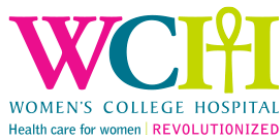


1-800-Imaging Pilot: Building Partnerships between Primary Care and Medical Imaging



1

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

2

Authors & Contributors

Authors:

- Corwin Burton, Manager Diagnostic Imaging at Women's College Hospital, JDMI
- Christina Ciapanna, Manager, Business Operations, JDMI
- Paul Cornacchione, Clinical Director, JDMI
- Dr. Danielle Martin, Vice President, Medical Affairs and Health System Solutions, Women's College Hospital
- Dr. Geetha Mukerji, Clinician in Quality and Innovation, WIHV
- Dr. Pauline Pariser, Associate Medical Director, Primary Care Lead, UHN (SCOPE), University of Toronto
- Dr. Heidi Roberts, Site Director Medical Imaging, Women's College Hospital, JDMI, University of Toronto
- Catherine Wang, Executive Director, JDMI
- Karen Weiser, Business Analyst, Office of Strategy Management, JDMI
- Lilly Whitham, Senior Project Manager, Office of Strategy Management, JDMI

Key Contributors

- Medical Imaging Call Centre, JDMI
- Seamless Care Optimizing the Patient Experience (SCOPE)
- Women's College Hospital
- Women's College Hospital Institute for Health System Solutions and Virtual Care

3

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

¹ Wait Times Alliance of Canada. (2014). Time to Close the Gap: Report Card on Wait Times in Canada.

² Finamore, S., & Turris, S. (2009). Shortening the Wait: A Strategy to Reduce Waiting Times in the Emergency Department. *Journal of Emergency Nursing*, 509-514.

4

Background

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

Partners:



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



Program designed to provide community-based primary care providers with improved access to hospital-based resources (n=60)



HealthLinks

5

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



6

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



Berwick DM, Nolan TW, Whittington J. (2008). The Triple Aim: Care, health, and cost. *Health Affairs*, 27(3), 759-769.

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:

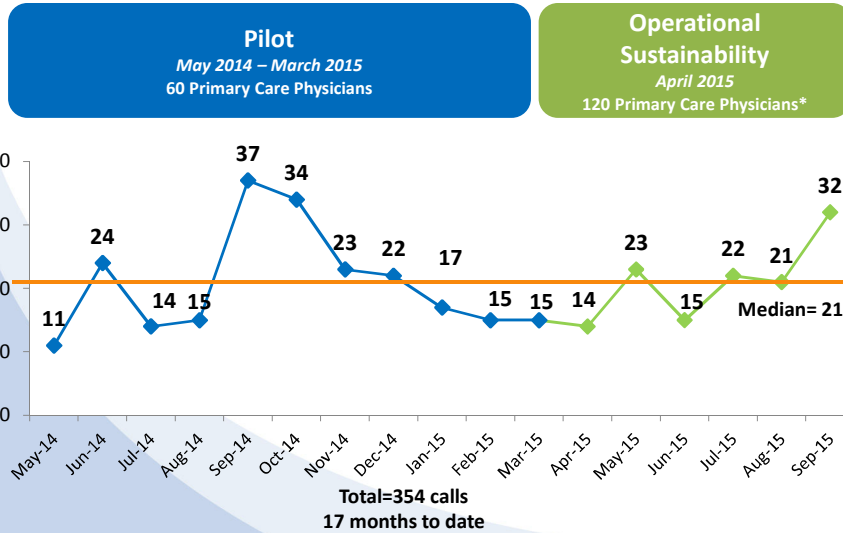
- Avoided ED visits
- Improvement in appropriate imaging
- Improvement provider experience



Process Measures

Results

Call Volumes



* Additional physicians began registering for SCOPE starting in May

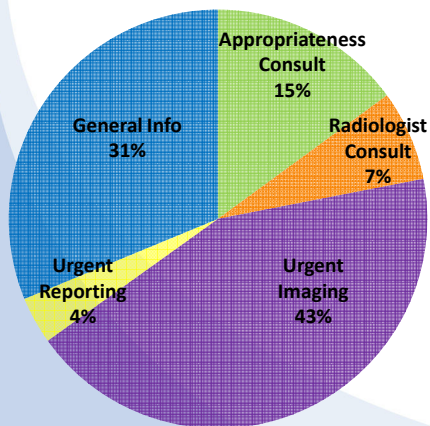
9

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

10

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)*

11

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

12

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

Contact Information

Lilly Whitham, MSc, PMP
Senior Project Manager, JDMI, UHN
Email: lilly.whitham@uhn.ca

Karen Weiser, MBA
Business Analyst, JDMI, UHN
Email: karen.weiser@uhn.ca

