Board of Directors
Open Meeting
Wednesday, March 4, 2020 – 5:00 pm Boardroom, Level 3, TBRHSC
980 Oliver Road, Thunder Bay
AGENDA

Vision: *Healthy Together*
Mission: *We will deliver a quality patient experience in an academic health care environment that is responsive to the needs of the population of Northwestern Ontario*
Values: *Patients ARE First (Accountability, Respect and Excellence)*

#	Time	Presenter	Item & Purpose	Expected Outcome				
				Recommendation /Decision/Action	Education	Discussion	Strategic Progress	Fiduciary Information
1.0	2	**CALL TO ORDER and WELCOME**						
1.1	5	M. Simeoni	Chair's Remarks*					X
1.2	1	M. Simeoni	Quorum (9 members total required, 7 being voting)					
1.3	1	M. Simeoni	Conflict of Interest					
1.4	1	M. Simeoni	Approval of the Agenda	X				
2.0	5	**PATIENT STORY** – *Dr. Zaki Ahmed*						
3.0	**PRESENTATIONS/EDUCATION**							
3.1	15	A. Bjorn	Violence in the Workplace*		X			
4.0	**CONSENT AGENDA**							
4.1	-		Board of Directors Open Minutes-February 5, 2020*	X				X
5.0	**REPORTS**							
5.1	10	J. Bartkowiak	Report from the President and CEO* 5.1.1 Current Challenges: a. Capital Projects Challenges b. Seasonal Influx of Patient Volumes c. Ontario Health Team Update d. 2020-2021 Budget					 X X X X
5.2	5	Senior Leaders J. Garofalo	2020 Q3 Strategic Plan Progress and Scorecard Report*					X
5.3	5	Dr. Z. Ahmed	Report from the Chief of Staff*					X
5.4	2	Dr. V. Grdisa	Report from the Chief Nursing Executive*					X
5.5	2	G. Craig	Report from the Foundation*					X
6.0	**FIDUCIARY MATTERS**							
6.1	5	P. Lang	Report from the Chair of the Patient Safety and Quality of Care Committee: a. Prevention and Screening b. Surgical and Ambulatory Services c. Annual Research Compliance Report					 X X X
6.2	5	M. Hardy	Report from the Chair of the Governance and Nominating Committee: a. Board Recruitment b. Expressions of Interest for Officer Positions					 X X
7.0	**FOR INFORMATION**							
7.1	-		Work Plans*					X

#	Time	Presenter	Item & Purpose	Expected Outcome				
				Recommendation /Decision/Action	Education	Discussion	Strategic Progress	Fiduciary Information
7.2	-		Webcast Statistics*					X
7.3	-		Report from the Health Research Institute*					X
7.4	-		Report from the Volunteer Association*					X
7.5	-		Environmental Compliance and Fire Safety Update*					X
7.6	-		Annual Research Compliance Report*					X
7.7	-		Employee and Professional Staff Experience Survey (EPSES) Corporate Action Planning Report*					X
7.8	-		Canadian Association of Medical Radiation Technologists (CAMRT) Publication*					X
8.0	**BOARD MEMBER COMMENTS**							
9.0	**DATE OF NEXT MEETING** – April 1, 2020							
10.0	**ADJOURNMENT**							

Ethical Framework

The Hospital is committed to ensuring decisions and practices are ethically responsible and align with our Vision, Mission and Values. Leaders should consider decisions from an ethics perspective including their implications on patients, staff and the community.

The following questions should be considered for each decision:

1. Does the course of action put 'Patients First' by responding respectfully to the needs, values, and expectations of our patients, their families, and the communities?
2. Does the course of action demonstrate 'Accountability' by advancing a quality patient experience that is socially and fiscally accountable?
3. Does the course of action demonstrate 'Respect' by honouring the uniqueness of each individual and his/her culture?
4. Does the course of action demonstrate 'Excellence' by fostering an environment of innovation and learning to provide a quality patient experience?

For more detailed questions to use on difficult decisions, please refer to the Hospital's Framework for Ethical Decision Making

BOARD OF DIRECTORS (Open)
March 4, 2020 – DRAFT

Agenda Item	Committee or Report	Motion or Recommendation	Approved or Accepted by:
1.1	Agenda – March 4, 2020	"That the Agenda be approved as circulated."	Moved by: Seconded by:
4.0	Consent Agenda	"That the Board of Directors: 4.1 Approves the Board of Directors Open Minutes of February 5, 2020; as submitted."	Moved by: Seconded by:

Thunder Bay Regional Health Sciences Centre

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Report from Matt Simeoni
Chair, Board of Directors
March 4, 2020

I consider serving on the Board of Directors of our Hospital a great privilege. Although it requires an intensive commitment of time and energy, it is rewarding to be part of the quality care that is provided at our Hospital to the patients and families of Northwestern Ontario.

In addition to attending Board meetings, Directors participate on Committees of the Board: Resource Planning, Audit, Executive, Patient Safety and Quality of Care, Governance and Nominating, and Fiscal Advisory. Some of the committees also include community volunteer members who are not members of the Board.

I encourage residents of our community and region to consider joining our team for the 2020-21 Board cycle by volunteering to participate on committees of the Board. This level of involvement supports interested and committed people to gain experience and knowledge and prepare them for positions on the Board of Directors in the future. In addition to committee members, we are currently recruiting for individuals to serve as members of our Board of Directors. Information on how to apply will be made available in the next several weeks.

In addition to my colleagues on the Board and its committees, there are hundreds of dedicated volunteers who contribute time, energy, and expertise to enhance patient care at our Hospital. I take this opportunity to recognize the many volunteers, including the committed members of the organizing committee of the Bearskin Airlines Hope Classic. As a result of their efforts, over $117,000 was raised this year, and more than $3.25 million since its inception. The funds raised by this bonspiel have been used for the Breast Cancer Support Group, breast cancer services, and since 2006, to help support the Hospital's Linda Buchan Centre for Breast Screening and Assessment.

I would like to assure the community that our Hospital is well prepared to handle the 2019 Novel Coronavirus should any cases become present in Thunder Bay. The 2019 Novel Coronavirus, or COVID-19, is a new respiratory virus first identified in Wuhan, Hubei Province, China. Coronaviruses cause illness ranging from the common cold, to more serious infections like bronchitis, pneumonia, or severe acute respiratory syndrome (SARS). Although it was declared a global health emergency, there have been very few confirmed cases in Ontario and the risk to Ontarians remains low. Our Hospital is working closely with the Ministry of Health and Long-Term Care and our partners implementing a robust plan to monitor for, detect and, if needed, isolate any cases of the virus. The health and safety of patients and families in Northwestern Ontario is our top priority. People can rest assured that our Hospital is prepared to effectively manage the 2019 Novel Coronavirus and to help anyone who may have come in contact with it. We have infection control policies and procedures in place and have activated additional screening procedures as an added precaution.

February was Heart Month, an ideal time to bring attention to the importance of cardiovascular health, and what we can do to reduce our risk of cardiovascular disease. Heart disease affects approximately 2.4 million Canadian adults, and is the second leading cause of death in Canada. We can all reduce our risk of heart disease by making healthy lifestyle choices, including quitting smoking, eating a healthy and balanced diet, getting enough sleep, exercising regularly, and monitoring blood pressure and cholesterol levels. Heart Month is also an opportunity for the residents of Northwestern Ontario to be aware of the benefits of calling 9-1-1 and the expertise that paramedics bring to cardiac care, especially during the critical first hours after a heart attack. Paramedics are trained to recognize the signs of a heart attack and mobilize the patient quickly.

BRIEFING NOTE

Thunder Bay Regional Health Sciences Centre

TOPIC	Prevention of Workplace Violence – Building to our Current State
PREPARED BY	Joy Halfkenny, Administrative Assistant, People, Culture and Strategy
REVIEWED BY DECISION SUPPORT (if required)	<Does this have financial impacts to the hospital's budget? Has a Decision Support Analyst been consulted on this briefing note?> YES ☒ NO ☐ N/A ☐
APPROVED BY	Amanda Bjorn, Executive Vice President, People, Culture, and Strategy
CO-SPONSER (if required)	
PREPARED FOR: President &CEO ☒ Board of Directors ☒ Other: SLC – February 11, 2020 RPC: February 18, 2020	
DATE PREPARED	February 25, 2020

Our Hospital is committed to ensuring decisions and practices are ethically responsible and align with our Vision, Mission, and Values. Leaders should consider decisions from an ethics perspective including their implications on patients, staff and the community.

The reader considers the following questions to ensure each decision are ethically responsible by indicating with a √:

☐ 1. We put '**Patients First'** by responding respectfully to needs, values, & expectations of our patients, families, and communities?
☐ 2. We demonstrate '**Accountability**' by advancing a quality patient experience that is socially and fiscally responsible?
☐ 3. We demonstrate '**Respect**' by honouring the uniqueness of each individual and his or her culture?
☐ 4. Does the course of action demonstrate '**Excellence**' by fostering an environment of innovation and learning to advance a quality patient experience?

For more detailed questions to use on difficult decisions, please refer to the Hospital's Framework for Ethical Decision Making on the iNtranet under Quality and Risk Management>Ethics.

PURPOSE/ISSUE(S)

To provide an update to the Board of Directors regarding workplace violence prevention initiatives at Thunder Bay Regional Health Sciences Centre (TBRHSC).

BACKGROUND

The Occupational Health and Safety Act (OHSA) defines workplace violence as physical force by a person against a worker in a workplace that causes or could cause physical injury, including statements or behaviours that a worker could reasonably interpret as a threat. Led by the Occupational Health and Safety Department (OHS), TBRHSC has had a Workplace Violence Prevention Policy and a Workplace Violence Prevention Program in place since 2006.

The Joint Occupational Health and Safety Committee (JOHSC) provides a forum to address global workplace violence prevention. In 2017, four working groups, reporting to the JOHSC were developed to focus on enhancing staff safety related to:

- Violent Incident and Risk Analysis;
- Security & Facilities;
- Clinical Process/Practices; and
- Training & Education.

These working groups analyze all reported incidents of violence/aggression against staff and implement solutions to prevent and mitigate future incidents. The four working groups are accountable to the JOHSC and report progress monthly at JOHSC meetings.

Public Services Health & Safety Association (PSHSA) guides TBRHSC's workplace violence prevention initiatives. PSHSA provides training, consultation, and resources to reduce workplace risks and prevent occupational injuries and illnesses. TBRHSC uses the PSHSA toolkit for workplace violence prevention; the toolkit includes five areas of focus:

1. Workplace Violence Risk Assessment
2. Individual Patient/Client Risk Assessment
3. Communicating & Flagging Risk of Violence
4. Security
5. Personal Safety Response System

We also believe it is important to focus on:

6. Orientation and Training

This report was compiled by:

Amanda Bjorn, EVP, People, Culture and Strategy;
Rose Lazinski, Manager, Occupational Health and Safety;
Sabrina Felice, Consultant, Occupational Health and Safety;
In consultation with Clinical Nurse Specialists, Interprofessional Education and the JOHSC.

The report details work done in these six areas since 2006, as well as the progress we have seen as a result of focusing on workplace violence through our Quality Improvement Plan (QIP).

ANALYSIS/CURRENT STATUS

Please see attached report.

RECOMMENDATION

For information Only.

NEXT STEPS

Please see page 11 of the attached report.

STAKEHOLDER REACTION

N/A

COMMUNICATIONS

This report has been communicated to the Senior Leadership Council, Resource Planning Committee and will be shared with TBRHSC Leadership at the next Leadership Enhancement and Performance Session on February 26th, 2020.

FINANCIAL IMPACTS

N/A

APPENDIX SECTION

Preventing Violence in the Workplace – Building to our Current State

Workplace Violence Initiatives - Timeline

Preventing and Mitigating Violence in the Workplace – Building to our Current State

Preventing and mitigating the impact of workplace violence has been a focus for Thunder Bay Regional Health Sciences Centre (TBRHSC) since 2006. This report outlines the various tactics implemented to date to address workplace violence.

Background and Overview

The Occupational Health and Safety Act (OHSA) outlines the roles and responsibilities of workplaces concerning workplace violence. The Ministry of Labour (MOL), in turn, ensures that policies and programs within organizations are in place and followed. The key focus points regarding workplace violence are prevention, measurement, and response strategies.OHSA defines workplace violence as physical force by a person against a worker in a workplace that causes or could cause physical injury, including statements or behaviours that a worker could reasonably interpret as a threat. Led by the Occupational Health and Safety Department (OHS), TBRHSC has had a Workplace Violence Prevention Policy and a Workplace Violence Prevention Program in place since 2006.

The Joint Occupational Health and Safety Committee (JOHSC) provides a forum to address global workplace violence prevention. Consisting of seventeen members – seven unionized, five management and five resource (one Human Resources, two Occupational Health and Safety, one Infection Prevention and Control and one Research Institute) representatives, all Unions have representation on the JOSHC. The EVP People, Culture & Strategy is the Executive representative. In 2017, four working groups, reporting to the JOHSC were developed to focus on enhancing staff safety related to:

- Violent Incident and Risk Analysis;
- Security & Facilities;
- Clinical Process/Practices; and
- Training & Education.

These working groups analyze all reported incidents of violence/aggression against staff and implement solutions to prevent and mitigate future incidents. Some examples of actions these groups have taken to improve staff safety include

- Addition of a permanent Security Guard in the Emergency Department from 8 pm to 8 am;
- Restricting access to key doors in the hospital, especially after daytime hours;
- Reviews of security models and training at other health care organizations in Ontario; and
- The development of the Violence Prevention Universal Precautions Approach eLearning education module.

The four working groups are accountable to the JOHSC and report progress monthly at JOHSC meetings.

TBRHSC's workplace violence prevention initiatives are guided by Public Services Health & Safety Association (PSHSA). PSHSA provides training, consultation, and resources to reduce workplace risks and prevent occupational injuries and illnesses. TBRHSC uses the PSHSA toolkit for workplace violence prevention; the toolkit includes five areas of focus:

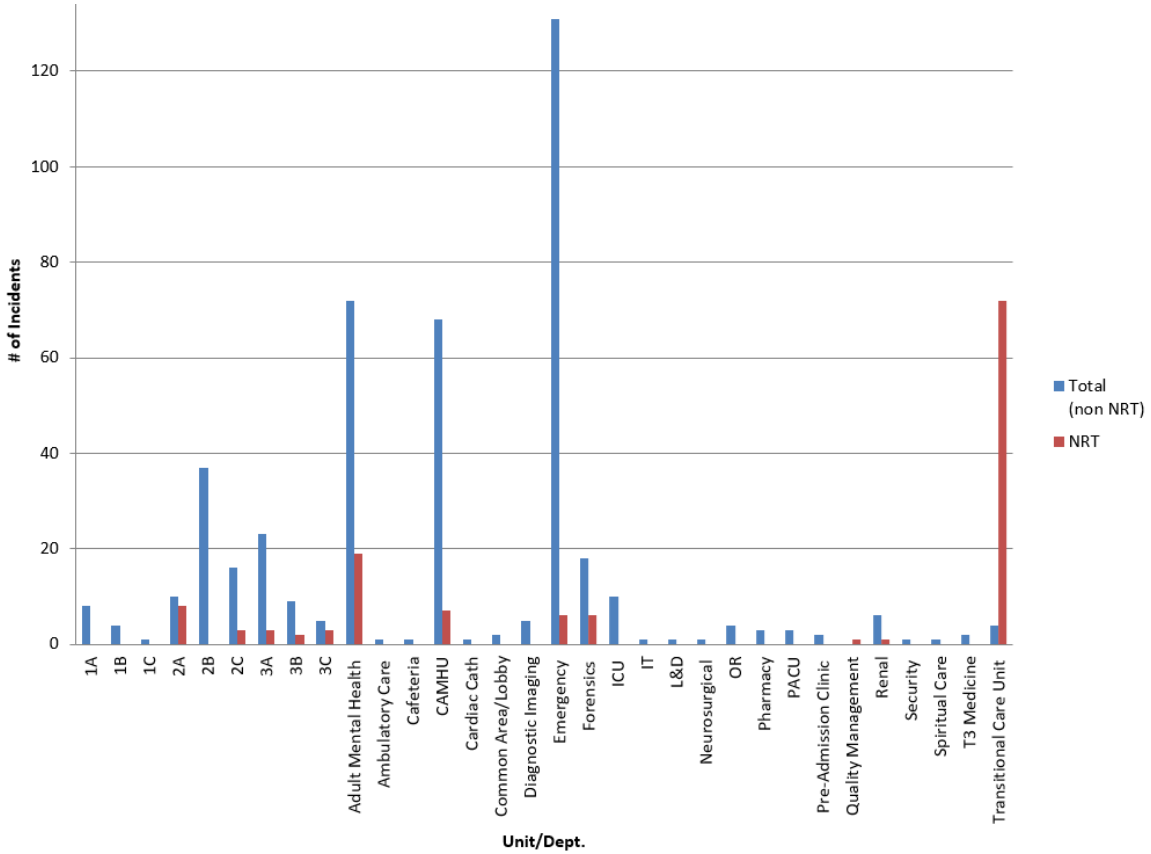
1. Workplace Violence Risk Assessment
2. Individual Patient/Client Risk Assessment
3. Communicating & Flagging Risk of Violence
4. Security
5. Personal Safety Response System

We also believe it is important to focus on:

6. Orientation and Training

This report details work done in these six areas since 2006, as well as the progress we have seen as a result of focusing on workplace violence through our Quality Improvement Plan (QIP).

Current State: Workplace Violence Incidents by Unit, 2019



Reported Incidents of Violence, 2019

131 - Emergency Department

72 - Adult Mental Health

68 - Child and Adolescent Mental Health

37 - 2B

18 - Forensic Mental Health

131 impacting Nursing Resource Team (NRT) staff in a variety of settings in our Hospital (72 of these incidents occurred at the HRM Transitional Care Unit)

1. Workplace Violence Risk Assessment Initiatives

Workplace Violence Risk Assessment is conducted to ♣ identify hazards ♣ establish their risk rating ♣ identify controls ♣ implement an action plan.

Actions to date	STATUS

Risk Assessments • Overall Physical Environment; • Department Specific Environment and Practices; and • Direct Care of Potentially Violent Patient	Workplace Violence Risk Assessments using the PSHSA's online tool have been completed in all in-patient areas. Risk assessments are reviewed every two years or more frequently, depending on changes to the department. To ensure reviews are completed, risk assessment reminders are inputted into the SmartSheet tool. 100% of the hospital was assessed in 2015. All high-risk areas (including all in-patient areas) of the hospital were re-assessed in 2018. High-risk areas should review their risk assessments annually, and strategies to support and remind the managers to be able to do this are being implemented. JOHSC members, in collaboration with Senior Leaders, conduct health and safety assessments monthly covering the entire hospital campus (both indoor and outdoor). Conversations with front line staff regarding observed risks occur and action plans to remove hazards are implemented and tracked by JOHSC.	Complete and Ongoing
Post Incident Risk Re-Assessment	A Post-Violent Incident Investigation Tool and Risk Re-assessment Form is used to re-assess an area following a violent incident. The Incident & Risk Analysis group is engaged in assessing trends, root causes, and the identification of recommendations for mitigation based on the findings of the Post-Violent Incident Investigation Tool.	Complete and Ongoing

2. Individual Patient/Client Risk Assessment

Assessment of risks related to individual patients needs to be conducted so that flagging and communication of risk can occur. All employees who come into contact with the patient will benefit when a sound violence risk assessment has been completed.

Actions to date		**STATUS**
Assessment & Communication Tools	The Violence Assessment Tool (VAT) is available to support accurate patient assessments. To communicate the findings of the VAT, the Situation, Background, Assessment, Recommendation (SBAR) tool is completed. SBAR is used when transferring patients between units to ensure information about patients with a risk of violent behaviour is communicated. The SBAR is a method of concise communication borrowed from the military. It is a best practice in health care, especially for the hand-over of patient care between health care professionals. As part of the accreditation standards for safe patient hand-over, TBRHSC Nursing Practice embedded the SBAR format into the transfer documentation used when transferring patients from the Emergency Department to In-patient nursing units. SBAR is also used when transferring patients to other parts of the Hospital for special procedures (e.g., 2A patient going to Renal Services for dialysis). Any risk of violence is included to alert providers in the specialty areas.	Complete and Ongoing

3. Flagging and Communicating Risk of Violence

Flagging and communicating to all employees that an individual patient has been violent during a current and/or previous admission significantly increases awareness and enables staff to be aware of risk.

Actions to date		STATUS
Acting Out Behaviours (AOB) Flagging and Communication	The Acting Out Behaviours Policy (AOB) outlines the procedure for identifying, communicating, and managing risk(s) to the personal safety of TBRHSC staff, professional staff, learners, volunteers, patients, and visitors. The AOB policy was launched in September 2018 with extensive training provided to all staff by Professional Practice and the Interprofessional Educators. Extensive research and consultation occurred to develop the AOB policy to ensure a balance between staff and patient safety, as well as legislative and privacy boundaries. Patient and Family Advisors (PFA's) contributed to the policy and procedure development. The AOB policy identifies practices regarding communication of risk (including signage, arm band and chart stickers to identify patients who demonstrate acting out behaviours, information to alert visitors to check with staff before entering the patient's room and verbal communication strategies to inform other departments of risks). The mental health areas also have standard operating practices (SOP's) that focus on safety, identification of risk, and communication.	Complete and Ongoing
Staff Safety Huddles	Safety Huddles have been occurring for many years as a mechanism for staff to have conversations with their leaders about safety issues directly related to their work. Led by the Unit Manager, all types of safety topics from both staff and patient perspectives, as well as global corporate safety initiatives, are discussed to increase employee awareness and knowledge. A formal Huddles Guide Tool (developed by Occupational Health and Safety in 2018) directs meaningful conversations. Patients who pose a potential safety risk are discussed to increase team awareness.	Complete and Ongoing

4. Security

PSHSA's Security Toolkit guided the development TBRHSC's security program in terms of functions, training requirements, and program elements.

Actions to date		STATUS
Codes	Policies for Code White, Code Silver, and Code Purple are in place. A Lead and a Working Group exist for each code. Code White – The Policy was modernized in 2017 to include responses such as Non Violent Crisis Intervention (NVCI) and Gentle Persuasion Approach (GPA). See training section for details. Training and tabletop activities for staff occurred from 2017-2019 regarding the revised policy, procedure and techniques/approaches (including three hour sessions for all mental health staff and training for all Security staff). The first mock Code White simulation learning event for the Adult Mental Health staff will occur in February, 2020. Code Silver – Introduced by Ontario Hospital Association (OHA) in 2016. TBRHSC implemented EMER-190 (Code Silver policy) in February of 2018. In July 2018 the policy was rolled out through various education initiatives, Lunch & Learns in collaboration with Thunder Bay Police Services and Safety Huddles. Open to all staff, these learning opportunities were well attended. Code Purple – The code purple policy was last revised in 2018.	Complete and Ongoing
Security Guards – Services and Training	A 'Security Walkabout' is available upon request by any staff; this includes having a security guard come to a requested location to walk through the space and assist with dissolving any potential risky, escalating or high-tension situations. Staff can also request to be accompanied to their car if concerned about safety for any reason. Current security personnel that are part of the Code White Response team are trained in NVCI (see Education and Orientation section for description) and respond to Code Whites. Security Guards have also been trained to correctly apply physical restraints. 2019 - Security guards received training to use The Turtle Shield® (a padded shield designed to safely secure a combative patient in a humane and effective manner). Only Security Personnel that have been trained may use the Shield at the direction of the Primary Nurse for the patient.	Complete and Ongoing

Secure Environments	High-risk areas have secure rooms (Adult Mental Health, Forensics Mental Health, and Emergency Department) that are equipped with camera surveillance for monitoring patients that have been secured for safety; dedicated staff monitor the cameras. There is also direct window viewing access in addition to camera surveillance.	Complete and Ongoing
Security and Facilities Working Group	An assessment of the current state of security practices has been completed. This included a review of the security staffing model and data related to patient watches within our hospital as well as other hospitals in Ontario. The Securities & Facilities group is currently developing recommendations for improving the cost-efficiency of providing this service. Overall facility access, mainly after hours, is also under review.	Complete and Ongoing

5. Personal Safety Response System

Personal Safety Response System - Communicating the need for assistance to manage an emergency, including any violent situation. Personal alarms have been provided to staff across the Hospital.

