

Transforming the specialist referral and consultation process in Canada

Erin Keely MD, Clare Liddy MD MSc

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Canadians take pride in their universal, publicly funded health care system. However, lengthy wait times to see a specialist are a problem. A recent Ontario-based study found that the median wait time between a patient being referred to a specialist and attending an appointment was 11.3 weeks for nonurgent referrals and 7 weeks for urgent referrals.¹ We lag behind other countries in this regard; a 2016 survey from The Commonwealth Fund ranked Canada last among 11 countries on its measure of wait times.² Our referral and consultation system is complex, time consuming and fragmented. Referrals can be refused, lost or overlooked, sometimes with tragic consequences for patients and much frustration for primary and secondary care providers alike. To address these issues, several jurisdictions in Canada have embraced new technologies, including telephone access lines (e.g., Specialist LINK in Alberta and the RACE [Rapid Access to Consultative Expertise] model in British Columbia), text messaging, electronic consultation (eConsult) or electronic referral (eReferral) services. We discuss 2 of these, eConsult and eReferral, to highlight the possibilities for transforming referral processes in Canada.

Currently, in most cases, referrals to a specialist by a primary care provider are initiated in the following way. The primary care provider selects the most appropriate available specialist and forwards the patient's relevant information, usually by fax. Several specialists may share a central intake, and others may have individual processes that the primary care provider must know about and able to access. The specialist (or delegate) reviews the patient's file, triages for urgency and schedules an appointment. Ideally, the process keeps primary care providers and patients in the loop, but this is often not the case. A recent study found that 36% of referrals were not acknowledged within 7 weeks of sending.³ Referrals may sometimes be denied, leaving primary care providers to begin the process again or manage their patients without guidance.

Difficulty accessing specialists and lack of timely response has been associated with lower job satisfaction among primary care providers.⁴ Specialists also express dissatisfaction with the quality of referral letters, which may lack clear details outlining the reason for referral, sufficient information to triage the referral appropriately, or a clear communication of expectation regarding level of input (i.e., advice only v. shared care).⁵

eConsult, a secure application, accessed by Web browser or within an electronic medical record (EMR), allows primary care

KEY POINTS

- Electronic consultation and referral services are promising innovations to help address inequitable access occurring in a fragmented, inefficient system.
- Further development of these services is needed, including improved integration with clinical workflows, electronic medical records and health information systems.
- Patients and providers must be empowered to influence the design, implementation and evaluation of these services.

providers to submit a patient-related question directly to a specialist or specialty group. It is a formalized way for colleagues to discuss cases, similar to an in-person “hallway consultation” or discussion in the historical doctors’ lounge. A 2018 scoping review identified 53 versions of eConsult services in 16 countries and 1 international service, which differed in scope, technology platform, remuneration policies and engagement strategies.⁶

In Canada, the most mature eConsult service is Champlain BASE (Building Access to Specialists through eConsultation). The service currently provides access to 114 specialty groups and processes more than 1000 cases each month, with a median response time of 21 hours and nearly two-thirds (65%) of cases resolved without requiring patients to attend a face-to-face specialist visit.⁷ Specialists are paid a prorated hourly rate based on self-reported length of time to complete cases, and primary care providers can use a billing code for case submission. A recent case study suggested a positive impact across the quadruple aims of improved population health, experience of care, provider satisfaction and cost effectiveness.⁸

Through partnership with the Canadian Foundation of Health-care Improvement, the Royal College of Physicians and Surgeons of Canada (RCPSC), the College of Family Physicians of Canada (CFPC) and Canada Health Infoway, 7 provinces — BC, Alberta, Manitoba, Ontario, Quebec, New Brunswick, and Newfoundland and Labrador — have established eConsult services provincially or in some regions. There are different technology platforms, workflows and remuneration policies across Canadian services. The RCPSC and the CFPC have officially endorsed eConsult as a standard of practice. National scale-up of eConsult could allow all Canadians to have more timely access to specialist advice through provincial, interprovincial and potentially national services.

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eReferral allows health care providers to exchange referral and consultation information electronically rather than by fax or mail (Appendix 1, available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.181550/-/DC1). eReferral services simplify the referral process and have been found to reduce wait times, improve referral tracking and lower costs.^{7,9} Many services also include an organized directory of providers and specialties, clinical pathways, and a centralized triage system for identifying a referral's urgency, completeness and appropriateness.

Many provinces have implemented eReferral systems for some specialty services. Alberta Netcare launched an eReferral platform in 2014, adding an eConsult option in addition to telephone consultation in 2016, and has processed more than 20 000 cases.¹⁰ Ontario has ongoing pilots in various regions using 3 different platforms addressing a few key clinical priority areas. Manitoba also attempted to launch a service, which is no longer active.

