CCTA Access Initiative Community of Practice (CoP) #1

September 3, 2024 4-5pm

Ontario Health
CorHealth Ontario

Agenda

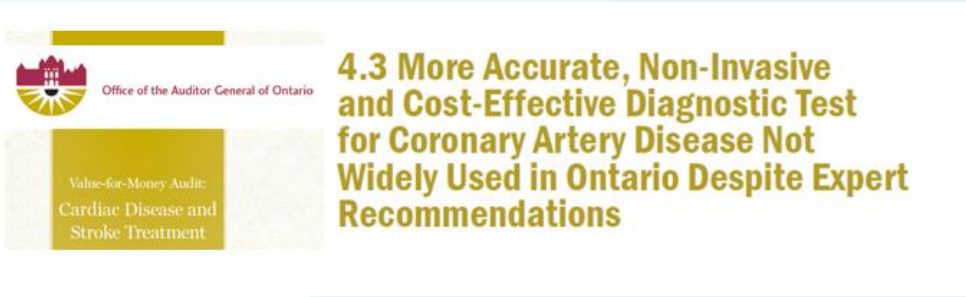
TIME	TOPIC	PURPOSE	PRESENTER
2 mins	Welcome & Land Acknowledgement		Erin McPherson
10 mins	Review on CCTA Access Initiative	Information	Dr. Chow
25 mins	Hamilton Health Sciences: Knowledge Sharing	Information/Discussion	Dr. Tej Sheth Sarah-Jane Adams Eric Ricker
5 mins	Review of Data Reporting Requirements	Planning	Dana Lian
10 mins	Roundtable Discussion / Q&A	Discussion	All

Land Acknowledgement

Erin McPherson, BSN, MSN

CCTA Access Initiative

CCTA Access Initiative



Purpose

Increasing appropriate CCTA utilization and avoiding inappropriate use of ICA can result in:

1. Most appropriate patient-centred care based on best evidence
2. Increased patient safety through avoidable complications and deaths
3. Cost savings for the health system

Objectives

Improve access and ensure appropriateness:

1. Assist with Ministry planning for future state CCTA utilization
2. Define an appropriate priority level for timely CCTA access
3. Create provincial clinical guidance on appropriate patient selection for use of CCTA

Objective: Improve access and ensure appropriateness

- For FY 2024/25, MOH has provided incremental base funding for ~10,000 CT hours, or the equivalent of ~6,667 CCTA volumes
- New base funding dedicated to CCTA will allow for sustainable support of this important testing modality

1. 2024/25 funding allocations are based on a modeled volume distribution and initially focused on hospitals with Regional Cardiac Programs (RCPs), which provide patients with a comprehensive suite of cardiac services
2. Future volume distribution patterns will continue to be refined based on uptake and capacity for CCTA at individual centers
3. 2024/25 funding is focused on incremental CCTA volumes to facilitate appropriate redirection of patients from invasive coronary angiography (ICA)

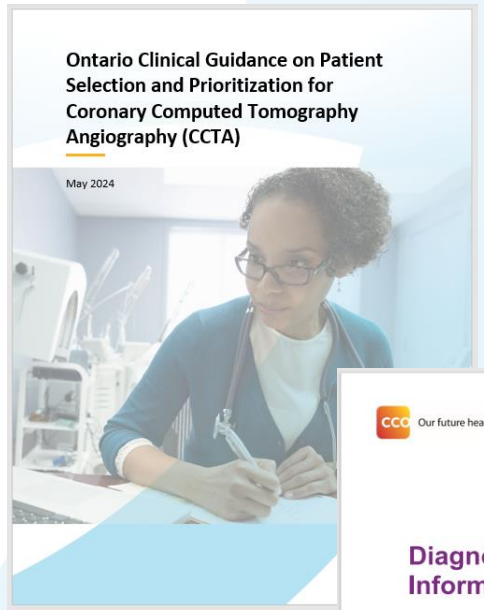
Implementation: Improve access and ensure appropriateness