Actions to date		**STATUS**
Personal Alarm Systems	Currently, there are two different safety alarm systems for staff to use to call for help (the Mental Health areas have a wired system, and the remaining areas have personal audible alarms). Moving forward, the communication system within the Hospital is under review with the goal of one centralized personal response system across the Hospital.	Complete and Ongoing
Personal Alarm Compliance	Personal alarm inspections occur in all patient care areas to monitor and enhance compliance with staff wearing their personal alarms; the inspections are conducted in collaboration with Union leaders, Occupational Health and Safety staff and Human Resources staff. Usage of personal alarms increased from 0% in January 2019 (no staff were found to be wearing their personal alarms) to 100% in April 2019 as a result of these inspection blitzes. Random inspection blitzes continue and are led by the Ontario Nurses Association (ONA) representative of the JOHSC.	Complete and Ongoing

6. Training and Orientation

Teaching our staff to detect, respond to, de-escalate and contain violence is important.

Actions to date	**STATUS**

Non-Violent Crisis Intervention Training	NVCI training provides proven strategies for safely defusing anxious, hostile, or violent behavior. Recognition of behavior levels in a crisis, paraverbal communication, precipitating factors, staff fear and anxiety, decision-making, disengagement skills, holding skills and post-intervention debriefing are covered in NVCI. The training is open to all staff who want to participate, and is mandatory for all staff who work in high-risk areas. 100% of all staff working in Adult Mental Health, Forensic Mental Health and Child and Adolescent Mental Health have received NVCI training and all are re-certified every two years. 100% of ED staff are trained in NVCI, but not all have recertified as per the training guidelines. All Security Guards are trained in NVCI.	Complete and Ongoing
Gentle Persuasion Approach Training	Hogarth Riverview Manor (HRM) staff have all received GPA training. GPA is an innovative person-centred dementia care approach that is evidence-based, interactive and practical. GPA provides skills to respond effectively to aggressive behaviours; this includes respectful self-protective and gentle redirection techniques for use in situations of risk. As of October, 2019, 100% of HRM staff have participated in GPA training. Two Clinical Nurse Specialists (CNS) have been trained to provide GPA and they will start at the TBRHSC site on the medical units beginning with 2B where most patients with dementia are currently cohorted; timelines have yet to be determined.	Complete and Ongoing
Orientation of New Staff	During general orientation, all new staff are informed about the risks of workplace violence, including the number and types of incidents that occur at the Hospital. The controls, policies, procedures, training and supports in place and the worker's and employer's responsibilities related to workplace violence are covered. Since 2017, Simulation (a best practice learning tool) has been used for violence prevention training during nursing orientation. An aggressive patient simulation occurs which focuses on providing nurses with the communication skills to prevent a person from becoming physically aggressive, how and when to call a code white, what to expect when code white responders arrive, and when to call the police. Hands-on simulation, includes how to disengage from physical contact (e.g. wrist grabs, hair pull, choke, clothing grab, and bites). Demonstrations and hands on training of correct application and removal of the Pinel Restraint system occurs. In addition, training is provided regarding Forms 1, 3, and 4 under the Mental Health Act, policies including Code White, Least Restraint Standard, and the Medical/Surgical Mental Health Patient Standard of Care.	
Internal Staff Expertise	We have an Interprofessional Educator and a Forensics CNS who have expert knowledge in NVCI, GPA and applying and monitoring physical restraints. These experts deliver NVCI and GPA training internally and can provide refresher training regarding restraints for any staff who require more knowledge and skill.	

	When a Code White is called in the hospital, one of the Adult Mental Health nurses will arrive to the scene with a red backpack. This backpack contains a full set of Pinel restraints to use in the event that the unit does not have an adequate supply.	
Restraint Training	All nurses in the Adult Mental Health program receive hands on training of Pinel Restraint application at least once yearly and more often as required. Currently, videos demonstrating proper restraint application are being developed and will be available to all staff through the Intranet by Q2, 2020.	
eLearning	The Training & Education Working Group has researched best practices in workplace violence training including eLearning and simulation. The key best practice components include recognizing risk and behaviours, assessing and planning care, responding to risk, post-incident debrief, and reporting. As a result of their research, a new mandatory eLearning module has been launched (as of January 2020) titled Violence Prevention: Universal Behavioural Precautions Approach.	

Quality Improvement Plan	
Since 2018, Workplace Violence has been a mandatory Health Quality Ontario indicator for all hospital Quality Improvement Plans (QIP). The goal is to reduce the number of violent incidents that occur and foster a culture of reporting. The QIP indicator measures the number of violent incidents that are reported by workers – and workplace violence is known to be underreported. As we improve reporting and develop a culture of safety, the number of reported incidents of workplace violence may rise; this is expected and encouraged.	
Performance and Actions to date	

Reporting	TBRHSC Incident Statistics Violence/Harassment Incidents: 2016 = 265 2017 = 331 2018 = 233 **2019 = 582**  ***150%** increase in 2019 vs. 2018*	With our tactics to increase reporting, we saw a 150% increase in reporting from 2018 to 2019. We know that in health care, approximately 30-55% of incidents of violence are not reported. We are pleased that reporting has increased so that proper solutions can be implemented to further prevent violence.
Impact to Staff	TBRHSC Incident Statistics 2018 vs. 2019 by Type **2018:** Hazards = 53% First Aids = 30% Health Care = 15% Lost Time = 2% **2019:** Hazards = 71% First Aids = 13% Health Care = 12% Lost Time = 4%	With increased reporting, we have the information required to implement better solutions to keep staff safe. We have seen a decrease in the severity of harm to our staff who have experienced workplace violence. **Hazards** - A situation where no personal injury was sustained but harm could have occurred had the circumstances been different. Hazards increased 34% from 2018 – 2019 meaning more hazards are being reported and incident outcomes may be less severe. **First aid** - A work-related injury requiring simple first aid. First Aid requirements decreased 57% from 2018 to 2019 indicating incidents were less severe.
	Health Care - A work-related injury when there is no time lost away from work, other than on the day of the incident, but medical attention from a chiropractor, physician, physiotherapist or registered nurse was required. Health Care needs post-violent incidents decreased 20% from 2018 to 2019 indicating incidents were less severe.	

Type of Violent Incidents, 2019

2019 Incident Statistics

Injury Type	*Sub Group*	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	*Sub Group Totals*	Total
Aggressive Action	*Physical Contact*	19	29	38	32	23	17	28	17	17	18	34	38	*310*	**582**
	Non Physical (Attempted)	3	1	2	15	7	14	0	5	7	6	8	21	*89*	
	Verbal/Harassment	21	9	11	18	6	9	15	11	5	6	11	11	*133*	
	Violence & Harass.	5	4	6	8	4	2	1	1	5	4	3	7	*50*	

Next Steps

- A Value Stream Mapping (VSM) Event has occurred in the Emergency Department (ED). Over 50 people from across the hospital as well as representatives from Thunder Bay Police, Superior North Emergency Medical Services and Community Support providers were present. A follow up event with a subsection of the original VSM team will be held in February, 2020 to complete the work that was started at the Event. The goal will be to create short term and medium term priorities to increase safety in the ED, identify leads and champions for each of the priorities, develop a visual tool to track results and display success measures and determine which solutions can apply to other clinical areas of the hospital.

- Improvements are currently underway to increase the effectiveness and solidify the leadership of the four Workplace Violence Prevention working groups that report to the JOHSC. A plan is being developed to ensure these working groups support the ED initiatives and lead the spread of successful violence prevention and mitigation strategies throughout the organization.

TBRHSC

Workplace Violence Initiatives Timeline

2006

- Workplace Violence Prevention Program Policy is initiated at TBRHSC
- Launched Forensic Mental Health NVCI training and ongoing re-certification requirements
- Implemented Forensic Mental Health Personal Alarms

2012

- Adult Mental Health/ Child and Adolescent Unit - Non Violence Crisis Intervention (NVCI) Training and Re-Certification is Introduced
- Emergency Department - NVCI Training begins

2015

- Use of Risk Assessment Tool for In-Patient and Out-Patient Areas Commences

2016

- Adult Mental Health, Child Adolescent Mental Health Unit, and Emergency Department - Personal Alarms are wired to alert security
- SBAR (Situation, Background, Assessment, Recommendation) Tool is Introduced

2017

- Violent Patient Simulation Training is Added to Nursing Orientation
- Research Begins in Developing the Acting Out Behaviour Policy
- Patient Violence Assessment Tool (VAT) Available on Meditech
- Audible Alarms are Rolled Out in Stages to Other Areas Dependent on Risk
- Code White Policy is Modernized and Staff are Trained
- Joint Occupational Health and Safety is Designated as the Workplace Violence Steering Committee
- Security & Facilities and Incident & Risk Working Groups are Established

2018

- Safety Huddle Tool is Launched
- New PSHSA Risk Assessment Initiated and Completed for All In-Patient Areas
- Clinical Process/Practices and Education & Training Working Groups are Formed
- Health Quality Ontario Adds Workplace Violence as a Mandatory QIP Indicator
- Code Silver Policy is Launched and Staff are Trained

2019

- Online education tool - Violence Prevention: Universal Behaviour Precautions Approach is Introduced
- Personal Alarm Blitzes/Inspections are Conducted
- Acting Out Behaviours Policy is Implemented
- Gentle Persuasion (GPA) Training Completed at HRM
- Security Guards Trained to Use Turtle Shield

2020

- Value Stream Violence Mapping Event in Emergency Department Occurs
- Post-Violent Incident Investigation Tool Launched
- Restraint Application Training Videos to be Launched
- Gentle Persuasion Training to be Rolled out on Medical Floors

Thunder Bay Regional Health Sciences Centre

CREATED BY
People, Culture and Strategy_Occupational Health and Safety
February 2020

Thunder Bay Regional Health Sciences Centre

Board of Directors - *Open*

Wednesday, February 5, 2020

Boardroom – 5:00 p.m.

Action

***Present*:**

Matt Simeoni *(Chair)*	Jean Bartkowiak*	Gary Whitney
Dr. Sarita Verma (t-con)	John Friday	Joy Wakefield
Grant Walsh	Gordon Wickham	Micheal Hardy
Dr. S. Zaki Ahmed*	Dr. Valerie Grdisa*	Nathalie Coppola
Dr. Eric Davenport*		

By Invitation – Senior Leadership:

Peter Myllymaa	Dr. Stewart Kennedy	Amanda Björn
David Murray	Dr. Chris Mushquash	Dr. Peter Voros
Glenn Craig		

By Invitation:

Angela Kutok, *Rec. Sec.*

Regrets Board of Directors:

Douglas Judson	Patricia Lang	John Hatton
Anita Jean		

1.0 CALL TO ORDER – The Chair called the meeting to order at 5:00 p.m.

1.1 Chair's Remarks

Chair welcomed Board members, staff, and webcast audience to the meeting.

1.2 Quorum – Quorum was attained.

1.3 Conflict of Interest – None.

1.4 Approval of the Agenda

Moved by: ***Micheal Hardy***
Seconded by: ***John Friday***

Motion

"That the Agenda be approved, as presented."

CARRIED

2.0 PATIENT STORY

Glenn Craig, CEO of the Thunder Bay Regional Health Sciences Foundation shared a patient story.

3.0 PRESENTATIONS

3.1 Physician Recruitment Update

Dr. Stewart Kennedy, Executive Vice President, Regional Programs, Clinical Supports, and Medical Affairs provided an update on the Hospital's physician recruitment challenges and successes over the past year as well as recruitment plans for 2020.

A coordinated effort between Medical Affairs and Professional Staff Leadership ensures the execution of good recruitment and retention practices. Professional staff leadership have updated their departments' annual human resource plans, which inform the hospital's recruitment efforts.

Some specialties continue to be challenging to recruit nationally. Other specialties move through a multi-year cyclical imbalance between the amounts of physicians trained versus the job market needs. Successes over the past year include recruitment in psychiatry, dermatology, as well as the opening of the internal medicine clinic to help avoid admissions and improve patient flow.

3.2 Regional Mental Health Update

Dr. Peter Voros, Executive Vice President, In Patient Care Programs, provided an update on the current state of Acute Schedule 1 Mental Health services in Northwestern Ontario and the related challenges and successes over the past year.

4.0 CONSENT AGENDA

Moved by:	***Gordan Wickham***	***Motion***
Seconded by:	***Grant Walsh***	

That the Board of Directors:

4.1 Approves the Board of Directors Open Minutes of December 4, 2019;

4.2 Accepts the Minutes of the Patient Safety and Quality of Care Committee meeting of December 18, 2019;

4.3 Accepts the Minutes of the Patient Safety and Quality of Care Committee meeting and Quarterly Scorecard of January 15, 2020;

4.4 Accepts the Minutes of the Governance and Nominating Committee meeting of December 6, 2019;

4.5 Accepts the Q3 2019-2020 Wages and Source Deduction Attestation, as recommended by the Resource Planning Committee,

as submitted."

CARRIED

5.0 REPORTS AND DISCUSSION

5.1 Report from the President & CEO

5.1.1 Current Challenges

The President and CEO report was pre-circulated for information. The following current challenges and activities were highlighted:

a. ***Seven Youth Inquest/Racism:*** A roundtable meeting was held on-site resulting in dialogue that was helpful and informative in framing the care of Indigenous youth at the Hospital.

b. ***Ontario Health Teams (OHT):*** There is no additional information regarding the OHT application process. Regional CEOs will be partnering with Jessica Logozzo, EVP, Regional Transformation and Integration, to engage in regional health integration discussions.

5.2 Report from the Chief of Staff

The Chief of Staff report was pre-circulated for information and highlighted the following:

a. ***Coding Audit:*** Following a recommendation from a Health Record's Coding Audit, education will take place with Professional Staff focusing on clinical documentation.

b. ***Attendance at Department Meetings***: To increase attendance and engagement, Professional Staff may now begin attending department meetings by audioconference or possibly Zoom web meeting.

c. ***PSA Evaluations:*** Professional Staff Evaluations will begin in January 2020 initially with the Department of Surgery. This will be a pilot with evaluations completed in collaboration with NOSM and will include both clinical work as well as academic activity.

5.3 Report from the Chief Nursing Executive

Dr. Valerie Grdisa, Executive Vice President, Research, Quality, and Academics/Chief Nursing Executive, provided a report highlighting:

a. ***Integrated Workforce Strategy:*** A working group has been formed to ensure that current staffing needs are met and that future needs are forecasted based on internal and external market trends/forces.

b. ***2020 Spring Hires:*** The 2020 spring hire interviews are being held off site at the Victoria Inn Hotel and preliminary feedback by the candidates has been extremely positive. Sixty-five new graduate RN candidates have been invited for interviews. The interview process is based on best practices which involves four concurrent candidates participating in circulating interviews with four dyads of Hospital managers.

c. ***Nursing Resource Team (NRT) Staffing Model:*** The NRT staffing model continues to evolve based on detailed recommendations that were summarized at the November 2019 Resource Planning Committee meeting. Over the past year, several steps have been taken to realign specialty area FTEs from the NRT complement into the identified Clinical Program.

d. ***Health Professions***: Michelle Addison, Director of Health Professions and Collaborative Practice was commended for her leadership and collaboration with the Practice Heads, Practice Leads and Program Directors and Managers in moving several projects forward.

5.4 Report from the Foundation

Glenn Craig, President and CEO, Thunder Bay Regional Health Sciences Foundation highlighted the successful Family Care Grants program which awarded $64,000 to various projects that will improve the experience for patients and families.

The 24th anniversary of the Bearskin Airlines Hope Classic will take place from February February 7-9th, 2020 at the Fort William Curling Club. This event has raised over $3.3 M in support of breast cancer research, education, and treatment in Thunder Bay and throughout Northwestern Ontario. This event has been pivotal in making the success of the Linda Buchan Centre for Breast Screening and Assessment possible.

The Dancing with the Docs fundraiser scheduled for May 2 at the Valhalla Inn sold out in 24 hours. The event is designed to raise money to buy a positron emission tomography scanner, a device used to help plan treatment of a growing number of cancer cases.

6.0 FIDUCIARY MATTERS

6.1 Patient Safety & Quality of Care Committee (PSQCC) Report

Joy Wakefield, Director, provided an update highlighting the following items that were presented at the January PSQCC meeting:

a. Mental Health Supports in the Emergency Department;
b. Infection Control Update;
c. Reputational Risk Matrix Process ;
d. Critical Incidents ;
e. Cardiovascular, Stroke, and Medicine.

6.2 Governance and Nominating Committee (GNC) Report

The Chair of the GNC, Gordan Wickham, provided the following updates:

a. TBRHSC Board Policies:

The GNC is responsible to draft policies regarding the effective and efficient functioning of the Board as well as review and recommend changes to policies for Board approval. All Board policies are to be reviewed once every three years or as directed by the Board. Nine policies were reviewed and presented for Board approval.

Moved by:	***John Friday***	***Motion***
Seconded by:	***Joy Wakefield***	

"That upon recommendation from the Governance and Nominating Committee, the Board of Directors approves the following TBRHSC Board policies:

- ***BD-05 CEO Performance Evaluation and Compensation;***
- ***BD-07 Chief of Staff Performance Evaluation;***
- ***BD-11 Board and Committee Meeting Attendance;***
- ***BD-20 Review and Revision of Board Policies and By-Law;***
- ***BD-25 Education and Development;***
- ***BD-36 Public Attendance at Open Board Meetings;***
- ***BD-39 Board Committee Terms of Reference;***

- ***BD-44 President and CEO Succession Planning;***
- ***New Policy - Selection of Officers of the Board;***

as presented."

CARRIED

b. Committee Evaluations Process Change

The GNC Chair will now review Board and Committee evaluations each month; areas of concern will be addressed immediately rather than wait until the next evaluation review period. Twice a year, a themed summary of the evaluations will be shared with the GNC according to the GNC work plan cycle.

6.3 Resource Planning Committee (RPC) Report

Grant Walsh, Director, provided a report highlighting the following from the January RPC meeting:

a. The People Plan Update:

Highlights were provided of the development of the Hospital's People Plan within the new Right Plan strategic plan. Timelines for both the People Plan and the Right Plan continue to be evaluated.

b. Staff and Physician Engagement Update:

An update was provided on the action plans of the 2018 Employee and Professional Staff Experience Survey (EPSES). Action plans have been developed by Directors and Managers and span the next two years in preparation for the next survey period.

7.0 FOR INFORMATION

7.1 Board and Committees Work Plans - For information.

7.2 Webcast Statistics - For information.

7.3 Report from the Health Research Institute - For information.

7.4 Report from the Volunteer Association – Web-links provided for information.

7.5 **Report from the Northern Ontario School of Medicine** – For information.

7.6 **Critical Incidents Update** – For information.

7.7 **Reputational Risk Matrix** – For information.

8.0 **BOARD MEMBERS COMMENTS**

9.0 **DATE OF NEXT MEETING** – March 4, 2020

10.0 **ADJOURNMENT** - The meeting adjourned at 6:34 p.m.

_____ _____

Chair Board Secretary

_____

Recording Secretary

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**Report from the President & CEO
and Senior Leadership Team
March 4, 2020**

The following highlights priority operational activities since the February 5, 2020 meeting of the Board of Directors:

Between February 13th and March 13th, Jessica Logozzo, Executive Vice President, Regional Transformation and Integration, will be visiting communities across Northwestern Ontario. The purpose of this tour is to meet key stakeholders and to discuss opportunities for better integration of services across the region, as well as challenges and barriers that community hospitals are facing. This engagement is also part of Jessica's 90 day work plan and will inform priorities and her work plan for the next 1-4 years. In total, Jessica will visit 11 communities which include Geraldton, Manitouwadge, Marathon, Terrace Bay, Nipigon, Atikokan, Fort Frances, Dryden, Red Lake, Kenora and Sioux Lookout. Visits will include meetings with the CEOs of each of the hospitals, as well as other key stakeholders as identified by the CEOs; including senior hospital leaders, staff and community stakeholders (i.e. primary care). As of the Board meeting on March 4th, Jessica will have completed visits to four communities (Nipigon, Red Lake, Atikokan and Geraldton). Some key themes that arose from those meetings include opportunities to address transportation challenges, nurse transfers, further virtual supports for patients in the region and regional approaches for IT/IS.

On January 31st, myself, Dr. Stewart Kennedy, Executive Vice President, Regional Programs, Clinical Supports & Medical Affairsand Peter Myllymaa, Executive Vice President, Corporate Services and Operations, visited the Ministry of Health in Toronto to meet with Mike Heenan, Assistant Deputy Minister and Melanie Kohn, Director, Hospitals Branch. It was a productive discussion that focused on our Hospital's ongoing financial viability. Mr. Heenan has committed to visiting our Hospital, likely in the Spring or Summer of 2020, to learn more about the capital projects that have been forwarded to the province for approval. We also met with James Stewart, Director, Health Capital Investment Branch, Scott Coe, Manager, Capital Projects (North and East) and Maureen Judge, Senior Consultant, Capital Projects (North and East) to discuss several capital projects, including cardiovascular services, renal expansion, MDRD centralization, mental health emergency redesign and replacements for our Hospital's PET-CT and LINAC. This meeting was a good opportunity to advise the capital branch of our most pressing issues.

During a recent walkabout with Housekeeping on February 19th, myself and Peter Myllymaa had an opportunity to learn about the positive impact that additional staffing has had on the department. Housekeeping has been functioning at a high level, and as result, is one of the reasons why the units in our Hospital are experiencing outbreaks less often.

Amanda Björn, Executive Vice President, People, Culture, & Strategy, will be leading engagement sessions with Hospital and Health Resarch Institute staff over the following weeks. The purpose of these sessions will be to gather feedback and discuss the short and long term structure of the Nursing, Research, Quality, & Academics portfolio.

On February 12th, I attended the 2020 Global Forum for Health Care Innovators in Toronto with Dr. Stewart Kennedy, Executive Vice President, Regional Programs, Clinical Supports & Medical Affairs and Dr. Peter Voros, Executive Vice PresidentIn-Patient Care Programs. The topic of this year's

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interactive series was ”Thriving amidst change: Thought leadership for our Canadian chief executives (CE’s)”. The series upacked two related topics on the future of health care: The State of the Health Care Industry, and Leading Digital Transformation. In addition to providing an opportunity for networking and dialogue, it gave participants the following takeaways: a global scan of health care reconfiguration aimed at improving outcomes and managing demand, recommendations on how to prioritise the steps that will shift your organisation to the future, a field guide to what ‘digital’ actually means in health care and how it will shape the future of the industry, a blueprint for where CE’s should lead digital strategy, and what they’re looking for from others.

Research & Innovation (R&I) Week is Lakehead University’s annual celebration of Northwestern Ontario’s research and innovation achievements. It’s an event that our Hospital and Health Research Institute looks forward to with many of our staff, students and scientists being involved as presenters, organizers and volunteers. This year’s event, taking place between February 28th to March 5th, features fascinating presentations, interesting displays and round table sessions for students, faculty, and members of the public. A great example our involvement in this event was the panel discission on March 3rd, ’Improving Healthcare in Northwestern Ontario with Technology’. It explored the topic from the perspective of three expert panelists; Dr. Zubair Fadlullah, a Health Research Institute Chair and Associate Professor in the Department of Computer Science at Lakehead University, Dr. David Savage, an Emergency Physician in our Hospital and Assistant Professor at the Northern Ontario School of Medicine, and Chris Young, a Clinical Informatics Specialist at Sioux Lookout Meno Ya Win Health Centre.

Prostate brachytherapy is now a local treatment option for prostate cancer patients after the first patient underwent treatment locally at the end of January. Prostate brachytherapy is an internal radiation treatment that has shown great results in recent clinical trials that confirm that it’s an effective treatment for prostate cancer. Not only does this treatment option have a potentially higher cure rate, it also shows more acceptable side effects when compared to alternative treatments. This treatment, like many others at our Hospital, is proudly supported by the Health Sciences Foundation. Having this equipment at our Hospital allows patients and families to recieve the care they need closer to home. Thanks to the caring and generosity of donors in our community, the Thunder Bay Regional Health Sciences Foundation was able to donate $60,000 towards the purchase of the ultrasound system that is required to provide this treatment option.

A program led by paramedics in Thunder Bay is helping to keep people from unnecessarily ending up in hospital. The emergency department avoidance program started as a six-month pilot project that ran from October 2018 through the end of March 2019, with funding from the North West Local Health Integration Network. It was renewed for a second six-month run, from October 2019 until the end of March 2020.The program provides safe discharge from hospital and transitions patients back into their homes, with specially trained community paramedics doing follow-up through home visits where they can physically assess the patients, check home safety, provide Meals on Wheels to help with nutrition and do medication compliance checks.

Senior patients at our Hospital are receiving the right care, at the right time, and by the right provider thanks to expanded coverage for the Geriatric Assessment program. Beginning in the Emergency Department, the program streamlines the assessment process of at-risk seniors (aged 65 years and older) through consultation with internal geriatricians and the Hospital Elder Life Program (HELP). Collaboration with external partners such as St. Joseph’s Care Group (SJCG), Alzheimer’s Society, Superior North Emergency Medical Service, and the North West Local Health Integration Network’s (LHIN) Home and Community Care, is also crucial to the program’s success. The assessment

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process looks for signs of geriatric syndromes, including mobility issues, weakness, frailty, functional decline, pain, cognitive impairment, dementia, delirium, and other risk factors often associated with seniors. The program also supports discharges for patients who do not require acute care in a hospital setting and works with community partners to provide a smooth transition to home or other programs and services that would best address their needs, such as SJCG's geriatric programs. By identifying their needs sooner, the average length of stay for seniors' of the program has decreased by half – meaning that vulnerable senior patients are not spending more time in the hospital than needed. Additionally, over 150 unnecessary hospital admissions were avoided in 2019.

