

**Designing Imaging for  
Primary Care**

*Serving the Needs of Our Primary Care Partners*

**WCH**  
WOMEN'S COLLEGE HOSPITAL

**The Joint Department of  
MEDICAL IMAGING**  
Mount Sinai Hospital • University Health Network • Women's College Hospital

Radiological Society of North America  
Annual Meeting 2016

**Presentation Outline**

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**B:**

Ensuring rapid access to appropriate high-quality imaging at a sustainable cost is a major challenge in **Canadian healthcare**

- **Lack of integration** between community primary care providers and hospital-based imaging
  - However, non-urgent cases account for 59% of referrals within our organization, 50% referred by primary care providers in the community
- **Long wait times:** Patients wait 89 days for an MRI and 42 days for a CT (90th percentile)<sup>1</sup>

**Result: Patients sent to overcrowded emergency departments to expedite imaging**

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

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## Primary Care Strategy

**Navigation Support for Primary Care**

**Evidence-Based Imaging Guidelines**

**Design full continuum of imaging services for primary care**

- **Improve patient experiences** by avoiding unnecessary waits and testing
- **Ease pressure on imaging departments** by avoiding duplicate and unnecessary procedures
- **Create robust, Ontario-specific, guidelines**, framed through primary care lens

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**Initiative**  
*Designing Imaging for Primary Care*


**Purpose:**  
 Redesign sub-specialized imaging department to serve the needs of the primary care community

**Goals:**

- Streamline referral process
- Provide convenient high quality imaging
- Create bi-directional communication
- Ensure appropriate care by providing integrated support




**Methods**  
*Implementation Partners*




Radiology department comprised of the following organizations:  
 Sinai Health Systems  
 University Health Network  
 Women's College Hospital

**JDMI partnered with community primary care groups**






**SCOPE**  
SEAMLESS CARE  
 OPTIMIZING THE PATIENT EXPERIENCE



**(n=128 primary care providers)**  
 Program designed to provide community-based primary care providers with improved access to hospital-based resources



**(n=19 primary care providers)**  
 Local Family Health Team in downtown Toronto, Ontario


## Service Elements

-  **Medical Imaging Call Centre**  
"1-800-Medical Imaging"
-  **Same Day Imaging**  
No appointment required
-  **MRI Standby List**



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## Medical Imaging Call Centre Approach





**A call centre designed to improve integration with medical imaging by providing:**

- Coordination of calls by a clerical staff
- Real-time consultation with radiologist


**One contact number for support:**

- Appropriateness consult
- Radiology consult
- Urgent imaging
- Urgent reporting
- General information




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## Medical Imaging Call Centre Approach



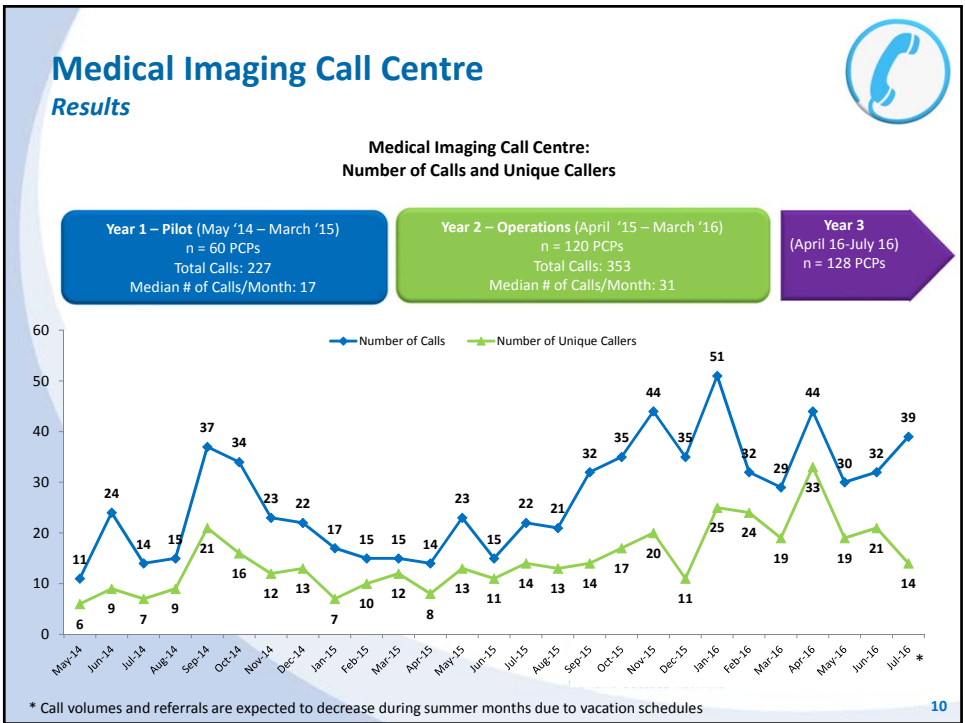
**Designed according to the principles of the Triple Aim** (Institute for Healthcare Improvement) to deliver:

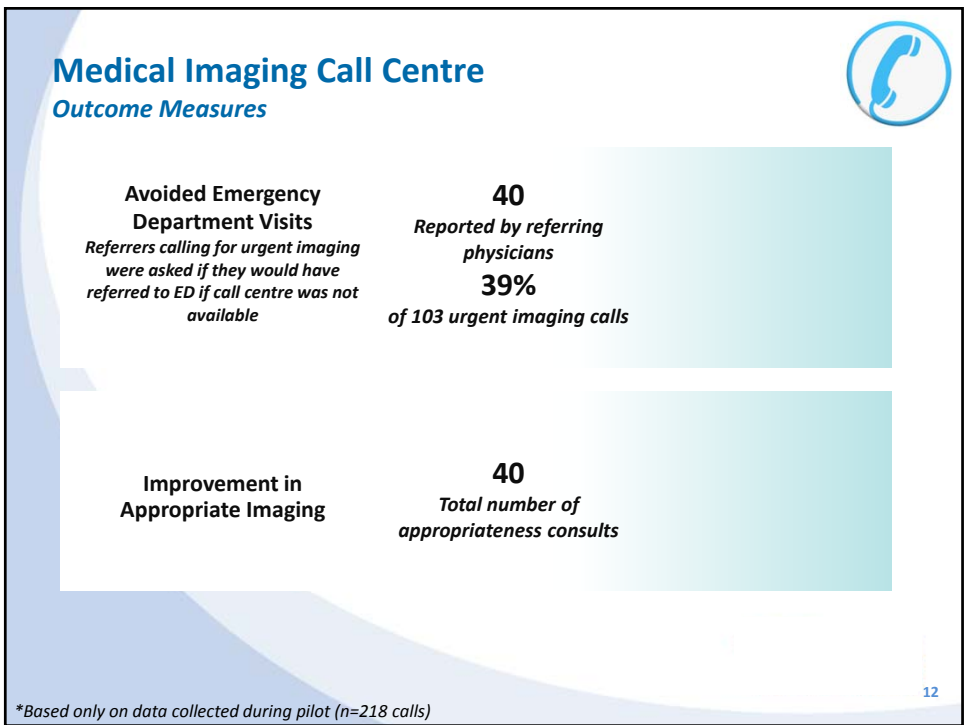
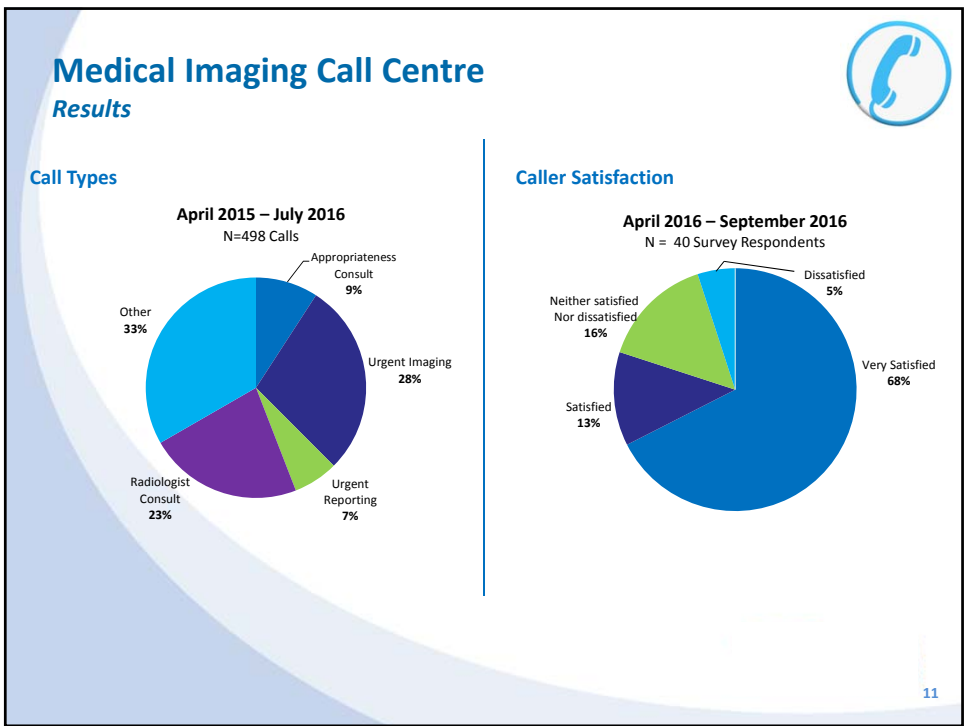
- Decreased per-capita cost
- Improved population health
- Improved experience of care

