The successful integration of eConsult service into a Family Health Team’s workflow

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Conflict of Interest

• Faculty: Dr. Erin Keely
• Relationship with commercial interests
  – I receive compensation from MOHLTC for Co-Executive Director Ontario eConsult of Excellence
  – I answer eConsults and am remunerated for this
• Mitigation of potential bias
  – Presentation reviewed by leads of Ontario eConsult Program
Objectives:

• Provide overview of the Ontario eConsult program

• Assess the benefits of integrating eConsult into clinical workflow

• Explore how eConsult could be best integrated into your own practices
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…”
The solution

**eConsult** enables primary care providers to engage in a secured, electronic dialogue with specialists to manage patient care, often without the need for a patient visit with specialist.

**Benefits**
- Faster access to specialist advice
- Avoid unnecessary in-person specialist visits
- Improved care coordination
- More flexibility and better documentation than traditional phone calls, pages, or hallway conversations
- Builds relationships between primary care and specialists
- Prompts learning for primary care and specialists
The provincial eConsult pilot

- Limited provincial expansion
- Solution enhancement - Champlain BASE on OTN platform
- EMR integration – Proof of Concept

- Pilot - 7 LHINs; 12,000 eConsults
- Benefits evaluation
- Provincial requirements

- "Blend and extend" – Consolidating into a single service
- EMR Integration – Proof of Concept with QHR & OSCAR
- Launch of provincial program
eConsult numbers from Jan 2015- June 2018

13,152
Primary Care Providers

81,818
People have had an eConsult

912
Specialists in 150+ specialties
Specialty Distribution (33,327 cases)

20 Most Frequently Used

- Dermatology
- OBS/GYN
- Hematology
- Endocrinology
- Cardiology
- Neurology
- Gastroenterology
- Orthopaedics
- General Pediatrics
- Infectious Diseases
- Urology
- Psychiatry
- Rheumatology
- Internal medicine
- Pediatric Dermatology
- Nephrology
- ENT
- Pain Medicine
- Radiology
- Respiratory
Impact of eConsult on Access

• Specialists responded to eConsults in a median of 0.9 days* (Improved access)
• 67% of cases did not require a face-to-face specialist visit (efficient, coordinated care)
• In 4% of cases, eConsult prompted a medical referral (patient safety)
Evidence that supports eConsult

**Better Population Health**
- eConsult cuts response times from months to days (0.9 days median)
- Two-thirds of cases did not require a face-to-face specialist referral
- 8% decrease on referral rate for PCPs who use eConsult

**Improved Patient Experience**
- eConsult responds to previously articulated patient dissatisfaction with wait times
- Interviews with patients reveal high satisfaction with eConsult’s impact on access, care quality, and continuity of care

**Lower Costs**
- Across specialty groups, the service cost a weighted average of $47.35/case versus $133.60/case for traditional referrals
- Accounting for societal factors nets additional savings of ~$11/eConsult
- Impact of other indirect costs are being explored

**Improved Provider Experience**
- PCPs rank eConsult as high/very high value in over 90% of cases
- 94% of specialists report eConsult improves communication with PCPs
- eConsult provides a powerful teaching tool for PCPs

**Exploring Policy/Implementation Issues**
- eConsult services remain relatively uncommon in Canada
- Implementation of a successful service requires adherence to key steps
- A number of legal and policy challenges must be addressed to support the full and effective implementation of eConsult services

Ref: ChamplainBASEeConsult.com
Ontario eConsult Program

• Led by newly formed **Ontario eConsult Centre of Excellence**

• **Incorporates 4 services**
  – Ontario eConsult service (through OTNhub)
  – Champlain BASE™ regional service (through Sharepoint, Champlain and MH LHINs)
  – Teledermatology
  – Teleophthalmology

• **Delivery partners**
  – OTN
  – OntarioMD
  – eHealth Ontario

• **Regional partners**
  – Champlain BASE
  – SEAMO
Provincial eConsult program leadership organizations/partners