The Special Olympics Canada Winter Games are a multi-sport national event for athletes with an intellectual disability. The Games were hosted in Thunder Bay, from February 25 to 29, 2020 and welcomed over 1,200 athletes, coaches and mission staff from across Canada. Our Hospital is very proud to have joined other organizations in our community to help support these Games. I would like to especially thank Hospital staff, who were among the hundreds of volunteers who donated their time and energy, ranging from sport-specific roles and athlete support, to drivers, hospitality, security, registration support and more.

BRIEFING NOTE

Thunder Bay Regional Health Sciences Centre

TOPIC	2019-20 Q3 Strategic Progress Report
PREPARED BY	Michael Del Nin, Director, Strategy & Performance
APPROVED BY	Amanda Bjorn, EVP, People, Culture, and Strategy
CO-SPONSER (if required)	<Does this impact another E/VP's portfolio/program? Have they been consulted on this briefing note?>
PREPARED FOR: President &CEO Board of Directors X Other:	
DATE PREPARED Feb 27, 2020	

Our Hospital is committed to ensuring decisions and practices are ethically responsible and align with our Vision, Mission, and Values. Leaders should consider decisions from an ethics perspective including their implications on patients, staff and the community.

The reader considers the following questions to ensure each decision are ethically responsible by indicating with a √:

1. ☐ We put '**Patients First'** by responding respectfully to needs, values, & expectations of our patients, families, and communities?
2. ☐ We demonstrate '**Accountability**' by advancing a quality patient experience that is socially and fiscally responsible?
3. ☐ We demonstrate '**Respect**' by honouring the uniqueness of each individual and his or her culture?
4. ☐ Does the course of action demonstrate '**Excellence**' by fostering an environment of innovation and learning to advance a quality patient experience?

For more detailed questions to use on difficult decisions, please refer to the Hospital's Framework for Ethical Decision Making on the iNtranet under Quality and Risk Management>Ethics.

PURPOSE/ISSUE(S)

Highlight the 2019-20 Strategic Plan Q3 overall progress, tactics to achieve targets, strategic performance indicator results and associated improvement action plans.

BACKGROUND

The Strategic Quarterly report is formatted to provide a more comprehensive description of strategic tactics in each strategic direction, to address the **achievement of the targets, the related strategic indicators, and any new tactics planned where targets fall short.** The Balanced Score Card (BSC) attached provides a summary of the strategic indicators and trending.

ANALYSIS/CURRENT STATUS

Refer to the attached 2019-20 Q3 Strategic Progress Report and Balanced Scorecard.

RECOMMENDATION

None required for Quarterly Report.

NEXT STEPS

None required.

STAKEHOLDER REACTION

There are plans and tactics developed for strategic initiatives falling short of targets or specific projects falling behind slightly.

COMMUNICATIONS

The same report is provided to leadership at Leadership Enhancement and Performance (LEAP) session quarterly, and the Medical Advisory Committee bi-annually.

Success stories and profiles are communicated to staff, physicians, volunteers, patient and family advisors on unit posters, intranet and public bulletin board in the Hospital and to the community in Chronicle Journal articles.

All strategic project teams develop communication plans to ensure the progress, challenges and remedial actions are communicated in a timely manner to the appropriate audience/stakeholders.

FINANCIAL IMPACTS

Strategic initiatives that require investment develop business cases and submit to the annual operational budget process.

APPENDIX SECTION

2019-2020 Q3 Strategic Progress Report

2019-20 Q3 Balanced Scorecard - Strategic Indicators

2019-20 Q3 Board of Directors Strategic Update Report

Strategic Progress Summary

Since its inception, tremendous progress has been achieved on the 2020 Strategic Plan. A significant portion of the 224 planned initiatives has been completed or are substantially complete at December 31, 2019. A small number of initiatives are moderately or signficiantly behind planned completion dates and a few initiatives have been closed, either because they were influenced by factors beyond the Hospital's control, lacked funding to proceed, or planning assumptions and/or circumstances changed that made them impossible to complete within the Plan's timelines. The table below shows a breakdown of the initiatives and their respective statuses.

	Patient Experience		Comprehensive Clinical Care		Seniors' Health		Indigenous Health		Acute Mental Health		Grand Total	
Status	Initiatives	% Complete	Initiatives	% Complete	Initiatives	% Complete	Initiatives	% Complete	Initiatives	% Complete	Initiatives	% Complete
Complete or Substantially Complete	70	92.1%	33	97.1%	30	100.0%	33	91.7%	45	93.8%	209	93.3%
Moderately Behind		0.0%	1	2.9%		0.0%		0.0%		0.0%	2	0.9%
Significantly Behind	2	2.6%		0.0%		0.0%		0.0%	3	6.3%	4	1.8%
Closed	4	5.3%		0.0%		0.0%	3	8.3%		0.0%	9	4.0%
Total	**76**	**100.0%**	**34**	**100.0%**	**30**	**100.0%**	**36**	**100.0%**	**48**	**100.0%**	**224**	**100.0%**

A more fulsome final report on the 2020 Strategic Plan is being prepared and will be distributed later this spring. In the interim, this report is intended to provide a summary of progress on initiatives as at Dec 31, 2019, as well as related results of key performance indicators.

Strategic Direction 1: Patient Experience

Overall, 70 of 76 (92.1%) inititives in the Patient Experience strategic direction are complete or substantially complete. Two initiatives are behind and 4 initiatives were closed.

Moderately or Significantly Behind	Comments
1.2.1 Implement an organ izational structure and accountability that creates an integrated quality framework.	Requires structural changes that are not yet complete
5.1.6 Implement a staged approach to CPOE	No funding available
Closed	**Comments**
3.3.3 Implement a model to facilitate teaching and research for physicians.	No funding available
3.3.6 Implement a model to facilitate teaching and research for clinical staff.	No funding available
3.4.5 Provide patients the opportunity to participate in research.	Investigated but considerable difficulties in consenting patients and few opportunities to involve patients in research
5.1.4 Implement the patient portal to increase patient access to manage care	No funding available

Performance Measure	18-19 Q4	18-19 Final	19-20 Target	19-20 Q1 Actual	19-20 Q2 Actual	19-20 Q3 Actual
Rate of hand hygiene compliance before initial patient/environment contact	67.10%	86.44%	93.00%	70.73%	72.74%	56.93%
30-day in-hospital deaths following major surgery (risk-adjusted)	2.00	1.70	1.60	2.05	1.93	1.31
Number of critical events	1	6	0	0	1	0
Patient Satisfaction: All Dimensions - Inpatient	70.11%	66.1%	69.76%	71.48%	69.88%	67.00%
Learner Satisfaction		85.0%	87.0%		88.1%	85.25%
Total Researchers	356	352	301	347	385	408
Paid sick hours as a percentage of worked hours	3.83%	4.08%	2.97%	4.47%	3.93%	4.21%

Hand hygiene compliance – before contact:

Observations:19-20 Q3 results declined and now considerable below target.

Reason: Public Health Ontario reviewed TBRHSC's infection control practices earlier in 2018 and provided a comprehensive report including a number of recommendations for improvement. The recommendations were broadly communicated, supported and resourced, and led to increased awareness of the importance of hand hygiene. In late 18-19, Infection Control changed its hand hygiene monitoring processes to include a higher percentage of testing by non-unit staff. This resulted in the reduction in reported compliance.

Action: An outbreak team has been established to work on a variety of infection-related initiatives, including hand hygiene. It is expected these initiatives will improve hand hygiene compliance in the near future.

30-day in-hospital deaths following major surgery (risk-adjusted):

Observations: 19-20 Q3 results improved from prior quarters and now better than target.

Reason: Fewer high-risk surgeries being done on patients who were palliative and victims of serious trauma and/or in fragile health.

Action: Surgical & Ambulatory Care leadership and Chief of Surgery review individual case-level results on an ongoing basis.

Number of critical events:

Observations: 19-20 Q3 result better than past quarters and better than target.

Reason: Definitive causes of improvement are uncertain.

Action: Ongoing monitoring and review as per current practice.

Patient satisfaction: All dimensions - Inpatients:

Observations: 19-20 Q3 results worse than past quarters and now slightly worse than target.

Reason: Definitive causes of regression are uncertain, but increased occupancy and related challenges are likely a contributor.

Action: Continuation of current initiatives and efforts.

Learner Satisfaction

Observations: 19-20 Q3 results slightly worse than past quarters and target.

Reason: Results for a number of learner survey questions were lower than in the past.

Action: Results are being reviewed to determine required improvements.

Total Researchers

Observations: 19-20 Q3 results continue improving and are better than target.

Reason: Ongoing improvement efforts proving successful.

Action: Continuation of current initiatives and efforts.

Paid sick hours as a percentage of worked hours

Observations: 19-20 Q3 results slightly worse than prior quarters and considerably worse than target.

Reason: Determining the root cause(s) of high sick time usage has proven difficult. Likely contributors are high occupancy levels, and significant staffing shortages which are also causing high rates of overtime usage.

Action: A number of initiatives are currently underway to address sick time usage, including recruitment to fill vacancies, frontline staff engagement on culture and morale, investigation of additional supports to better assist with sick leave management and corporate support for wellness. As well, data from Ontario peer hospitals which have improved their sick time usage has been sourced and they will be contacted to determine the tactics used to make these improvements.

Strategic Direction 2: Comprehensive Clinical Care

Overall, 33 of 34 (97.1%) inititives in the Comprehensive Clinical Care strategic direction are complete or substantially complete. One initiative is behind and none were closed.

Moderately or Significantly Behind	Comments
2.3.1 Develop infrastructure to provide patient access to cardiac surgical services.	Final MOHLTC capital funding commitment taking longer than expected

Performance Measure	18-19 Q4	18-19 Final	19-20 Target	19-20 Q1	19-20 Q2	19-20 Q3
Emergency Department length of stay (90th percentile in hours)	37.6	43.2	28.8	38.6	32.4	39.9

90th Percentile ER length of stay for admitted patients (QIP):

Observations: 19-20 Q3 results regressed considerable from earlier quarters and remain worse than target.

Reasons: Results are heavily dependent on overall occupancy, which regressed considerably in 19-20 Q3. A significant number of admitted patients who require isolation and/or telemetry experience long waits due to insufficient isolation and telemetry capacity in inpatient units.

Actions: Occupancy pressures have improved somewhat but are expected to continue. Ontario has committed to building more long-term care capacity, but this increased capacity will take some time to emerge. In the meantime, in 17-18 Q4, the Hospital worked with the NWHLIN, the SJCG and MOHLTC to temporarily transfer 32 ALC patients into Hogarth Riverview Manor, and an additional 32 ALC patients were transferred in 2018-19. Although ALC rates haven't dropped (the ALC patients transferred are still counted in the Hospital's results), the transfer has provided considerable relief of occupancy pressures at the Hospital's main site.

The Hospital's upcoming transitional strategic plan is expected to assist with improving patient flow and reduce occupancy, both of which should enable shorter waits for ER admitted patients.

Strategic Direction 3: Seniors' Health

Overall,all 30 of 30 (100.0%) inititives in the Patient Experience strategic direction are complete or substantially complete. None were behind and none were closed.

Performance Measure	18-19 Q4	18-19 Final	19-20 Target	19-20 Q1	19-20 Q2	19-20 Q3
Pressure Ulcer Incidence	2.00%	3.00%	6.00%		1.0%	

Pressure Ulcer Incidence

Observations: No new results for 19-20 Q3.

Strategic Direction 4: Indigenous Health

Overall,all 33 of 36 (91.7%) inititives in the Indigenous Health strategic direction are complete or substantially complete. None were behind and 3 were closed.

Closed	Comments
1.3.2 Use technology to develop and implement discharge plans.	No funding available
1.5.1 Develop a plan to increase the use of technology to provide greater access.	No funding available
1.5.2 Implement the plan to increase the use of technology.	No funding available

Performance Measure	18-19 Q4	18-19 Actual	19-20 Target	19-20 Q1	19-20 Q2 Actual	19-20 Q3 Actual
Acute hospital admissions per 1,000 population for patients from Indigenous communities	154	159	N/A	161	158	n/a

Acute hospital admissions from Indigenous communities

Observations: No new results for 19-20 Q3.

Strategic Direction 5: Acute Mental Health

Overall, 45 of 48 (93.8%) inititives in the Acute Mental Health strategic direction are complete or substantially complete. Three are behind and none were closed.

Closed	Comments
4.2.4 Secure NW LHIN funding.	No funding available
4.2.6 Implement full MHES.	No funding available
4.3.1 Implement transitional plan (phase 1 & 2) as noted in NW LHIN business case (if approved)	No funding available

Performance Measure	18-19 Q4	18-19 Final	19-20 Target	19-20 Q1	19-20 Q2 Actual	19-20 Q3 Actual
Psychiatrist full-time equivalent staffing as percentage of required full-time equivalent complement	58.33%	70.25%	83.33%	66.67%	66.67%	66.67%

Phychiatrist full-time equivalent:

Observations: 19-20 Q3 results consistent with prior quarters and considerably worse than target.

Reason: Difficult to recruit psychiatrists due to shortages in the profession.

Action: An additional psychiatrist was recruited in 19-20 Q4, which increases the complement to 5 of 6 FTE filled. Recruitment efforts continue.

Thunder Bay Regional Health Sciences Centre

Balance Scorecard

Strategic Indicators

19-20 Q3 Report for Board of Directors

Updated 2020-02-20

			2018-19 Fiscal							2019-20 Fiscal							
Domain	**Indicators**	**Ind Type**	**Q1 Actual**	**Q2 Actual**	**Q3 Actual**	**Q4 Actual**	**18-19 Target**	**18-19 Actual**	**18-19 Variance**	**Q1 Actual**	**Q2 Actual**	**Q3 Actual**	**19-20 Target**	**YTD Target**	**19-20 Actual**	**18-19 Variance**	**Trending (last 6 or available quarters)**
Safe	Rate of hand hygiene compliance before initial patient/environment contact	Strat	95.62%	93.66%	89.37%	67.10%	93.00%	86.44%	(6.56%)	70.73%	72.74%	56.93%	93.00%	93.00%	66.80%	(26.20%)	
Safe	30-day in-hospital deaths following major surgery (risk-adjusted) [QIP]	Strat	2.20	2.00	1.10	2.00	1.67	1.70	(0.03)	2.05	1.93	*1.31*	1.60	1.60	1.76	(0.16)	
Safe	Number of critical events	Strat	1	2	2	1	0	6	(6)	0	1	0	0.0	0.0	0.3	(0.3)	
Safe	Pressure ulcer incidence	Strat		3.00%		2.00%	6.00%	2.50%	3.50%		1.0%		6.00%	6.00%	1.00%	5.00%	
Timely	90th Percentile ER length of stay (hours) for admitted patients [QIP]	Strat	50.0	40.1	45.2	37.6	31.0	43.2	(12.2)	38.6	32.4	39.9	28.8	28.8	37.0	(8.2)	
Equitable	Acute hospital admissions per 1,000 population for patients from Indigenous communities	Strat	173	142	169	154		159		161	158				159		
Effective	Psychiatrist full-time equivalent staffing as percentage of required full-time equivalent complement	Strat	83.33%	83.33%	56.00%	58.33%	83.30%	70.25%	(13.1%)	66.67%	66.67%	66.67%	83.30%	83.30%	66.67%	16.6%	
Patient/Family Centred	Patient satisfaction: All dimensions - Inpatients	Strat	70.83%	70.46%	69.59%	70.11%	60.30%	69.26%	9.0%	71.48%	69.88%	*67.00%*	69.76%	69.76%	69.45%	(0.3%)	
Learning & Growth	Total researcher staff (CAHO definition)	Strat	340	350	361	356	301	352	51	347	385	408	301	301	380	79	
Learning & Growth	Learner satisfaction	Strat	84.99%	85.05%			87.00%	85.02%	(2.0%)		88.11%	85.25%	87.00%	87.00%	86.68%	(0.3%)	
Financial	Paid sick hours as a percentage of worked hours	Strat	4.01%	3.46%	3.97%	3.83%	2.91%	3.81%	(0.90%)	4.47%	3.93%	4.21%	2.97%	2.97%	4.20%	(1.23%)	

At or better than target

Slightly (less than 5%) worse than target

Significantly (5% or more) worse than target

Data not expected for reporting period or too few results to be meaningful

Indicator has been discontinued and replaced

Blue text Incomplete period or result not yet finalized

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Chief of Staff
Médecin chef

Chief of Staff Report

to the
Board of Directors
Thunder Bay Regional Health Sciences Centre

March 2020

New Clinical Lead, Digital Order Sets

- Alanna Marasco has accepted the position of Clinical Lead, Digital Order Sets with a start date of February 17, 2020.

Director, Medical Affairs

- Dan Ward has accepted the position of Director of Medical Affairs with a start date of February 17, 2020.

Recruitment

- Dr. Cobus Hauptfleisch (Anesthesia), Dr. Kristina Pulkki (ENT), Dr. Colin Runbolt (GI) and Dr. Sarah Scapinello (Psychiatry) have accepted a position pending arrival in the Summer of 2020.
- Site Visits have been completed for Internal Medicine, Bariatric Surgery, Plastic Surgery and Emergency Services.

Awards

- Dr. Nicole Laferriere was awarded the College of Physicians and Surgeons of Ontario 2020 Council award. The award honours outstanding Ontario physicians with a broad range of diverse roles and abilities.
- Jamie Sitar, Physician Recruitment and Retention Specialist was awarded a Northern Ontario Visionary Award (NOVA) for Leadership. The award recognizes young professionals who take charge in motivating, inspiring and mentoring others.

Non-Emergent Use of Mechanical Restraints

- The Medical Advisory Committee accepted the new Non-Emergent Use of Mechanical Restraints Policy SAF-1-33. A physician order and consent of the patient or substitute decision maker are both required prior to initiating a restraint in a non-emergent situation. Restraints must be re-ordered every 24 hours and require face-to-face assessment by the Most Responsible Physician (MRP) prior to re-ordering.

Consultations and Admissions in the Emergency Department

- Professional Staff were reminded not to advise patients to attend to the Emergency Department for work up or follow up appointments. If admitting a patient from the region, Professional Staff are to make arrangements by calling the Beds Blackberry.

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Chief Nursing Executive
Chef des soins infirmiers

Chief Nursing Executive Open Report to the Board of Directors

March 2020

Celebrating Successes in Fiscal 2019/20

The World Health Organization (WHO) has designated 2020 as the ***"Year of the Nurse and Midwife"***, in honour of the 200th birth anniversary of Florence Nightingale.The year 2020 is significant for WHO in the context of nursing and midwifery strengthening for Universal Health Coverage. WHO is leading the development of the first-ever State of the World's Nursing report which will be launched in 2020, prior to the 73rd World Health Assembly.

Canada's National Nursing Week 2020 is May 11-17. The theme this year is ***"Nurses: A Voice to Lead — Nursing the World to Health"***. The theme was developed by the International Council of Nurses (ICN) to showcase how nurses are central to addressing a wide range of health challenges. ICN says the theme will help raise the profile of the profession and attract a new generation into the nursing family. At TBRHSC, Julie Vinet, RN, Professional Practice Lead is chairing the *Nurses Week Club* (comprised of a diverse group of nurses) to plan our 2020 Nursing Week events. Notably, The Honourable Patty Hajdu, MP, Thunder Bay—Superior North and Minister of Health was invited to join us, at one or more events. More details to follow.

The following summarizes key accomplishments from April 2019 to March 2020 based on our collective efforts to advance the nursing profession within TBHRSC:

- In April 2019, we reported our nurse-led quality improvement initiatives resulting in significant decreases in pressure injuries (decreased from 3% to 1.7%, in comparison to national average of 9.5%), based on implementation of best practice guidelines (BPG), as a Best Practice Spotlight Organization (BPSO).
- In May 2019, we summarized our 2019 Nursing Week events, including the Best Practice Champions Open House, funded by the Registered Nurses' Association of Ontario (RNAO). Also, 2 TBRHSC staff attended the RNAO BPSO Knowledge Exchange Symposium – a provincial network focused on implementation science.
- In June 2019, we brought together approximately 50 Nursing Leaders for the inaugural Nursing Leadership Retreat and we discussed our shared purpose as 1473 nurses (as of 28/2/19). Our goal focused on collectively advancing the

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nursing profession within the tri-mandate of an academic health sciences centre and in alignment with the Hospital and Institute strategies.
    - We also celebrated the impact of nurse-led initiatives on achieving our key strategic priorities (e.g., nurse-led initiative: Patient Oriented Discharge Summary, RNAO BPG implementation etc.)
    - Finally, we recognized that 54% of the hospital learners are nurses of the 1000 total learners (994) and observers (69).
- From June to September 2019, multiple strategies were implemented by the Emergency Department (ED) leadership team, in collaboration with the other Program Leaders to address the nursing workforce shortages in the ED and Women & Children's Health over the summer months. We also moved forward with evolution of the Nursing Resource Team (NRT), to improve the transition for new graduate nurses and ultimately, improve patient safety and quality of care. We also reinitiated the Nursing Education Collaborative, a committee chaired by our CNE that includes leaders from TBRHSC, Lakehead University, Confederation College and St. Joseph's Care Group.
- In October 2019, we highlighted the profound impacts of two nurse-led initiatives at Patient Safety & Quality of Care committee. One improved transitions in care from hospital to community by the PFCC team who completed post-discharge follow-up calls to address patient concerns and urgent needs. The second involved scope optimization of a Clinical Nurse Specialist, to provide rapid access to the intravenous therapy, which expedited patient discharges from the Hospital.
- In November 2019, our CNE led two transformational planning events: 1) the Academic Practice Plan session with more than 80 participants (representing all professions) focused on achieving our academic health sciences centre mandate and in alignment with the Hospital & Institute strategies and 2) the *Nursing NOW 2020: Planning Together in Northwestern Ontario* session involving regional CNEs, CEOs and/or COOs focused on identifying innovative strategies to address our pressures, such as health workforce shortages. Dr. Michelle Acorn, Provincial Chief Nursing Officer, Ministry of Health and Ministry of Long-Term and Carol Timmings, Chief Quality Officer, College of Nurses of Ontario presented and engaged in these strategic discussions.
- In December 2019, we reported on the highlights from the November 2019 Resource Planning Committee presentation on nursing workforce planning strategies that have been completed, are underway or are being planned, in collaboration with Human Resources and Clinical Program leadership. We highlighted the importance of understanding the unanticipated consequences of new models of care (e.g., increased nurse to patient staff ratios for patients needing cardiac telemetry) or new services (e.g. 64-bed transitional care unit).
- In January 2020, we hosted an engagement session for our national nursing strategic plan facilitated by Canadian Nurses Association President, Claire Betker.

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- In February 2020, we highlighted the significant efforts focused on nursing workforce planning and the establishment of the Integrated Workforce Strategy – Working Group (led by Amy Carr, Director, Human Resources) and its mandate to ensure current staffing needs are met and future needs are forecasted to address health workforce shortages in nursing and health professions.

March 2020 Nursing Workforce Transformation Update

Nursing Workforce Planning

Current vacancies for the in-patient care areas, as reported by the clinical managers via the monthly vacancy report continue to decrease, 16.49 FTE RNs and 4.61 FTE RPNs, for a subtotal of 21.1 FTE combined vacancies. Current vacancies for the Nursing Resouce Team (NRT) remain at 10 FTE RNs and 4 FTE RPNs, for a subtotal of 14 FTE combined vacancies (most of which are temporary positions). Total vacancies are 35.1 combined FTEs, representing another decrease from the 57.07 combined FTEs reported at the February 2020 Board meeting.

Notably, SLC approved the purchase of an **automated call out software** to improve efficiencies in our Staffing Office and lower expenditures in filling shifts and over-time.

2020 Spring Hire

The 2020 spring hire Registered Nurse (RN) interviews were completed. An additional 6 candidates were interviewed on top of the 65 previously reported for a total of 71 interviewees. **Job offers have been made to 68 candidates.**

Registered Practical Nurse (RPN) interviews are scheduled for March 4 to 6, 2020. We plan to hire approximately 20 FTE RPNs. Historically we have had no issue satisfying our RPN needs and do not anticipate any this year.

When the new graduate RN and RPNs have received their permanent registration with the CNO we will offer and encourage them to apply for our permanent vacancies.

