Evaluation of an Electronic Consultation Service in Psychiatry for Eastern Ontario
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Department of Psychiatry, University of Ottawa
Presenter: Dr. Julia Stratton
Relationships with commercial interests: None

Presenter: Dr. Douglas Archibald
Relationships with commercial interests: None
LEARNING OBJECTIVES

1) To identify the educational potential of Champlain BASE eConsult service.

2) To review the most common psychiatry eConsult cases in which new information was provided for the primary care provider.

3) To review eConsult cases which resulted in reducing the number of traditional referrals requested.
The Problem...
“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 consult was received…”

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

“I am frustrated by my wait list. I can’t ever seem to catch up…”
Barriers to Access

- Excessive wait times
- Challenges in scheduling/travel
- Unnecessary testing
- Duplication of tests/procedures
- Poor care coordination

Patient referred to specialist

Patient has specialist visit

Patient begins treatment

Patient follow-up appointments
A Solution: eConsult

Champlain BASE™

Patient referred to specialist

Patient has specialist visit

Patient begins treatment

Patient follow-up appointments
The eConsult Team

A collaboration between:
• The Champlain Local Health Integration Network
• The Ottawa Hospital
• Bruyère Research Institute
• Winchester District Memorial

Initial Seed Funding
• TOHAMO AFP Innovation Fund
• eHealth Ontario

Service Sustainability Funding
• Champlain Local Health Integration Network
• Ontario Ministry of Health and Long-term Care

Current Research Funding
• Canadian Institutes of Health Research
• Bruyère Research Institute
• Royal College of Physicians and Surgeons
Welcome to LHINWorks

User name: 
Password: 
Language: English (en-US) 

Log On

For security purposes, when you finish working with this site do one of the following:
- Click the Logoff button to log off from the site.
- Close all browser windows (including applications that are open in other windows).

Login Hint - Your username is typically your firstname.lastname, your password consists of at least 8 characters, one capital letter, one small letter, and one non-alphabet character.
IE users should ensure pop-ups are allowed, and *.lhinworks.on.ca is added to your trusted sites and compatibility view setting.
Primary Care Providers
My eConsult forms needing my attention

Unsubmitted eConsults

<table>
<thead>
<tr>
<th>Type</th>
<th>Patient First Name</th>
<th>Patient Last Name</th>
<th>Specialty</th>
<th>PCP User</th>
</tr>
</thead>
</table>

There are no items to show in this view of the "PCP Unsubmitted eConsults" document library. To add a new item, click "Add document".

eConsults requiring more information

<table>
<thead>
<tr>
<th>Type</th>
<th>First Name</th>
<th>Surname</th>
<th>Specialty</th>
<th>PCP User</th>
</tr>
</thead>
</table>

There are no items to show in this view of the "PCP Needs More Information" document library. To add a new item, click "New" or "Upload".

eConsults with a recommendation

<table>
<thead>
<tr>
<th>Type</th>
<th>Given Name</th>
<th>Surname</th>
<th>Specialty</th>
<th>PCP User</th>
<th>Process Form</th>
</tr>
</thead>
</table>

Joe  Test  Test  LHINWORKS\pcp.test  No

eConsults recommending a referral

<table>
<thead>
<tr>
<th>Type</th>
<th>Given Name</th>
<th>Surname</th>
<th>Specialty</th>
<th>PCP User</th>
</tr>
</thead>
</table>

There are no items to show in this view of the "PCP Referral Requested" document library. To add a new item, click "New" or "Upload".

eConsult forms in progress

<table>
<thead>
<tr>
<th>Pt. First Name</th>
<th>Pt. Last Name</th>
<th>Specialty</th>
<th>Form State</th>
<th>PCP User</th>
<th>Process Form</th>
</tr>
</thead>
</table>

Lisa  Test  Test  Waiting for Assignment  LHINWORKS\pcp.test

Completed eConsults

<table>
<thead>
<tr>
<th>Type</th>
<th>Pt. First Name</th>
<th>Pt. Last Name</th>
<th>PCP User</th>
<th>Modified</th>
</tr>
</thead>
</table>