**Ontario eConsult Centre of Excellence**
- Established at The Ottawa Hospital, in partnership with Bruyere Research Institute
- Provide clinical leadership and program oversight

**Ontario Telemedicine Network**
- Primary technology service provider
- Responsible for maintaining a stable, secure platform
- Provide technical and administrative support to end users

**OntarioMD**
- Lead and manage EMR integration
- Provide change management support in collaboration with regional partner sites inline with program plans
- Contribute to program oversight through governance

**eHealth Ontario**
- Support EMR integration with provincial HIAL assets
- Provide ongoing support for the provisioning of ONE ID accounts for eConsult users

**MOHLTC**
- Provide strategic direction
- Make policy decisions for implementation

**Provincial digital health governance (e.g., Clinician Digital Health Council)**
- Provide ongoing advice and input for some implementation decisions (e.g. EMR integration priorities, integration with eReferral, regional digital health models)

**Regional eConsult partner sites**
- Locally coordinate and administer program in their region
Ontario eConsult Service accessed through the OTN hub
New platform went live June 29, 2018
**Requester**
Dr. Matt Parks, Family/General Practice Medicine

**Model**
- BASE Managed Specialty
- Specific Provider or Group

**BASE Managed Specialty:** This option allows you to submit cases to a regional Managed Specialty, which is a group of consultants responding to eConsult cases for a given specialty or sub-specialty (e.g., Pediatric Cardiology). These consultants have received privileges for completing eConsult cases. Your case will be routed to the closest Regional Managed Specialty or a Provincial Managed Specialty if a local one is not available. Cases are assigned based on consultants’ availability.

**Specific Provider or Group:** This option allows you to submit cases to specific consultants by name or to organizational or regional groups (e.g., UHN’s SCOPE group). Cases are sent directly to the consultant or group.
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<thead>
<tr>
<th>Specialty Group</th>
<th># of Specialists</th>
<th>LHINs</th>
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<tbody>
<tr>
<td>Addiction Medicine</td>
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<th>LHINs</th>
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<tr>
<td>Vascular Surgery</td>
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<td>8,9</td>
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</table>
Pt Details & eConsult Question
In a recent CBC, patients' platelets are 50,000 and white blood cell count is 1,200. I'm attaching the entire CBC for your reference. Patient is otherwise well and has no significant past history other than hypertension well controlled for several years on enalapril 10mg a day. The previous CBC, completed a year ago, was normal. Is this something to pursue or should I wait and retest CBC in 3 months? Thank you in advance for your assistance.
Before you complete...

Your feedback on eConsult is instrumental in future directions and enhancements to this type of service. Please take a moment to choose the responses below that represent your views regarding this specific case:

1. Which of the following best describes the outcome of this eConsult for your patient:
   - I was able to confirm a course of action that I originally had in mind
   - I got good advice for a new or additional course of action
   - I did not find the response very useful
   - None of the above (please comment)

2. As a result of this eConsult would you say that:
   - Referral was originally contemplated but not avoided at this stage
   - Referral was originally contemplated and is still needed
   - Referral was not originally contemplated and is still not needed
   - Referral was not originally contemplated, but eConsult process resulted in a referral being initiated
   - There was no particular benefit to using eConsult in this case
   - Other (please comment)