Evolution of Nursing Resource Team Staffing Model

As a next step in the evolution of the NRT, we are working with Human Resources and the unions (ONA and SEIU) to co-create a plan to return casual staff that work one unit or program only back to a home unit.

Exciting Opportunity for Provincial Project with the CNO

Our CNE has approved an exciting opportunity for TBRHSC to be a participant in CNO's Public Outreach Strategy. The pilot project is intended to educate patients and caregivers about CNO's Code of Conduct. The CNO Code of Conduct was workshopped at the January 2020 PFA Council meeting and our nurses and patients and families will be engaged in Spring 2020.

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Health Professions & Collaborative Practice Update

From May 2019 to March 2020, we incorporated the outstanding contributions of our other health professions (approximately 530 staff representing 29 professions) within the CNE reports, to demonstrate their leadership in workforce optimization strategies and innovative models of care, to achieve desired outcomes for patients, interprofessional care, the Hospital and the region. Our updates include:

Physiotherapy Best Practice for Patients with Total Knee Arthroplasty (TKA)

- Following best practice for physiotherapy treatment as part of Bundled Care, the Physiotherapy Department began delivering TKA group classes in April 2019. Patients who had undergone a TKA attended the class twice a week up to six weeks. This change had a dramatic impact on quality patient care, improving efficiency, patient and family centred care (PFCC) and timely access, without negatively affecting patient outcomes.

  Baseline data was collected for 8 months in 2018 (pre-implementation) and for the same length of time in 2019 post implementation the TKA group class. The results demonstrate that pre-implementation the average number of physiotherapy visits per patient were 10.5 (882 visits/84 patients), while post implementation, the number reduced to 8.5 (919 visits/108 patients).

Medical Radiation Therapy

- **Publication with PFCC Focus –** An article written by Simone Smith, a 4th year Laurentian University radiation therapy student, on placement at TBRHSC, was featured by the Canadian Association of Medical Radiation Technologists in CAMRT News. Her article highlights how our staff exemplify PFCC and the impact that our philosophy of care has had on Simone's practice.

- **Change in Regulatory College Name** – Effective January 1, 2020 the College of Medical Radiation Technologists of Ontario (CMRTO) changed to the College of Medical Radiation and Imaging Technologists of Ontario (CMRITO).

Medical Laboratory

- **Interprofessional Education** – To ensure patient safety, the Medical Laboratory is facilitating half day placements for internal medicine learners to help them understand the complexities and best ordering practices related to transfusion medicine (blood bank). This best practice approach is consistent with many other Academic Health Sciences Centres.

- **Accreditation** – The Medical Laboratory dedicates time to accreditation standards on a daily basis, as there are over 1200 mandatory requirements. They undergo full lab accreditation reviews every four years, with extensive mid-cycle reviews at the two year mark. The lab will undergo a mid-cycle review summer 2020.

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Medication Reconciliation

The pharmacy is continuing to advance the success of the Hospital wide Medication Reconciliation (Med Rec) Program. In January, the Med Rec Program expanded to include pharmacist students from the University of Waterloo, who are performing *Best Possible Medication Histories* in the Emergency Department Monday to Friday. The pharmacist then completes the Med Rec process, collaborating with the physician as needed. This integration has allowed pharmacy to expand the Med Rec program to 2C with the pharmacy technician model. The pharmacy is also collaborating with a temporary Medication Reconciliation Lead to explore the possibility of incorporating modified nurses into the Med Rec model. The goal of these expansions and exciting projects is to bring the Hospital closer to successful and quality Medication Reconciliation.

Allied Health Professional Development Fund Ending

Unfortunately the Ontario government has opted to end the Allied Health Professional Development Fund, which delivered up to $1500/applicant, effective March 2, 2020. The fund offered financial reimbursement for education to a number of health professions, and was regularly accessed by TBRHSC staff.

Thunder Bay Regional Health Sciences Centre Board of Directors Work Plan
Updated: February 27, 2020

Colour Legend	
Completed by target	
In progress but not completed by target	
Not in progress, and not completed by target	

Legend:
BD: Board of Directors
EC: Executive Committee

olumn	Accountability	Activity	Responsible Body	As Needed	October	November	December	February	March	April	May	June	Comments
1	Governance	Monthly education topics for the Board	BD		x	x	x	x	x	x	x	x	
2	Governance	Approval of By-Laws	BD									x	
3	Governance	Approve Slate of Nominees to fill Board vacancies	BD									x	
4	Governance	Approval of all Committee terms of reference	BD									x	
5	Governance	TBRHRI update	BD			x							
6	Governance	TBRHS Foundation update	BD		x								
7	Governance	Board Members to complete self assessment questionnaire	BD				x						Reviewed by Chair in Feb.
8	Governance	Board Members to complete Team Effectiveness Scale	BD							x			Sept.2019 - will be replaced with OHA on line tool in 2019-2020
9	Governance	Board Members to complete Board Annual Evaluation	BD							x			Sept.2019 - will be replaced with OHA on line tool in 2019-2020
10	Legal Compliance	Environmental compliance and fire safety update	BD		x		x		x			x	
11	Legal Compliance	Accessibility update	BD	x									

olumn	Accountability	Activity	Responsible Body	As Needed	October	November	December	February	March	April	May	June	Comments
12	Quality Oversight	Critical Incidents Update	BD					x			x		Moved from December to February to align with PSQCC Workplan. May did not change.
13	Quality Oversight	Research Ethics Board appointments	BD	x									
14	Quality Oversight	Research Ethics Board Annual Report	BD									x	
15	Performance Measurement and Monitoring	Strategic Plan and Scorecard quarterly update	BD		x		x		x			x	
16	Oversight of Management	Physician recruitment plan update	BD					x					
17	Oversight of Management	Participate in CEO evaluation via website	BD							x			
18	Oversight of Management	Participate in COS evaluation via website	BD							x			will take place in Nov 2019 - timelines to be reviewed
19	Oversight of Management	CEO evaluation	EC								x		
20	Oversight of Management	COS evaluation	EC								x		
21	Oversight of Management	Approve CEO evaluation	BD									x	
22	Oversight of Management	Approve COS evaluation	BD									x	
23	Performance Measurement and Monitoring	Committee Scorecard and BN to be appended to committee minutes	BD			x		x		x			Nov 2018 - added

RESOURCE PLANNING COMMITTEE WORK PLAN

2019-2020

Colour Legend	
Completed by target	
In progress but not completed by target	
Not in progress, and not completed by target	

#	Accountability	Activity	As Needed	September	October	November	December	January	February	March	April	May	June	Comments
TBRHSC ITEMS														
1	Oversight of Management	2019-20 Work Plan for information only		x	x	x	x	x	x	x	x	x		
2	Financial Oversight	Monthly Hospital Statistics for information only		x	x	x	x	x	x	x	x	x		
3	Financial Oversight	Marketed Services & Medical Remuneration Reports for information only		x	x	x	x	x	x	x	x	x		
4	Performance Measurement and Monitoring	People, Culture & Strategy Update		x	x	x	x	x	x	x	x	x		
5	Performance Measurement and Monitoring	Personal Emergency Leave Report for information only		x	x	x	x	x	x	x	x	x		
6	Financial Oversight	Attestation: Wages and Source Deductions		x	x			x			x			
7	Financial Oversight	Financial Statements and Variance Report		x		x			x			x		
8	Financial Oversight	Financial Statements for information only		x	x		x	x		x	x			
9	Financial Oversight	Investment Policy Annual Review: BD-16		x										
10	Financial Oversight	Investment Portfolio Reviews									x			
11	Oversight of Management	Work Plan Review 2019-20		x										
12	Governance	Terms of Reference Review 2019-20		x										
13	Financial Oversight	Operating Plan Update with Budget Planning Targets & Directives 2020-21		x	x	x								
14	Financial Oversight	Operating Plan Approval 2020-21					x							
15	Financial Oversight	Capital Budget Update 2020-21			x									
16	Financial Oversight	Capital Budget Approval 2020-21					x							
17	Financial Oversight	Northern Supply Chain Performance and Medbuy Update			x									

#	Accountability	Activity	As Needed	September	October	November	December	January	February	March	April	May	June	Comments
18	Performance Measurement and Monitoring	Corporate Balanced Scorecard			x			x		x				
19	Financial Oversight	H-SAA 2019-20 Operating Plan Agreement Review			x									
20	Risk Identification and Oversight	Approval Authorities Policy Review: ADMIN-21			x									*Completed in September*
21	Performance Measurement and Monitoring	Sick Time & Overtime Initiatives Report for information only				x	x		x			x		*To be Completed in March*
22	Financial Oversight	Broader Public Sector Travel & Expense Report				x						x		
23	Financial Oversight	Funding HBAM and Quality Based Procedures Update				x								
24	Financial Oversight	CAPS 2020-21 Approval					x							
25	Financial Oversight	HAPS 2020-21 Approval					x							
26	Financial Oversight	Non Union Compensation					x							
27	Quality Oversight	Emergency Preparedness Report					x							*transferred from PSQOCC*
28	Financial Oversight	Capital Equipment and Capital Projects Update 2019-20						x			x			
29	Financial Oversight	Insurance Review						x						
30	Performance Measurement and Monitoring	Staff & Physician Engagement Update						x						*transferred from PSQOCC*
31	Oversight of Management	Work Plan Annual Approval 2020-21							x					
32	Governance	Terms of Reference Annual Approval 2020-21							x					
33	Performance Measurement and Monitoring	Accessbility Plan Update							x					*transferred from PSQOCC - to be completed in March*
34	Risk Identification and Oversight	Informatics Update								x				
35	Performance Measurement and Monitoring	Labour Relations, Grievances and Arbitrations Update								x				
36	Legal Compliance	Occupational Health and Safety Program Update								x				
37	Legal Compliance	Public Sector Salary Disclosure								x				
38	Legal Compliance	Broader Public Sector Accountability Attestation Certificate										x		
39	Legal Compliance	Broader Public Sector Use of Consultants Attestation										x		
40	Oversight of Management	H-SAA Declaration of Compliance Attestation										x		
41	Oversight of Management	M-SAA Declaration of Compliance Attestation										x		
42	Financial Oversight	Numbered Companies Unaudited Financial Statements 2019-20										x		

#	Accountability	Activity	As Needed	September	October	November	December	January	February	March	April	May	June	Comments
43	Financial Oversight	Unaudited Preliminary YE Financial Statements to 2020-03-31										x		
44	Quality Oversight	Report on Financial Pressures Related to Risk										x		*transferred from PSQOCC*
TBRHRI ITEMS														
45	Financial Oversight	Attestation: Wages and Source Deductions		x	x			x			x			*transferred from RI FARM*
46	Financial Statements and Variance Report			x		x			x			x		*transferred from RI FARM*
47	Financial Oversight	Financial Statements for information only		x	x		x	x		x	x			*transferred from RI FARM*
48	Financial Oversight	Investment Policy Annual Review: FN 5.05		x										*transferred from RI FARM*
49	Financial Oversight	Operating Plan Update with Budget Planning Targets & Directives 2020-21		x	x	x								*added to align with Hospital budget process*
50	Financial Oversight	Operating Plan Approval 2020-21					x							*transferred from RI FARM*
51	Financial Oversight	TBRHRI 2019-20 Operating & Capital Budget Report and Sustainability Updates				x					x			*previously listed above*
52	Risk Identification and Oversight	TBRHRI 2020-21 Unaudited Financial Statements Review										x		*previously listed above*

Governance and Nominating Committee 2019-2020

Updated: February 27, 2020

Colour Legend
Completed by target
In progress
Delayed

Committee legend:
G - Governance
N - Nominating business
R - Research Institute

Meetings Held:
Governance-September, November, February, May
Nominating-March, April (interviews)

#	Accountability	Activity	Committee	As Needed	September	October	November	December	January	February	March	April	May	July	Comments
1	Governance	Review Committee work plan for upcoming year	G		x								x		approved in May for following year and reviewed in Sept for any adjustments
2	Governance	Review Gov/Nom Committee terms of reference	G		x										
3	Governance	Identify education needs, monthly Board education topics, and department tours for coming year	G		x										
4	Governance	Review Evaluation Tools	G		x										Evaluation Tools include: 1)Board Monthly Evaluation, 2)Board Committee Evaluation, 3)Board Self Assessment(Dec), 4)Team Effectiveness(Dec&Apr) 5)Annual Board Evaluation(Apr) - under review
5	Governance	Review Board vacancies	G							x					
6	Governance	Discuss Board re-appointments/vacancies in preparation for June AGM								x		x			**NEW*** from RI/HSC governance model restructuring 2019
7	Governance	Review Board policies - Hospital	G				x								Only a portion of the policies to be reviewed annually on a three year rotation.
8	Governance	Review Board policies - Research Institute	R				x								**NEW*** from RI/HSC governance model restructuring 2019
9	Governance	Plan annual Board retreat	G										x		Retreat to be held in September of each year **NEW*** 2019 - removed from RI workplan and only on HSC workplan
10	Governance	Review Board committees terms of reference	G										x		Nov 21/18 - moved from November to May
11	Governance	Review Committee evaluations for the semester	G				x						x		Nov-review May, June, Sept, Oct May-review Nov, Dec, Jan, Feb, Mar, April
12	Governance	Review Board and Board Committee attendance	G										x		
14	Governance	Appoint community member on Board member interview panel	N							x					
15	Governance	Review Board member Selection and skills criteria (Policy BD-45)	N							x					

#	Accountability	Activity	Committee	As Needed	September	October	November	December	January	February	March	April	May	July	Comments
16	Governance	Board Skills Matrix	N					x							distribute if required
17	Governance	Review Board member skills matrix inventory	N							x					-Feb- review skills matrix inventory/summary to assist in determining booard recruitment needs and advertising -Refer to BD-45
18	Governance	Approve Application for Membership form	N							x					
19	Governance	Review Board of Directors recruitment ad, interview questions and schedule	N							x					***Updated Sept 2019:*** Ensure ad is bilingual
20	Governance	Deliberate outreach for potential future Board Directors	N							x					*Added Sept 19, 2018* -Maintain a list of potential candidates as names arise
21	Governance	Expressions of Interest for slate of Officers including Chair, if applicable	N							x					*Added Sept 19, 2018* -Process for Expressions of Interest (to be developed) -working group to review draft policy
22	Governance	Proposed slate of Officers for recommendation to the Board	N									x			*Added Sept 19, 2018* -Formal process under development
23	Governance	Review applications (Board and Community)	N								x				
24	Governance	Interview Board member candidates	N									x			
25	Governance	Propose slate of nominees for Board	N									x			
26	Governance	Review By-Law - Hospital	G										x		
27	Governance	Review By-Law - Research Institute	R				x								**NEW*** from RI/HSC governance model restructuring 2019 - moved from May to November per Sept 18 GNC meeting **NOTE:** Moved to Feb or March22020 for this year as the details of the affiliation are being finalized.
28	Governance	Review new Board member orientation program	G										x		
29	Governance	Review Board annual evaluation summary	G										x		Distributed at April Board meeting
30	Governance	Review annual education session summary	G										x		
31	Governance	Determine Board Committees membership	G											x	

AUDIT COMMITTEE

2019-2020 WORK PLAN

Colour Legend	
Completed by target	
In progress but not completed by target	
Not in progress, and not completed by target	

#	Accountability	Activity	As Needed	September	October	November	December	January	February	March	April	May	June	Comments
TBRHSC ITEMS														
1	Oversight of Management	2019-2020 Work Plan for information only						x		x		x		
2	Financial Oversight	2019-2020 Audit Plan Overview - Grant Thornton						x						
3	Governance	Terms of Reference Annual Approval 2020-2021						x						
4	Oversight of Management	2020-2021 Work Plan Approval						x						
5	Performance Measurement and Monitoring	Review Results of May 2019 Evaluation of Auditors						x						
6	Financial Oversight	Independence Questionnaire 2019-2020						x						
7	Risk Identification and Oversight	Policy Review: Admin-19 Whistleblower & Admin-28 Ethical Business Conduct						x						*deferred to March*
8	Risk Identification and Oversight	Expense Test Audit						x						
9	Risk Identification and Oversight	Interim Audit Review 2019-2020								x				
10	Performance Measurement and Monitoring	Discussion of Year End Reporting Issues 2019-2020								x				
11	Financial Oversight	Audit Statement Review 2019-2020								x				
12	Financial Oversight	Individual Program Audit Reports								x				
13	Financial Oversight	Summary of Audit Fees Paid for 2019-2020								x				
14	Financial Oversight	2019-2020 Year End Financial statements for Board Approval										x		
15	Financial Oversight	2019-2020 Audit Results - Grant Thornton										x		
16	Oversight of Management	2019-2020 Management Letter										x		
17	Risk Identification and Oversight	2019-2020 Litigation Review & Claims Summary										x		
18	Risk Identification and Oversight	Analysis of Legal Fees as at March 31, 2020										x		
19	Performance Measurement and Monitoring	Evaluation of Auditors for 2019-2020										x		
20	Performance Measurement and Monitoring	Recommend Appointment of Auditors for 2020-2021										x		
TBRHRI ITEMS														
21	Financial Oversight	2019-2020 Audit Plan Overview - Grant Thornton						x						*transferred from RI FARM*
22	Risk Identification and Oversight	Policy Review: GV 1.10 Ethical Conduct and Whistleblower						x						*transferred from RI FARM deferred to March*
23	Financial Oversight	2019-2020 Audit Results - Grant Thornton										x		*transferred from RI FARM*
24	Performance Measurement and Monitoring	Recommend Appointment of Auditors for 2020-2021										x		*transferred from RI FARM*
25	Risk Identification and Oversight	Analysis of Legal Fees as at March 31, 2020										x		*transferred from RI FARM*
26	Financial Oversight	2019-2020 Year End Financial statements for Board Approval										x		*transferred from RI FARM*

FISCAL ADVISORY COMMITTEE

2019-2020

Colour Legend	
Completed by target	
In progress but not completed by target	
Not in progress, and not completed by target	

#	Accountability	Activity	As Needed	September	October	November	December	January	February	March	April	May	June	Comments
1	Stakeholder Communication and Accountability	Financial Statements and Variance Report				x								
2	Stakeholder Communication and Accountability	Operating Plan 2019-20				x								
3	Stakeholder Communication and Accountability	Q2 2019-20 Financial Review				x								
4	Stakeholder Communication and Accountability	Work Plan 2019-20 Review				x								
5	Stakeholder Communication and Accountability	Financial Statements as at 2019-08-31				x								
6	Stakeholder Communication and Accountability	Financial Statements and Variance Report									x			
7	Stakeholder Communication and Accountability	Operating Budget 2020-21									x			
8	Stakeholder Communication and Accountability	Q3 2019-20 Financial Review									x			
9	Stakeholder Communication and Accountability	Financial Statements as at 2020-01-31									x			
10	Stakeholder Communication and Accountability	Terms of Reference Annual Approval									x			
11	Stakeholder Communication and Accountability	Work Plan 2020-21 Approval									x			
12	Stakeholder Communication and Accountability	Hospital Monthly Statistics for information only				x					x			
13	Stakeholder Communication and Accountability	Vacancy, Overtime & Sick Time Report				x					x			

WORKPLAN: Patient Safety and Quality of Care Committee - 2019-2020

Last Updated: February 2020

Colour Legend	
Completed by target	
In progress but not completed by target	
Not in progress, and not completed by target	

#	Activity	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	COMMENTS
1.0	**Spotlight on Program Level**									
	Patient and Family Centred Care	X								
	Cancer		X							
	Prevention and Screening					X				
	Medicine				X					
	Emergency Department			X						
	Surgical					X				
	Cardiology				X					
	Women and Children						X			
	Mental Health and Addictions						X			
	Lab, Pharmacy and Diagnostic Imaging							X		
	Renal							X		
	Trauma and Critical Care								X	
	Patient Flow								X	
2.0	**Quality and Risk Management**									
	Quality Improvement Plan (QIP)			X		X	X			
	Patient Safety				X			X		
	Infection Control			X				X		
	Integrated Risk Management							X		
	Organizational Data	X		X				X		
	Professional Practice			X						
	Research					X				
	Accreditation							X		
3.0	**PSQCC Education**									
	Magnet Hospital		X							
	Patient Safety and Improvement Processes				X					
	Safety of Patient Data									
	Cardiovascular Program								X	
4.0	**Committee Business**									
	Terms of Reference review	X					X			
	Identify education needs	X	X	X	X	X	X	X	X	
	Committee evaluation review		X			X				
	Annual Summary								X	

Page Views: Open Board Meeting Webcast

September 2017 – February 2020

Month	# of Page Views	Month	# of Page Views	Month	# of Page Views
September 2017	--	September 2018	--	September 2019	--
October 2017	18	October 2018	*No views due to technical difficulties*	October 2019	14
November 2017	26	November 2018	13	November 2019	16
December 2017	17	December 2018	18	December 2019	13
January 2018	--	January 2019	--	January 2020	--
February 2018	15	February 2019	12	**February 2020**	**11**
March 2018	33	March 2019	17	March 2020	
April 2018	13	April 2019	24	April 2020	
May 2018	10	May 2019	24	May 2020	
June 2018	17	June 2019	17	June 2020	
Yearly Total # of Page Views	**149**	**Yearly Total # of Page Views**	**125**	**Yearly Total # of Page Views**	

Thunder Bay Regional Health Research Institute

Translational Research Office
980 Oliver Road
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Pre-Clinical Research Office
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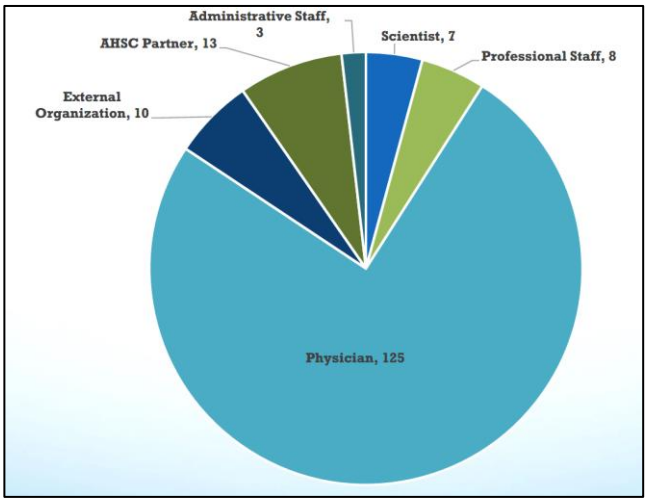
Thunder Bay Regional Health Research Institute Report for TBRHSC Board – February, 2020

Submitted by: Mr. Jean Bartkowiak, CEO and Dr. Valerie Grdisa, EVP Research, Quality & Academics/CNE February 24, 2020. In alignment with the main directions of the Institute's *2020 Strategic Plan* we are pleased to share the following:

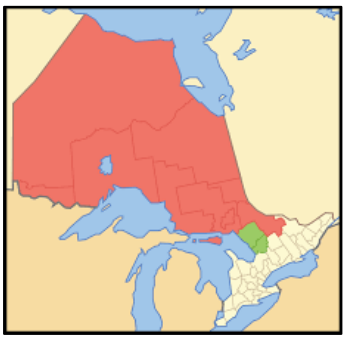
Improving the Health of People of NWO and Beyond

Clinical Research at TBRHSC: Health research undertaken at TBRHSC and TBRHRI has the potential to make a positive impact on the residents of Northwestern Ontario. The following table and graph provide an overview of the program or service areas leading research projects and by whom, as of January 29th:

Program or Service Area	Total Number of Open Studies
Academics and Interprofessional Education	1
Adult and Forensic Mental Health	3
Medicine, Cardiovascular and Stroke Program & Northwestern Ontario Regional Stroke Network	18
Patient Flow and Partnerships	3
Patient Care and Professional Practice	2
Prevention and Screening Services	1
Regional Cancer Program	45
Renal and Clinical Services	32
Surgical and Ambulatory Services	37
Trauma Program and Emergency and Critical Care Services	17
Women and Children's Program	7
Total	**166**



Generating Revenue through Science & Partnerships



Talks have resumed among the seven organizations who have joined forces as the founding members of the **Northern Ontario Health Innovation Cluster**. Health Sciences North (HSN), HSN Research Institute, Laurentian University, Lakehead University, the Northern Ontario School of Medicine (NOSM), Thunder Bay Regional Health Sciences Centre and the Thunder Bay Regional Health Research Institute are working together to secure more equitable funding for health research in Northern Ontario.

The Northern Ontario Health Innovation (NOHI) Cluster is aiming at closing the funding gap for health research and innovation in Northern Ontario through increased synergies and efficiencies among its founding organizations so that we can more successfully apply to health innovation public granting agencies. NOHI will focus on research with an outcome of improving health equity for underserviced and disenfranchised populations in remote communities. Founding member organizations are working together to finalize a multi-year proposal in 2020 to submit to the federal and provincial governments to support collaborative research efforts and strengthen the health innovation ecosystem of Northern Ontario.