Amir  Test  PCP Test  2/11/2015 4:35 PM
### Step 1 - Primary Care Practitioner Information

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LHIN Office</td>
<td>Ottawa</td>
</tr>
<tr>
<td>Street Address</td>
<td>613-747-1334</td>
</tr>
<tr>
<td>Telephone</td>
<td>613-747-1122</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:amir.afkham@lhins.on.ca">amir.afkham@lhins.on.ca</a></td>
</tr>
</tbody>
</table>

### Step 2 - Specialty

- **Consultant Specialty:** Endocrinology
- **Other specialties:** Cardiology, Dermatology, Diabetes Education

### Step 3 - Patient Information

- **Date of birth:** 1990-01-01
- **Gender:** Male

### Step 4 - Background/Histories

- **Consultation request should include the:**
  - Reason for consultation
  - Specific treatments already prescribed
  - Suggestions for possible treatments (e.g., I would like to optimize current treatment; I am inquiring about an alternative approach to the problem)

### Additional Notes

- **Avoid using:** & < >
Welcome to the Champlain eConsult Service

Any issues or questions, please contact Amir and Melanie at econsultsupport@ltheworks.on.ca, or by phone: 613-747-3235 and 613-747-3258, respectively.

IMPORTANT NOTE: Please avoid using any of the characters below when entering information into the eConsult form:

- (use “and” instead)
< (use “less than” instead)
> (use “greater than” instead)

Specialists
My eConsult forms needing my attention

<table>
<thead>
<tr>
<th>Type</th>
<th>Patient First Name</th>
<th>Patient Last Name</th>
<th>Date To Be Completed By</th>
</tr>
</thead>
<tbody>
<tr>
<td>![icon]</td>
<td>Joe</td>
<td>Test</td>
<td>17-Mar-2015</td>
</tr>
</tbody>
</table>

Completed eConsults

<table>
<thead>
<tr>
<th>Type</th>
<th>Pt First Name</th>
<th>Pt Last Name</th>
<th>PCP User</th>
<th>Modified</th>
</tr>
</thead>
<tbody>
<tr>
<td>![icon]</td>
<td>test</td>
<td>test1</td>
<td>Melanie Rebelo</td>
<td>3/5/2015 10:21 PM</td>
</tr>
</tbody>
</table>
The requester has also attached the following documents concerning the additional information that was requested.

PCP at 12-Feb-2014 10:47: boat has left.jpg - Labs

Step 3 - Specific Question from Primary Care Practitioner

The requester has posed the following question:

Here is a sample text for additional background and question...

eConsultation Summary:

12-Feb-2014 10:47 (PCP Entry): PCP asked question: Here is a sample text for additional background and question...
12-Feb-2014 10:47 (PCP Entry): eConsult created

Step 4 - Specialist Response

Do you require additional information before generating an informed recommendation? No ▼

Recommendation should include the following elements (if applicable):

- Reason for recommendation:
- Suggestions for possible treatments (i.e. How to optimize current treatment; Recommending an alternative approach to the problem)
- Suggestions for tests and recommendations according to the results of the test (i.e. Prescribe test X. If results are positive/negative, proceed with treatment Y/Z or request patient referral)

Please type recommendation in the space provided below:

A clearly constructed recommendation will assist the Primary Care Provider to improve patient care.

Here is a sample response text from specialist...