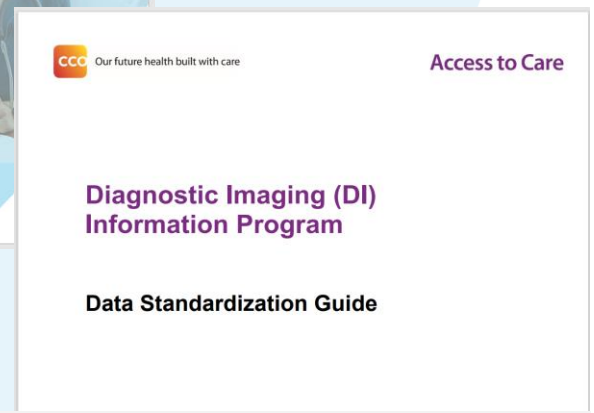
- The aim is to facilitate a gradual shift of appropriate patients to CCTA; balancing change in referral patterns with concurrent reduction in CCTA wait times. Timely access to CCTA will be critical to remove wait time related barriers to clinical decision-making for test selection.
- The implementation plan includes significant clinical engagement and change management to support the transition. This will include communication of provincial guidance on appropriate utilization of CCTA and appropriate prioritization of CCTA scans.
- Hospital progress on CCTA volumes, wait times and patient outcomes will be monitored collaboratively.

Change Management: Improve access and ensure appropriateness

CCTA Tool Kit

- *Ontario Clinical Guidance on Patient Selection and Prioritization for Coronary Computed Tomography Angiography (CCTA)* May 2024
- CCTA-related updates to the DI Data Standardization Guide
- Instructions on accessing cardiac wait times data in the Diagnostic Imaging Wait Times Reports on the ATC Information site





Community of Practice:

- Share best practices and opportunities to improve efficiency
- Supporting uptake of clinical guidance on patient selection and appropriate patient triaging (Priority 3 versus Priority 4)

Knowledge Sharing: Hamilton Health Sciences

Hamilton Health Sciences

Cardiac CT at HHS

Dr. Tej Sheth – Interventional and Structural Cardiologist, Director of Cardiac CT, Director of TAVR program, Aortic Valve Clinic, & Cardiac Cath Lab
Sarah-Jane Adams – Director of Diagnostic Services
Eric Ricker – Clinical Manager of Diagnostic Services

Introduction

Why did this **initiative** come about?

Hamilton Health Sciences

Program History

- Program started in 2005
- Evolved over 20 years to current state
- Collaborative model – joint program between cardiology and radiology
- In 2018, established an additional site at Niagara Health as a collaborative reading model
- HHS and NHS serve a region with population of 2.5 million
- This region has the largest volume of cardiac catheterization and PCI in Ontario

CT Readers at HHS and NHS

Dr. Tej Sheth	Interventional Cardiologist
Dr. Vikas Tandon	Non-invasive Cardiologist
Dr. Matt Sibbald	Interventional Cardiologist
Dr. Natalia Pinilla	Interventional Cardiologist
Dr. David Landry	Cardiac Radiologist
Dr. Nida Syed	Cardiac Radiologist
Dr. Danielle Walker	Cardiac Radiologist
Dr. Amit Mehta	Cardiac Radiologist
Dr. Ali Sabri	Cardiac Radiologist

- Almost all readers have dedicated fellowship training in Cardiac CT imaging

Academic Program

- Cardiac CT education
  - 6 fellowship level trainees participate in cardiac CT rotation each year, including subspecialty interventional cardiologists, radiologists, and cardiac surgeons
- Cardiac CT research
  - Long history of research trials led by local PIs in Coronary CT and structural heart
  - Cardia AI Trial, PIs Dr. JD Schwalm and Dr. J. Petch
    - Randomized Trial of CCTA vs invasive angiography in patients referred to invasive angiography who are identified as low risk by an Artificial Intelligence algorithm

Cardiac CT Activity

Tues	MUMC 20 CCTA (starting Oct1)	HGH	15 CCTA, other cardiac
Wed	MUMC 14 CCTA, 14 TAVR/CVSX	NHS	20 CCTA
Thurs		HGH	15 CCTA, other cardiac
Friday	MUMC 20 TAVR/CVSX (1-2x/month)		