To use an eReferral system, specialists and primary care providers must have health information systems that can be linked through a shared EMR or through an independent eReferral platform.^{9,11} This is important for usability, as systems designed for single specialties or requiring manual data entry are burdensome for primary care providers and a barrier to use. In some systems, specialists can decline referrals that fail to meet certain criteria, which may result in delayed treatment, repeat visits, and frustration for patients and primary care providers. To address this issue, some services allow specialists to convert eReferrals into eConsults, so that they offer an opinion rather than offer the patient an appointment. If the primary care provider or patient feels the patient should be seen in person by the specialist and the specialist responds with an eConsult, ideally the primary care provider would be able to discuss the decision with the specialist or potentially override that decision.

Although new referral solutions hold promise, primary care providers have described experiencing frustration over the added workload of writing and submitting eConsults, which often occurs outside the patient record in the EMR, and have expressed concern that eConsults will engender expectations that primary care should provide care previously offered by specialists.¹² Furthermore, eReferral systems require organization of specialists through centralized triaging of consults and willingness to consider alternatives to face-to-face visits for providing specialist care.

Substantial investment has delivered enhanced referral and consultation technologies as well as change-management support for their adoption. Although eConsult and eReferral services appear to provide at least a partial solution to our overburdened and fragmented health care system, many key elements critical to the success of such programs have yet to be fully considered (Appendix 2, available at www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.181550/-/DC1), and more research is needed.

A successful service must be grounded in patient priorities, including access and safety, without ignoring provider satisfaction and system efficiencies. Patients and front-line providers should be empowered to influence the design, implementation and evaluation strategies of eConsult and eReferral services to ensure that these services are implemented in a way that serves them optimally. Without this critical engagement, any new service carries the risk of causing increased fragmentation, restricted access when failing to meet

referral requirements, reduced portability across geographical boundaries, inequity based on patients' access to technology and computer literacy, and provider burnout from additional administrative work. All services need a robust evaluation and quality-improvement strategy that is shared with others to improve understanding of the benefits, risk and potential unintended consequences of these innovative service-delivery models.

References

- Liddy C, Nawar N, Moroz I, et al. Understanding patient referral wait times for specialty care in Ontario: a retrospective chart audit. *Healthc Policy* 2018;13:59-69.
- How Canada compares: results from The Commonwealth Fund's 2016 international health policy survey of adults in 11 countries. Ottawa: Canadian Institute for Health Information; 2017. Available: www.cihi.ca/sites/default/files/document/text-alternative-version-2016-cmwf-en-web.pdf (accessed 2018 Nov. 15).
- Neimanis I, Gaebel K, Dickson R, et al. Referral processes and wait times in primary care. *Can Fam Physician* 2017;63:619-24.
- Thind A, Freeman T, Thorpe C, et al. Family physicians' satisfaction with current practice: What is the role of their interactions with specialists? *Healthc Policy* 2009;4:e145-58.
- Tobin-Schnittger P, O'Doherty J, O'Connor R, et al. Improving quality of referral letters from primary to secondary care: a literature review and discussion paper. *Prim Health Care Res Dev* 2018;19:211-22.
- Joschko J, Keely E, Grant R, et al. Electronic consultation services worldwide: environmental scan. *J Med Internet Res* 2018;20:e11112.
- Liddy C, Moroz I, Afkham A, et al. Sustainability of a primary care driven eConsult service. *Ann Fam Med* 2018;16:120-6.
- Liddy C, Keely E. Using the quadruple aim framework to measure impact of health technology implementation: a case study of eConsult. *J Am Board Fam Med* 2018;31:445-55.
- Hughes CA, Allen P, Bentley M. eReferrals: Why are we still faxing? *Aust J Gen Pract* 2018;47:50-7.
- eReferral. Edmonton: Alberta Netcare EHR. Available: www.albertanetcare.ca/eReferral.htm (accessed 2018 Nov. 15).
- Liddy C, Hogel M, Blazhko V, et al. The current state of electronic consultation and electronic referral systems in Canada: an environmental scan. *Stud Health Technol Inform* 2015;209:75-83.
- Lee MS, Ray KN, Mehrotra A, et al. Primary care practitioners' perceptions of electronic consult systems: a qualitative analysis. *JAMA Intern Med* 2018;178:782-9.

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Affiliations: Department of Medicine (Keely), University of Ottawa; Division of Endocrinology and Metabolism (Keely) and Ontario eConsult Centre of Excellence (Keely, Liddy), The Ottawa Hospital; C.T. Lamont Primary Health Care Research Centre (Liddy), Bruyère Research Institute; Department of Family Medicine (Liddy), University of Ottawa, Ottawa, Ont.

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Correspondence to: Erin Keely, ekeely@toh.ca