3. We would value any additional feedback you provide on the system/application:

   Enter comments...
Ontario eConsult Service - July-August 2018

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<th>Response Interval</th>
<th>Mean</th>
<th>Median</th>
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<tbody>
<tr>
<td>Response Interval</td>
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<td>1 day</td>
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<table>
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<tr>
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<th>Mean</th>
<th>Median</th>
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<td>11 min</td>
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<table>
<thead>
<tr>
<th>Cost per Case</th>
<th>Median</th>
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<tbody>
<tr>
<td>Cost per Case</td>
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<th>Number of eConsults</th>
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<td>1 – Erie St. Clair</td>
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<tr>
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<tr>
<td>3 – Waterloo Wellington</td>
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<td>4 – Hamilton Niagara HB</td>
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<tr>
<td>5 – Central West</td>
<td>93</td>
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<tr>
<td>6 – Mississauga Halton</td>
<td>53</td>
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<tr>
<td>7 – Toronto Central</td>
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<tr>
<td>8 – Central</td>
<td>186</td>
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<td>9 – Central East</td>
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<td>10 – South East</td>
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<tr>
<td>11 – Champlain</td>
<td>67</td>
</tr>
<tr>
<td>12 – N. Simcoe Muskoka</td>
<td>132</td>
</tr>
<tr>
<td>13 – North East</td>
<td>201</td>
</tr>
<tr>
<td>14 – North West</td>
<td>39</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2787</td>
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</tbody>
</table>

*Does not include Champlain BASE™*
Your peers comments

• “Thank you for your rapid response. The patient is very appreciative of the rapid response, clarification of his concerns, and suggestions for treatment.”

• “The patient preferred the eConsult as it was more convenient for her.”

• “This helped me better organize a future referral on a complex patient. I will have more things sorted out and ready for the future consultant as a result of this eConsult.”

• “This is such a super means to get a comprehensive answer to a question in a prompt way. The patient is going to be thrilled.”
This looks great, but I really need this to be part of my EMR to make this work for me

Options

– Full integration
– Use a delegate
EMR Integration Roadmap

**Proof of Concept**
To demonstrate the technical feasibility of eConsult – EMR Integration, involving QHR and OSCAR through KAI EMR

- 2016 – March 2017
  - Completed

**Pilot**
To finalize the provincial delivery model including the incorporation of the Blended Service Model and to prepare for provincial rollout

- April 2017 – March 2019
  - In Progress

** Provincial Availability**
All EMR vendors have access to the published specification and are able to offer eConsult to their users

- March 2019 Onward
  - Not Started
EMR Service Offering & Benefits

OntarioMD is currently piloting an expansion of the service with OSCAR EMR. The pilot, done in partnership with the Ontario Telemedicine Network and eHealth Ontario, is aimed at incorporating the newly released Blended Service Model which offers the BASE Managed Service provincially into EMRs.

Benefits
✓ Service is available directly in the EMR, eliminating the need to use multiple applications;
✓ Ability to easily add additional patient information from their electronic records, as an attachment, into the consult;
✓ Responses from specialists are received directly in the physicians EMR;
✓ Any work completed in the EMR is seamlessly available on OTN Hub and vice versa ensuring continuity of information;
EMR Service Statistics

Referring Clinicians Enrolled

The graph above identifies the total number of referring clinicians (primary care and/or nurse practitioners) leveraging eConsult through their EMRs.

Total Specialists Enrolled

The graph above identifies the total number of specialists leveraging eConsult through their EMRs.

30/109 enrolled PCP’s have sent 275 eConsults (1-29 per PCP)

Note: The data provided is the property of OntarioMD and reflects a time period of November 2016 to August 2018. The time period captured reflects a Limited Production Release as the service was implemented and tested with a small user base.
Using a delegate

• Several groups have developed a workflow using a delegate to enable the PCP to request an eConsult as they would a face to face consult

  — Examples

  • Champlain BASE™ service (Sharepoint platform) - Bruyere Family Health Team, Ottawa
  • Ontario eConsult service (OTN platform) - Queen’s Family Health Team, Kingston
What does the delegate do:

Clinic referral/admin staff work with the eConsult system on behalf of providers to:

• Retrieve new eConsult request from EMR and create a new case in the eConsult system
• Get notified of specialist having responded
• Access the response
  – Add it to patient chart in the EMR
  – Notify PCP of new information that needs to be reviewed
• Per PCP instruction,
  – submit follow-up information/question to continue the case, or
  – Get closure survey input to complete the case
Using a delegate