- **Total Regional Activity 100 to 110 cardiac scans per week**

Administrative Collaboration

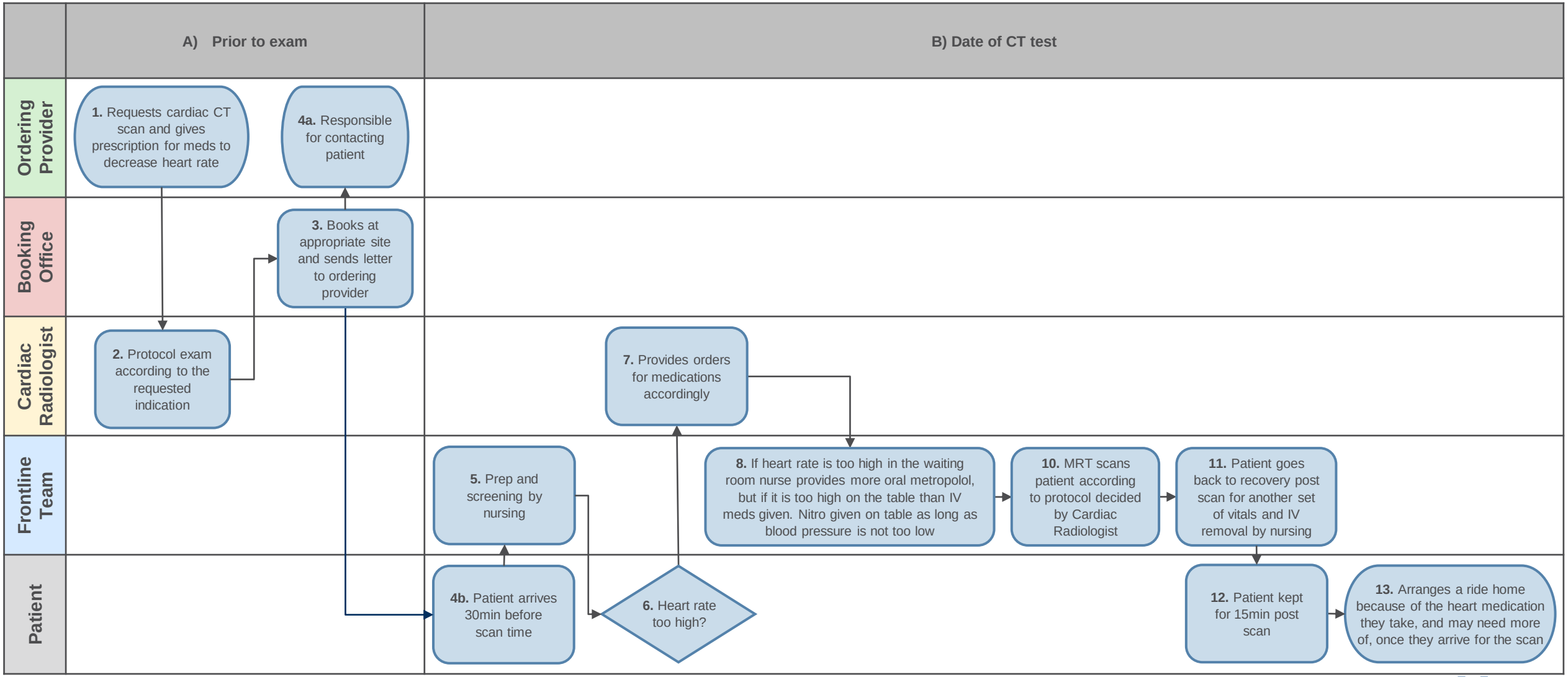
- Regular meetings with administrative partners to share physician perspective on future clinical directions – jointly evolved program to focus on most pressing clinical needs
- Much of the recent growth has focused on meetings the needs of structural heart patients
- Consistent efforts to increase throughput and efficiency
- Access to scanning at pediatric hospital was a huge advantage
- Looking forward to next phase of growth focused on coronary CTA

Processes

How we **do what we do** and who does what

Hamilton Health Sciences

Workflow



Legend: Process Decision Start/End

Efficiencies

How we got to **where we are now** and how it started

Hamilton Health Sciences

Template Evolution

0730-0745	unavailable
0745-0800	unavailable
0800-0815	CARDIAC
0815-0830	CARDIAC
0830-0845	CARDIAC
0845-0900	CARDIAC
0900-0915	CARDIAC
0915-0930	CARDIAC
0930-0945	CARDIAC
0945-1000	CARDIAC
1000-1015	CARDIAC
1015-1030	CARDIAC
1030-1045	CARDIAC
1045-1100	BUNDLED TAVI
1100-1115	CARDIAC
1115-1130	BUNDLED TAVI
1130-1145	CARDIAC
1145-1200	CARDIAC
1200-1215	BUNDLED TAVI
1215-1230	BUNDLED TAVI
1230-1245	BUNDLED TAVI
1245-1300	unavailable
1300-1315	BUNDLED TAVI
1315-1330	unavailable
1330-1345	unavailable
1345-1400	unavailable
1400-1415	TAVI
1415-1430	TAVI
1430-1445	BUNDLED TAVI
1445-1500	unavailable
1500-1515	BUNDLED TAVI
1515-1530	unavailable

Original

- 24 Outpatients
- 14 Coronary
- 10 TAVI (8 bundled)

