

# Diagnostic Services

## Professional Practice Leader (Charlton, King, West 5th):

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## Number of Members of Discipline:

SITE	FTE	PTE	POSITION
Charlton/ King/ West 5th	14	22	Registered Medical Radiation Technologist
Charlton	11	6	Registered CT & IR Technologist
Charlton	9	1	Registered Nuclear Medicine/PET Technologist
Charlton / West 5th	11	14	Registered Magnetic Resonance Imaging Technologist
Charlton / King/ West 5th	12	18	Registered Ultrasound Technologist
King / West 5th	4	1	Registered Mammography Technologist
Charlton / West 5th	9	10	Cardiac Ultrasound Technologist & Vascular Technologist

## Scope of Practice

The practice of Medical Radiation Technology is the use of ionizing radiation, electromagnetism and other prescribed forms of energy for the purposes of diagnostic and therapeutic procedures, the evaluation of images and data relating to the procedures and the assessment of an individual before, during and after the procedure.

Cardiology Technology involves the non-invasive testing and monitoring of the functioning of the human heart under various conditions, the provision of basic patient care during these procedures and the assessment and programming of implantable cardiac devices

Diagnostic Medical Sonographers are now regulated under the Regulated Health Professions Act, recognizing Ultrasonography as the 5<sup>th</sup> imaging specialty.

## Clinical Practice Achievements

### Quality & Safety

- Continued comprehensive Preventative Maintenance Programs across all imaging modalities maintain a high standard of equipment performance to provide safe and high-quality diagnostic imaging for our community. All legislative and regulatory guidelines maintained for proper equipment operation.
- Evaluated all lead protective equipment on an annual basis using a computerized Smart Track System to document the condition and integrity of the lead. This ensures the safety of all staff members and patients exposed to ionizing radiation by prompt identification of any issues for repair or replacement of protective lead equipment.
- Monitored modality wait times weekly for timely access to care for patients.
- Hand Hygiene Program- Staff members from Diagnostic Services act as ambassadors within the Department. This program facilitates the promotion of hand hygiene education and auditing through peer-leadership. This metric is displayed on the department quality boards to encourage continuous quality improvement to reduce infections.
- The creation of quality boards in Diagnostic Services ensures that departmental metrics and goals align with organizational quality priorities such as staff safety, improving transactions, improving access, patient safety and reducing infection rates. Frontline staff correlates their daily work to organizational goals. These outcomes are regularly updated and reviewed.

## Quality & Safety Continued...

- Discussions at staff meetings help to facilitate problem identification at the frontline level and the development of problem-solving strategies and techniques results in process improvements.
- All Staff members in Diagnostic Services complete e-learning modules in patient safety measures such as falls prevention, hand hygiene, SIR reporting and emergency preparedness.

### Computed Tomography (CT)

- The development of contrast allergy order sets was an important safety initiative in the CT department. Since Nov 2019, ordering physicians now have access to the necessary pre-medication protocols for patients who have a documented contrast allergy in Dovetale. The referring physicians can prioritize the examination and order the pre-medications required for both urgent or non-urgent/elective CT examinations requiring the administration of contrast media.

### Electro-Diagnostic Services – EDS

- Improved access for Cardiology services by implementing dedicated Cardiology Clinics. Patients now have access to cardiology consultations on the same day their diagnostic testing is completed. This includes the Rapid Access Cardiology Clinic with a referral base from SJHH Emergency Department. The General Cardiology Clinic receives referrals from community-based family physicians. The Peri-Op clinic consults with patients that have developed a troponin rise during surgery. These dedicated clinics have increased access to quality cardiac care in the community.
- Patient safety has been a top priority for the Cardiology team. Registered Nurses are now part of the multi-disciplinary team delivering patient care before, during and after Trans-esophageal echo examinations for patients receiving moderate sedation.
- Lanthius was on site for a quality improvement day. A visitor from St. Michael's hospital came into the Echo Lab and provided the Techs, Physicians and Registered Practical Nurses with recommendations and tips on processes and how to use Definity safely and correctly.

