The Current State of Electronic Consultation and Electronic Referral Systems in Canada: an Environmental Scan

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Overview

• State of electronic consultation and referral in Canada

• Themes arising from interviews with program experts

• Update on status of eConsult/eReferral programs in 2015
Background

• Accessing specialist care is a major challenge for Canadians

• E-health platforms can improve access to specialist care

  ➢ **eConsult**: links PCP and specialist electronically, enabling specialists to offer advice directly, often without face-to-face visit

  ➢ **eReferral**: automation of the referral process, including scheduling (may or may not have eConsult capabilities)
Objective

- Use of eReferral and eConsult technology remains limited in Canada (only 21.5% of GPs and 10.1% of specialists use EMRs exclusively in 2010)\(^1\)
- Aimed to conduct a systematic review of literature on Canadian eReferral and eConsult programs
- However, lack of published Canadian data led to employment of environmental scan methodology

\(^1\)National Physician Survey, 2010
Methods

• Systematic Literature Review
  ➢ Searched Medline and EMBASE on 29 Jan 2013
  ➢ Grey literature search 4 Feb 2013
  ➢ Electronic **asynchronous** communication systems between physicians

• Key Informant Interviews
  ➢ Conducted semi-structured interviews with seven participants identified by literature
  ➢ Candidates stratified based on location and system type
eConsult/eReferral Services in Canada: 2013

- **OASIS**: 1,200 PCPs, 26,000 client encounters
- **AHS Closed Loop Referral**: TBD
- **Pooled Referral Project**: 17 surgeons, 20,000 referrals/year
- **BGSC**: 20 PCPs, 39 specialists, 140 referrals
- **Champlain BASE**: 200+ PCPs, 26 specialty groups, 843 eConsults
- **Ambulatory Referral Management**: 5,000 PCPs, 54 specialty clinics, 67,000 referrals
- **Provincial Surgical Access Registry**: 240 surgeons, 15 surgical centres
- **Surgeon Directory**: All FPs have access, All specialists listed

Image source: www.worldatlas.com
eConsult Systems

• Bridging General and Specialist Care (MB)
  ➢ Redirected 60% of inappropriate referrals
  ➢ Relaunching within Manitoba eHealth

• Ambulatory Referral Management (ON)
  ➢ ↑ quality of referral info submitted
  ➢ ↓ number of incomplete/rejected referrals

• Champlain BASE* eConsult Service (ON)
  ➢ Face-to-face specialist visit was originally planned but avoided in 43% of cases
  ➢ High user satisfaction ratings (4.63/5)

*Building Access to Specialists through eConsult
eReferral Systems

• Many provinces exhibited activity to improve referrals and implement full eReferral systems

• Central intake systems (BC, SK, AB, NL) act as referral coordinator to diffuse the patient demand for specialty services across specialist population

• Information directories (NB, NS) provide a guide to help physicians connect patients with most appropriate specialists and reduce misdirected referrals
Key Informant Interviews

• Four themes emerged from interviews

1) eReferral as an end goal
2) Importance of re-organizing the referral process before automation
3) Engaging the end user
4) Technological incompatibilities as impediments to progress
Key Informant Interviews

eReferral as an end goal

- Many informants stated that eReferral was the primary objective of system redesign (SK, NS, NL)
- Recognized the efficiency of eReferral process and importance of an auditable electronic trail

Importance of re-organizing the referral process first

- Automating dysfunctional systems hinders process
- “We’re designing our processes first, and then we’ll bring in an electronic system to automate that process later.”
Key Informant Interviews

Engaging the end user

• Informants expressed importance of engaging physicians prior to system development
• Physician champions offer an advantage in the recruitment of potential users

Technological incompatibilities can impede progress

• Extracting data from EMR/EHR systems was a major impediment to developing eReferral systems
• “Lack of IT integration and synchronicity is the real barrier to making [eReferral] work the best it can”
eConsult/eReferral Services in Canada: 2015

- **OASIS**
  - 27,655 PCPs
  - 63,113 client encounters

- **AHS Closed Loop Referral**
  - 46,000 PCPs
  - 3 specialty groups
  - 1,100 referrals

- **Pooled Referral Project**
  - 17 specialty groups
  - 110 specialists
  - 51,000 referrals/year through central intake

- **BGSC**
  - 58 PCPs
  - 44 specialists
  - 229 referrals (FY 14/15)

- **OTN eConsult**
  - 8,000 PCPs
  - 60 specialty clinics
  - ~57,000 referrals/year

- **Ambulatory Referral Management**
  - 243 surgeons
  - 16 surgical centres

- **Champlain BASE**
  - 682 PCPs
  - 67 specialty groups
  - 6,824 eConsults

- **OCIP**
  - 4,000+ referrals

- **Surgeon Directory**
  - All FPs have access
  - All specialists listed

Image source: www.worldatlas.com
Conclusion

• Despite demand for improvements and investments in health technology, eConsultation/eReferral systems remain scarce in Canada

• Several provinces are in various stages of implementing their own eReferral systems

• Lessons learned from these projects should be disseminated in order to decrease the duplication of efforts and mistakes