A Collaborative Approach to a Chronic Care Problem in Canada
Evaluative Results from the Atlantic Healthcare Collaboration

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Context
- In Atlantic Canada, people live with greater risk factors for and higher rates of chronic disease (CD) than the average Canadian¹;²;³, and health system costs have historically risen faster than other parts of Canada²;
- In 2012, Atlantic Regional Health Authorities (RHAs) partnered with CFHI, endorsed by provincial health departments, to strike a charter² to improve patient- and family-centred care, develop more sustainable care, and create a network of care teams to undertake chronic care improvements⁵;
- The Atlantic Healthcare Collaboration for Innovation and Improvement in Chronic Disease (AHC) is a quality improvement collaborative (QIC) that supported 11 improvement teams (Figure 1) working to improve care for patients living with CD and their families (from 2012-2014); and
- The AHC QIC was designed to combine education in QI (based on the CFHI Improvement Model™) and chronic care, relying on the Chronic Care Model (CCM)⁷.

Evaluation Objectives
The AHC QIC summative evaluation⁸,⁹ captured:
- Team performance of their improvement projects (IPs); and
- Collaboration performance.

Methods
The evaluation relied on the following data sources:
- Document review of team worksheets and progress reports, CFHI supporting materials, charter;
- Surveys (four post-workshop surveys; one coaching survey);
- Key informant interviews with AHC executive committee (EC) members, academic mentors and improvement coaches, team members and CFHI staff;
- Social Networking Analysis (SNA) surveys (three point-in-time surveys); and
- Focus group with CFHI staff.
**AHC Collaborative Approach**

The AHC QIC model incorporated a number of features (Table 1); many of these components are shared within existing QICs\(^{10}\), while some are unique to the AHC:

- **Shared governance and costing**
  - An EC of Atlantic RHA CEOs and VPs governed the collaborative with CFHI leadership.
  - Formalized partnership through a charter, which set the goals, activities and features of the collaborative.
- **Reliance on regional needs and local expertise**
  - Patient- and family-centred CD management and prevention was selected as a central focus by AHC leaders.
  - Region-specific improvement aims, teams and improvements selected by local leadership from each health region.
  - CFHI regional liaison position created to serve as main point of contact.
- **Emphasis on connecting delivery to policy**
  - Participation of policymakers in workshops and in discussions with the EC.
  - Briefings and orientations with health departments on an ongoing basis.
- **Use of a coaching-mentorship model to support teams**
  - Support offered to each team by an academic mentor and an improvement coach, where:
    - Academic Mentors, who assisted with problem formulation, methodology and data requirements as well as the assessment and application of evidence from research to practice, were senior applied researchers and practitioners.
    - Improvement Coaches, who assisted with the change management process and the tactical and strategic approaches to effective implementation, were experienced healthcare leaders and clinicians.

**Results**

- Eleven teams of front-line clinicians and managers joined CFHI faculty, coaches, mentors and staff to assess, design, implement, evaluate and share healthcare improvements for people living with CD. Team improvements supported patients and families with diabetes, chronic obstructive pulmonary disease (COPD), mental health issues or multi-morbidity issues; some were based in acute settings while others took place in the community.
- The eleven team progressed to different stages along a QI team maturity matrix scale:
  - Eleven teams: Assessment of underlying problems;
  - Seven teams: Design of a solution; note that two LGH teams opted to exit the collaborative and another one joined; and
  - Four teams: Implementation and evaluation.
- **Table 2** provides a summary of results as of February 2015.
- While not all teams advanced to implementation during the course of the collaboration, all benefited from gaining new QI skills and the formation of new pan-regional connections. See Verma et al (2015)\(^{11}\) for further results.

<table>
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<tr>
<th>Table 1.</th>
<th>Components of the Atlantic Healthcare Collaboration Quality Improvement Collaborative (QIC) Model</th>
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<td><strong>Component</strong></td>
<td><strong>Description</strong></td>
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| Overall QIC Structure | ▶ 24 months in duration  
▶ All team in-person workshops and webinars  
▶ Team-led improvement projects  
▶ Phone meetings reserved for teams with CFHI and the team’s coach and mentor |
| Multidisciplinary QI Teams* | ▶ Teams comprised of two to six members |
| In-person Sessions* | ▶ Four two-day workshops, one hosted in each of the Atlantic provinces  
▶ Foster team learning and planning as well as cross-team sharing of experiences |
| Content of In-person Sessions | ▶ Didactic training in QI (e.g., spread and sustainability, logic modeling) and CCM best practices (e.g., chronic care model, patient and provide engagement strategies) |
| Plan-Do-Study-Act (PDSA) Cycles* | ▶ Did not make use of PDSA cycles |
| QI Processes* | ▶ Measurement and data collection plans  
▶ Ongoing, individualized team feedback  
▶ Logic modeling  
▶ Change management |
| Organizational Involvement | ▶ Organizational leadership involvement  
▶ Workshop materials/webinars available to broader organizations |