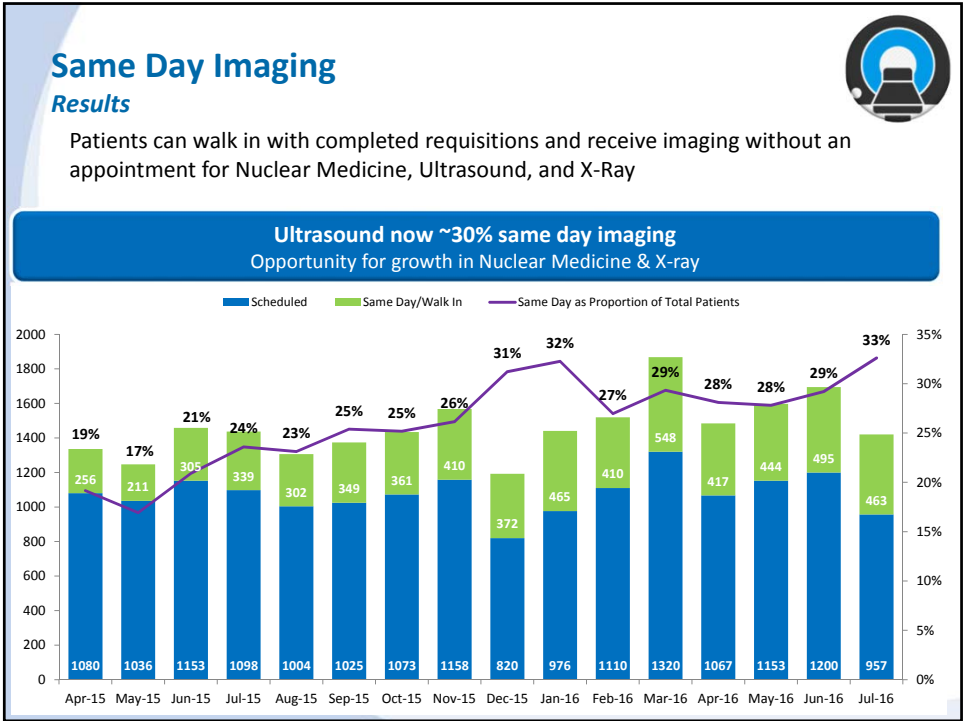


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Berwick DM, Nolan TW, Whittington J. (2008). The Triple Aim: Care, health, and cost. *Health Affairs*, 27(3), 759-769.