### Fluoroscopy

- The Medical Radiation Technologists have been trained by the Speech Language Pathologists to perform Video Swallow Studies according to a new protocol. The Clinical Leader of Speech Language Pathology and the Senior Medical Radiation Technologist worked collaboratively to provide up to date training and supervision for the Medical Radiation Technologists to perform these fluoroscopic exams in an accurate and standardized manner.
- Radiation Safety: The introduction of a lockbox containing the keys required to operate the portable C-Arms ensures the presence of a Medical Radiation Technologist. During fluoroscopic procedures. Radiation safety policies and procedures are followed to protect both the staff and patients. This safety and quality initiative was also implemented in the Cystography Suites to ensure proper radiation safety and documentation for all OR cases requiring the use of fluoroscopy.

### General Radiography

- Enhanced Security at the King Street Campus: The volume on the panic button system was adjusted to allow the Urgent Care Staff to differentiate the sound of this alarm from other alarm systems utilized in the facility. In the event of an emergency, the radiology staff has immediate access to assistance.

## Quality & Safety Continued...

### General Radiography

- Additional Bubble Mirrors were installed at the West 5th Campus in the General Radiography Tech Area as well as Front Reception to eliminate blind spots.
- Pediatric Chest X-ray Examinations are now performed using the Pedia Poser Chair. This positioning device is more patient-centric and provides an improved experience for the child and parent.
- A new policy has been drafted after review of a critical incident concerning the revision of ordered general radiography examinations. This policy will highlight the steps required before the decision can be made to revise an existing order. This safety initiative will ensure the patient receives the appropriate examination based on specific clinical indications.

### Interventional Radiology

- The successful implementation of a double sign-off process for all lab specimens collected in the Interventional Radiology department has significantly reduced the need for repeat procedures.
- Commitment to quality and safety through the implementation of standardized infection control procedures to reduce central line infections associated with Interventional Radiology. Minor changes to draping techniques and sterile tray preparation have reduced our central line infection rate to zero for the last year.

### Mammography

- Continue to focus on improving the patient experience by centralizing diagnostic and surgical services in one location. The Surgical Referral Program has been moved to the new Mammography / Ontario Breast Screening Program Center. All patients having a breast biopsy are referred to a surgeon within 2 weeks to discuss the results and develop a treatment plan if required. The integration of diagnostic and surgical services has improved patient care and timely access to care resulting in better clinical outcomes for breast cancer patients.
- The purchase of a new mammography unit provides the ability to control the amount of compression used for examinations to ensure a balance between diagnostic images and patient comfort.
- Breast Tomosynthesis is available at the King Campus and will soon be available at the West 5th Campus. This technology provides valuable information when evaluating patients with clinical symptoms. The images acquired increase the breast cancer detection rate and support early diagnosis and treatment of breast cancer patients.

### MRI

- Set up a modality-based safety committee. This committee meets every month to assess areas of concern requiring improvement in the department. As a result of this initiative, patient safety grab bars have been installed in patient change rooms.

### Nuclear Medicine / Molecular Imaging

- As part of a quality initiative, cardiac patients have the option of receiving an e-mail that provides general information and specifically outlines the necessary patient preparation instructions. This has significantly reduced cancellations due to inadequate preparation and subsequently improved patient wait times.

## Quality & Safety Continued...

### **Nuclear Medicine / Molecular Imaging**

- In the summer of 2019, a human factors analysis of cardiac stress testing in the Nuclear Medicine department was performed. This involved mapping and assessing both the physical and people / safety environment. Mitigation strategies were identified and implemented which improved the physical working space and the staff safety culture.
- The installation of new equipment has improved access to care. The ability to decrease the duration of appointment slots has provided the opportunity to add 4 additional patient examinations per day.
- Nuclear Medicine Technologists can perform diagnostic blood work as part of the renal donor pilot program. This initiative improves the patient experience and reduces the need for additional medical appointments. The focus remains on delivering quality care from a patient perspective.