Thunder Bay Regional Health Research Institute

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On January 27th, Dr. Grdisa attended a Strategic Planning workshop with the **Ontario Institute for Cancer Research** (OICR). The session was organized in follow-up to site visits OICR representatives made across the province last year. While in Thunder Bay on March 19th, 2019, OICR met with and heard presentations from senior leaders as well as several physicians, scientists, learners and young investigators at the Hospital, Research Institute, Lakehead University and NOSM. The purpose of the January workshop was to discuss how OICR can partner with Ontario cancer centres/universities/research institutes to accelerate translational cancer research in order to maximize health and economic impact. This included a strategic conversation about more equitable distribution of research funding for the North.

Enhancing the Academic Environment

3rd Annual Research Day: Planning is under way for our 3rd Annual Research Day which will be held on **October 2nd.** The planning committee is seeking input on topics and themes that could be the focus for this year's event. ***If you have any suggestions about what you would like to see at Research Day please forward them to Dr. Chris Mushquash at mushquac@tbh.net or to Lisa Niccoli at niccolil@tbh.net.***

Departures and Arrivals

We will be sad to say farewell to **Dr. Valerie Grdisa** on March 13th. For the past year, Dr. Grdisa has occupied the new role of EVP Research, Quality and Academics/CNE. She has brought a wealth of knowledge and new ideas to this large and diverse portfolio and has brought together staff, health professionals, management and partners on several occasions for strategic discussions related to nursing, workforce planning, academic practice planning and more. She has also worked with staff of the Research Institute to build a better foundation for Clinical Trials and the Research Program and will leave us with a good start to our new transitional Strategic Plan. We wish Valerie all the best in her future endeavours!

In November, the **TBRHRI Board of Directors** welcomed its newest member, **John Dixon**. John is the Director of Mental Health and Addictions for Dilico Anishinabek Family Care and a proud band member of the Mississaugas of the Credit First Nation. He has 20 years of experience in the addiction and mental health sector, spent primarily working with Indigenous populations. He was inspired to join the Research Institute Board of Directors to support work that makes a difference for our region, to reduce health inequities, but more importantly to inform and enhance interventions and services that improve population health at a systems level in the North. Welcome John, we look forward to working with you!

Volunteer Association
to Thunder Bay Regional
Health Sciences Centre

"SUPPORTING PATIENT FAMILY CARE"

Report from Volunteer Association President.

2019 was a challenge for Seasons Gift Shop. TBRHSC introduced the "Eating Healthy Together" initiative, and the V.A. Board made the decision to stop purchasing and selling junk food in Seasons. Effective January 2019, Seasons began phasing out confectionary. Thanks to Louisa and the Seasons staff and volunteers, we were largely able to meet the challenge head on and 2019 was much more successful than anticipated.

The profits from Seasons Gift Shop are donated directly to the Foundation and TBRHSC either in cash or equipment. It was decided by the Board that, at least for 2019, donations of equipment would be suspended but all cash commitments would be honoured.

A special thank you to the Tuesday craft ladies. They make and donate all the beautiful items for the Christmas Craft Sale and also donate some of the infant sweaters, hats and afghans sold in Seasons. In addition, they donate a gift basket that is presented to the New Year's Baby and they make favours that are placed on patient trays at Christmas and Easter

In 2019, the Volunteer Association received cash donations of about $3,100 from the Employee Giving Program and the Hospital Marathon Bridge Group and raised an additional $1,465 from the Quilt Raffle. The Christmas Craft Sale generated about $1,800 which will help support our bursaries and scholarships.

Between April 2019 and February 2020, donations from the Volunteer Association totalled $79,000 including:

- $9,000 in scholarships and bursaries
- $32,000 to the "Our Hearts at Home Cardiovascular Campaign" (Committed to $160,000 over 5 years)
- $30,000 to the Family CARE Grants
- $5,000 to the Clothing Cupboard (Social Services)
- $3,000 to "Our Hearts at Home Cardiovascular Campaign" (This is over & above the committed $160,000.)

The Volunteer Board of Directors is currently seeking a Director at Large. Ideally, the Board operates with eight (8) members consisting of four (4) Directors, President, Vice-President, Treasurer and Secretary. If you are interested in finding out more about becoming a Board member, please speak with Sam or Donna in Volunteer Services or you can reach out to Cathy by email at brittc@tbh.net

Respectfully submitted,
Cathy Britt, President
Volunteer Association to TBRHSC

BRIEFING NOTE

Thunder Bay Regional Health Sciences Centre

TOPIC	**Fire & Environmental Compliance Update**
PREPARED BY	Anne Marie Heron, Executive Director, Capital Planning & Operations
REVIEWED BY DECISION SUPPORT (if required)	<Does this have financial impacts to the hospital's budget? Has a Decision Support Analyst been consulted on this briefing note?> YES ☐ NO ☐ N/A ☒
APPROVED BY	Peter Myllymaa, Executive Vice President, Corporate Services & Operations
CO-SPONSOR (if required)	n/a
PREPARED FOR:	President &CEO ☐ Board of Directors ☒ Other:
DATE PREPARED	February 2020

Our Hospital is committed to ensuring decisions and practices are ethically responsible and align with our Vision, Mission, and Values. Leaders should consider decisions from an ethics perspective including their implications on patients, staff and the community.

The reader considers the following questions to ensure each decision are ethically responsible by indicating with a √:

☐ 1. We put '**Patients First'** by responding respectfully to needs, values, & expectations of our patients, families, and communities?
☐ 2. We demonstrate '**Accountability**' by advancing a quality patient experience that is socially and fiscally responsible?
☐ 3. We demonstrate '**Respect**' by honouring the uniqueness of each individual and his or her culture?
☐ 4. Does the course of action demonstrate '**Excellence**' by fostering an environment of innovation and learning to advance a quality patient experience?

For more detailed questions to use on difficult decisions, please refer to the Hospital's Framework for Ethical Decision Making on the iNtranet under Quality and Risk Management>Ethics.

PURPOSE/ISSUE(S)

To provide the Hospital Board of Directors with an update on Fire and Environmental Compliance.

BACKGROUND

The Hospital has no outstanding orders under the Ontario Fire Code (as overseen by the Chief Fire Official) or the Environmental Protection Act (as overseen by Ministry of Environment and Climate Change). The Hospital is not aware of any non-compliance in regards to the requirements of these legislations, except as noted following.

ANALYSIS/CURRENT STATUS

Ontario Fire Code

- The Hospital continues to provide an update on the use of HRM to relieve capacity issues to the Thunder Bay Chief of Fire Prevention.
- The Hospital's annual Fire Plan review is being completed.
- The Hospital's annual Fire Inspection will be completed in the spring with Thunder Bay Fire and Rescue.
- The last Minimum Staffing Drill was completed in October with Thunder Bay Fire and Rescue.

Environmental Protection Act

- There are no outstanding amendments to the Environmental Compliance Approval (ECA) for air emissions, noise or stormwater.

Green Energy Act (Ministry of Energy)

- The annual energy reporting requirement commenced in July 2013. The next annual submission is due June 30, 2020.

RECOMMENDATION

N/A.

NEXT STEPS

N/A.

STAKEHOLDER REACTION

N/A.

COMMUNICATIONS

N/A.

FINANCIAL IMPACTS

N/A.

APPENDIX SECTION

N/A.

ANNUAL RESEARCH COMPLIANCE REPORT

TBRHSC: for SLC, MAC, Patient Safety & Quality Committee of BoD
TBRHRI: for EMC, Science &Research Committee of BoD

Dr. Valerie Grdisa
EVP Research, Quality and Academics/CNE

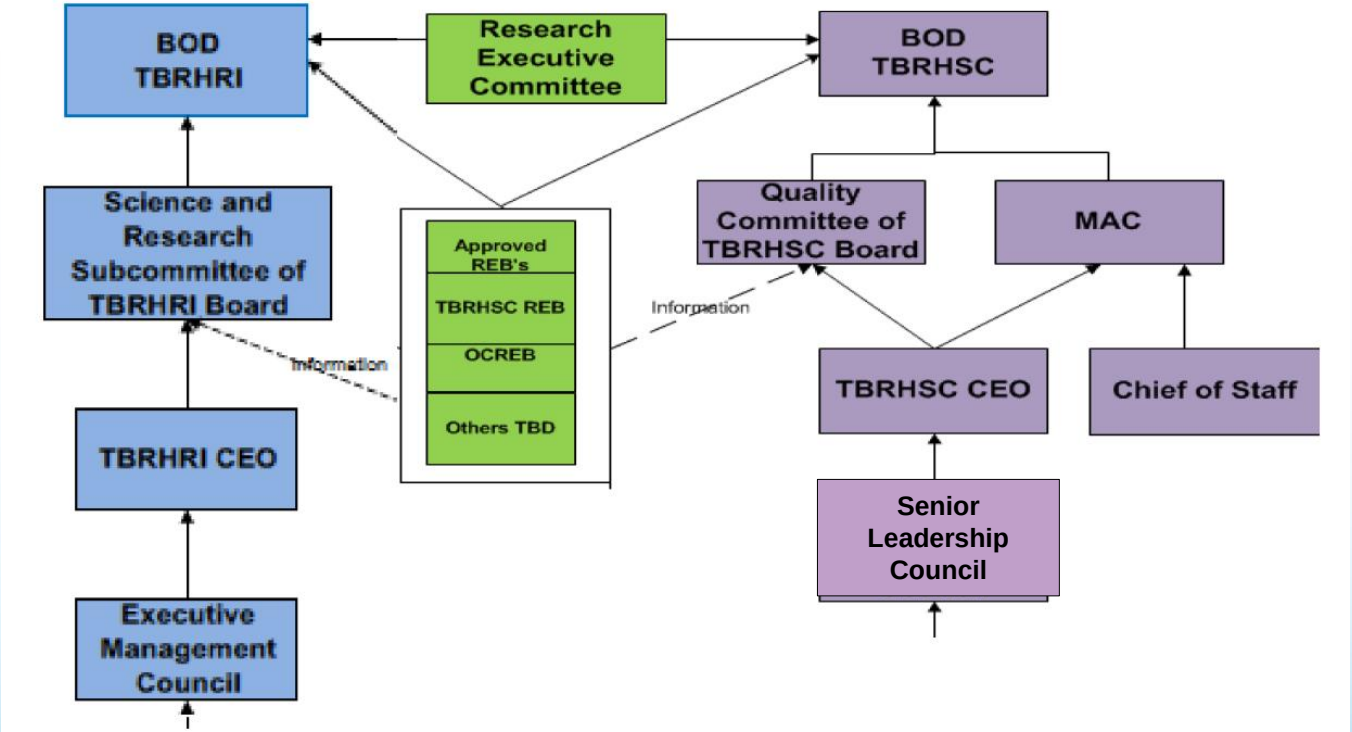
January, 2020

Compliance Report Outline

- Research Quality Update
- Research Risk Registry
- Clinical Research Projects
- Regulatory Summary
- Metrics
- List of Research Program Open Studies by Principal Investigator (attached separately)

Research Quality Update

TBRHSC/TBRHRI
Research Quality Governance Oversight
- Accountabilities -



EVP – Research, Quality & Academics/CNE

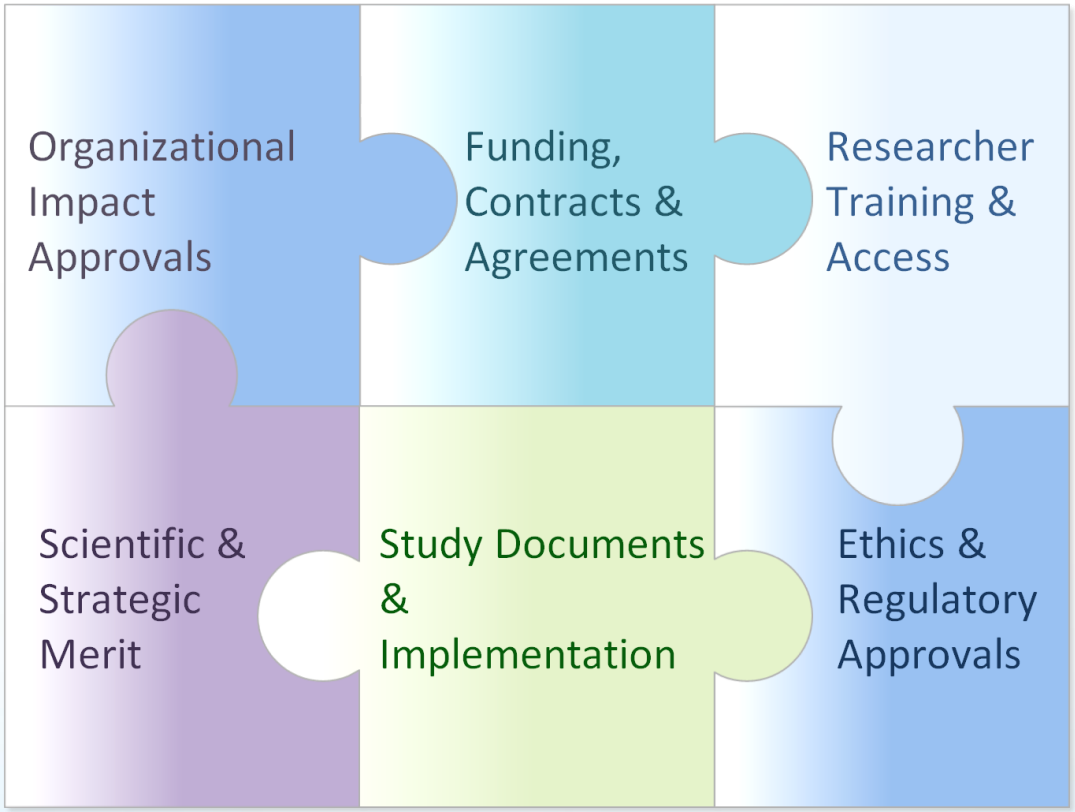
Research Quality Update

- Research policies are posted on the TBRHSC & RI intranet sites;
- Guidance and information on the clinical research authorization process at TBRHSC is available online at: http://tbrhsc.net/research/research-program/ ;
- Research Ethics & Authorization Office (RE&A) is responsible for the review, authorization and tracking of all research projects involving staff, patients, equipment/facilities and data/personal health information at or under the auspices of TBRHSC or TBRHRI;
- RE&A Office provides a recommendation for authorization to the EVP Research, Quality & Academics/CNE for research projects to begin after all identified requirements, including ethics approval, are received;
- Work continues with “Building the Academic Environment” in the Institute’s 2020 Strategic Plan through the integration of research activities in various Hospital committees/initiatives and development of an Academic Practice Plan 2022;

Research Quality Update continued …….

- Research Ethics Board REB Reciprocity Agreement between TBRHSC & Lakehead University was signed in April, 2017 to streamline how health research applications are reviewed and approved by REBs across these two organizations;
- Began pilot in July, 2019 of a new organizational structure which has one Manager overseeing three Coordinators in the areas of Research Support Services , Clinical Trials and the Research Ethics & Authorization Office, will assess this structure after one year;
- Discussions ongoing with REB re: their concerns related to the potential for conflict of interest (COI) with this new organizational structure; and
- 3 levels of review for each authorization are in place which although creates duplication in authorization process, mitigates COI for the Coordinator.

Elements of the Research Program Review



If you're interested in conducting research:

- Contact researchprogram@tbh.net or Clinical Research Services Department at 684-6359;
- Or for ethical questions or processes TBR_REO@tbh.net or the Research Ethics & Authorization Office at 684-6422.

Research Risk Registry

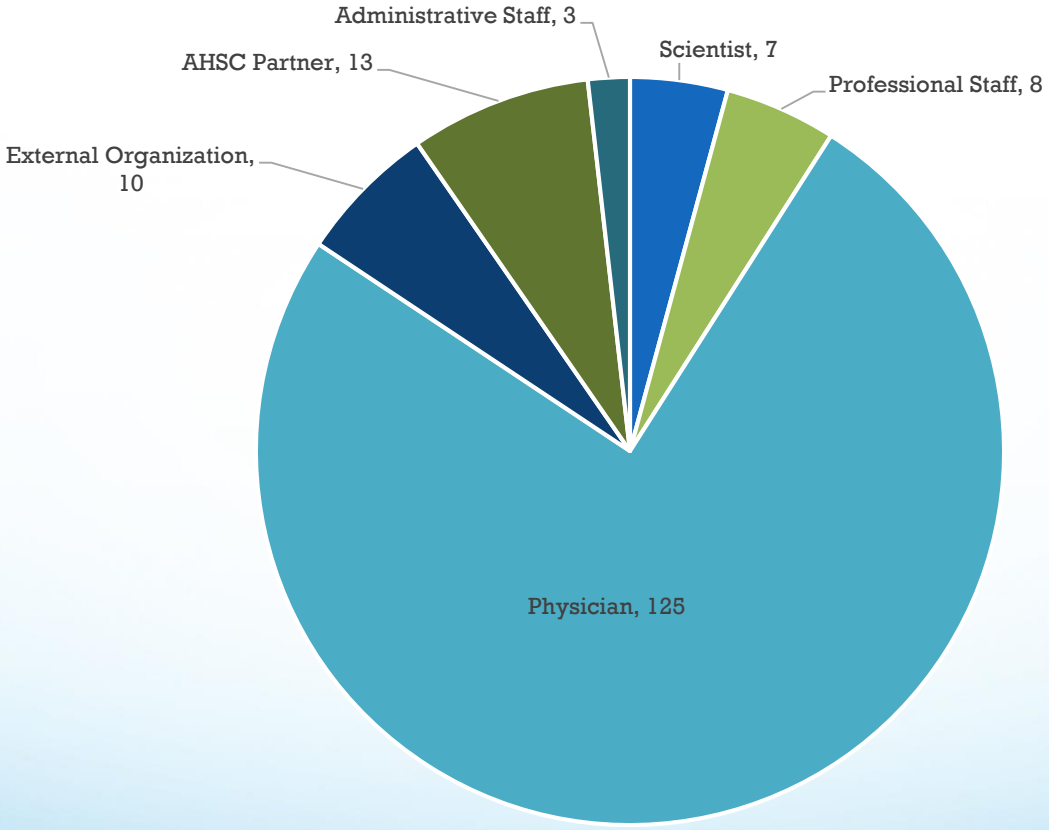
Research Risk Registry 2019/20

Risk Item	Impact	Lead(s)	Committee Oversight	Mitigation Strategies
TBRHRI Financial Sustainability	Financial	COO	TBRHSC Resource Planning Comm. & TBRHRI Board	Business Development benchmarking re:/revenue sources Collaborative Strategies w/Foundation
Patient accruals in Clinical Trials	Patient Care & Financial	EVP RQA/CNE AVPR/Chief Scientist (CS) Manager	S&R / QC	Research intervention documentation in Patient Record Opt In/Opt Out (on hold)
Physician engagement in Research	Patient Care & Research agenda	AVPR/CS Manager	S&R / QC	Academic Practice Plan Physician on Academic License engagement

Clinical Research Projects

Who is conducting Research?

Number of Open Studies by Researcher Type (Principal Investigator)



166 clinical research projects open as of January 22, 2020

Open Research Projects by Program

Program or Service Area	Total Number of Open Studies
Academics and Interprofessional Education	1
Adult and Forensic Mental Health	3
Medicine, Cardiovascular and Stroke Program & Northwestern Ontario Regional Stroke Network	18
Patient Flow and Partnerships	3
Patient Care and Professional Practice	2
Prevention and Screening Services	1
Regional Cancer Program	45
Renal and Clinical Services	32
Surgical and Ambulatory Services	37
Trauma Program and Emergency and Critical Care Services	17
Women and Children's Program	7
Total	**166**

Clinical Research Overview

- **There are currently 33 regulated clinical trials being conducted at TBRHSC through Clinical Trials department**
  - 3 actively recruiting
  - 30 in long term follow-up
  - 1 sponsored by TBRHRI

- **There are 16 non-regulated clinical research studies being conducted at TBRHSC through Clinical Trials department**
  - 7 actively recruiting
  - 8 in long term follow-up
  - 1 paused to accrual

- **There are 26 open research studies being conducted at TBRHSC through Research Support Services**
  - 18 of these are chart reviews

Total Screened vs Enrolled

Non-Oncology	2019/20 (Q1-3)
Patients Screened	14
Patients Enrolled	11

Oncology	2019/20 (Q1-3)
Patients Screened	431
Patients Enrolled	9

Physician-Initiated	2019/20 (Q1-3)
Patients Screened	18
Patients Enrolled	17
Total Enrolled:	**37**
Non-Trials Deducted Total Enrolled:	**10**

Clinical Research Services Dept. Regulatory Summary

Monitoring Visits, Audits and Outcomes

- **Non-oncology Studies**
  - 10 remote monitoring visits
  - 4 onsite monitoring visits

- **Oncology Studies**
  - 2 remote monitoring visits
  - 3 on-site monitoring visits
  - 4 closeout visits

Protocol Deviations and SAEs

- **April 1 – December 31, 2019:**
  - Non-Oncology
    - 14 SAEs, 0 protocol deviations
  - Oncology
    - 2 SAE, 2 protocol deviations
  - Research Support Services
    - 0 SAEs, 3 protocol deviations

(SAE = Serious Adverse Event)

Privacy

- Systems and process limitations impacting ability to implement clinical trials while maintaining compliance with Privacy legislation
  - CRSD is working to propose a solution that will increase opportunities for patients to participate in research while ensuring their privacy is maintained; SLC has been informed and provided input on this

- Comparison of privacy concerns and breaches:

	2019	2018
TBRHRI Privacy Concerns	1	1
TBRHRI Privacy Breaches	0	1
Total Privacy Concerns @ TBRHSC	42	11
Total Privacy Breaches @ TBRHSC	592	538
Total Patients Impacted by Breaches @ TBRHSC	1110	746

Training Compliance

- Training depends on type of study (i.e. regulated vs. non regulated)
- Training requirements are identified by Research Ethics & Authorization Office and must be satisfied prior to project Authorization by the EVP Research, Quality, Academics & CNE

Metrics

Re$earch Infosource

RE$EARCH Infosource Inc.

CANADA'S TOP 40 RESEARCH HOSPITALS

- After being listed among the Top 40 Research Hospitals since 2014, TBRHSC fell off the list in 2019;
- The 2019 decision was based on total research expenditures and the total number of active researchers for the 2017/18 fiscal year;
- Although the number of active researchers increased at TBRHSC over the prior year, total research expenditures decreased by over $1.2M from the prior year.

CAHO Metrics for 2018/19

CAHO

Thunder Bay Regional Health Sciences Centre
Contact: Dr. Valerie Grdisa, 807-684-7223, c/o niccolil@tbh.net

Instructions: Please complete all cells highlighted in yellow. Only cells that require completion can be edited.

Research Impact - For April 1, 2018 to March 31, 2019

Line #		
	Category A: Research Staff	
1	**Total Researchers who conducted research (Head count #)**	136
	Recruitment - Of the total Researchers, the number of faculty-level researchers recruited from…	
2	Another Canadian province or territory	0
3	Outside Canada	1
4	**Postdoctoral fellows**	3
5	**Graduate students**	14
6	**Total research trainees:**	**17**
7	**Other research staff (excluding faculty and trainees)**	299
8	**Total Research Staff**	**452**
	Category B: Experimental Output	
9	**Number of products commercialized**	0
10	**Number of disclosures**	1
	Category C: Clinical Trials	
11	**Number of clinical *research projects* started this year**	5
12	**Total number of new clinical *trials* started this year**	4
	Clinical trial phases - Of number of new clinical trials started this year…	
13	Number of trials in Phase 1	0
14	Number of trials in Phase 2	1
15	Number of trials in Phase 3	0
16	Number of trials in Phase 4	1
	Role in clinical trial - Of number of new clinical trials started this year…	
17	Number of trials in which your Institute is the leading site	0
18	Number of trials in which your Institute is a participating site	5
	Clinical trial leads - Of number of new clinical trials started this year…	
19	Number of trials that are industry-led	1
20	Number of trials that are investigator-led	0
21	**Total number of clinical trials *generating revenue***	23
	Clinical trial phases - Of number of number of clinical trials generating revenue…	
22	Number of clinical trials generating revenue in Phase 1	0
23	Number of clinical trials generating revenue in Phase 2	1
24	Number of clinical trials generating revenue in Phase 3	10
25	Number of clinical trials generating revenue in Phase 4	4
	Role in clinical trial - Of number of number of clinical trials generating revenue…	
26	Number of clinical trials generating revenue in which your Institute is the leading site	1
27	Number of clinical trials generating revenue in which your Institute is the participating site	22
28	**Total number of subjects enrolled in clinical trials this year**	99
29	**Number of clinical trails enrolling subjects on March 31, 2019**	20
	Dedicated Research Space (square foot)	
30	What is the total size of the dedicated research space associated with the hospital, your research towers, and/or other research space affiliated with your hospital?	30,252
31	What is the total sq.ft of your hospital area?	716,500

Highlights:

- 136 Researchers – faculty level
- 452 people involved in research
- 5 new clinical research projects
- 4 new clinical trials
- 23 revenue generating clinical trials
- 99 participants enrolled in clinical trials this year

Questions?

