary care.

Key learnings:

- It's essential to have patient and family advisors to inform, guide and inspire the team; to directly communicate needs/gaps; and to share their experiences, which transcend roles, backgrounds and silos.
- Culture change is possible through improved communication, partnerships and collaboration across silos; and lateral knowledge transfer as staff move between hospital and community facilities.
- Know your site, the demographics and the rostered patients.

Nova Scotia Health Authority, Nova Scotia



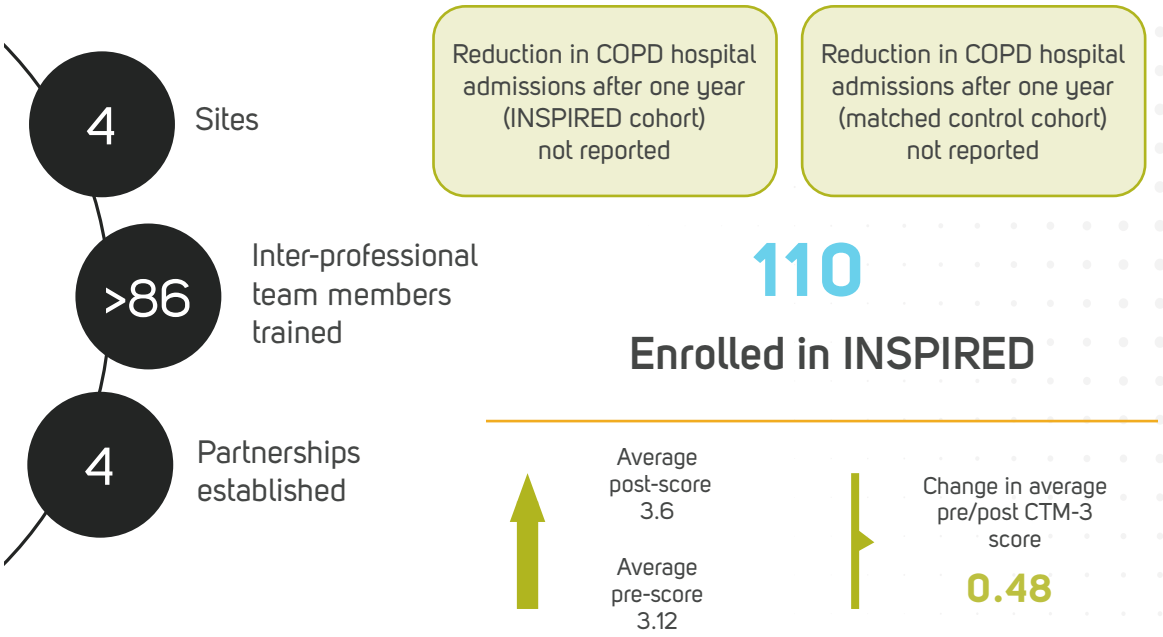
Key successes:

- Positive patient/family feedback.
- More than double the number of new enrollments than the target.
- The teams' engagement, dedication and enthusiasm.
- Expanding teams' expertise, including adding a nurse practitioner.

Key learnings:

- Timely, two-way communication is critical.
- Carefully consider data collection: "what, how, how often, and by whom."
- The importance of accountability, while recognizing inter-site variation – local autonomy versus "non-negotiables."
- Human resources realities: rural versus urban; collaboration "opportunities."
- When referral sources, type and volumes evolve, there is a range of implications.

Joseph Brant Hospital and Caroline Family Health Team: Burlington, Ontario



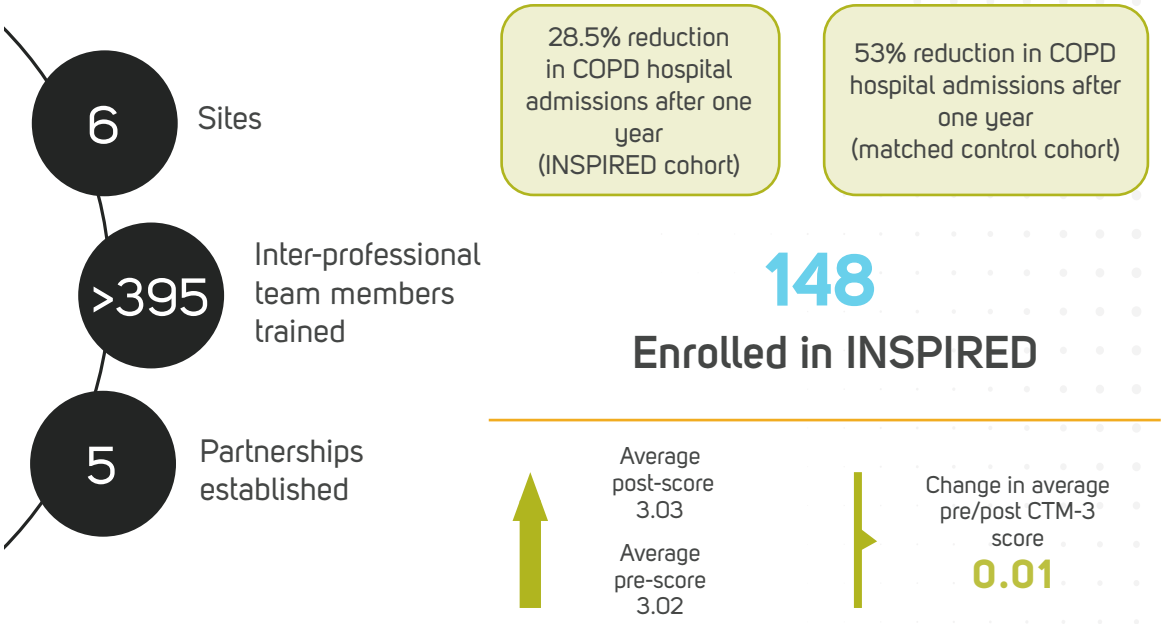
Key successes:

- Collaboration for healthcare delivery: spreading the program to three Family Health Teams; sharing resources across teams; telehealth monitoring; and advance care planning.
- Increased access to INSPIRED COPD care: improvements in local data integrity; increased access to spirometry; expanding pulmonary rehab access.
- Increased industry awareness of leading practice for management of COPD.

Key learnings:

- Partnering with private and public health services may provide quick gains and a logical approach, however in the long term it isn't effective.
- Current funding models need to be re-evaluated.
- Additional resources are needed to support unplanned staffing changes and build capacity.
- To avoid staff redundancy, redefine team member roles.
- INSPIRED is adaptable in primary healthcare and can be expanded to other chronic conditions and services.
- Patients often provide practical and fiscally responsible ideas, and identify health literacy issues and solutions.
- Patients are not always trained on some of the basics in COPD self-management.

Health PEI, Prince Edward Island



Key successes:

- The partnership with home care further extending provincial reach.
- Enhanced connections with other programs such as remote patient monitoring (RPM), Integrated Palliative Care (through home care) and pulmonary rehabilitation.
- The Respiratory Therapist pilot in primary care demonstrated the need for team based care.
- Decreased ED visits for acute exacerbation of COPD provincially, not just for INSPIRED participants.

Key learnings:

- "Ownership" versus "buy in" is important for each in order for people to believe in the change; Health PEI wanted them to feel a sense of belonging and empowered to take action.
- Refinement of the INSPIRED criteria and triage process. Through a provincial central intake process, the RT COPD Coordinator receives and reviews all COPD referrals (not just INSPIRED) and directs each referral to the most appropriate provider either in primary care or home care as well as other programs such as RPM, pulmonary rehabilitation, etc.
- The value added by patient andcaregiver advisors. They were very engaged and provided great input, sharing their perspective and helping to shape patient-centered care.
- The RT COPD Coordinator is instrumental in providing leadership in the development and maintenance of a strong partnership between acute care, primary care, home care and chronic disease programs.

Implementation of the INSPIRED COPD Outreach ProgramTM core components, by team

Core components of INSPIRED COPD Outreach ProgramTM	Alberta	Manitoba	New Brunswick	Nova Scotia	Ontario	Prince Edward Island
Home visits with COPD patients and families	■	■	■ ■*	■	■	■
Self-management education	■	■	■	■	■	■
Psychosocial and/or spiritual care support	■	■ in 1/3 sites ■ in 2/3 sites	■	■ in 3/5 sites ■ in 2/5 sites	■	■
An opportunity to discuss advance care planning and complete a personal directive, if desired	■	■ in 1/3 sites ■ in 2/3 sites	■	■	■	■
Liaison with community and allied healthcare support services to assist patients to remain in their homes	■	■	■	■	■	■
Follow-up phone calls to track patient progress and reinforce education	■	■	■	■	■	■
Providing COPD action plans, where appropriate	■	■	■	■	■	■
A phone number that patients and families can call to have their COPD related questions and/or concerns answered	■	■	■	■	■	■

■ = Implemented ■ = In development ■ = No plans to implement

* Home visits were part of the INSPIRED spread collaborative as well as continued hospital-based programs; home visits were not a part of the program for patients identified through UPSTREAM primary care program

Conclusion

As with the INSPIRED spread collaborative, patients in the INSPIRED scale collaborative reported improvements in both their experience and transition of care. They also noted better collaboration among staff, better resources and more compassion in patient care.

Analysis conducted by CIHI demonstrated some improvements in hospitalization rates among INSPIRED patients; however, comparisons to matched controls muted some of these results. CIHI faced some limitations in collecting data from teams and accessing contextual data, so further analysis and exploration is recommended before making any broad interpretation of these results. Working with CIHI was a huge benefit to the collaborative as it allowed many teams to have enhanced and credible reporting and data analytical capabilities, and facilitated tracking of system indicators.

Teams reported increased capacity and skills related to scaling initiatives and that they had benefitted from participating in this collaborative. We also learned a great deal about the barriers and enablers to large scale change, useful knowledge which will feed into the design of future scale collaboratives.