### **Ultrasound**

- Sonographers have joined the College of Medical Radiation Technologists of Ontario (CMRTO). This Professional College regulates the quality of practice for all Medical Radiation and Imaging Technologists in Ontario. Professional Regulation promotes continuing education, ensures clinical competency and quality improvement.

## Change

- Across Diagnostic Services, the optimization of Dovetale Processes is a top priority. The prioritization of Dovetale issues and identifying opportunities to engage users and improve workflows ensure quality documentation in accordance with hospital policies and procedures. The implementation of an electronic health record has provided the opportunity to embrace the concept of continuous change. We strive to streamline processes to enhance patient care and safety in all imaging modalities.

### **Computed Tomography (CT)**

- The Rad Apps Protocoller is a stand-alone after-hours application that alerts the CT Technologist via pager and/ or a sound alert on the computer that there is an urgent CT approved and pending by our on-call Radiology Residents. The CT technologist then checks the Rad Protocoller for the patient name, location, and scan protocol. It shows who approved the study and acts as a messaging application so the Radiology Resident and the Technologist can communicate in real-time. The revisions to this clinical app have reduced the turn-around time for notification of pending urgent exams significantly. In 2018, the turn-around time was 20 minutes. Currently, the turn-around time is 6 minutes. This has significantly impacted access to care, improved patient flow and assisted in improving turn-around times in the Emergency Department.

### **Electro-Diagnostic Services (EDS)**

- The introduction of a Registered Practical Nurse (RPN) in the echo staffing model has improved workflow processes and improved patient care. The RPN assists the Techs by reviewing the patient's medical history starting intravenous access, giving injections and taking vitals.

## Change Continued...

### Electro-Diagnostic Services (EDS)

- The purchase of new equipment in the past year has improved access to quality patient care. The purchase of additional Holter Monitors and 3 new ECG units has improved access to these diagnostic cardiac tests.

### Fluoroscopy

- The Senior Medical Radiation Technologist and the Lead Radiologist, are working together to develop and implement a standardized protocol for Upper GI Studies. The protocol will be based on best practices and will address specific clinical ordering details for each examination request. In collaboration with the surgical referral base, the standardized protocol will streamline radiation exposure times, the number of diagnostic images and proper contrast administration to enhance quality and provide optimal patient care.
- The clerical booking staff has implemented a reminder phone call system to reduce the number of no-shows as well as ensure that the pre-requisites for the examination or procedure have been met. This initiative has vastly improved the workflow and wait times in the fluoroscopy area; positively impacting the delivery of quality patient care.

### General Radiography

- A new GE General Radiography Room has been installed at the King Street campus. The state of the art, digital x-ray equipment will improve the workflow and reduce wait times for patients in the Urgent Care Department as well as numerous Physician Out-Patient Clinics requiring diagnostic imaging.
- A new GE General Radiography room will also be installed at the Charlton Campus in 2020. This equipment will replace an existing obsolete unit. The state of the art, digital equipment will improve workflow for out-patients, in-patients, and fracture clinic patients. This project is part of the fracture clinic redevelopment in the Juravinski Tower.
- General Radiography is focused on improving the repeat rates for pelvic examinations through conducting a quality audit. This included discussions at Gen Rad rounds and monthly staff meetings. As a result, a process change regarding the order of the imaging views was implemented. The Anterior-Posterior (AP) view is completed first followed by the Shoot-Thru Lateral View (STL). By assessing the AP view first, positioning and technique selection can be tailored to each patient.

### Interventional Radiology

- The development of a new anti-coagulant policy for interventional radiology procedures has reduced the need to re-schedule patients. This policy is based on best-practice and medical evidence to reduce risk and support positive outcomes for the patient populations that we serve.