0730-0745	unavailable
0745-0800	unavailable
0800-0815	CARDIAC
0815-0830	CARDIAC
0830-0845	CARDIAC
0845-0900	CARDIAC
0900-0915	CARDIAC
0915-0930	CARDIAC
0930-0945	CARDIAC
0945-1000	CARDIAC
1000-1015	CARDIAC
1015-1030	BUNDLED TAVI
1030-1045	BUNDLED TAVI
1045-1100	CARDIAC
1100-1115	BUNDLED TAVI
1115-1130	BUNDLED TAVI
1130-1145	CARDIAC
1145-1200	CARDIAC
1200-1215	BUNDLED TAVI
1215-1230	BUNDLED TAVI
1230-1245	BUNDLED TAVI
1245-1300	CARDIAC
1300-1315	BUNDLED TAVI
1315-1330	BUNDLED TAVI
1330-1345	BUNDLED TAVI
1345-1400	CARDIAC
1400-1415	TAVI
1415-1430	TAVI
1430-1445	BUNDLED TAVI
1445-1500	BUNDLED TAVI
1500-1515	unavailable
1515-1530	unavailable

Today

- 28 Outpatients
- 14 Coronary
- 14 TAVI (12 bundled)

Efficiencies

- Cardiology presence in Diagnostic Imaging for immediate response
- Cardiology working with Diagnostic Imaging Central Booking Office for scheduling
- Staffing model that allows for no open table time
- Dedicated nursing and technologists
- Bundling of activity (CT, ECG, ECHO, Consultation) all at the same time
- Layout of space (waiting room, interviewing, recovery)
- Intercom system for communication between CT / Cardiology / Nursing
- Patients asked to be medicated prior to ensure a low heart rate

