



Atlantic Canada Backgrounder: Supporting COPD patients at home saves hospital resources and healthcare dollars

Canadian patients living with chronic obstructive pulmonary disease (COPD) do not receive adequate care. As a result, COPD is a costly disease to treat – negatively affecting both hospital resources and healthcare dollars. COPD patients would experience improved quality of life if they received more appropriate supports.

How big is the problem?

By conservative estimates, about 800,000 Canadians live with COPD today. Those living with advanced COPD are among the highest users of healthcare resources. It's estimated that one in four Canadians over age 35 will develop COPD in their lifetime.

Many patients in the advanced stages of COPD resort to episodic emergency department (ED) care to cope with poorly managed symptoms of breathlessness.

What CFHI did:

The Canadian Foundation for Healthcare Improvement (CFHI) and Boehringer Ingelheim Canada Ltd. (BICL) helped 19 teams implement INSPIRED programs across 78 organizations to improve COPD care. This proactive program supports patients living with late-stage COPD, and their families, transition from the hospital into supported care in the community. It was modelled on the INSPIRED COPD Outreach Program™ developed by Medical Director Dr. Graeme Rocker and his team of respiratory therapists and spiritual care practitioners at the Nova Scotia Health Authority in Halifax. INSPIRED delivers self-management support education, individualized action plans, telephone help lines, home visits, psychosocial and spiritual care support, and advance care planning where needed.

INSPIRED teams include respirologists and other physicians, certified COPD educators (respiratory therapists or nurses), spiritual care practitioners or social workers, program coordinators and others. Early results show 90 days into the program, six teams succeeded in reducing hospitalizations by up to 80 percent.

What would happen if we scaled up across the country?

CFHI projects significant healthcare savings across Canada. An independent analysis conducted by RiskAnalytica identifies possible savings in ED visits and in-patient hospital care. It accounts for realistic growth in Canadian populations and the aging of the population. It assumes gradual implementation and patient enrolment. It also adjusts for an expected decrease in cigarette smoking rates, the underlying cause of the majority (80-90 percent) of COPD cases.





Atlantic Canada

New Brunswick

In New Brunswick, about 24,000 people currently live with COPD and about 21 percent of the population are smokers. Smoking rates are down since 1965 when half of Canadians over 15 years old smoked, but yesterday's smokers are today's COPD patients. Over five years, CFHI projects New Brunswick would enrol an average of 140 patients living with advanced COPD per year -- saving \$17 million in hospital care.

This works out to an average net annual benefit of \$34,000 per COPD patient in New Brunswick.

New Brunswick Participants

The following healthcare team and associated facilities implemented INSPIRED programs.

Horizon Health Network

- 92 percent of patients have received a written action plan
- 100 percent of patients have had consults for smoking cessation
- 100 percent of patients have received a referral to the New Brunswick Extra-Mural Program, which provides health services in home and community
- Three other primary care facilities within Horizon Health Network are now enrolling patients using the process implemented in Saint John

Saving Healthcare Dollars in New Brunswick

In New Brunswick, patients living with COPD account for the most hospitalizations of all chronic diseases. INSPIRED services help patients manage COPD better, which would significantly reduce their ED and hospital visits.

Five years of INSPIRED programs across New Brunswick would prevent:

- 1,700 ED visits
- 1,100 hospitalizations
- 9,900 hospital bed days

Five years of INSPIRED programs would decrease ED and hospital costs:

- Saving \$2 million in ED costs
- Saving \$16 million in hospital costs

New Brunswick Bottom Line

The INSPIRED programs cost around \$1,000 annually per COPD patient to implement, but the return on investment is substantial.





In five years, INSPIRED programs across New Brunswick would net \$17 million in healthcare savings. Note this figure is based on prevented ED visits and hospitalizations and does not include savings in prevented routine care, but includes the costs of delivering the program.

INSPIRED Bottom Line: \$1 spent in New Brunswick prevents \$21 in healthcare costs.

Newfoundland and Labrador

In Newfoundland and Labrador, about 13,000 people currently live with COPD and about 20 percent of the population are smokers. Smoking rates are down since 1965 when half of Canadians over 15 years old smoked, but yesterday's smoker's are today's COPD patients. Over five years, CFHI projects Newfoundland and Labrador would enrol an average of 100 COPD patients per year -- saving \$11 million of COPD-related hospital care.

This works out to an average net annual benefit of \$34,000 per COPD patient in Newfoundland and Labrador.

Newfoundland and Labrador Participants

The following healthcare team and associated facilities implemented INSPIRED programs.

Central Health

- 63 percent reduction in ED visits by participating patients
- 57 percent reduction in hospital admission rates by participating patients
- 31 percent reduction in length of hospital stay by participating patients

Saving Healthcare Dollars in Newfoundland and Labrador

In Newfoundland and Labrador, patients living with COPD account for the most hospitalizations of all chronic diseases. INSPIRED services help patients manage COPD better, which would significantly reduce their ED and hospital visits.

Five years of INSPIRED programs across Newfoundland and Labrador would prevent:

- 1,100 ED visits
- 700 hospitalizations
- 6,400 hospital bed days

Five years of INSPIRED programs would decrease ED and hospital costs:

- Saving \$1.3 million in ED costs
- Saving \$10.3 million in hospital costs

Newfoundland and Labrador Bottom Line

The INSPIRED programs cost around \$1,000 annually per COPD patient to implement, but the return on investment is substantial.