### Mammography

- The Women's Health Centre has been relocated to the West 5th Campus. The move has provided an opportunity to improve access to care and streamline workflow processes to deliver a patient-centric care for the women in our community.

### MRI

- Implemented a new policy regarding contrast administration for patients with renal impairment by following the recommendations from the Canadian Association of Radiology.

## Change Continued...

### Nuclear Medicine / Molecular Imaging

- New PET / CT Scanner : New scanner up and running as of August 2019. This update in equipment and technology has contributed to faster scan times for oncology patients and improved access to care by increasing the available appointments per day. New scanning protocols allow patients to be scanned in a shorter period of time. A whole-body protocol can now be accomplished in one scan providing quality diagnostic imaging and improving patient comfort.
- Cardiac Imaging in Nuclear Medicine: The Cardiac Stress Test Program has been redesigned according to Human Factors Analysis and Lean methodology. Two Technologists have been trained in Electro Cardiogram (ECG) interpretation.
- Nuclear Medicine City-Wide Programs: St. Joseph's recently adopted a city-wide program for Thyroid and Renal Imaging. All patients requiring a thyroid uptake and scan or renal imaging are referred to St. Joseph's Healthcare.
- Renal Donor Pilot Project: Nuclear Medicine Technologists can perform the required blood work for potential donors as part of a quality initiative. This reduces non-value-added time for patients as they no longer have to travel to the lab and wait for their blood work to be done. The ability for the blood work of to be processed quickly improves access to care. Quality metrics have been identified and are tracked to facilitate staff discussion and aim for continuous quality improvement.

### Ultrasound

- A dedicated breast ultrasound machine is being acquired for the Women's Health Program at the West 5th Campus acquired through the generous donation of the St. Joseph's Healthcare Foundation.
- At the Charlton campus, ultrasound has implemented new workflows. 6 Sonographers are scheduled daily with inpatient and outpatient assignments commencing at 07:30 am and running continuously throughout the day.
- The addition of an afternoon shift running from 2-10 pm Monday to Friday has increased capacity as well as improved access to care.

## Community

- A comprehensive review of compliments, recommendations and complaints has provided Diagnostic Services with many opportunities to improve patient care and the delivery of services.
- Through the generosity of the foundation and community partners, we were able to acquire 2 dedicated breast imaging ultrasound machines for the Women's Health Program.
- Diagnostic Service's commitment to quality patient care and the community is reflected through our participation in the Around the Bay Road Race and The Paris to Ancaster Road Race to raise additional funds to support new and innovative treatments and procedures.

## Formal Teaching:

- Radiation Safety Review conducted yearly by the department Physicist ensured that best practices are adhered to, to balance diagnostic quality and the reduction in occupational and patient doses across all departments that apply ionizing radiation to patients. This review included our clinical partners in the Operating Room to educate and provide support for radiation safety practices in the Operating Room Suites for surgical patients and staff.
- Ultrasound Technologists have participated in POCUS – Point of Care Ultrasound Training for Emergency Department Physicians.

## Internal Teaching:

### Computed Tomography (CT)

- 4th-year students from the Mohawk-McMaster Institute for Applied Health Sciences completed a 3-week rotation in the modality achieving competencies in simple single-phase CT examinations and intravenous contrast media injection.

### Electro-Diagnostic Services (EDS)

- Echo provided clinical placements for Mohawk College Cardiac Sonography students as well as clinical placements for Mohawk College Cardiovascular Technologists. Provided opportunities for high school co-op students to gain insight and knowledge regarding cardiology diagnostics.
- Supported a 4-week rotation for 4th year McMaster University Internal Medicine Residents.

### General Radiology

- 2nd and 4th-year students from the Mohawk-McMaster Institute for Applied Health Sciences completed clinical rotations and achieved competencies in general radiography examinations, fluoroscopic imaging and portable clinical and operating room imaging.
- The Diagnostic Imaging department provided learning experiences for local co-op students interested in pursuing careers in healthcare.