- Case entered into EMR template
- Case uploaded to eConsult platform and submitted
- Response given within 7 days
- Closeout survey answered in template
- Survey response submitted and case closed
- Response forwarded to PCP
- PCP Question
- Specialist Reply
- Case Closure
Examples from PS/Telus  [PCPs]

1. Creating
   - **Provider** initiates referral tracker:
     - Selects specialty + enters "eConsult" as consultant’s name in field + tab.
     - Adds additional details, if required, for consult desk in "details" box.
     - Selects "create letter".
     - Selects "adds a message" + "done".

   Create letter & add attachments:
   - In the letter view, inserts "Ref-eConsult" stamp and edits accordingly.
   - From the letter, "green bars" information ie reports etc., from the patient record, required for the referral package.
   - Types Ctrl + P to print, and selects "print later" in the pop up window.

2. Processing
   - **Delegate** receives message indicating pending referral.
     - Submits the referral to eConsult.
   - **Delegate** then opens the "referral tracker" in the patient's record, and makes required notations (ie submitted to eConsult on 4/23/2014)

3. Monitoring
   - **Delegate *monitors** and updates referral tracker window as well as notifies provider if additional action is required.
     - Once the specialist’s response is received in eConsult, the **delegate** copies the recommendation into the patient’s record, using the report module, and the provider is notified.

   (assuming there are no additional follow up questions to the recommendation)
   - **Provider** completes the eConsult survey.
   - **Delegate** transfers the responses to the survey in eConsult and closes the referral.

4. Closing
   - **Provider** completes the eConsult survey.

*Delegate will follow up if:
   - Provider has additional questions following the recommendation from the specialist.
   - Provide additional information if required.
Creating the eConsult

1. Select consultation tab

2. Select specialty

3. Enter “eCon” in Consultant’s name field + tab. Window will open to provide options (with details)

4. Make selection from the list
Examples from PS/Telus [PCPs]

Creating letter

Insert REF-eConsult stamp in letter and add additional details/Questions for eConsult specialist etc...

Jun 26, 2014
Needs Printing
To: eConsult
To Whom It May Concern
Re: John - TEST Travolta
Examples from PS/Telus

Completing and submitting the “e-Consult Close Case Survey”

1. Insert Encounter Assistant custom form “e-Consult Close Case Survey” custom form.
A delegate will have a drop down list of delegators to filter the case list. Choose all delegators or any individual delegator.
A delegate must choose the physician or nurse practitioner delegator from the drop down list to submit the request on behalf of.
Do delegate workflows work?

Methods

- Retrospective, cross sectional study of all eConsults submitted by Bruyere Family Health Team between May 1 2013 – Dec 31 2017
- 25 PCPs, 2 practice sites, 17,000 patients
- EMR - Practice Solutions
- Workflows and templates developed to mirror conventional consultations
Do delegate workflows work?

**Utilization**

- 3,233 cases submitted by 30 PCPs (26 MDs, 4 NPs)

**Comparison to other PCPs**

- Median number of cases per PCP in one year
  - Bruyere FHT users 25 (IQR 15-35)
  - Other active users 14 (IQR 8-24)
What next steps do you want to take?

1. **Sign up for eConsult today**
   - **Primary Care Physicians & Nurse Practitioners:**
     1. Visit the eConsult/ONE ID Booth (Booth #15) for ONE ID registrations, eConsult demonstrations and to provide sign up information;
     2. Email econsult@ontariomd.com for additional information;
   - **Specialists:**
     1. Visit the eConsult/ONE ID Booth (Booth #15) for info gathering;
     2. Email the Ontario eConsult Centre of Excellence at eConsultCOE@toh.ca

2. **Learn how to incorporate delegate feature in your office and hear about resources to help you with this**
   eConsultCOE@toh.ca

3. **General questions/concerns/feedback**
   ekeely@toh.ca