APPENDIX

Clinical Research Studies: Screened vs. Enrolled by Study Type

Total Screened vs Enrolled

Non-Oncology	April	May	June	July	August	September	October	November	December	YTD
Patients Screened	2	5	1	0	4	1	0	1	0	14
Patients Enrolled	1	4	0	0	4	1	0	1	0	11

Oncology	April	May	June	July	August	September	October	November	December	YTD
Patients Screened	82	65	34	53	64	38	48	31	16	431
Patients Enrolled	2	3	0	2	0	0	2	0	0	9

Physician-Initiated	April	May	June	July	August	September	October	November	December	YTD
Patients Screened	6	2	4	0	1	2	0	2	1	18
Patients Enrolled	6	2	3	0	1	2	0	2	1	17
Total Enrolled:	**9**	**9**	**3**	**2**	**5**	**3**	**2**	**3**	**1**	**37**
Non-Trials Deducted Total Enrolled:	**2**	**3**	**2**	**0**	**0**	**0**	**2**	**1**	**0**	**10**

Oncology Studies

Study Name:	April 2019 # Screened	April 2019 # Enrolled	May 2019 # Screened	May 2019 # Enrolled	June 2019 # Screened	June 2019 # Enrolled	July 2019 # Screened	July 2019 # Enrolled	August 2019 # Screened	August 2019 # Enrolled	September 2019 # Screened	September 2019 # Enrolled	October 2019 # Screened	October 2019 # Enrolled	November 2019 # Screened	November 2019 # Enrolled	December 2019 # Screened	December 2019 # Enrolled
BR31	11	0	10	0	6	0	6	0	12	0	0	0						
Lustre	11	0	10	2	6	0	6	0	12	0	12	0	9	0	14	0		
PETMUSE	0	0	2	0	5	0	5	0	2	0	4	0	3	0	2	0	4	0
PETABC	20	0	21	0	8	0	17	1	19	0	11	0	8	0	11	0	12	0
Ruby	20	0	21	1	8	0	17	0	19	0	11	0	8	0	0	0	0	0
React EF	20	2																
Devote	0	0	1	0	1	0	2	1	0	0	0	0	1	1	0	0	0	0
Thor											0	0	4	0	0	0	0	0
Prep											0	0	15	1	0	0	0	0
Agent															4	0	8	0
TOTAL:	**82**	**2**	**65**	**3**	**34**	**0**	**53**	**2**	**64**	**0**	**38**	**0**	**48**	**2**	**31**	**0**	**16**	**0**

Non-Oncology Studies

Study Name:	April 2019 # Screened	April 2019 # Enrolled	May 2019 # Screened	May 2019 # Enrolled	June 2019 # Screened	June 2019 # Enrolled	July 2019 # Screened	July 2019 # Enrolled	August 2019 # Screened	August 2019 # Enrolled	September 2019 # Screened	September 2019 # Enrolled	October 2019 # Screened	October 2019 # Enrolled	November 2019 # Screened	November 2019 # Enrolled	December 2019 # Screened	December 2019 # Enrolled
Hip Attack	1	0	3	2	0	0												
INVESTED																		
Adjust - DVT	1	1	2	2	1	0	0	0	4	4	1	1	0	0	1	1	0	0
TOTAL:	**2**	**1**	**5**	**4**	**1**	**0**	**0**	**0**	**4**	**4**	**1**	**1**	**0**	**0**	**1**	**1**	**0**	**0**

Investigator Initiated

Study Name:	April 2019 # Screened	April 2019 # Enrolled	May 2019 # Screened	May 2019 # Enrolled	June 2019 # Screened	June 2019 # Enrolled	July 2019 # Screened	July 2019 # Enrolled	August 2019 # Screened	August 2019 # Enrolled	September 2019 # Screened	September 2019 # Enrolled	October 2019 # Screened	October 2019 # Enrolled	November 2019 # Screened	November 2019 # Enrolled	December 2019 # Screened	December 2019 # Enrolled
Weston Brain (RP-307)	2	2	1	1	3	2	0	0	0	0					2	2	1	1
Sepsis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Prevnar 13	0	0	0	0	0	0												
APS2	4	4	1	1	1	1	0	0	1	1	2	2	0	0	0	0	0	0
TOTAL:	**6**	**6**	**2**	**2**	**4**	**3**	**0**	**0**	**1**	**1**	**2**	**2**	**0**	**0**	**2**	**2**	**1**	**1**

Research Support Services - Ortho

Study Name:	Participant Goal	Study Type	Cumulative Enrollment: Study Start - Mar 2018	Cumulative Enrollment: Past Fiscal	Cumulative Enrollment: Current Fiscal	April 2019 # Enrolled	May 2019 # Enrolled	June 2019 # Enrolled	July 2019 # Enrolled	August 2019 # Enrolled	September 2019 # Enrolled	October 2019 # Enrolled	November 2019 # Enrolled
TXA	360	Observational	0	0	11	0	1	2	3	3	2	0	0
FCL	20	Clinical Trial	7	0	0	0	0	0	0	0	0	0	0
Calcific Tendinitis	60	Clinical Trial	21	0	0	0	0	0	0	0	0	0	0
Ankle	200	Observational	4	2	0	0	0	0	0	0	0	0	0
BMI	350	Observational	19	172	60	16	17	5	4	9	1	1	7
Vancouver B1	10	Clinical Trial	0	0	0	0	0	0	0	0	0	0	0
COTS-H	20	Observational	0	0	2	0	0	0	0	1	0	1	0
Charnley	40	Observational	16	0	0	0	0	0	0	0	0	0	0
Dental	80	Intervention	10	31	0	0	0	0	0	0	0	0	0
Flywheel	100	Clinical Trial	55	0	0								
POCD	100	Observational	100	0	0								
Decipher	30	Observational	0	2	2	0	0	1	0	0	0	0	1
FIRM	10	Clinical Trial	0	0	2	0	2	0	0	0	0	0	0
Ulnar Shaft	5	Clinical Trial	0	0	0	0	0	0	0	0	0	0	0
BMI-Hip	350	Observational		20	20			0	5	3	5	5	2
COPE	50	Clinical Trial		0	0			0	0	0	0	0	0
				0									
TOTAL:				227	97	16	20	8	12	16	8	7	10

Note: Data reflects Research Support Services Enrollment from 1-Apr-19 to 31-Nov-19

Research Support Services – Non-Ortho

Study Name:	Participant Goal	Study Type	Cumulative Enrollment: Study Start - Mar 2018	April 2019 # Enrolled	May 2019 # Enrolled	June 2019 # Enrolled	July 2019 # Enrolled	August 2019 # Enrolled	September 2019 # Enrolled	October 2019 # Enrolled	November 2019 # Enrolled
Sputum	25	Intervention	25	3	1	1	0	0	0	0	2
Tele-palliation	36	Intervention	0	0							
HOLEP 2	50	Clinical Trial	0								
Recoup	40	Clinical Trial	2	0	0	0	1	0	0	1	0
Can-Solve	30	Intervention	0								
MRSI	250	Observational	0								
Greenlight vs Xpeeda	92	Clinical Trial	4				4	0	0	0	0
Top-Down PCNL	50	Clinical Trial	0								
Tubeless PCNL	50	Clinical Trial	0								
L&D Simulation	84	Intervention	0								
TOTAL:				3	1	1	5	0	0	1	2

*Study boxes shaded are those that are about to open

Note: Data reflects Research Support Services Enrollment from 1-Apr-19 to 31-Nov-19

Research Program Open Studies by Principal Investigator

TBRHSC Physicians					
RP #	**REB #**	**Project Identifier**	**Local Principal Investigator (PI)**	**Date Open**	**Type of Study**
RP-002	2013139	Efficacy of Surgical Skin Preparation Solutions in Hip Arthroplasty Surgery	Droll, Kurt	6-Aug-2014	Program Development Process Improvement
RP-011	2013132	Effect of Acute Pain Service on Postoperative Pain ("APS")	Sikorski, Rob	23-Dec-2013	Prospective Cohort Study
RP-023	2017501	Evaluating the Incidence of Dental Pathology in the Total Joint Arthroplasty Population of Northwestern Ontario	Droll, Kurt	13-Sep-2017	Cross Sectional Prospective Study
RP-044	2008207	BRC. 2 / 2E - A Phase III Randomized Trial of Adjuvant Chemotherapy With or Without Bevacizumab for Patients With Completely Resected Stage IB (> 4 cm) - IIIA Non-small Cell Lung Cancer (NSCLC)	Faghih, Amir	YES	Randomized Controlled Trial
RP-046	2009205	RTOG 815 - A PHASE III PROSPECTIVE RANDOMIZED TRIAL OF DOSE-ESCALATED RADIOTHERAPY WITH OR WITHOUT SHORT-TERM ANDROGEN DEPRIVATION THERAPY FOR PATIENTS WITH INTERMEDIATE-RISK PROSTATE CANCER	Hagerty, Marlon	YES	Randomized Controlled Trial
RP-047	2009200	RTOG 534 - A PHASE III Trial of Short Term Androgen Deprivation with Pelvic Lymph Node or Prostate Bed Only Radiotherapy (SPPORT) in Prostate Cancer Patients with a Rising PSA after Radical Prostatectomy.	Hagerty, Marlon	YES	Clinical Trial
RP-048	2011202	MA. 33 - A Randomised Phase III Study of Radiation Doses and Fractionation Schedules for Ductal Carcinoma in Situ (DCIS) of the Breast	Anthes, Margaret	YES	Randomized Controlled Trial
RP-049	2010202	MA. 32 - A Phase III Randomized Trial of Metformin Versus Placebo On Recurrence And Survival In Early Stage Breast Cancer	Faghih, Amir	YES	Randomized Controlled Trial
RP-055	2004279	RTOG 126 - A Phase III Randomized Study of High Dose 3DCRT/IMRT versus Standard Dose 3DCRT/IMRT in Patients Treated for Localized Prostate Cancer	Hagerty, Marlon	YES	Randomized Controlled Trial
RP-056	2008202	RTOG 415 - A Phase III Randomized Study of Hypofractionated 3DCRT/IMRT versus Conventionally Fractionated 3DCRT/IMRT in Patients Treated for Favorable-Risk Prostate Cancer	Hagerty, Marlon	YES	Randomized Controlled Trial
RP-060	2004276	RTOG 9601 - A PHASE III TRIAL OF RADIATION THERAPY WITH OR WITHOUT CASODEX IN PATIENTS WITH PSA ELEVATION FOLLOWING RADICAL PROSTATECTOMY FOR pT3NO CARCINOMA OF THE PROSTATE.	Hagerty, Marlon	YES	Randomized Controlled Trial
RP-062	2004278	RTOG 99-10 - A Phase III Trial to Evaluate the Duration of Neoadjuvant Total Androgen Suppression (TAS) and Radiation Therapy (RT) in Intermediate-Risk Prostate Cancer	Hagerty, Marlon	YES	Randomized Controlled Trial
RP-065	2007204	B-42 - A Clinical Trial to Determine the Efficacy of Five Years of Letrozole Compared to Placebo in Patients Completing Five Years of Hormonal Therapy Consisting of an Aromatase Inhibitor (AI) or Tamoxifen Followed by an AI in Prolonging Disease-Free Survival in Postmenopausal Women with Hormone Receptor Positive Breast Cancer	Faghih, Amir	YES	Randomized Controlled Trial
RP-067	2004222	NCIC BR 16 - A Phase III Chemoprevention Trial of Selenium Supplementation in Persons with Resected Stage I Non-Small Cell Lung Cancer	Faghih, Amir	YES	Randomized Controlled Trial
RP-069	2004228	NCIC CRC. 3 - A randomized phase III study comparing 5-FU, leucovorin and oxaliplatin versus 5-FU, leucovorin, oxaliplatin and vbevacizumab in patients with stage II colon cancer at high risk for recurrence to determine prospectively the prognostic value of molecular... NCIC CTG CRC 3 (E5202)	Faghih, Amir	YES	Randomized Controlled Trial
RP-078	2004246	MAC. 4 - A Phase III Trial Evaluating the Role of Ovarian Function Suppression and the Role of Exemestane As Adjuvant Therapies for Premenopausal Women with Endocrine Responsive Breast Cancer	Faghih, Amir	YES	Randomized Controlled Trial

RP-080	2007202	MAC. 9 - A Phase III Trial of Bisphosphonates As Adjuvant Therapy For Primary Breast Cancer	Faghih, Amir	YES	Randomized Controlled Trial
RP-081	2007210	MAC. 11 - Phase III Trial of Continuous Schedule AC + G Vs. Q 2 Week Schedule AC, Followed by Paclitaxwl Given Either Every 2 Weerks or Weekly for 12 Weeks as Post-Operative Adjuvant therapy in Node-Positive or High-Risk Node Negative Breast Cancer	Faghih, Amir	YES	Randomized Controlled Trial
RP-082	2004248	MAC. 12 - Phase III Randomized Study of Adjuvant Combination Chemotherapy and Hormonal Therapy versus Adjuvant Hormonal Therapy Alone in Women with Previously Resected Axillary Node-Negative Breast Cancer with Various Levels of Risk for Recurrence	Faghih, Amir	YES	Randomized Controlled Trial
RP-083	2007208	REC. 2/ASSURE - Adjuvant Sorafenib or Sunitinib for Unfavourable Renal Carcinoma	Faghih, Amir	YES	Randomized Controlled Trial
RP-095	2006109	Resucitation Outcomes Consortium (ROC) registry	Affleck, Andrew	YES	Retrospective Chart Review
RP-127	2012111	CCDC Data Collection	Ahmed, Zaki	YES	DataCollection/Analysis
RP-145	2004203	Blood borne pathogens surveillance project	Laferriere, Nicole	YES	Retrospective Chart Review
RP-172	2010137	Validation of the medical admissions risk system (MARS) score in patients admitted to TBRHSC	Kellett, John	YES	Program Development Process Improvement
RP-173	2010140	Bariatric Registry study	Ahmed, Zaki	YES	Observational Study
RP-202	2013119	Assessing the impact of the Inter-Professional Spine Assessment and Education Clinic (ISAEC)	Puskas, David	11-Sep-2013	Program Development Process Improvement
RP-227	2015145	Monitoring sputum differential cell counts in patients with chronic respiratory disease: Phase 1	Biman, Birubi	8-Nov-2017	Cross Sectional Prospective Study
RP-231	2013143	Peritoneal Dialysis Outcomes and Practice Patterns Study (PDOPPS)	Boake, Armour	4-Apr-2014	DataCollection/Analysis
RP-243	2014116	BIONICS - BioNIR Ridaforolimus Eluting Coronary Stent System (BioNIR) in coronary stenosis trial	MacDougall, Andrea	30-Jul-2014	Clinical Trial
RP-252	2018503	Investigating the Presence of Fibrinolysis in Orthopaedic Surgery and the Rationale of Administration of Tranexamic Acid-TXA	Labib, Yasser	8-Nov-2018	Prospective Cohort Study
RP-263	Unknown	ESTEEM - A multicentre, global, observational study to collect information on safety and to document the drug utilization of Tecfidera when used in routine medical practice in the treatment of Multiple Sclerosis	Hassan, Ayman	11-Jun-2014	Clinical Trial
RP-265	2014105	FCL - A Multicentre, Randomized Trial of Far Cortical Locking vs. Standard Constructs for Acute, Displaced Fractures of the Distal Femur Treated with Locked Plate Fixation	Puskas, David	10-Dec-2014	Randomized Controlled Trial
RP-267	2015202	LUSTRE - A randomized trial of Medically-Inoperable Stage 1 Non-Small Cell Lung Cancer Patients Comparing Stereotactic body radiotherapy versus conventional radiotherapy.	Ramchandar, Kevin	11-Feb-2016	Randomized Controlled Trial
RP-275	2015133	Evaluation of the efficacy of the new evidence-based triage toolkit for triaging Transient Ischemic Attack and mild non-disabling stroke in Northwestern Ontario	Sweet, Margaret	21-Apr-2016	Program Development Process Improvement
RP-279	2013119	Regional Delivery of Lower Back Pain (LBP) Treatment to Remote Communities	Puskas, David	14-Sep-2015	Program Development Process Improvement
RP-284	2010136	Blastomycosis complicated by septic shock, a case series from Northern Ontario	Ahmed, Zaki	YES	DataCollection/Analysis
RP-288	2014124	Optimization of pneumococcal immunization of patients with severe chronic kidney disease	McCready, William	21-Apr-2015	Clinical Trial
RP-289	2015102	HIP ATTACK - HIP fracture Accelerated surgical care and Treatment Track	Puskas, David	15-Jul-2015	Randomized Controlled Trial
RP-302	2015125	Cognitive decline post-total hip surgery	Payandeh, Jubin	29-Jun-2015	DataCollection/Analysis
RP-304	2015141	Evaluating the Implementation of a Cardiopulmonary Resuscitation and Advanced Life Sustaining Treatment Code Status Levels Policy	Anderson, William	16-Oct-2015	Retrospective Chart Review
RP-310	2014121	Thirty day follow-up study of acutely severely ill medical patients admitted to TBRHSC	Oukachbi, Salima	6-Apr-2015	DataCollection/Analysis
RP-320	2014202	LUMINA - A Prospective Cohort Study Evaluating Risk of Local Recurrence Following Breast Conserving Surgery and Endocrine Therapy in Low Risk Luminal A Breast Cancer	Anthes, Margaret	16-Sep-2014	Prospective Cohort Study
RP-331	2015122	The Ontario Neurodegenerative Disease Research Initiative	Hassan, Ayman	26-Jun-2015	Prospective Cohort Study

RP-335	2015131	The Development of a Novel SEPSIS Diagnostic Biomarker System	Ahmed, Zaki	21-Jun-2016	Prospective Cohort Study
RP-336	2014136	CALCIFIC - Calcific Tendinitis: Comparing Minimally Invasive Modalities	Payandeh, Jubin	29-Apr-2015	Prospective Cohort Study
RP-347	2015105	Treatment of Periprosthetic Distal Femur Fractures: A Retrospective Review of Outcomes	Cullinan, Claude	18-Mar-2015	DataCollection/Analysis
RP-358	2016130	Hearing Our Voices: An Indigenous Women's Reproductive Health Curriculum	Jumah, Naana	9-Jan-2017	Qualitative (Focus Groups/Interviews/Surveys)
RP-369	2015201	NCIC BR.31 - A Phase III Prospective Double Blind Placebo Controlled Randomized Study of Adjuvant MEDI4736 in Completely Resected Non-Small Cell Lung Cancer	Faghih, Amir	3-Mar-2015	Randomized Controlled Trial
RP-370	2004273	RTOG 0521 - A PHASE III PROTOCOL OF ANDROGEN SUPPRESSION (AS) AND 3DCRT/IMRT VS AS AND 3DCRT/IMRT FOLLOWED BY CHEMOTHERAPY WITH DOCETAXEL AND PREDNISONE FOR LOCALIZED, HIGH-RISK PROSTATE CANCER	Hagerty, Marlon	YES	Randomized Controlled Trial
RP-384	2015138	DOC-Utility: Simple Screening of Depression, Obstructive sleep apnea and Cognitive impairment to Identify Stroke Clinic Patients at Risk of Adverse Outcomes	Hassan, Ayman	25-Jan-2016	Program Development Process Improvement
RP-385	2017102	Standardization of Processes with the Regional Critical Care Response Program: Enhancing Care for Critically Ill Patients in Northwestern Ontario	Scott, Michael	3-Apr-2017	Observational Study
RP-389	2015152	RAPS - Rivaroxaban in Antiphospholipid antibody Syndrome (RAPS) Pilot Study	Mozzon, Lise	13-Jun-2016	Clinical Trial
RP-391	2016131	Association between the Presence of Loculation and the Concentration of LDH and Total Protein in Exudative Pleural Effusions Fluid	Biman, Birubi	7-Dec-2016	DataCollection/Analysis
RP-395	2015149	Canadian Orthopedic Foot and Ankle Society Randomized Clinical Study of Surgical Treatment of Ankle Arthritis Outcome Study	Le Francois, Tina	19-Apr-2016	DataCollection/Analysis
RP-397	2015151	Comparison of Outcomes and Access to Care for Heart Failure (COACH) Trial	MacDougall, Andrea	21-Sep-2018	Stepped-Wedge Cluster Randomized Controlled Trial
RP-403	2015157	Electrophysiological studies of ulnar neuropathy at the elbow: correlation with nerve ultrasound, and clinical severity	Elsherif, Hanan	23-Jun-2016	DataCollection/Analysis
RP-409	2015148	VANCOUVER B1 - Isolated locked compression plating versus cable plating and strut allograft with cerclage wiring for Vancouver B1 periprosthetic femoral fractures: A Randomized Controlled Trial	Cullinan, Claude	3-May-2016	Randomized Controlled Trial
RP-412	2015147	Expanding urgent oncofertility services for reproductive aged women at cancer centres remote from a tertiary level ART centre by use of telehealth and an on-site nurse navigator.	Laferriere, Nicole	19-Jan-2016	Program Development Process Improvement
RP-413	2016202	PR 17 - Randomized phase 3 trial of enzalutamide in first line androgen deprivation therapy for metastic prostate cancer: ENZAMET	Sicheri, Dolores	12-Feb-2016	Randomized Controlled Trial
RP-425	2016132	Group cognitive behavior therapy for psychosis: A controlled effectiveness trial	McMahan, Mandy	5-Dec-2016	DataCollection/Analysis
RP-434	2016113	dal-GENE - A phase III, double-blind, randomized placebo-controlled study to evaluate the effects of dalcetrib on cardiovascular (CV) risk in a genetically defined population with a recent Acute Coronary Syndrome (ACS): The dal-Gene trial	Nigro, Frank	12-Sep-2016	Randomized Controlled Trial
RP-441	2016205	PETMUSE - Impact of Positron Emission Tomography (PET) Imaging in Muscle-invasive Urothelial Carcinoma of the Bladder Staging (PET MUSE)	Sicheri, Dolores	10-Jun-2016	Clinical Trial
RP-445	2016117	Tripolar revision technique for failed Charnley low friction arthroplasty	Cullinan, Claude	18-Jul-2016	DataCollection/Analysis
RP-446	2016204	MEC-5 - A Phase III Randomized Trial Comparing High Dose Interferon to MK-3475 (Pembrolizumab) in Patients with High Risk Resected Melanoma	Ibrahim, Mohammed	27-Apr-2016	Randomized Controlled Trial
RP-451	2016120	Early Psychological and Other Factors associated with Excessive Gestational Weight Gain: a prospective cohort study ("Baby & Me" Study)	Jumah, Naana	9-Dec-2016	Prospective Cohort Study