In five years, INSPIRED programs across Newfoundland and Labrador would net \$11 million in healthcare savings. Note this figure is based on prevented ED visits and hospitalizations and does not include savings in prevented routine care, but includes costs of delivering the program.

INSPIRED Bottom Line: \$1 spent in Newfoundland and Labrador prevents \$21 in healthcare costs.

Nova Scotia

In Nova Scotia, about 33,000 people currently live with COPD and about 22 percent of the population are smokers. Smoking rates are down since 1965 when half of Canadians over 15 years old smoked, but yesterday's smoker's are today's COPD patients. Over five years, CFHI projects Nova Scotia would enrol an average of 170 COPD patients per year -- saving \$20 million of COPD-related hospital care.

This works out to an average net annual benefit of \$34,000 per COPD patient in Nova Scotia.

Nova Scotia Participants

The following healthcare teams and associated facilities implemented INSPIRED programs.

Nova Scotia Health Authority (Halifax) – the INSPIRED COPD Outreach Program™ that CFHI spread through the INSPIRED collaboration

- 58 percent reduction in ED visits
- 62 percent reduction in hospital visits
- 60 percent reduction in hospital bed days

Nova Scotia Health Authority (South Shore)

- Average number of bed days for participating patients decreased from 10.6 to 7.3
- 100 percent of patients involved in the INSPIRED care pathway attended a primary care provider appointment post-discharge

Saving Healthcare Dollars in Nova Scotia

In Nova Scotia, patients living with COPD account for the most hospitalizations of all chronic diseases. INSPIRED services help patients manage COPD better, which would significantly reduce their ED and hospital visits.

Five years of INSPIRED programs across Nova Scotia would prevent:

- 2,000 ED visits
- 1,300 hospitalizations
- 11,900 hospital bed days

Five years of INSPIRED programs would decrease ED and hospital costs:

- Saving \$2.3 million in ED costs
- Saving \$19 million in hospital costs





Nova Scotia Bottom Line

The INSPIRED programs cost around \$1,000 annually per COPD patient to implement, but the return on investment is substantial.

In five years, INSPIRED programs across Nova Scotia would net \$20 million in healthcare savings. Note this figure is based on prevented ED visits and hospitalizations and does not include savings in prevented routine care, but includes costs of delivering the program.

INSPIRED Bottom Line: \$1 spent in Nova Scotia prevents \$21 in healthcare costs.

Prince Edward Island

On Prince Edward Island, about 5,000 people currently live with COPD and about 20 percent of the population are smokers. Smoking rates are down since 1965 when half of Canadians over 15 years old smoked, but yesterday's smoker's are today's COPD patients. Over five years, CFHI projects Prince Edward Island would enrol an average of 20 COPD patients per year -- saving \$2.8 million of COPD-related hospital care.

This works out to an average net annual benefit of \$34,000 per COPD patient on Prince Edward Island.

Prince Edward Island Participants

The following healthcare team and associated facilities implemented INSPIRED programs.

Health PEI

- 78 percent reduction in ED visits by participating patients
- 77 percent reduction in hospital admission rates by participating patients

Saving Healthcare Dollars on Prince Edward Island

On Prince Edward Island, patients living with COPD account for the most hospitalizations of all chronic diseases. INSPIRED services help patients manage COPD better, which would significantly reduce their ED and hospital visits.

Five years of INSPIRED programs across Prince Edward Island would prevent:

- 280 ED visits
- 180 hospitalizations
- 1,600 hospital bed days

Five years of INSPIRED programs would decrease ED and hospital costs by at least nine percent:

- Saving \$322,000 in ED costs
- Saving \$2.6 million in hospital costs





Prince Edward Island Bottom Line

The INSPIRED programs cost around \$1,000 annually per COPD patient to implement, but the return on investment is substantial.

In five years, INSPIRED programs across Prince Edward Island would net \$2.8 million in healthcare savings. Note this figure is based on prevented ED visits and hospitalizations and does not include savings in prevented routine care, but includes costs of delivering the program.

INSPIRED Bottom Line: \$1 spent in Prince Edward Island prevents \$21 in healthcare costs.

National Portrait

Saving Healthcare Dollars

COPD is a primary cause of ED and hospital visits in Canada. By helping patients manage their COPD symptoms better, the INSPIRED COPD Outreach Program™ significantly reduces ED and hospital visits.

Five years of INSPIRED programs across Canada would prevent:

- 68,500 ED visits
- 44,100 hospitalizations
- 400,000 hospital bed days

Five years of INSPIRED programs would decrease ED and hospital costs:

- Saving \$79 million in ED costs
- Saving \$644 million in hospital costs

National Bottom Line

The INSPIRED program costs around \$1,000 per COPD patient to implement. In five years, nationwide INSPIRED programs would net \$688 million in healthcare savings. Note this figure is based on prevented ED visits and hospitalizations and does not include savings in prevented routine care, but includes the costs of delivering the program.

Bottom line: \$1 invested in INSPIRED prevents \$21 in healthcare costs.

The Canadian Foundation for Healthcare Improvement identifies proven innovations and accelerates their spread across Canada, improving patient care, the health of Canadians and value-for-money. These innovations could save healthcare budgets over \$1 billion per year. CFHI is a not-for-profit organization funded by Health Canada. Visit www.cfhi-fcass.ca for more information.

The views expressed herein do not necessarily represent the views of Health Canada.