* Indicates most common QIC components (as per Nadeem et al 2013)
1.1) QIC components:
Participants reported that the most helpful QIC components of the AHC included:
- **The customized support and curriculum.** It respected the stages of progress of teams and their IPs.
- **The coaching-mentorship model.** It combined complementary expertise (academic and practical application).
- **The additional support from CFHI during transitional and high-risk situations,** e.g., change management support during staff turnover.
- Triangulation of participant feedback from the activity surveys, workshops and interviews demonstrate that the curriculum:
  - Effectively promoted the principles of effective chronic care improvement across the health system. It covered the spectrum from delivery to policy.
  - Was useful in increasing teams’ knowledge and confidence to conduct evaluation and project management, establish community partnerships and work in a multidisciplinary team.
  - Increased teams’ understanding of ways to better communicate improvement progress and results with various stakeholders on an ongoing basis.

1.2) Collaborative network:
The SNA showed:
- Paired network density at least doubled across all types of connections including the know, share and collaborate connections;
- The know network had the greatest increase in new connections (with 132 new connections developed from baseline to follow-up);
- The share network grew the most; and
- CFHI fostered the strongest connections with the teams at the outset. At follow-up teams had become more closely connected to the local expertise of faculty, coaches and mentors.

1.3) Patient- and family-centred chronic care improvement:
Lessons learned from the four out of eleven teams who implemented and evaluated their improvements are shared (Table 2).

| Table 2. Key Milestones of the Atlantic Healthcare Collaboration Teams who are Undergoing Implementation and Evaluation of their Chronic Care Improvements |
|-----------------|-------------------------------------------------------------------------------------------------------------|
| Team            | Improvement Project Milestones                                                                                                                                 |
| Health PEI      | 111 targeted healthcare providers completed or are in the process of self-management support (SMS) training. |
|                 | Post-training surveys showed:                                                                                                                                       |
|                 | • High provider satisfaction with the training and content, citing the main strengths as the patient/family tools, practical examples and opportunity to apply the training in practice; |
|                 | • An increase in providers’ confidence in their SMS ability; and                                             |
|                 | • Providers cite at least two behaviour changes they will make in practice, e.g., set goals with patients and identify barriers to change. |
| Horizon Health Network | Peers Engaged in Education and Recovery (PEER) 126 youth participants reported making progress toward goals, e.g., friendships and activities showed the most significant progress; while participants reported developing skills for future employment as they progress toward active employment. |
|                 | Healthcare utilization data showed decreased use of healthcare services by participants.                                                                                          |
|                 | Surveys focusing on levels of concern in fourteen life areas pre- and post-PEER 126 showed youth self-report improvements in all areas with the exception of spirituality. |
| Central Health  | Created an outreach program for patients living with advanced COPD and their families—the program targets home-based support including self-management education, action plan development, psychosocial support and, where appropriate, advance care planning. |
|                 | Redesigned the former asthma outpatient clinic into the Respiratory Care Centre, which uses a 9-month pathway combining onsite medical management with education and self-management support for the mild – moderate COPD population (having seen 60 patients in a two-month span since opening). |
| Western Health  | Reported 100% compliance of a depression screening tool for people living with type 2 diabetes (based on an implementation audit). |
|                 | Educated staff on a new “compliments and complaints policy” for soliciting patient feedback, which includes: |
|                 | • Knowledgeable, skilled, respectful, providers; |
|                 | • Easily scheduled appointments; |
|                 | • Helpful diabetes management plans, and education sessions; and |
|                 | • Patient-reported self-confidence in diabetes management. |
|                 | Identified team core competencies and training for self-management support. |
|                 | Assessment results of Primary Care Resources and Supports for Chronic Disease Self-Management (PCRS) conducted pre- and post- the aforementioned processes showed improvements across all categories from baseline to follow-up, e.g.: |
|                 | • Emotional health and physician, team and staff self-management education—6 out of 7 teams met or exceeded the target of a 2.0 change; and |
|                 | • Patient input—all teams met or exceeded the target of a 2.0 change. |
Key Takeaways

- Changes in the design, delivery and evaluation of healthcare require continued time and commitment to the improvement process.
- Improvement readiness assessments help set realistic expectations regarding the time and commitment needed to see a change process through to fruition.
- Aligning improvement efforts with strategic priorities leads to more reliable and ongoing support.
- Leadership support is essential to aligning provincial, regional or organizational policies with on-the-ground improvement efforts.

References


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