RP-453	2016125	MY TEMP - Major cardiovascular and other patient-important outcomes with personalized dialYsate TEMPerature: A registry-based cluster randomized controlled trial	Watson, Paul	30-Mar-2017	Cluster Randomized Controlled Trial
RP-459	2017505	Osteomyelitis as a novel clinical target for magnetic resonance guided focused ultrasound	Peeva, Valentina	17-Oct-2017	Retrospective Chart Review
RP-460	2017401	C-SPINE - A Pragmatic Strategy Empowering Paramedics to Assess Low-Risk Trauma Patients with the Canadian C-Spine Rule and Selectively Transport them Without Immobilization	Affleck, Andrew	15-May-2017	Stepped Wedge Cluster Randomized Clinical Trial
RP-461	2016401	INVESTED - INfluenza Vaccine to Effectively Stop Cardio Thoracic Events and Decompensated heart failure	MacDougall, Andrea	3-Nov-2016	Clinical Trial
RP-463	2017106	Correlation of Pneumonia Severity Index (PSI) on the length of stay in patients with Community Acquired Pneumonia in TBRHSC	Peeva, Valentina	3-May-2017	Retrospective Chart Review
RP-465	2016134	TAILOR-PCI - Tailored Antiplatelet Initiation to Lessen Outcomes Due to Decreased Clopidogrel Response after Percutaneous Coronary Intervention	MacDougall, Andrea	29-Mar-2017	Clinical Trial
RP-466	2016207	PETABC - Impact of 18F-FDG PET-CT versus Conventional Staging in the Management of Patients Presenting with Clinical Stage III Breast Cancer	Chan, Adrien	30-Nov-2016	Clinical Trial
RP-470	2017402	VICTORIA - A Randomized Parallel-Group, Placebo-Controlled, Double-Blind, Event-Driven, Multi- Center Pivotal Phase III Clinical Outcome Trial of Efficacy and Safety of the Oral sGC Stimulator Vericiguat in Subjects With Heart Failure With Reduced Ejection Fraction (HFrEF) - VerICiguaT Global Study in Subjects With Heart Failure With Reduced Ejection Fraction	Nigro, Frank	20-Jun-2017	Randomized Controlled Trial
RP-471	2017108	RUBY - Reducing the bUrden of Breast cancer in Young women	Holmes, Matthew	31-Jul-2017	Prospective Cohort Study
RP-473	2016137	Understanding Barriers to Postmastectomy Breast Reconstruction in Ontario: Closing the Gap	Azad, Sanjay	30-Jan-2018	Qualitative (Focus Groups/Interviews/Surveys)
RP-479	2016141	Cancer Care Access in Northwestern Ontario	Laferriere, Nicole	19-May-2017	Retrospective Chart Review
RP-481	2017110	Medial migration of the helical blade after use of the Trochanteric Fixation Nail (TFN): a case series analysis	Le Francois, Tina	13-Apr-2017	Retrospective Chart Review
RP-482	2017109	Thunder Limb Protocol: Analysis of the implementation of a clinical pathway for adult patients presenting to the emergency department with an erythematous, painful lower extremity	Garnett, Meghan	9-Jun-2017	Retrospective Chart Review
RP-483	2017510	Using statistical and spatial analysis techniques to investigate the mortality of patients being transported by emergency medical services in Northwestern Ontario	Affleck, Andrew	9-Jan-2018	Retrospective Chart Review
RP-493	2018508	Is there any benefit of interventional radiologist performing a guided biopsy?	Rozenberg, Radu	14-May-2018	Retrospective Chart Review
RP-497	2017114	REaCT EF - An Integrated Consent Model Study to Compare Two Standard of Care schedules for monitoring cardiac function in patients receiving Trastuzumab for early stage breast cancer	Aseyev, Olexiy	9-Jan-2018	Randomized Controlled Trial
RP-498	2018401	REaCT BTA - A pragmatic randomised, multicentre trial comparing 4-weekly versus 12-weekly administration of bone-targeted agents in patients with bone metastases from either castration-resistant prostate cancer or breast cancer	Aseyev, Olexiy	2-Mar-2018	Randomized Controlled Trial
RP-502	2017514	Validation of a Self-Administered Outcome Measure for Young Patients With Hip Trauma (COTS-H)	Droll, Kurt	6-Feb-2019	Prospective Cohort Study
RP-505	2018513	Necrotizing Soft Tissue Infections in Northwestern Ontario	Harris, William	1-Aug-2018	Retrospective Chart Review
RP-515	2017509	How do social workers make sense of and respond to the organisational complexities of social enterprises? Perspectives from Ontario's counselling services	Voros, Peter	11-Jan-2018	Qualitative (Focus Groups/Interviews/Surveys)
RP-517	2017512	Evaluating the Appropriateness of Inpatient MRI Orders	Kisselgoff, David	23-Apr-2018	Retrospective Chart Review
RP-518	LU	Using geomapping technology to inform timely access to stroke care for regional patients of Northwestern Ontario	Hassan, Ayman	1-Oct-2019	DataCollection/Analysis

RP-519	2017513	The impact of a physician's clinical experience on the accuracy of the gestalt diagnosis in the emergency department	Sarrazin, Fred	21-Mar-2018	Prospective Cohort Study
RP-521	2017516	The Role of Holmium Laser/Top Down Technique in Management of Enlarged Prostate	Elmansy, Hazem	15-Dec-2017	Retrospective Chart Review
RP-525	2017519	The effects of obesity on functional outcomes after total knee arthroplasty	Cullinan, Claude	22-Jan-2018	Prospective Cohort Study
RP-536	2019507	Evaluating a simple, Doppler-based, semi-quantitative index for grading mitral regurgitationin daily clinical practice	Rohani, Atoosheh	2-Jan-2020	Retrospective Chart Review
RP-537	2019518	The operative parameters and postoperative outcomes of the Top-Down Holmium Laser Enucleation of the Prostate (HoLEP) technique vs the Traditional HoLEP for treatment of benign prostatic hyperplasia (BPH): A randomized prospective comparative study	Elmansy, Hazem	15-Oct-2019	Randomized Prospective Comparative Study
RP-544	LU	Investigating the services provided by family physicians across Ontario to improve health human resource planning	Savage, David	29-Oct-2018	Retrospective Chart Review
RP-549	2018509	Wolf Vs. Storz prostate morcellation devices: retrospective multi-institutional comparative study	Elmansy, Hazem	16-Oct-2018	Retrospective Chart Review
RP-551	2018510	ADJUST-DVT - Age-adjusted D-dimer cut-off levels to rule out deep vein thrombosis: A prospective outcome study	Garnett, Meghan	2-Jan-2019	Prospective Cohort Study
RP-554	2018402	MCRN 004 - A Randomized Phase II, Open Label, Study of Daratumumab, Weekly Low-Dose Oral Dexamethasone And Cyclophosphamide With or Without Pomalidomide In Patients With Relapsed And Refractory Multiple Myeloma	Laferriere, Nicole	11-Jul-2018	Randomized Controlled Trial
RP-561	2018514	A Randomized Clinical Trial Comparing Open Reduction and Internal Fixation with Non-operative Treatment of Isolated Ulnar Shaft Fractures	Marion, Travis	15-Nov-2018	Randomized Controlled Trial
RP-563	2018103	DEVOTE - Post-Marketing Observational Study (PMOS) to Describe the Management and the Use of Healthcare Resources in Patients with Chronic Lymphocytic Leukemia (CLL) Initiating Venetoclax in Routine Clinical Practice	Davies, Gwynivere	1-Aug-2018	Observational Study
RP-567	2018403	REaCT-G2 - A Multi Centre Study to Compare Administration Schedules of G-CSF (filgrastim) for Primary Prophylaxis of Chemotherapy-Induced Febrile Neutropenia in Early Stage Breast Cancer	Aseyev, Olexiy	30-Jul-2018	Clinical Trial
RP-568	2018516	The Maternal Addictions Continuum of Care Project	Jumah, Naana	19-May-2019	Qualitative (Focus Groups/Interviews/Surveys) and retrospective chart review
RP-570	2018525	Ontario Transitional Pain and Opioid Safety Program: Improving Pain and Opioid Practices for Complex Chronic Pain Patients Following Surgery	Toman, Melanie	25-Mar-2019	Randomized Controlled Trial
RP-571	LU	CanSOLVE CKD: Improving Indigenous Patient Knowledge about Treatment Options for Failing Kidneys	Watson, Paul	15-Nov-2019	Randomized Controlled Trial
RP-575	2018519	The DECIPHER Study: Determinants of Function and Clinically Important Outcomes in Proximal Humerus Fractures in the Elder Population: A National Cohort	Marion, Travis	20-Sep-2018	Prospective Cohort Study
RP-576	2018523	Long Term Outcomes in a Remote Northern Bariatric Centre of Excellence Follow up study	Smith, Andrew	25-Oct-2018	Retrospective Chart Review
RP-578	2018521	FIRM Trial – A Randomized Clinical Trial Evaluating Fixation In-situ vs Removal for Midfoot Lisfranc Injuries	Le Francois, Tina	21-Jan-2019	Randomized Controlled Trial
RP-580	2018106	THOR - A Phase 3 Study of Erdafitinib Compared With Vinflunine or Docetaxel or Pembrolizumab in Subjects with Advanced Urothelial Cancer and Selected FGFR Gene Aberrations	Faghih, Amir	5-Jun-2019	Clinical Trial
RP-582	2019510	Holmium Laser ExpeedaTM Vaporesection versus GreenLight XPS Vaporization of the Prostate for Benign Prostatic Obstruction: A Randomized Controlled Clinical Study	Elmansy, Hazem	31-Jul-2019	Randomized Controlled Trial
RP-584	2019505	Effect of nearness to cancer centre on prostate cancer outcomes and patients choice for the type of intervention	Shahrour, Walid	29-Aug-2019	Retrospective Chart Review
RP-590	2018527	Holmium Laser Vaporesection of the Prostate for Benign Prostatic Obstruction: Case series analysis	Elmansy, Hazem	28-Feb-2019	Retrospective Chart Review

RP-597	CTO	Canadian Resuscitation Outcomes Consortium - Ontario Prehospital Advanced Life Support Study (OPALS) Site	Affleck, Andrew	29-Nov-2019	Unknown
RP-600	CTO	PREP - PET Registry for Recurrent Prostate Cancer	Hagerty, Marlon	29-Jul-2019	Clinical Trial
RP-603	2019501	TBRHSC ED Super-Users: Defining the Characteristics of the Super-Users of Emergency Department and their risk of ICU admission, surgery, and death	VanderBurgh, Dave	26-Mar-2019	Retrospective Chart Review
RP-607	2019504	The effects of obesity on functional outcomes after total hip arthroplasty	Cullinan, Claude	14-Jun-2019	Prospective Cohort Study
RP-608	CTO	Cognitive Behavioural Therapy to Optimize Post-Operative Recovery (COPE): A Randomized Controlled Trial	Puskas, David	17-Jun-2019	Randomized Controlled Trial
RP-611	LU	Observation of a medical inpatient unit leveraging a Champion Team to achieve a measurable and sustainable improvement in preventing the spread of Vancomycin Resistant Enterococci (VRE) through a change in healthcare provider practice	Gamble, David	19-Nov-2019	Program Development Process Improvement
RP-613	2019509	Diagnosis and management of UTIs in infants and young children at TBRHSC between 2015-2018: a retrospective chart review	Dineen, Sarah	22-Oct-2019	Retrospective Chart Review
RP-614	2019503	Spectrum of Diabetic Ketoacidosis in Thunder Bay Regional Health Sciences Centre (TBRHSC): A Retrospective Chart Review	Malik, Saleem	20-Jun-2019	Retrospective Chart Review
RP-623	2019511	Evaluation of clinical and cardiac outcomes in patients referred to multidisciplinary Cardio-Oncology Clinic: Observational Retrospective Study	Aseyev, Olexiy	21-Aug-2019	Observational Retrospective Study
RP-640	CTO	AGENT - A randomized, multicenter, parallel-group, Phase III study to compare the efficacy of arfolitixorin versus leucovorin in combination with 5-fluorouracil, oxaplatin, and bevacizumab in patients with advanced colorectal cancer	Faghih, Amir	15-Nov-2019	Clinical Trial
RP-656	CTO	SAFE HD - Strategies for the management of Atrial Fibrillation inpatients receiving HemoDialysis	Acedillo, Rey	9-Jan-2020	Clinical Trial

TBRHSC Staff

RP #	REB #	Project Identifier	Local Principal Investigator (PI)	Date Open	Type of Study
RP-001	2013102	Smoking Treatment for Ontario Patients (STOP) Program: STOP on the Road	Gillis, Kelly Jo	YES	Treatment feasibility
RP-167	2010113	Oncology exercise program - WE-Can	Gillis, Kelly Jo	YES	Program Development Process Improvement
RP-426	2015156	Effect of Diet on Body Composition in Patients undergoing Renal Dialysis	Freill, Holly	19-Apr-2016	DataCollection/Analysis
RP-427	2016103	Improving access to therapeutically restricted foods for those living with end-stage renal disease on remote First Nations in Northwestern Ontario	Freill, Holly	18-May-2016	DataCollection/Analysis
RP-468	2016139	Promoting Optimal Physical Exercise for Life (PROPEL) – Aerobic exercise and self-management early after stroke to increase daily physical activity: a randomized trial	French, Esme	28-Mar-2017	Randomized Controlled Trial
RP-510	2017115	Methicillin-Resistant Staphylococcus aureus Osteomyelitis Treatment Outcomes: a Retrospective Chart Review.	Khabad, Marianna	12-Oct-2017	Retrospective Chart Review
RP-524	LU	Understanding wait times from the cancer patient's perspective	Docherty, Andrea	12-Sep-2018	Qualitative (Focus Groups/Interviews/Surveys)
RP-532	2018102	More-2-Eat Phase 2	Bernosky, Kirsten	22-Apr-2019	Program Development Process Improvement
RP-565	LU	Lived Experiences of Nurses in the Emergency Department Caring for Patients with Mental Health Concerns	MacLean, Sandra	19-Jul-2019	Qualitative (Focus Groups/Interviews/Surveys)
RP-588	LU	Testing a Model of Nurse Job Satisfaction: An International Effort to Address the Quadruple Aim	Perry, Dawna Maria	28-May-2019	Qualitative (Focus Groups/Interviews/Surveys)

RP-596	2018105	Evaluation of the Clinical Value of Extended Field of View vs. Standard Field of View 18F fluoro-2-deoxy-glucose PET/CT Imaging in Melanoma Patients: A Multi-Center Study	O'Connor, Janet	1-Oct-2019	Retrospective Chart Review

TBRHRI Affiliations					
RP #	REB #	Project Identifier	Local Principal Investigator (PI)	Date Open	Type of Study
RP-126	2012115	Investigation of the Neural Mechanisms Underlying Changes in Motor Learning Following Stroke	Lawrence-Dewar, Jane	YES	Basic Research
RP-293	2014117	Functional magnetic resonance imaging of the cervical spinal cord during motor learning tasks	Lawrence-Dewar, Jane	21-Aug-2014	Basic Research
RP-307	2015144	WESTON BRAIN - Hyperpolarized Xenon-129 Functional Magnetic Resonance Imaging of Healthy Volunteers and Participants with Alzheimer's Disease	Albert, Mitchell	2-Jun-2016	Clinical Trial
RP-312	2015132	Developing Optimal Parameters for Hyperpolarized Noble Gas (3He and 129Xe) and Inert Fluorinated Gas Magnetic Resonance Imaging of Lung Disorders	Albert, Mitchell	20-Nov-2019	Clinical Trial
RP-402	2015142	Travelling human subjects MRI study	Lawrence-Dewar, Jane	12-Sep-2016	DataCollection/Analysis
RP-421	2016107	Growth and propagation of cells isolated from cervical lesion biopsies	Zehbe, Ingeborg	9-Aug-2016	Basic Research
RP-429	2016123	Hyperpolarized Noble Gas MRI Detection of Radiation Induced Lung Injury	Albert, Mitchell	20-Nov-2019	Clinical Trial

External Agency					
RP #	**REB #**	**Project Identifier**	**Local Principal Investigator (PI)**	**Date Open**	**Type of Study**
RP-026	2013121	Managed Alcohol Programs: Implementation and Effectiveness (MAP)	Pauly, Bernie	18-Sep-2013	Program Development Process Improvement
RP-141	2003101	Creutzfeldt-Jakob Disease surveillance system in Canada	Coulthart, Michael B	YES	DataCollection/Analysis
RP-155	2006124	Ductal carcinoma in situ: a population based analysis	Rakovitch, Eileen	YES	Retrospective Chart Review
RP-157	2007129	Lobular carcino in situ: a population based analysis	Rakovitch, Eileen	YES	Retrospective Chart Review
RP-159	2008112	Research Use of the Ontario Osteoporosis Strategy's Fracture Screening and Prevention Program Routinely Collected Data	Sale, Joanna	YES	Program Development Process Improvement
RP-258	2013152	Early Phase Interventions for Acute Ischemic Heart Failure	Lee, Douglas	29-Jun-2015	Retrospective Chart Review
RP-449	2016124	Experiences of Aboriginal Dialysis Patients in Northwestern Ontario	Tobe, Sheldon	12-Sep-2016	DataCollection/Analysis
RP-542	2018101	Adapting hospital-to-home transitional care interventions to the Ontario rural healthcare context	Fox, Mary	7-Mar-2019	Qualitative (Focus Groups/Interviews/Surveys)
RP-566	2018515	Substance-involved in-patients in medical and rehabilitation settings	Kiepek, Niki	10-Jan-2019	Retrospective Chart Review
RP-641	CTO	Acute Care for Elders Strategy – Sustainability and Sustainment Study (ACES-SSS)	Sinha, Samir	19-Nov-2019	Qualitative (Focus Groups/Interviews/Surveys)

Lakehead/NOSM					
RP #	**REB #**	**Project Identifier**	**Local Principal Investigator (PI)**	**Date Open**	**Type of Study**
RP-096	2012105	Using Simulation Modelling to Evaluate Strategies for Reducing the Length of Stay of CTAS 3 Patients in the Emergency Department	Weaver, Bruce	YES	Program Development Process Improvement
RP-182	2011118	Continuing surveillance of invasive haemophilus influenzae disease in northwestern ontario	Ulanova, Marina	YES	Retrospective Chart Review
RP-184	2011124	Current epidemiology of invasive pneumococcal and meningococcal disease in NOW	Ulanova, Marina	YES	DataCollection/Analysis

RP-232	2014124	PREVNAR - The effect of previous pneumococcal immunization on the immune response of adult patients with severe chronic kidney disease to Prevnar 13	Ulanova, Marina	21-Apr-2015	Clinical Trial
RP-260	2013156	Women who are breastfeeding: Increasing self-efficacy to improve outcomes (WISE) trial	McQueen, Karen	9-Jun-2014	Randomized Controlled Trial
RP-350	2015127	IMPACT OF A HAND TRAINING PROGRAMME IN CHRONIC STROKE SURVIVORS: SENSORI-MOTOR, FUNCTION, AND QUALITY OF LIFE	Johnson, Vineet	17-May-2016	Treatment feasibility
RP-464	2017104	Phase I: A chart audit to invesitgate chronic pain high frequency emergency department users, their health demographics for chronic pain and practice patterns of opioid provision	MacLeod, Bryan	3-Apr-2017	Retrospective Chart Review
RP-506	2017511	A Multi-modal Evaluation of a Physical Intervention Approach to Treating Persistent Post-concussive Symptoms	Wark, Sheryl	15-Dec-2017	Randomized Controlled Trial
RP-539	2018504	Inpatient Child and Adolescent Psychiatric Care: A retrospective descriptive cohort analysis of the children and adolescents admitted with suicidality and the prevalence of substance abuse and adverse childhood experiences	Cheng, Chiachen	23-May-2018	Retrospective Chart Review
RP-548	2018507	Embedding patient perspectives within compassionate physician leadership development	Goertzen, James	21-Mar-2018	Qualitative (Focus Groups/Interviews/Surveys)
RP-556	2018511	Exploring Multiple Pedagogies to Promote Culturally Safe Care in An Academic Health Sciences Center: A Preliminary Study	Cameron, Erin	16-Jul-2018	Qualitative (Focus Groups/Interviews/Surveys)
RP-579	LU	Bauerfeind GenuTrain Knee Sleeve for Improved Proprioception Post ACL Reconstruction	Dubois, Sacha	14-Jan-2019	Prospective Cohort Study
RP-610	LU	Supporting complex cancer patients with multimorbidity navigate efficiently between health care and cancer care systems	Kone-Pefoyo, Anna	26-Mar-2019	Qualitative (Focus Groups)

BRIEFING NOTE

Thunder Bay Regional Health Sciences Centre

TOPIC	Employee and Professional Staff Experience Survey (EPSES) Corporate Action Planning
PREPARED BY	Amy Carr, Director, Human Resources
APPROVED BY	Amanda Bjorn, EVP People, Culture & Strategy
CO-SPONSER (if required)	
PREPARED FOR: President &CEO☒ Board of Directors ☒ Other: Resource Planning Committee – January 21st, 2020	
DATE PREPARED	January 10, 2020

Our Hospital is committed to ensuring decisions and practices are ethically responsible and align with our Vision, Mission, and Values. Leaders should consider decisions from an ethics perspective including their implications on patients, staff and the community.

The reader considers the following questions to ensure each decision are ethically responsible by indicating with a √:

1. ☐ We put '**Patients First'** by responding respectfully to needs, values, & expectations of our patients, families, and communities?
2. ☐ We demonstrate '**Accountability**' by advancing a quality patient experience that is socially and fiscally responsible?
3. ☐ We demonstrate '**Respect**' by honouring the uniqueness of each individual and his or her culture?
4. ☐ Does the course of action demonstrate '**Excellence**' by fostering an environment of innovation and learning to advance a quality patient experience?

For more detailed questions to use on difficult decisions, please refer to the Hospital's Framework for Ethical Decision Making on the iNtranet under Quality and Risk Management>Ethics.

PURPOSE/ISSUE(S)

Provide an update on the action plans for the 2018 EPSES results.

BACKGROUND

Thunder Bay Regional Health Sciences Centre (the Hospital) conducted the most recent Employee and Professional Staff Experience Survey (EPSES) in 2018. This survey is delivered every 3 years; this was the 6th cycle of experience surveys.

EPSES Timeline:

- September- October 2018: survey (complete)
- November 2018: results received (complete)
- November – December 2018: Presentation to SLC and MAC (complete)
- December 2018: Approval of communication & action planning period. Communication to staff. Distribution of results to Leaders (complete)
- January 2019 – March 2019: Engage on results and development of department level and corporate action plans (complete)
- March 2019 - Ongoing -Implementation of department and corporate action plans (in progress)
- September 2021: next EPSES survey (Worklife Pulse in 2020)

ANALYSIS/CURRENT STATUS

TOPIC	Employee and Professional Staff Experience Survey (EPSES) Corporate Action Planning
PREPARED BY	Amy Carr, Director, Human Resources
APPROVED BY	Amanda Bjorn, EVP People, Culture & Strategy
CO-SPONSER (if required)	
PREPARED FOR: President &CEO☒ Board of Directors ☒ Other: Resource Planning Committee – January 21st, 2020	

- Under guidance from their representative Director, each Manager was tasked with engaging with staff to create action plans to address deficiencies, and/or capitalize on areas of strength for future growth, utilizing the Me to We to All framework
- Action plans span the next 2 years, in preparation of our next survey period. Strategies/actions inclusive of are short term, mid-term and long term goals
- Detailed action plans are tracked and monitored in the Program Operational Plans in SmartSheet.
- Over 200 department action plans were submitted. As of December 2019:
    - o 50 initiatives have been completed
    - o 158 plans are in progress
    - o 47 more are planned to begin at a later date.
- The attached action plan progress report has been designed to share information and celebrate the progress

RECOMMENDATION

- Information update only

NEXT STEPS

- Post progress report corporately via Intranet and department quick frames
- Continue to implement department and corporate action plans and update SmartSheet
- Update progress report

STAKEHOLDER REACTION

- Staff will be pleased to see that their participation and feedback has resulted in actions to continuously improve our work environment

COMMUNICATIONS

- See next steps above

FINANCIAL IMPACTS

- Any new costs associated with action plans will require separate approval as applicable. Communications are developed in-house

APPENDIX SECTION

Poster ESPSES Progress Report January 2020

Employee & Professional Staff Engagement Survey

Progress Update January 2020

Thunder Bay Regional Health Sciences Centre

Survey response

7 out of 10 employees completed the survey

Highest Scores / Lowest Scores

HIGH
- Job Clarity
- Count on Colleagues

LOW
- Enough Staff
- Work life balance

Department Action Plans

200+ Activities for improvement submitted:

✓ 50 Completed | 158 In progress | 47 Prior to start date

Completed

- Strength based team building
- Recognition at staff meetings
- Workload distribution review
- New hire orientation tools
- Respect training
- Thank You board

Corporate Action Plans - What matters to you

5 Themes Submitted

- Respect
- Psychological Safety
- Attendance
- Recognition
- Professional Development

Programs to support you

New
- Healthy Eating
- Exercise Classes
- Coaching
- Mental Health First Aid
- Part Time Group Benefits (New options coming soon)

Existing
- Mindfulness
- EFAP
- Employee Benefits
- Respect Project
- Tuition Reimbursement

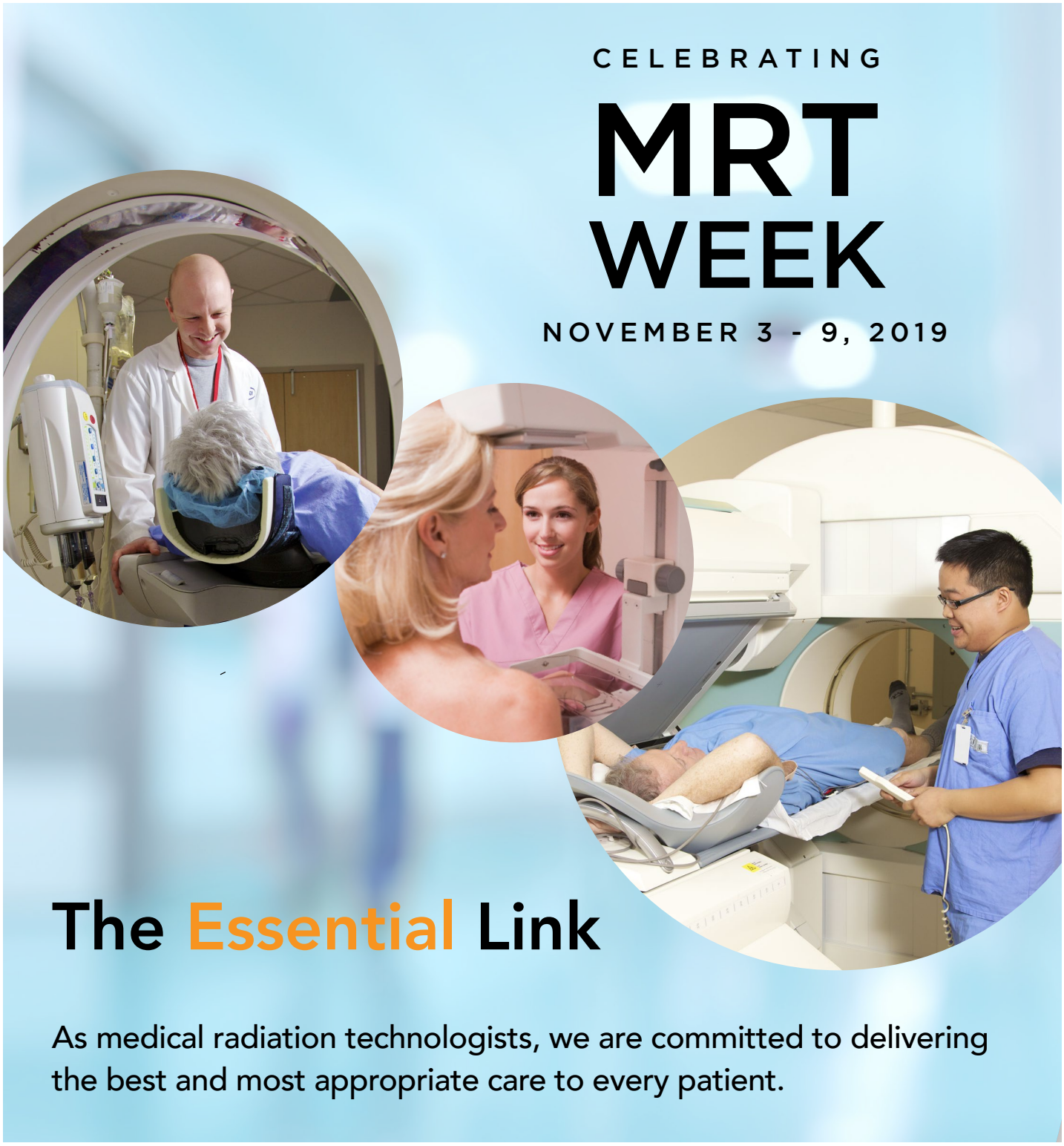
Feedback

One change you would recommend about your job	What are we doing
Senior Leadership presence	Senior Leadership Walk-abouts with action items
Appreciation	I admire program
Time off / Flexible scheduling	Launch of integrated workforce planning initiative
More staff	
Wages	

CAMRT ACTRM

CAMRT NEWS

Volume 37; Issue 4



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Fax: (613) 234-1097
www.camrt.ca

CAMRT ACTRM

Powered by slack

5 TOP REASONS TO JOIN

CAMRT Communities of Practice (COPs)

To expand your practice network, simply sign up at : cop@camrt.ca

CAMRT COPs are secure for privacy/confidentiality.

