1-800-Imaging Pilot: Building Partnerships between Primary Care and Medical Imaging

Declaration of Conflict of Interest

- The University Health Network received financial support from the Ontario Ministry of Health and Long-Term Care and the Ontario Medical Association in the form of one-time funding for this pilot project
- No other relationships with commercial interests exist
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Key Contributors
- Medical Imaging Call Centre, JDMI
- Seamless Care Optimizing the Patient Experience (SCOPE)
- Women’s College Hospital
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Background

Ensuring rapid access to appropriate high-quality imaging for primary care physicians at a sustainable cost is a major challenge in Canadian healthcare

- **Lack of integration** between community primary care providers and hospital-based imaging specialists
- **Long wait times**: Patients wait 89 days for an MRI and 42 days for a CT (90th percentile)\(^1\)

Result: Patients sent to overcrowded emergency departments to expedite imaging \(^2\)

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Background

**Pilot:** 1-800-Imaging (May 2014 - March 2015) tested a navigational hub design for community-based primary care providers

**Partners:**

- Mount Sinai Health System
- Women’s College Hospital
- Princess Margaret Cancer Centre
- Toronto Western Hospital
- Toronto Rehabilitation Institute
- Women’s College Hospital
- Mount Sinai Health System

1-800-Imaging Pilot

A call centre for primary care providers designed to improve integration with medical imaging by providing:

- Central access point for imaging inquiries
- Coordination of calls by a clerical staff
- Real-time consultation with radiologist

**One contact number for informational and navigational support:**

- Appropriateness consult
- Radiology consult
- Urgent imaging
- Urgent reporting
- General information
1-800-Imaging Pilot

Designed according to the principles of the Institute for Healthcare Improvement Triple Aim

The Triple Aim structures improvements in healthcare to deliver:
- Decreased per-capita cost
- Improved population health
- Improved experience of care

Objective & Measures

Objective:
To assess impact of a navigational hub on the number of avoidable emergency department (ED) visits and on the appropriateness of imaging requested

Process Measures:
- Call volumes
- Services accessed
- Repeat users of the call centre

Outcome Measures:
- Avoided ED visits
- Improvement in appropriate imaging
- Improvement provider experience
Process Measures

Results

Call Volumes

Pilot
May 2014 – March 2015
60 Primary Care Physicians

Operational Sustainability
April 2015
120 Primary Care Physicians*

* Additional physicians began registering for SCOPE starting in May

Total=354 calls
17 months to date

# of Calls


11  24  14  15  37  34  23  22  17  15  15  14  23  22  21  22  32

Median= 21

Process Measures

Results

Services Accessed

May 2014 – August 2015

Unique callers (n=60) 78% of the pilot audience used the service

Repeat callers (n=47) 77% of callers used the service more than once

* Additional physicians began registering for SCOPE starting in May
### Outcome Measures

#### Results

**Avoided Emergency Department Visits**
- Referrers calling for urgent imaging were asked if they would have referred to ED if call centre was not available
- 40%
- Reported by referring physicians
- 39% of 103 urgent imaging calls

**Improvement in Appropriate Imaging**
- 40 Appropriateness consults

*Based only on data collected during pilot (n=218 calls)*

### Outcome Measures

#### Results

**User Comments:**
- “The service was efficient and wonderful. My patient and I are extremely pleased with the service provided “
- “It is an excellent service. It helps me tremendously to manage my urgent cases.”
- “This service was nothing short of spectacular - I cannot remember a time since I was a resident on site 24 hr a day where I could access this much service”

**User Satisfaction** (n=42)
- 100% of surveyed callers were satisfied with the call centre
- 100% of surveyed callers would recommend the call centre to colleagues
Challenges & Lessons Learned

Challenges
• Limited ability to report conclusively on patient outcomes due to anecdotal data
• Reconciling clinical appropriateness and urgency with existing wait lists

Lessons Learned
• Primary care providers value conversations with radiologists to gain insights and validation on imaging decisions
• Integrated guidelines are required to ensure appropriate, equitable, and efficient use of imaging resources

Next Steps & Future Work

Designing Imaging for Primary Care Project
Redesigning the imaging journey to meet the needs of community primary care providers and their patients in an integrated and seamless way

- Call Centre Support
- Same Day Imaging
  - No appointment required
- Link to Specialists
- MRI Standby List
- Adapting Requisitions for Primary Care
- Primary Care Toolkit and Website

Launched by Joint Department of Medical Imaging, Women’s College Hospital, SCOPE Project, and Taddle Creek Family Health Team
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