

Digestive Health Strategic Clinical Network: Striving for better care and outcomes in digestive health

Gilaad G. Kaplan MD MPH, Louise Morrin BSc(PT) MBA, Sander Veldhuyzen van Zanten MD MPH PhD; for the Digestive Health Strategic Clinical Network

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Digestive diseases are a broad group of disorders that affect Canadians and their health care system. A 2010 report by the Economic Burden of Illness in Canada estimated that health care expenditures for digestive diseases represented 17.2% of the total direct health care expenditures in Canada.¹ The annual cost of digestive diseases in Canada was primarily driven by admission to hospital (\$4.4 billion), drugs (\$1.9 billion) and physician expenditures (\$985 million).¹ Some digestive diseases are highly prevalent but have low morbidity: for example, a 2015 evidence review of MEDLINE and the Cochrane Database of Systematic Reviews found that irritable bowel syndrome (IBS) affects 7%–21% of the general population.² Other digestive diseases are less common but are associated with serious morbidity, high utilization of health care resources and mortality. For example, in 2010, in Alberta, the annual incidence, risk of surgery and in-hospital mortality for patients admitted to hospital for upper gastrointestinal bleeding secondary to peptic ulcer disease were 41.2 per 100 000 population, 4.2% and 3.7%, respectively.³ A substantial portion of care comprises endoscopic procedures that investigate gastrointestinal symptoms, of which screening for colon cancer plays an increasing part.⁴

The burden of digestive diseases is forecasted to rise over time. The prevalence of inflammatory bowel disease (IBD) in Canada in 2018 was 0.7%, which represents 270 000 Canadians living with IBD.⁵ By 2030, the prevalence of IBD is forecasted to rise to 1% of the general population, which would represent over 400 000 Canadians with IBD.⁵ Over the next decade, the health care system could struggle to provide equitable and affordable health care to patients with digestive diseases.

In November 2016, the Digestive Health Strategic Clinical Network (DH SCN; www.ahs.ca/dhscn) was launched by Alberta Health Services (AHS) to improve the quality of care, analyze and eliminate unwarranted variation in care across the province, and optimize cost efficiencies associated with caring for patients with digestive diseases. The DH SCN is responsible for engendering innovation in the delivery of health care in line with the 6 dimen-

KEY POINTS

- The Digestive Health Strategic Clinical Network (DH SCN) fosters a commitment to quality improvement on a provincial scale among the digestive health community.
- Strategic goals and priorities are derived from best available evidence, subject matter experts, patient advisors and stakeholder engagement with the digestive health community.
- Two major areas of work focus on 1) improving access for patients with digestive health concerns through the spread of primary care supports, including clinical pathways, phone advice and e-advice; and 2) reducing variation and improving the quality of endoscopy services through the province-wide adoption of the Canada-Global Rating Scale.

sions of quality of care: acceptability, accessibility, appropriateness, effectiveness, efficiency and safety.⁶ The vision of the DH SCN is to achieve the best digestive health for all Albertans by innovating and collaborating to create a person-focused, high-quality digestive health system through prevention, research and best practices (see figure). The foundation of the DH SCN is its core committee: a multidisciplinary team of health care professionals, patients and families, researchers, policy-makers and administrators.

The core committee was responsible for establishing the Transformational Roadmap: a 5-year strategic plan outlining the goals, priorities and principles guiding the activities of the SCN (<https://www.albertahealthservices.ca/assets/about/scn/ahs-scn-dh-roadmap.pdf>). The committee drew on evidence-based data derived from systematic literature reviews, analyses of administrative health care databases of provincial outcomes of digestive diseases and presentations from teams of local experts. Through several committee meetings, widely distributed surveys and several community events, over 290 stakeholders were engaged to define the direction of the SCN, identify the major gaps, define strategic goals and determine interventions required to address those challenges.