Save
Adoption and Utilization Data…
Provider Engagement

PCP Engagement

Specialty Engagement

Number of PCPs Registered

Cumulative Total

Number of Specialties Available

Cumulative Total
Monthly Volumes (cases completed)

* As of October 31st, 2016
Current Status  (as of February 28th, 2017)

- 22,779 Cases Completed
- 1,193 PCPs (1,013 MDs, 180 NPs) from 434 clinics in 103 towns/cities
eConsult Sites

Active Sites
Sites in Development

Mississauga
Halton LHIN
Current specialty services (n=99)

- Addictions Assessment/Treatment Services
- Addictions – Opioids and other Substances
- Allergy and Clinical Immunology
- Anesthesiology (Adult) *
- Back and Neck (Spine) Care *
- Bariatric Care
  - Medical
  - Surgical
  - Dietitian
- Cancer Genetics
- Cancer Screening
- Cancer Survivorship
- Cardiology *
- Champlain CCAC
- Chiroprody
- Clinical Pharmacy *
- Concussion - Rehabilitation
- Dermatology *
  - Hair loss
- Diabetes Education
- Endocrinology *
  - Osteoporosis
- ENT & Head/Neck Surgery
- Gastroenterology
- Genetics
- General Surgery
- Geriatrics *
  - Medications (Deprescribing)
  - Mind (Dementia, Delirium)
  - Mobility (Falls and Near Falls)
- Gynecology
- Hematology
  - Hemostasis
- HIV
  - Specialists
  - Pharmacist
  - Psychologist
  - Social Worker
- Infectious Diseases *
- ID - Viral Hepatitis
- Internal Medicine *
- Musculoskeletal Rehab *
- Nephrology *
- Neurology
  - Migraine
  - Parkinson Patient Care Coordination
  - Parkinsons and Movement Disorders
  - Epilepsy
  - Dementia and Cognitive Neurology
  - Multiple Sclerosis
- Neurosurgery
- OBS/GYN
  - Vulvo-Vaginal Disease
  - Menopause/Perimenopause
- Obstetrics
- Ophthalmology
- Orthopaedics *
- Pain Medicine *
- Pain and Opioid Addictions/Addictions – Opioids
- Palliative Care
- Psychiatry *
- Psychiatry - Perinatal
- Public Health – Ottawa
- Refugee and Immigrant Health (Adult)
- Radiology:
  - Abdominal
  - Musculoskeletal
  - Neuro Radiology
  - Thoracic
- Refugee and Immigrant Health(Adult)
- Respirology
- Rheumatology *
- Sexual Assault/Domestic Violence
- Spinal Surgery
- Sports Medicine
- Thrombosis
- Transgender Care
- Urology
- Vascular Surgery
- Wound Care

* Includes community-specific specialties
Specialty Distribution (22,779 cases)

- Dermatology: 16%
- Hematology: 7%
- OBS/GYN: 7%
- Endocrinology: 6%
- Cardiology: 6%
- Neurology: 5%
- General Pediatrics: 4%
- Gastroenterology: 4%
- Orthopaedics: 4%
- Infectious Diseases: 3%
- Urology: 3%
- Psychiatry: 3%
- Rheumatology: 3%
- Pain Medicine: 4%
- Internal medicine: 4%
- Nephrology: 4%
- ENT: 4%
- Radiology: 4%
- Respirology: 4%
- Thrombosis: 4%

*Building Access to Specialists through Consultation | © Bruyere Research Institute, Champlain LHIN, the Ottawa Hospital, Winchester District Memorial Hospital*
Response Time?
Day Response Time
How Long Does it take the Psychiatrist to Complete the eConsult?
88%
67%
eConsult Remuneration Data

$200/hour for all MD specialists

$46.25 per case
The CMPA views eConsultation like a “curb-side” or telephone consultation in terms of responsibility of care.

However, eConsultations result in clear documentation.
<table>
<thead>
<tr>
<th>DSM Disorder</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressive</td>
<td>30</td>
</tr>
<tr>
<td>Anxiety</td>
<td>17</td>
</tr>
<tr>
<td>Bipolar and Related</td>
<td>12</td>
</tr>
<tr>
<td>Neurodevelopmental</td>
<td>12</td>
</tr>
<tr>
<td>Schizophrenia Spectrum</td>
<td>11</td>
</tr>
</tbody>
</table>
The Most Common Question...