### MRI

- An MRI Technologist has taken on the role of Clinical Instructor. Student Placements are set to begin in January 2020. The modality will support 3 student placements per year for clinical training.

### Nuclear Medicine / Molecular Imaging

- Nuclear Medicine and PET / CT provided, and continues on an ongoing basis, clinical experience and teaching for Radiology Residents.
- PET / CT — Provided a 2-week rotation for students enrolled in the Michener Institute Nuclear Medicine Program.

### Ultrasound

- Students from the Mohawk–McMaster Institute for Applied Health Sciences completed clinical placements in general and obstetrical ultrasound imaging.
- Obstetrical Residents from McMaster University completed a rotation in diagnostic ultrasound learning basic scanning skills and techniques with the Ultrasound Technologists acting as preceptors and mentors.
- OB / GYN Resident presents Ultrasound Rounds to the Technologists during their Fontbonne Ultrasound Clinical Rotation.

## Internal Teaching Continued...

### Ultrasound

- Ultrasonography Students from the Mohawk-McMaster Institute for Applied Health Science complete clinical rotations in General and Obstetrical Ultrasound areas.

## Clinical Teaching:

### Computed Tomography (CT)

- Comprehensive yearly review of medical directive pertaining to the insertion of Intravenous Access and the administration of buscopan injections by technologists.
- Technologists are working on obtaining CT certification through the Canadian Association of Medical Radiation Technologists (CAMRT)

### Electro-Diagnostic Services (EDS)

- Echo Quality Assurance meetings are held quarterly.
- Cardiology meetings are held monthly
- Echo Rounds are held every other month

### Fluoroscopy

- The Medical Radiation Technologists have been trained by the Speech Language Pathologists to perform Video Swallow Studies according to a new protocol. The Clinical Leader of Speech Language Pathology and the Senior Medical Radiation Technologist worked collaboratively to provide up to date training and supervision for the Medical Radiation Technologists to perform these fluoroscopic exams in an accurate and standardized manner.

### General Radiography

- Gen Rad rounds take place quarterly. Rounds are led by a Staff Radiologist who discusses anatomy, pathology and imaging criteria. These rounds are documented for all staff to review at a later date. Rounds provide a great opportunity to encourage constructive dialogue among the team. The ability to understand and appreciate the needs and challenges of both the Radiologists and Technologists improves imaging quality and patient care.
- Quality Audits are held monthly, whereby 20 examinations of a chosen body part are critiqued on the quality of imaging using criteria like positioning, marker placement and technique used, decision making processes and clinical documentation. A tip sheet is developed and distributed explaining the audit results and providing recommendations on how to correct sub-optimal imaging.

### Interventional Radiology

- Monthly Difficult Access Rounds are scheduled with the Nephrology Program.
- Small tumour rounds scheduled monthly with the Urology Service evaluated potential candidates for Radiofrequency Ablation of Renal Tumours.
- Mortality and Morbidity Rounds are scheduled quarterly.

### MRI

- Educational Rounds conducted monthly to support the professional development of technologists. Practical sessions served to support the implementation of new scanning processes and protocols.



# Academic Pursuits

## Clinical Teaching Continued...

### Nuclear Medicine / Molecular Imaging

- Technologists have completed educational training in the Physics of CT Dose Reduction, Rubidium Generator Training, PET / CT Applications Training, Radiation Safety Education, Code Blue Drills and 12 Lead ECG Interpretation Courses.
- Technologists are working on obtaining PET/CT certification through the Canadian Association of Medical Radiation Technologists (CAMRT)

### Ultrasound

- Educational Rounds scheduled each month where Residents and Radiology Staff presented interesting and difficult cases supported the continuous professional development of technologists and enhanced quality of patient care. City Wide Ultrasound Rounds discussed clinical presentation and evaluation of transplant kidneys.