### MRI Standby List Results

Complete requisition; indicate **"MRI STANDBY"** on requisition

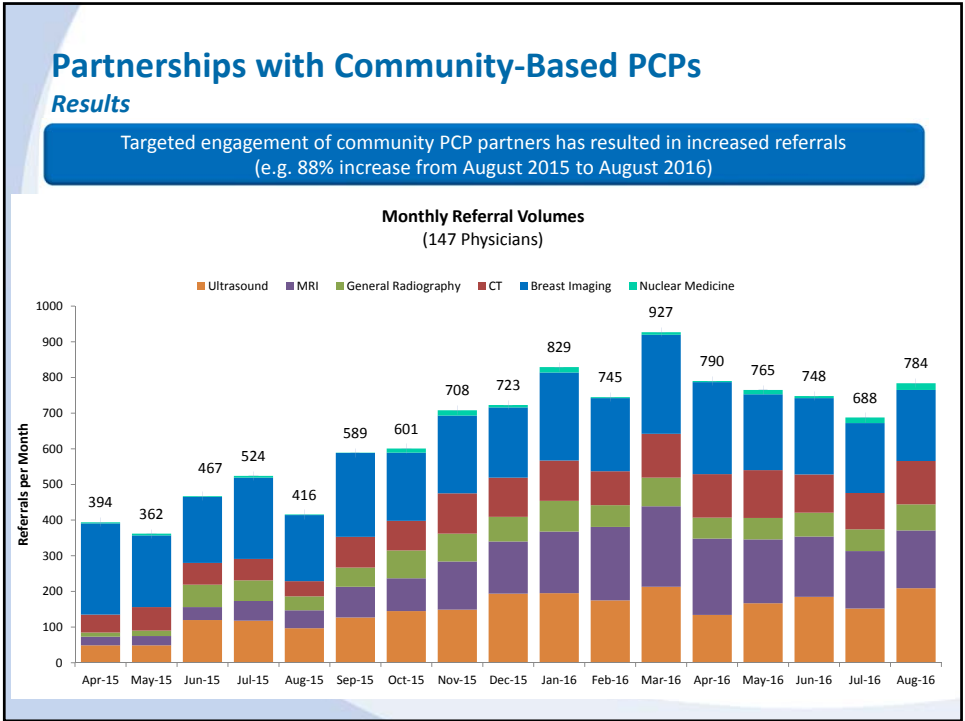
Patient receives MRI appointment in next available slot

Standby patient may be contacted at any time with an earlier appointment (within ~4 hours of available slot)

Preliminary Findings (July – September 2016):

	Patients on MRI Standby List	Rescheduled Patients
# of patients	45	17
Wait time (90 <sup>th</sup> percentile)	156 days	87 days
Wait time (average)	111 days	47 days

Rescheduled appointments were moved forward by an average of 46 days



### Lessons Learned

- Primary care providers value conversations with radiologists to gain clinical insights and validation
- Partnership enhanced by ability to trial and modify solutions
- Primary care providers appreciate additional information about procedures to inform appropriate referrals
- Data collection should be expanded to capture impact on avoided inappropriate emergency department visits and specialist referrals

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## Conclusion

- Achieved an **88% increase in referrals** from community partners (one year, across all modalities)
- Transformed relationship between radiologists and community PCPs, creating formal and informal connections with high levels of physician satisfaction
- Recognized potential to improve quality of patient care and decrease burden on emergency department and specialist care
- Acknowledged importance of evaluating **patient and referring physician experience** to measure impact and sustainability



## Future Initiatives



Evaluate Patient and Referring Physician Experience



Enhance the Role of Imaging as Navigator to Specialists



Enable Email Appointment Notification and Report Delivery



Enable eConsultation



Implement Diagnostic Imaging Appropriateness Tools in Primary Care

## Authors & Contributors

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### Key Contributors

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

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