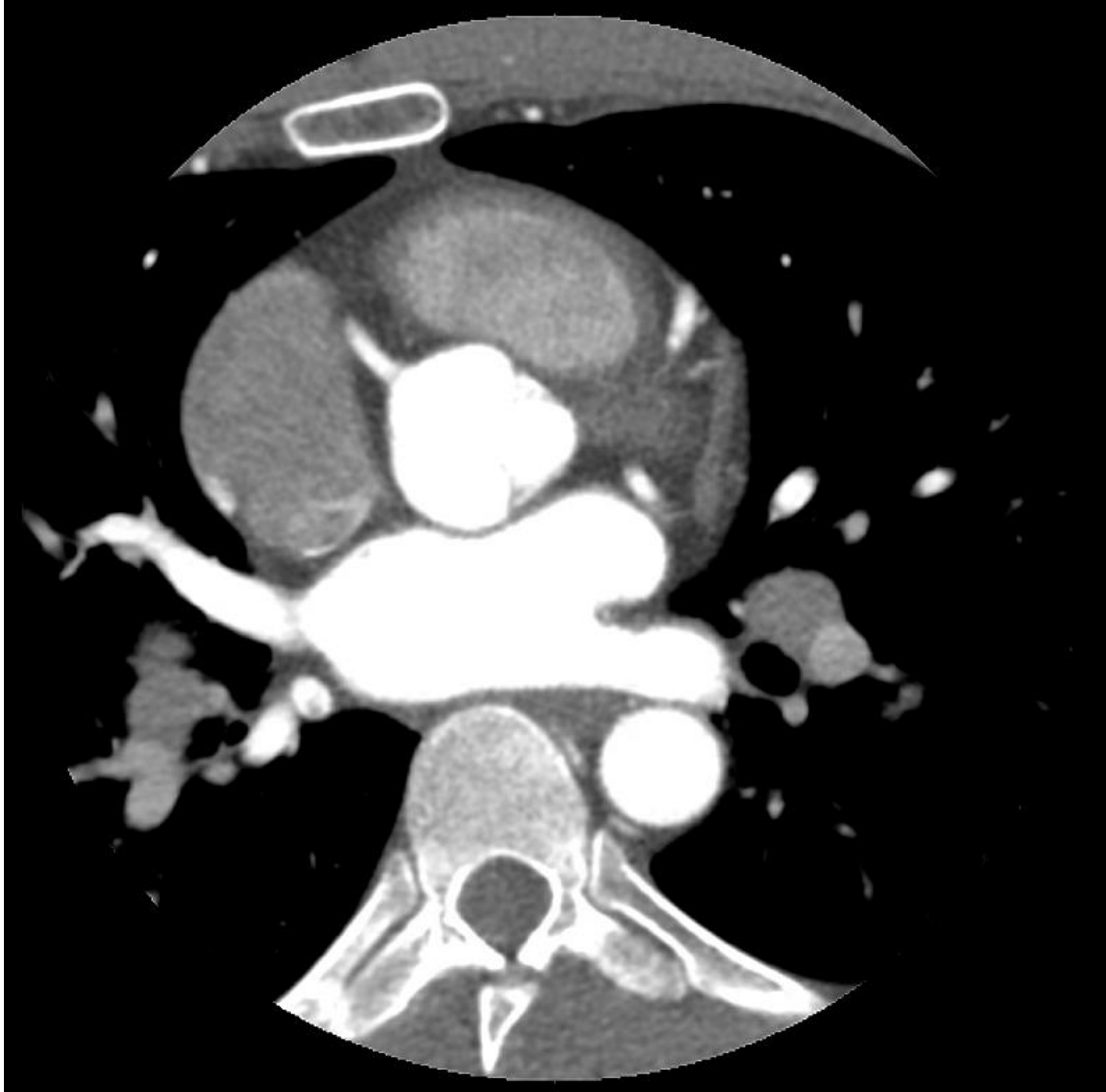
Learnings

Examining **what we learned** and how to apply the knowledge

Hamilton Health Sciences

What we learned

- Partnership between Cardiology and Radiology is key to success
- Shared goal and open communication
- Patient preparation is extremely important
- Cohesive interdisciplinary team / working environment
- Importance of properly trained staff
- Senior presence to ensure consistency
- Enough staff to preform multiple tasks simultaneously
- Staggered breaks to optimize table time



www.hamiltonhealthsciences.ca

Cardiac CT at HHS

Dr. Tej Sheth, Sarah-Jane Adams, Eric Ricker

Data Reporting Requirements

CCTA Reporting Requirements

- Hospitals will be asked to report on the following within the Self-Reporting Initiative (SRI) on a quarterly basis:
  - Total # of CT hours utilized for CCTA
  - Total # of CCTA cases completed
- Further details will be provided in the 2024/25 Wait Times Volume Management Instructions (VMI).

Roundtable Discussion

Cardiac Partner Engagement Cycle

QPMM Q2 Check-in calls:
October 28, 29, and Nov 5 2024

- Purpose: Quarterly outreach to facilitate a bi-directional conversation with cardiac centers to review volumes, provide updates on provincial initiatives and discuss facility needs and concerns
- Attendees:
  - Operations Director of the Cardiac Program (HA)
  - Executive VP – Cardiology Program
  - Medical Director of the cardiac program
  - Head of Cath Lab / Head of CV Surgery
  - Finance / Decision support staff
  - Quality leads

Cardiac Services Table: October 8, 2024

- Purpose: Provide strategic leadership and advice to define priorities that promote integrated care for cardiac patients and guide, monitor and lead initiatives to improve the delivery of high -quality cardiac care in Ontario
- Attendees:
  - Clinical Expertise from across Ontario
  - Hospital Leadership
  - Ontario Health Regions & the Ministry of Health

Cardiac Partners Update: TBD

- Purpose: Provide updates on key priorities and initiatives underway to improve the delivery of high-quality cardiac care in Ontario
- Attendees: Cardiac clinical community in Ontario

Next Steps

- CCTA Access initiative will be included in our fall QPMM check-in discussions, scheduled for late October / early November. DI colleagues are encouraged to attend and participate in discussions
- OH will continue to host CCTA Community of Practices every 2-3 months to support this initiative. We welcome teams to volunteer to share their experiences at a future session
- Feedback/questions on CCTA CoP format is welcome to Erin McPherson: erin.mcpherson@ontariohealth.ca

Thank you

Appendix

Current State: Diagnostic Imaging Priority Levels in Ontario

- **Priority 1 Emergent** – Target of 24 Hours. An examination necessary to diagnose and/or treat disease or injury that is immediately threatening to life or limb.
- **Priority 2 Urgent** – Target of 48 Hours. An examination necessary to diagnose and/or treat disease or injury and/or alter treatment plan that is not immediately threatening to life or limb. Includes all inpatients except where imaging is unrelated to patient admission based on clinical indication.
- **Priority 3 Semi-urgent** – Target of 10 Days. An examination necessary to diagnose and/or treat disease or injury and/or alter treatment plan, where provided clinical information requires that the examination be performed sooner than the P4 benchmark period
- **Priority 4 Non-urgent** – Target of 28 days. An examination necessary to diagnose/treat disease or injury, where the provided clinical information does not require the study to be performed within the Semi-Urgent time frame (P3 benchmark period of 10 days)