The DH SCN's Transformational Roadmap established 4 overarching strategic goals: integrate primary and specialist care and improve access; deliver high-quality standardized digestive health care; provide clinically appropriate and efficient care; and prevent digestive diseases. These strategic goals serve as the foundation for its key priorities (see figure and Appendix 1, available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.190599/-/DC1). The SCN has formed several multistakeholder working groups to study variation and disparity of outcomes, and to implement innovations in the delivery of health care. Appendix 2 (available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.190599/-/DC1) presents the current initiatives of the DH SCN and their alignment to its strategic priorities and the 6 dimensions of quality of care.

One initiative aims to address the timeliness of access to specialty care for digestive diseases. Referral demands from primary care exceeded the capacity of gastroenterologists practising in Alberta such that nonurgent referrals had wait times of 9–24 months. The University of Calgary's Division of Gastroenterology and Hepatology partnered with primary care networks to co-develop primary care clinical pathways for low-risk, high-demand indications (e.g., IBS). These pathways have decreased wait times while maintaining safety and increasing primary care capacity.⁷ The pathways comprise evidence-based algorithms to guide diagnosis and management for primary care providers with links to local resources, references and patient handouts. Communication between primary care and specialists in the use of these clinical care pathways are facilitated by Specialist LINK (same-day phone

consultation with a gastroenterologist) and eReferral Advice Request (secure Web-based electronic messaging between family physician and gastroenterologist). A complete list of pathways can be found at www.specialistlink.ca/clinical-pathways/clinical-pathways.cfm. The DH SCN was awarded a Health Innovation Implementation and Spread grant by Alberta Health and AHS to spread the adoption of these primary care supports across Alberta.

A second initiative is the DH SCN partnership with the Alberta Colorectal Cancer Screening Program: implementing the Canada-Global Rating Scale at all 50 endoscopy units in the province. The scale is an evidence-based, patient-centred approach to assessing the quality of endoscopic services and will guide teams to identify opportunities for quality improvement.⁸ Readiness assessments have been conducted with all sites, and implementation will be supported by an Innovation Learning Collaborative, modelled on the Institute for Healthcare Improvement Collaborative Model for Achieving Breakthrough Improvement.⁹ The collaborative will bring together front-line endoscopy teams from across the province to work toward implementation of the Canada-Global Rating Scale, identification of areas for improvement, development of action plans, and identification and measurement of quality indicators to assess progress.

The DH SCN has encountered several challenges while trying to operationalize strategic priorities into actionable activities with clear benefits and outcomes. First, comprehensive Canadian data on the burden (e.g., prevalence, admission to hospitals and costs) of the number of conditions encompassing digestive diseases was lacking. Overcoming this challenge required



Strategic directions of the Digestive Health Strategic Clinical Network (DH SCN).

partnership with data custodians and academic researchers to develop administrative health care databases on diseases and services (e.g., endoscopy). Second, evaluation of performance metrics was lacking. In response, the network is currently engaged in a process to prioritize quality indicators that measure the overall success of the DH SCN as a whole, as well as evidence-based evaluation metrics for each of the network's initiatives (Appendix 1). Third, lack of infrastructure to support province-wide implementation has required local tailoring (e.g., adaptations of primary care supports), innovative approaches (e.g., collaborative learning and practice-based supports) and strategic partnerships.

Over the past 3 years, the DH SCN has strived to provide the best digestive health for all Albertans. A multidisciplinary team encompassing patients and their health care providers led a widespread engagement of stakeholders to define the strategic priorities of the network that include primary care–specialist integration, appropriateness, accessibility, quality and standardization of care, prevention and optimization of cost efficiencies. Integrating these activities with research generates a cycle of knowledge that serves as a vehicle for implementation, spread and scale of interventions that improve the health system for patients with digestive diseases.

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Affiliations: Department of Medicine (Kaplan), University of Calgary; Alberta Health Services (Morrin), Calgary, Alta.; Department of Medicine (Veldhuyzen van Zanten), University of Alberta, Edmonton, Alta.

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Correspondence to: Gilaad Kaplan, ggkaplan@ucalgary.ca