### Continuing Education:

- Quality Assurance Program mandated by the College of Medical Radiation and Imaging Technologists of Ontario requires each registered member to complete 25-hours of continuing education to demonstrate a commitment to improving professional practice. Continuous learning ensures clinical competence and supports the delivery of high- quality patient care as the profession evolves to include new roles, responsibilities, and advances in technology. The self-assessment program ensures that each technologist maintains the knowledge, skills, and judgment to deliver safe, effective and ethical outcomes to meet the needs of our patients.
- In collaboration with GE Healthcare, Technologists have the opportunity to expand their clinical knowledge and expertise through the Tip-Ed Online Program. Imaging professionals can complete continuing education courses in areas such as Computed Tomography, Interventional Radiology, Leadership, Magnetic Resonance Imaging, Mammography, Molecular Imaging, Radiography, Special Programs, and Ultrasonography.



# Scholarly Pursuits

## Research:

- Diagnostic Services supports multiple research studies. These studies consist of both clinical and industry-sponsored research. Technologists in multiple disciplines actively participate in acquiring quality diagnostic images and studies in collaboration with Diagnostic and Interventional Radiologists to support research studies and professional publications. These academic pursuits investigate pathological conditions and diseases. The investigations serve to positively impact the future diagnosis, development of treatment plans and increase the quality of life for the community we serve.



### Breakdown of Current Research Studies in Diagnostic Services:

- Computed Tomography: 8
- Electro Diagnostic Services: 3
- Fluoroscopy: 1
- General Radiography: 1
- Interventional Radiology: 1
- Magnetic Resonance Imaging: 3
- Nuclear Medicine /PET CT: 7
- Ultrasound Imaging: 5

## Publications:

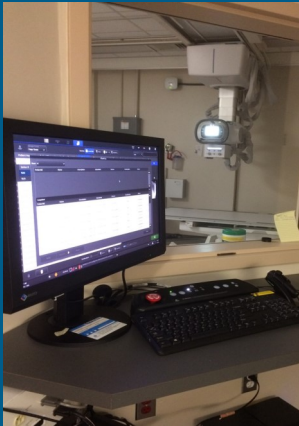
- Technologists across all imaging modalities have performed multiple imaging examinations that have been used in numerous academic publications by the Radiologists in Diagnostic Services.
- Relative afferent pupillary defect with normal vision – L. Donaldson, R. Rebello and A. Rodriguez.
- Spontaneous CSF-Venous fistulas associated with venous/venolymphatic vascular malformations – W. Schievink, M. Maya, F. Moser, A. Tuchman, R. Cruz, R. Farb, R. Rebello, K. Keddy & R. Prasad.

## External Committees:

- Clinical Educator for General Radiography is a member of the Medical Radiation Sciences Undergraduate Advisory Committee and the Specialization Education Committee. This committee brings Clinical Education Leaders, Faculty Members, Student Representatives as well as a Medical Physicist together to forecast the industry demand for graduates.

## External Committees Continued...

- This group participates in identifying the skills and characteristics required of graduates to meet the evolving needs and future direction of the profession. Committee members also provide feedback and suggestions regarding the Medical Radiation Science Program as well as advice on equipment and labs for practical instruction to support student success in the clinical setting.
- Senior Technologist Molecular Imaging- Member of the Integrated Radiation Safety Committee (IRSC) and the Integrated Radioisotope Safety Program.
- Technologist representation on the Integrated Nuclear Medicine and Molecular Imaging Occupational Health and Safety Committee.
- Senior Technologist in Electro-Diagnostic Services is the Technical Director for CorHealth, the Cardiac Care Network of Ontario.



## External Presentations:

### Computed Tomography (CT)

- The Rad Apps Protocoller won first place at the Canadian Association of Radiologist's Annual Conference. It was presented by Dr. Kaka and co-authored by the Senior CT Technologist.