Drug of Choice
Drug Treatment 76%
Diagnosis 10%
Non-Drug Management 14%
Does the eConsult change physician behaviour?
31% Referrals Avoided
Referral Outcomes based on the Primary Care Provider Survey

- **Referral Contemplated but Avoided**: 31%
- **Referral still needed, eConsult helpful for visit preparation**: 28%
- **eConsult Helpful, Referral not Contemplated**: 35%
- **Other**: 1% and 3%
Educational value of eConsults

“Excellent clear teaching on a subject that has confused me for many years and has resulted in many phone calls and some unnecessary referrals in past, no one has ever been able to explain as clearly, fantastic. Will give me ability to triage properly and avoid unnecessary consults or medical errors where I might not have referred as here”
Educational value of eConsults

“This was an excellent educational opportunity for me. I knew I didn't need to worry about this case but I got extra education about when I should worry and what course of action to take in these situations. I have shared this learning opportunity with my residents as well.”
Do topics in continuing education courses reflect the questions asked by primary care providers through eConsult?
**Top 4 areas where there is a difference between eConsult and CPD in Psychiatry**

<table>
<thead>
<tr>
<th>Content</th>
<th>eConsult (%)</th>
<th>CPD (%)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depressive Disorders</td>
<td>30.4</td>
<td>4.0</td>
<td>-26.3</td>
</tr>
<tr>
<td>Anxiety Disorders</td>
<td>16.7</td>
<td>0</td>
<td>-16.7</td>
</tr>
<tr>
<td>Bipolar and Related Disorders</td>
<td>11.9</td>
<td>3.0</td>
<td>-8.9</td>
</tr>
<tr>
<td>Neurodevelopmental Disorders</td>
<td>12.5</td>
<td>5.3</td>
<td>-7.2</td>
</tr>
<tr>
<td>Substance-Related and Addictive Disorders</td>
<td>3.0</td>
<td>18.0</td>
<td>15.1</td>
</tr>
<tr>
<td>Neurocognitive Disorders</td>
<td>1.8</td>
<td>13.5</td>
<td>11.7</td>
</tr>
<tr>
<td>Sleep-Wake Disorders</td>
<td>1.8</td>
<td>9.0</td>
<td>7.2</td>
</tr>
<tr>
<td>Disruptive, Impulse-Control, &amp; Conduct</td>
<td>1.8</td>
<td>8.3</td>
<td>6.5</td>
</tr>
</tbody>
</table>
The Champlain BASE(TM) (Building Access to Specialists through eConsultation) eConsult service is a secure online platform connecting primary care providers and specialists. The service:

- Offers patients more efficient, integrated, and coordinated care
- Provides improved access to specialty care through the use of low cost, easy to use technology
- Is planning service expansion, including to northern, rural, and remote communities
- Is looking at integrating eConsult with regional regional health information networks
- Has the potential to be leveraged across the Champlain LHIN

The Champlain LHIN featured the eConsult service in its LHINfo Minute Health Care Update

Did you know? Primary care physicians generally find the technical aspects of eConsult user-friendly. PDF here: https://t.co/5nKs4AmpbQ

May 1: eConsult team working with SEAMO to support a pilot service in Southeast LHIN

March 10: eConsult one of two services available from CFHI's Connected Medicine collaborative

February 14: eConsult featured in the College of Family Physicians of Canada's Innovations in Primary Care

January 17: The Champlain LHIN featured the eConsult service in its LHINfo Minute Health Care Update

December 5: the eConsult team hosted its first Policy Think Tank with members of the eConsult stakeholder advisory group in a successful brainstorming session on future directions for eConsult.

About the eConsult Service

The Latest

Home
A Success Story
Meet the Founders
By the Numbers
Awards
Publications
Policies
FAQs
Videos
Contact Us
Links

@BASE_eConsult
Fri Mar 24 2017

Did you know? Primary care physicians generally find the technical aspects of eConsult user-friendly. PDF here: https://t.co/5nKs4AmpbQ
https://t.co/pU1KkwLb
For more information, check out our eBook

Available in ibook (for Mac) and pdf (for PC) from

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