The Champlain BASE service: Building Access to Specialist Care through eConsultation

Distinguished Speaker Lecture - Trillium Primary Health Care Day
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The Champlain BASE eConsult Team

A collaboration between:
The Ottawa Hospital (TOH) - Dr. Erin Keely - Co-lead
The Bruyère Research Institute (BRI)
Winchester District Memorial Hospital (WDMH)
Champlain Local Health Integration Network (LHIN) - Mr. Amir Afkham-

Funding:
TOHAMO AFP Innovation Fund
Champlain LHIN
e-Health Ontario
MOHLTC
CIHR
The Champlain BASE eConsult service

“It’s the new hallway consult.....we used to have the doctors lounge and the coffee room, that’s falling away... This is sort of the coffee room/lounge of the future....”
What is eConsultation?

• A web-based service for primary care providers to access specialist care for their patients
• 480 primary care providers and 45 specialist services are involved in the service
• Over 3500 electronic consultations submitted enabling rapid access to specialist advice
• Over 1200 people have been able to avoid a face-to-face referral as a result of eConsultation

Data as of May 2014
Overview

• Identifying the Problem
• Development of eConsult
• Current status
• Program of research and next steps
The story of the Champlain BASE project…

Chapter 1 - The Problem
The problem: poor access

“I have been waiting a long time to get my appointment with the specialist”

“I refer and then wait and do not even know if the fax was received…”

“Takes a long time to have an non-urgent patient seen in Endocrinology”

“I am frustrated by my wait list. I can’t ever seem to catch up…”
Graph 5: Median Wait between Referral by GP and Treatment, by Province, 1993 and 2010

Source: The Fraser Institute’s national waiting list survey, 2010; and Waiting Your Turn, 1997
Innovation into practice…

All it takes is a problem and a desire to fix it…
Chapter 2: Let’s fix it…

Is there a way to improve the access to specialist care?

- Talked with many…
- Looked at the literature
- Found ideas to build on

Applied to local hospital innovation grant competition
Chapter 3: It takes a Team

We got funded!

Now we had to do it…

- Can no longer use email (Patient privacy)
- Not enough money to do our own technology development
- We needed some help
It takes a team

• Established collaboration with Winchester District Memorial Hospital and the Champlain LHIN
• Used the Regional Collaboration Space
• Started small with local providers and small group of specialists
• Consultation with privacy and liability experts
The Champlain BASE eConsultation service:

- Primary Care Provider submits eConsult using a simple template

  → Prompted for key information (specialist type, patient consent, DOB, gender)

  → Hints for quality question

  → May attach additional information (test results, images, EMR-generated letter)
Answering an eConsultation

Assigned to specialist based on availability/rotation schedule

Specialist receives an email notification [to access case via secure site]

- Expected to answer within one week

- Can give one of three replies:
  1. A reply to the question
  2. A request for additional information
  3. A recommendation for referral (along with any tests etc. to be completed beforehand)
Chapter 4: Does it work?

Qualitative study of proof of concept phase (2010)

- Developed and implemented system with physician participants
- Mixed-methods exploratory embedded design
- In-depth evaluation with initial users – interviews and focus groups
- The eConsult system worked “please add more specialty services…”
Does it work?

Pilot phase system utilization evaluation (2011)

- Number, types of e-consult
- Time to response
- Impact survey including avoidable referrals, perceived benefit for the patient and the provider
- Very promising early results in terms of avoidance of face-to-face referral and improved communication
- “Please add more specialties”
"Fast, easy to use service. Very user friendly. The advice I received was thorough and helpful. I am very grateful!"

"Excellent collaboration, very quick response – so glad to have access to this service!"

"This eConsult saved an in-person referral and months of wait. This is such an excellent service. Also, as a Nurse Practitioner, I really value this service ... I get direct, timely access - this is improving care for my clients."

"Invaluable service for GPs"
Development of eConsultation service

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<tbody>
<tr>
<td>Initial meeting with PCPs and develop e-form</td>
<td>Launch proof of concept with 5 specialties</td>
<td>Ongoing feedback and evaluation from users</td>
<td>Launch pilot of eConsult</td>
<td>End of proof of concept: Data collection and evaluation</td>
<td>LHIN Funding</td>
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Privacy Impact & Threat Risk Assessments done, CMPA contacted

Now in a sustainability and expansion mode
Moving beyond the pilot: the current service

Status and Latest Data
Current status – Geographic Reach
(480 PCP’s, 91 clinics in 37 towns/cities)

A select group of clinics outside of the Champlain region are also now using eConsult in support of the research initiatives underway
Current specialty services (n=45)

- Cardiology
- Dermatology
- Nephrology
- Neurology
- Endocrinology
- Pain Medicine
- PainConnect “Re- Consult”
- Psychiatry
- Gastroenterology
- Adolescent Medicine
- Sports Medicine
- Clinical Pharmacy
- Champlain CCAC
- Orthopaedics
- ENT & Head/Neck Surgery
- Diabetes Education
- General Pediatrics
- Pediatric
  - Anesthesiology
  - Cardiology
  - Chronic Pain
  - Orthopedics
  - Palliative Care
  - Radiology
  - Respirology
- OB/GYN
- Pediatric Hematology/Oncology
- Rheumatology
- Palliative Care
- HIV Social Worker
- Internal Medicine
- Thrombosis
- Hematology
- Radiology:
  - Abdominal
  - Musculoskeletal
  - NeuroRadiology
  - Thoracic
- Respirology
- Urology
- Genetics
- Chiropody
- Infectious Diseases
- ID-HIV, ID-Viral Hep
- Wound Care
- Pediatric Neurology
Specialty Distribution – ALL (2825 cases)

Data as of April 30, 2014
Cases Completed – By Patient Age Group
[ # of cases, % of total ]