## Leadership:

- With the implementation of Dovetale, Diagnostic Services is committed to providing exceptional patient care based on well-established clinical indicators and best practices. Medical Radiation Technologists in collaboration with Radiologists evaluate requisitions to ensure the appropriateness of the test or procedure in regards to answering a clinical question. Best practice guidelines outlined by the professional colleges provide technologists with a comprehensive framework to support and enhance decision-making skills and abilities and to seek clarification when required. This partnership supports positive patient outcomes. The Senior Technologists and the Diagnostic Services Management Team in collaboration with the Dovetale Radiant Application Analysts have continued to support the transition to the electronic medical record by scheduling monthly meetings to review corporate and departmental changes.
- Diagnostic Services implemented a departmental wide Transfer of Accountability (TOA) initiative in collaboration with the Nursing Leaders and administration to work towards improving patient safety and communication for the period of time between patient transfers for diagnostic examinations.
- Diagnostic Services has successfully implemented the electronic collection of MIS Workload Units for each Imaging Modality.
- A staff radiologist, Dr. Ehsan Haider was actively involved in a publication addressing the concept of the appropriateness of diagnostic imaging. The publication titled, Choosing Wisely Canada and Diagnostic Imaging, What level of evidence supports the recommendations, looks at key clinical indicators supporting the need for medical imaging. This initiative is still a core component of Diagnostic Service's current goals, to deliver safe and effective patient care.
- The Diagnostic Services Department is also actively involved in ensuring that the requested diagnostic examination or procedure is authorized by an appropriate healthcare provider to minimize harm and risk to the patient. This mandate is a core component of Diagnostic Services' commitment to enhancing patient safety.
- We are the first Interventional Radiology (IR) Department in Canada to expand our multi-disciplinary team. In 2019, IR welcomed a Physician Assistant (PA) to the current staffing model. The Physician Assistant works in collaboration with the IR team consisting of Interventional Radiologists, Medical Radiation Technologists, and Critical Care Nurses. This addition improves the patient journey by providing pre-procedural consultation and support as well as post -procedural and long-term maintenance of chronic medical conditions and follow-up.



# Discipline Goals 2019

## Quality & Safety

### Computed Tomography (CT)

- IV Recertification and Power PICC Line Injection review by all CT Technologists.
- Identification arm banding for all Computed Tomography patients upon registration.

### Electro-Diagnostic Services (EDS)

- Continue to support the development of the Trans-Esophageal Program (TEE) in collaboration with the Interventional Radiology nursing Team. This model will continue to improve access to quality care and improve patient safety in accordance with the hospital's moderate sedation policy.

### Fluoroscopy

- Continue to standardize examination protocols to ensure best practice with a focus on reducing radiation exposure and providing quality images to support an accurate diagnosis.

### General Radiography

- West 5th Campus- We will be looking at improving access to the area by implementing automatic door openers to support the mobility of patients using walkers that require assistance when entering the waiting room areas.

### Interventional Radiology

- Develop and implement the After -Visit Summary (AVS) for all of our patients undergoing interventional procedures requiring moderate sedation and post-intervention follow-up. This initiative will enhance patient care by supporting our patient population with educational information and post-procedural instructions to support the management of numerous health conditions.
- Continue to review Code Blue Procedures and ensure that CPR certification is up to date for all members of the multi-disciplinary team.

### MRI

- Create a Zone III area in the in-patient stretcher bay. This area will be for screened MRI patients and MRI personnel to improve patient flow.
- Review existing policies for contrast injected studies. Re-evaluate dose per weight for body cases and half dose for IAC's and Sella examinations.
- Review clothing / changing policy for all MRI examinations.

### Nuclear Medicine / Molecular Imaging

- Continue to track patient safety metrics and staff safety training.
- Empower staff to identify patient safety issues and actively participate in developing counter-measures for issues.
- Routinely review patient safety practices and continue to promote a safety culture that meets the organizational requirements at St. Joseph's Healthcare.
- Continue to review Code Blue Procedures and ensure that CPR certification is up to date.

### Ultrasound

- Continue to produce high-quality ultrasound examinations and strive to continue to enhance and develop staff training and mentoring programs within the modality.

# Discipline Goals 2020

## Change

### **Computed Tomography (CT)**

- Pre-Charting for the administration of intravenous contrast for Computed Tomography examinations.
- A new state-of-the-art CT Scanner will be installed in early 2020, improving access to this essential diagnostic test.

### **Electro-Diagnostic Services (EDS)**

- A request for purchase (RFP) has been submitted for a new echo unit as well as a new 3D transesophageal scope.
- Redevelopment is an on-going project within the Cardiology Services Department. Projects have been completed including a new patient waiting room, registration desk, conference and teaching room, pacemaker clinic space, cardiology clinic space and a flex space for the Senior Technologist, Residents and Clinical Fellows.
- All diagnostics have been centralized to improve workflows and access to care.
- All sterile supplies have been moved to a central location to improve workflows, reduce excess inventory and streamline processes.

### **Fluoroscopy**

- New Cystography Rooms will be installed in the OR as current equipment has reached end-of-life status.

### **General Radiography**

- Maintain good workflow for Urgent Care and Clinic patients with the install of the new digital radiography room at King Campus.
- Fracture Clinic will be relocating to the vacant Women's Health Centre. This move increases the volume of patients to the Diagnostic Imaging department. In preparation, DI is installing a new digital radiography unit and relocating the x-ray unit from Fracture Clinic downstairs. This work should be completed by early March 2020.
- Previous attempts at eliminating routine pre-op chest x-rays have been unsuccessful. General Radiography will be exploring the option of developing a medical directive that supports the Technologist's ordering and completing the examination if certain clinical criteria are met. This initiative will reduce multiple visits to the department and reduce delays in care.

### **Interventional Radiology**

- Look at improving workflow and bed usage / turn-around times as part of our goal for continuous quality improvement.

### **Nuclear Medicine / Molecular Imaging**

- The PET / CT Technologists will be working with the Physician Team to re-design the requisition. This initiative proves to be instrumental to reflect the technical advances in PET / CT regarding clinical indications. This update will allow Nuclear Medicine Physicians and Radiologists to efficiently protocol the correct test for each patient. This improves patient access, quality of care and most importantly aligns with the Choose Wisely initiative to meet each patient's unique needs.

# Discipline Goals 2019

## Change Continued...

### **Nuclear Medicine / Molecular Imaging**

- CT and radioisotope dose reduction strategies. These initiatives are possible due to the increased sensitivity of the new equipment and will require investigation and development of imaging protocols by the Radiation Safety Officer (RSO), Senior Technologist and Physician team.

### **PACS**

- The Picture Archival Communication System (PACS) is a citywide enterprise system in Hamilton. SJHH & HHS operate with the same PACS system and support each other's operations. With the threat of malware, SJHH will need to review risk management and system safety in the near future. The next upgrade for PACS which is Universal Viewer is being considered citywide.

### **Ultrasound**

- Actively Participate in building a collaborative Women's Health Program with Diagnostic and Interventional Mammography to enhance to centralize service and enhance the patient experience.

## Community

- Engage the community to provide valuable input and suggestions by holding focus group sessions to encourage feedback regarding the delivery of our programs and services.
- To continue to learn and improve services from patient compliments, recommendations, and complaints.
- Look at ways of incorporating patient and family involvement in the way Diagnostic Services delivers patient care.
- We are committed to continuous change to meet the evolving needs of the patient and their families. Our goal is to provide state-of-the-art care delivered with compassion, dignity, and respect.
- Continue to actively participate in community events such as the Around the Bay Road Race and the Paris to Ancaster Bicycle Race.

## Research & Education

- Continue to support the research being conducted at St. Joseph's Healthcare by providing access to quality imaging modalities and clinical expertise to explore new procedures and treatments to enhance the treatment of disease processes and improve the quality of life of all members of our community.
- Diagnostic Services is committed to training the leaders of tomorrow by providing a quality clinical experience and mentorship in all imaging modalities for every member of the multi-disciplinary team.