- **Under 18**
  - Number: 393
  - Percentage: 14%
- **Senior**
  - Number: 607
  - Percentage: 21%
- **Adult**
  - Number: 1825
  - Percentage: 65%
Time for specialist to respond

- Median 0.7 days
- Average: ~ 2 days
- 90th Percentile ~ 6 days
- Fastest response: 6 minutes! (Neurology)

Average time to complete an eConsult: 12.9 minutes (range 10-40)
Impact of eConsultation on Referral

(from PCP survey responses completed for each case)

- 41% of cases led to a referral being avoided
- N=2825 cases

- 1. Referral was originally contemplated but now avoided at this stage
- 2. Referral was originally contemplated and is still needed - this eConsult likely leads to a more effective visit
- 3. Referral was not originally contemplated and is still not needed - this eConsult provided useful feedback/information
- 4. Referral was not originally contemplated, but eConsult process resulted in a referral being initiated
- 5. There was no particular benefit to using eConsult in this case
- 6. Other (please comment)
Patient Value
[from PCP survey responses completed for each case]

- Eliminate travel to specialist
- Dramatically reduce wait time
- Appropriate treatment starts quickly, avoids deterioration
- Reduced anxiety
- 91% as high or very high value

Overall value of the eConsult service in this case for patient (2825 Completed Cases) AVG.: 4.60/5
Clinical Value
[from PCP survey responses completed for each case]

- 1. I was able to confirm a course of action that I originally had in mind
- 2. I got good advice for a new or additional course of action
- 3. I did not find the response very useful
- 4. None of the above (please comment)
Clinical Value
[from PCP survey responses completed for each case]

- Direct access to specialist expertise (PCP)
- Highly valued advice in a timely manner (PCP)
- Good educational value – opportunity for dialogue (both)
- Reduction in unnecessary visits and wait (SP)
- Much more effective communications
- 92% rated it as high or very high value

Overall value of the eConsult service in this case for PCP (2825 Completed Cases) AVG.: 4.66/5
Direct quotes from specialists

“I think it is an easy and cost-effective solution to providing rapid advice from specialists to family physicians and their patients. Physicians do it all the time (avoiding patient identifiers, using email) but eConsult is providing a secure platform where privacy is not a worry or concern and the dialogue is official and helpful.”

“Too many consults are unnecessary. I can figure that out based on data from the GP. The GP often just needs reassurance from a specialist, not a face to face consult. eConsult efficiently supports our GPs while educating them, making GPs better equipped to take care of patients.”

“I believe it makes a huge difference in decreasing unnecessary face time consults. I'm curious to know if patients like the system or not.”
eConsult Remuneration Data

• Remuneration rate is set at $200/hr for all specialists
• Average payment across all specialties is $46.25
• Recent survey of specialists regarding payment
  • 92% agreed both the current eConsult compensation process **and** frequency of payments was reasonable
  • 75% agreed the compensation amount received was fair
• Ongoing discussions with OMA and MOHLTC regarding payment mechanisms for virtual care
Impact of program

The Champlain BASE eConsult research program:

• Has demonstrated significant impact and value for clinicians and their patients through careful multipronged evaluation strategies

• Will provide a wealth of valuable data to inform planning for and delivery of timely, effective, equitable access to specialist advice
Key success factors leading to sustainability

- An evidence based approach grounded on solving a significant health services delivery problem
- Ongoing rigorous evaluation
- Built on existing infrastructure
- Regional collaboration
- Multiple funding structures
- “Out of the box thinking”
An enjoyable and useful service
Future directions eConsult

- **Expansion** of service across Ontario
- Implementation across Canada; **Northern** communities and Manitoba and Newfoundland
- Improving access for people with complex conditions such as **Chronic Pain**
- Ongoing **research** (costs, impact on referral rates, patient perspectives, pharmacy)
## Active Research Projects

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<tr>
<th>Project Title</th>
<th>Research Question (Funder)</th>
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<tr>
<td>eConsultation: an RCT to Examine the Impact on Referral Rates</td>
<td>How does the use of the Champlain BASE eConsult service impact referral rates?</td>
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<td>What are the patient’s perspectives of eConsult? (Inspire – PHC – Ontario 2013-2016)</td>
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<td>Living with HIV (LHIV) Innovation Team</td>
<td>Can the use of eConsult improve transitions of care for people living with HIV? (Canadian Institutes of Health Research 2013-2018)</td>
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### Active Research Projects (continued)

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<td><strong>Development of an eReferral Service: a Feasibility Project</strong></td>
<td>Can the Champlain BASE eConsult service be expanded to implement an eReferral service that not only links the family physician to the specialist, but also explores the role of the primary care pharmacist in the referral process? (Bruyère Research Institute-2013-2014)</td>
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<td><strong>Improving access to care for people living with Chronic Pain</strong></td>
<td>What is the impact of using eConsultation for people with chronic pain?</td>
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# Upcoming Presentations/Abstracts

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<th>Conference</th>
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<td>Trillium Primary Health Care Research Day, May 2014</td>
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<td>Canadian Pharmacist Association Conference, June 2014</td>
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<td>Association of Family Health Teams of Ontario, Oct 2014</td>
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<tr>
<td>North American Primary Care Research Group, Nov 2014</td>
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Need more information?

- Our service was selected by the Health Council of Canada as part of a video series on "Innovations in Reducing Wait Times" - the video is now available at: http://www.healthcouncilcanada.ca/waittimes

- Three publications:
  1. "Building access to specialist care through e-consultation" [http://www.openmedicine.ca/article/view/551/492#!]
Innovation into practice…
All it takes is a problem and a desire to fix it…
A big thank you!

We would like to thank all of our primary care practitioners, nurse practitioners, collaborators, funders, and staff!