Real time advice from MRTs across Canada

Do you have a practice related question you would like to troubleshoot? Tap into your CAMRT network in real time, get advice and a different perspective.

Join diverse conversations across a range of topics

The Slack platform organizes its topics, which are called "channels". You can participate in as many (or as few!) channels as you would like.

Be recognized by your peers

Join in the conversation and join weekly chats led by experts in the field. Gain recognition as a leader in your field.

Expand your professional network

MRTs can use the COPs to convene discussions and create a network online.

Help others. Share your expertise and experiences

"I was curious about others' thoughts on education programs and I received input from a number of MRTs. The COP is a good platform to get suggestions about career growth".

https://www.youtube.com/watch?v=4px_eZtDn1I

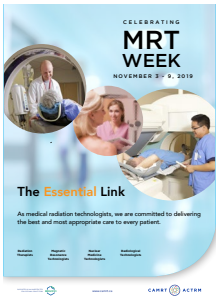
The CAMRT News is the official member newsletter of the Canadian Association of Medical Radiation Technologists (CAMRT). It reaches approximately 12,000 members within the field of medical radiation sciences.

Advertising: For information about advertising rates in the CAMRT News, please contact us at 1-800-463-9729 or by email at pmondesir@camrt.ca. See below for issue deadlines.

Submissions: Do you have a story idea or a topic you would like us to write about? We welcome your feedback and suggestions.
Please email us at pmondesir@camrt.ca.

Issue	Submission Deadline	Mailed Out
Number 1	December 5	End of January
Number 2	March 5	End of April
Number 3	June 15	End of July
Number 4	September 7	End of October

In this **ISSUE :**



On the cover...

The poster for 2019 MRT Week, November 3-9

President's Message

Another year is coming to a close, and it's been a busy one at CAMRT. November has been a particularly busy month as we celebrated MRT Week, held our annual Board of Directors meetings in Ottawa and completed the CAMRT CEO hiring process.

MRT Week was amazing. It was fabulous once again to see and hear about how MRTs are building on this week year after year. Reports from the CAMRT office are that this year's orders once again surpassed all previous years—I am told that nearly 100 new sites are taking place in MRT Week activities compared to just a few years ago. This is fantastic and does much to ensure the awareness work we are doing for the profession continues to reach new eyes and ears. It's also wonderful to see the sheer variety of approaches to MRT Week. In my home province of PEI, we take the opportunity to gather together and meet amongst ourselves. It's really a great opportunity for those of us in different disciplines to find the time to come together and appreciate the contributions of each of the disciplines to quality patient care. In other provinces, there were video campaigns, public announcements and outreach, and hundreds of in-facility awareness events. Part of the CAMRT strategic plan for the future is dedicated to increasing and amplifying this awareness activity; and starting next year we will be working on tools that you can all use to share over this week, and at other times throughout the year.

We are our own greatest advocates, and CAMRT is working hard to equip all of you for that important role.

Throughout the Fall, myself and the other members of the Board Executive were also very busy finding CAMRT's new chief executive. We were very pleased after this rigorous process to announce Irving Gold as our next CEO. Irving comes to CAMRT with two decades of experience in research environments, government relations and advocacy, and association leadership. His career has been defined by an unrelenting commitment to education in healthcare and the health of Canadians. From 2015 to 2019, Irving led Resident Doctors of Canada, representing over 10,000 resident doctors across the country. Prior to this, he held Vice President roles at two healthcare organizations, the Canadian Resident Matching Service (CaRMS) and the Association of Faculties of Medicine of Canada. Irving has also served on several Boards of Directors as both President and in other executive roles. He holds three post-secondary degrees: a Bachelor's in Sociology from McGill University, a Master's in Sociology from the University of Ottawa, and a Master's in Applied Criminology, also from the University of Ottawa. He also holds the status of PhD (ABD) in Sociology from McMaster University.

I have had the pleasure of working with Irving for a few weeks now, and on a number of occasions in person, and I am certain he will lead our organization in positive new directions. His diverse experience, extensive professional network, and palpable enthusiasm will serve us well into the future.

Both myself and the CAMRT Board want to express our sincere thanks to the CAMRT staff, who kept the organization ticking in the interim between CEOs. We are lucky to have such a capable and dedicated team working on behalf of the profession.

Marilyne MacPherson

A Toolkit For Building
Positive Change in Mental Health

With its partners, the Canadian Society for Medical Laboratory Science (CSMLS) and Sonography Canada (SC), CAMRT undertook a national study of mental health and wellness among the professionals represented by these groups. The survey helped our organizations to gauge the extent of mental health issues among our members and provide insight and opportunities for future initiatives.

In total, 4,366 professionals responded from all the groups. 1,903 of the 11,000+ MRTs contacted responded, making up the largest professional group. Response rates for MRTs were also substantially higher than for the other two professional groups, suggesting an interest in this topic among Canadian MRTs. In general, the profile of the respondent group closely resembled the profile of the general membership being sampled, and so the findings of the survey are representative of CAMRT membership.

You can view the summary of these results published in the last newsletter, by clicking here.

Part of the CAMRT commitment to mental health and wellness is to help provide its members—whether dealing with workplace stress, psychological distress or any mental health issue—some form of support. As a beginning, the CAMRT has an agreement with its partner in this survey, the CSMLS, to direct MRTs to a series of well-researched and diverse tools on the CSMLS website.

Here we highlight three trends identified by the survey results, and corresponding resources in the CSMLS toolkit that readers may find helpful.

https://mentalhealth.csmls.org/

1 Gauge Your Mental Health

https://mentalhealth.csmls.org/i-am-an-individual/

Benefit from an understanding of what is "Mental Wellbeing", "Mental Health", and "Mental Illness" by reading the definitions found in this section of the toolkit. In addition, at the link above, you will find quizzes based on Canadian Mental Health Association- indicated characteristics to help you gauge your: ability to enjoy life, resilience, ability to balance, self-actualization, and flexibility. By evaluating where we stand with these indicators, we can determine if they require improvement to build our mental health buffer and effect positive change.

2 Workplace Stress and Emotional Exhaustion

https://mentalhealth.csmls.org/i-am-an-employee/

Across all of survey results, a common story began to emerge. In general, MRTs that responded to the survey indicated higher than typical levels of emotional exhaustion and workplace stress, and substantial instances of personnel shortages to accomplish the work at hand. Emotional exhaustion was reported as high among MRTs, with more than 57% of MRTs in every discipline reporting moderate or high levels of emotional exhaustion.

A frequent source of workplace stress is interpersonal conflict, the results of which can be: lost productivity; poor relationships; mental health problems; workplace violence and bullying; absenteeism and/ or presenteeism; employee loss and turnover, to name a few. A good understanding of the conflict resolution process, as well as the resources and supports available to you through your workplace, can go a long way to alleviating some of the stress of situations when conflict does arise.

By visiting this section of the toolkit, you can learn about the general steps behind conflict resolution, understand your own conflict style, receive guidance on how to have difficult conversations, check out some of the myths associated with conflict resolution, see an example of an organizational conflict resolution process so you know what to expect if you elevate a conflict within your workplace to involve management, and so much more!

3 Effective Strategies for Organizations

https://mentalhealth.csmls.org/i-am-an-organization/

Did you know that mental health problems and illnesses account for more than $6 billion in lost productivity costs due to absenteeism and presenteeism? Or that on any given week, more than 500,000 Canadians will not go to work because of mental illness (The Mental Health Commission)?

There are steps that all organizations can take to help create an emotionally healthy and safe work environment, decrease illness and injury, and at the same time, increase productivity and decrease the costs associated with high employee turnover, burnout and presenteeism.

This section of the toolkit outlines strategies, policies and programs that organizations can use to put the mental health and psychological safety of its employees first. It challenges senior leadership to understand the barriers to a better work environment as well as to evaluate whether the organization is currently providing a mentally healthy and safe environment.

Newly APRT(T) Certified!

Submitted by: **Natalie Rozanec, RTT, Advanced Practice Registered Technologist, Radiation Therapy, APRT(T)**

As a radiation therapist, I have always felt that our profession has the ability to profoundly effect change. We see the results of this day-to-day as we work directly with our patients, and within the broader Canadian healthcare system, where we have established a reputation as early adopters, researchers and innovators. In collaboration with our radiation medicine colleagues, we have developed and implemented new technologies, improved and developed new models of care, and expanded the evidence-base driving our practice, all of which result in better care and better outcomes for patients.

APRT(T) Certification Process

I am proud and happy to have completed the APRT(T) certification through the CAMRT, which I feel will be an asset in continuing to contribute to the field of radiation therapy. As a profession, the APRT(T) certification allows us to demonstrate that we have met a national standard, akin to other advanced practice roles in the healthcare system and provides a platform to expand our practice to a new recognized level.

The certification process is meant to ensure that all APRT(T)s have the knowledge, skills and judgement required to safely and effectively work in advance practice roles within a defined patient population as defined by the APRT(T) Competency Profile.

This involves submission of a portfolio, case studies, and a final case-based oral exam within the candidate's area of specialty. While the certification process was challenging, it was rewarding to progress through each phase and reach the ultimate end goal. I would strongly encourage anyone who is thinking about pursuing a career in radiation therapy to also consider pursuing the APRT(T) certification. It has been an extremely humbling but rewarding path and has presented new opportunities for continued improvements in patient care and palliative radiotherapy.

Improving the Patient Experience

In my clinical work as an APRT(T), I see patients requiring urgent/emergent radiotherapy through the Rapid Response Clinic at the Stronach Regional Cancer Centre. I am also involved in research, leadership initiatives, teaching, and quality improvement. I have been working in this role since 2012, where we developed and launched the Rapid Response Clinic with the goal of expediting care for palliative patients. This has allowed patients to access care in two business days or less of referral and start treatment three to four days later.

When compared with patients seen through the standard oncology clinics, these patients can start treatment an average of four days earlier.

We have also developed and implemented several initiatives such as cone beam CT simulation, automated contouring tools, palliative VMAT spine treatment, automated discharge summaries, and community outreach initiatives, all to improve the palliative radiotherapy patient experience at Southlake. It has been extremely rewarding to see the results of this work over the last few years, and I look forward to taking on more of these projects in future.

Looking Ahead

With today's constantly changing healthcare landscape, the APRT(T) role is well positioned to improve efficiencies in our health care system while ensuring delivery of high-quality patient care. We are currently working and making an impact across the province in several different areas, and I am excited at the possibilities for the future as our profession continues to grow and expand.

I would like to take this opportunity to thank Dr. Woody Wells and Dr. Charles Cho, James Loudon, Elen Moyo, Nicole Harnett, Lilian Doerwald-Munoz, the Radiation Medicine Team at Southlake, and my family for their support, encouragement and mentorship over the last several months—I could not have done this without you and feel privileged and honoured to work with such a dedicated and inspiring team.

"When compared with patients seen through the standard oncology clinics, these patients can start treatment an average of four days earlier.

A Look at the Ottawa
Rad Tech Roadshow 2019

SEP
21
OTTAWA, ON

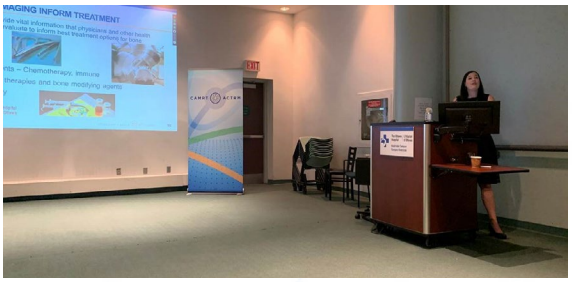
Rattle My Bones

This year's Radiological Technology Roadshow was themed *Rattle My Bones.* An education day pertaining to radiological technologists with presentations addressing pathology and treatment options from cross disciplinary perspectives included: *Contemporary approach to imaging of the adult hip - A surgeon's approach, Airbag for the brain: Facial trauma and brain injury, 3D Printing in Medicine* and much more.

For upcoming events, head to the CAMRT event listing page.

Airbag for the brain: Facial trauma and brain injury - Dr. Thomas Jenkyn

3D Printing in Medicine - Dr. Adnan Sheikh



Management of Bone Metastases: Complicated or Un-Complicated? - Kelly Linden

A Positive Experience Working with a Difficult Patient

Submitted by **Simone Smith**

I am at the end of my third year of Radiation Therapy studies as a student in the Laurentian University and Michener Institute of Education at UHN joint program, and I'm currently on a placement at the Thunder Bay Regional Health Sciences Centre's cancer care program. Through my transition from CT-simulation to working on a treatment unit, I've had the privilege of working with some patients every day during treatment. As part of an assessment for my clinical placement, I have been completing monthly reflections to initiate and internalize reflection of clinical practice. One such experience is recounted below, with the patient's name changed to maintain confidentiality.

A Distressed Patient

While placed in CT-simulation, an elderly patient named "John" with highly progressed dementia presented with a cancer in the head and neck region. John was quite confused and constantly asked questions such as, "Where am I?" and "Why am I here?" It was obvious he was unable to provide consent for the procedure and was thankfully accompanied by a substitute decision maker. To set him up for his CT scan, we had to mold the aquaplast mask to his head and face to ensure treatment accuracy and reproducibility. Unfortunately, while this was happening, he would not stop screaming while kicking his legs and thrashing his arms around him. During this appointment, I stayed to the side—I was only observing, and I did not want to get in the way of the therapists. I was also having a difficult time observing him in such a distressed state.

The Power of Music

Three weeks later, I transitioned onto the treatment unit where all of John's appointments were scheduled. Just prior to treating, the therapists turned the speaker inside the radiation bunker to a Frank Sinatra playlist. They explained that this helped calm John down. When I heard this, I was very interested—he struggled so much during CT-simulation—would it really make that much of a difference? As I was contemplating this, John and his daughter walked into the room. He was pushing his walker and stopped to dance! What a difference. He was no longer the agitated man I met before. We helped him onto the treatment couch and put the mask on. During this sequence of events, he shouted out a few times, but was quickly calmed down. The therapists would assure him that "everything is okay", tell him he is doing a great job, and explain what was happening one step at a time. I can only imagine the importance of having constant reminders about what is happening when you have progressed dementia.

The therapists and I were able to set him up quickly and left the room. However, we had to interrupt the treatment twice: he was dancing too much! The first time, we needed to ask him to relax his feet, which were moving to the beat of the music, and then to put his arms down so they were not in the treatment field. After we completed his treatment, he began to get off the bed towards his right side because he was sore and wanted to sit upright. This was unexpected because it is the opposite side of where we usually help patients down. I quickly moved the stool over to the other side to help him down and he asked me, "Am I causing trouble?" We then helped him to his walker, and he was out of the room with a smile on his face (and still dancing, of course).

A Learning Experience

This was a fantastic learning experience for me because it opened my eyes to what all medical radiation technologists are capable of doing to improve a patient's care through simple actions. The radiation therapists treating John went above and beyond to help make sure that his difficult situation could result in an overall positive experience. I learned a few lessons:

1. How to work with patients with dementia. It is important to ensure they feel acknowledged and to answer their questions, no matter how many times they may ask. I also learned about the value of compassion and empathy—when John asked me if he was causing trouble it was clear that he knew he was being difficult, but he had no intentions of doing so.

2. Find ways to change the environment for patients to be more comfortable, including turning on a specific song or radio station, making sure the lights are turned off, and modifying the patient setup for extra comfort if deemed appropriate. This can be documented to ensure continuity when multiple therapists are treating.

3. The importance of putting in the extra effort to gain a deeper understanding of patients. Patients are rarely difficult to work with because they want to cause issues. There are so many other factors such as pain, confusion, fear, financial stressors, and so much more they are dealing with. This has been a reminder to rid my mind of assumptions about patients and to have a clean slate with them every day.

4. Facilitating the inclusion of family members. Throughout John's treatments, his daughter helped him onto the bed, stood beside him during setup, held his hand, and reassured him. Their relationship was quite obviously very positive, and her presence brought him a lot of comfort.

5. Recognize the balance of accuracy and comfort. The radiation therapists concluded that it was preferable for John to be content and moving slightly than to be agitated, screaming, and trying to get out of the mask. Of course, they would not do anything to jeopardize his health or treatment, but this still showed their dedication to patient satisfaction.

Concluding Thoughts from a Student's Perspective

Overall, this was a wonderful learning opportunity for me. After watching John become so uncomfortable in CT-simulation, seeing him on treatment gave me hope for a more positive outcome. As a student, I will make sure to continue learning about ways to adapt to situations by observing the therapists' actions. Further, I will make sure to consciously find ways to make every patient more comfortable whether they seem like they "need" it or not. This experience has changed my thinking about what all medical radiation technologists can do for patients. The options are endless and I am looking forward to working with more patients and improving their cancer journey.

Quantitative Ultrasound Markers for Radiation Response in Head and Neck Cancer

Submitted by **William T. Tran, MRT(T), MSc, PhD**, Radiation Therapist Clinician Scientist, Sunnybrook Health Sciences Centre, Assistant Professor, University of Toronto

Quantitative ultrasound spectroscopy (QUS)

Quantitative ultrasound spectroscopy for tissue characterization has many medical applications such as detecting cardiac ischemia, characterising liver histology and renal imaging[1]. In oncology, QUS is aimed to provide acoustic data about tumour microstructure (cells and cell nuclei) that can be used for diagnosis and treatment-response evaluation[2]. The major advantage of analyzing the radiofrequency data from acoustic signals, in comparison to conventional B-Mode "greyscale" ultrasound is the added information about tissue properties such as attenuation, integrated backscatter, scatterer size and concentration[3]. Additionally, a significant advantage to using QUS data to characterize tumours is to mitigate operator dependent variations associated with conventional greyscale imaging such as time-gain compensations and image contrast adjustments.

Quantitative ultrasound spectroscopy (QUS) uses the spectral information of radiofrequency (RF) backscatter signals that are typically discarded in conventional greyscale sonography; thus, it is unique from other types of sonography since the information collected is based on the frequency-dependent power spectrum. QUS can employ either low or high (>20MHz) frequency ultrasound for tissue characterization based on the desired acoustic resolution, and required depth for imaging[4]. QUS parameters using spectral analysis, such as the mid-band fit (MBF), 0-MHz intercept (SI) and spectral slope (SS) are determined by applying a linear regression function within a discrete frequency bandwidth of the computed power spectrum[1,3,4,5]. In early studies by Lizzi et al, QUS parameters were studied for therapy response monitoring in hyperthermia-treated ocular tumours[1]. The results of their study showed an increase in the SI in responsive lesions, in comparison to the surrounding normal tissue (p=0.003). This increase in the backscatter intensity was explained as corresponding to changes in tissue microstructure caused by focal areas of increased cell death[1]. It was hypothesized that changes in the scattering surfaces at subcellular levels from cell death, such as fragmented nuclear structures, may modulate acoustic scattering in tissue. Later reports by Czarnota and colleagues applied Lizzi et al's theoretical framework to study the effects of apoptotic cell death and QUS in acute myeloid leukaemia (AML) cells treated with chemotherapy in vitro[5]. That work used QUS methods as markers for apoptotic cell death. Chemotherapy-treated AML cells demonstrated a 2.92-fold to 5.83-fold increase in backscatter intensity compared to non-treated cells, and histological data revealed morphological changes resulting from cellular pyknosis, karyorrhexis and apoptotic cell death[5]. In another study, Kolios et al demonstrated an increase in the MBF (+13 dB) after treating AML cells to chemotherapy in vitro and linked these findings to morphological changes from chromatin condensation[3].

These studies demonstrated the link between changes in tissue features, nuclear morphology and the resulting acoustic scattering in tissue[2] (Figure 1). Theoretical frameworks in these early QUS studies for cancer imaging have driven efforts to study chemotherapy response in breast cancer in vivo[6,7]. To date, QUS has been used to monitor treatment response in photodynamic therapy, chemotherapy, and radiation therapy; both in animal and human studies[5-10].

The sensitivity of QUS to measure the biomechanical features of tumours is dependent on two main factors: 1) Tissue-dependent features (i.e., scatterer size, distribution, organization) and; 2) the ultrasound (wave) properties[1,11,12]. In this section, important principles of ultrasound imaging are discussed since the experimental QUS parameters used in this study should be interpreted in terms of its relationship to the tumour response and biology. The important factors discussed here include image resolution, image reconstruction and system corrections that have a critical role in the QUS data that represents the tumour's biological characteristics.

Head and Neck Cancer

Head and neck (H&N) cancers account for 550,000 new cases in 2014, and the mortality rate reported by the World Health Organization was 300,000 (2014). Approximately 90% of cases are squamous cell carcinomas and presentation for advanced non-metastatic H&N cancers that are stage 3 or 4 (i.e. T3-T4, N0-N3, M0), may present as large (>4 cm) primary tumours with lymph node involvement. Treatment for node-positive, H&N cancer will include primary tumour resection, followed by post-operative chemoradiation. However, the five-year overall survival rate of patients with H&N cancer is about 40-50%; thus, a significant number of patients do not achieve sufficient locoregional control. To address this clinical problem, the purpose of this

asrt
American Society of Radiologic Technologists

CAMRT partners with the American Society of Radiologic Technologists (ASRT) to identify speakers for their events. Speakers are selected through a competitive process from among the CAMRT membership.

William Tran presented at the 2019 ASRT Radiation Therapy Conference in Chicago, USA, this past September.

Nancy Talbot was selected to attend the 2019 ASRT@RSNA in December – look for her experience in the next issue!

The competition for speaking opportunities in 2020 has closed, but please check out the CAMRT website under the "MRT Professional Recognition" tab for opportunities in 2021!

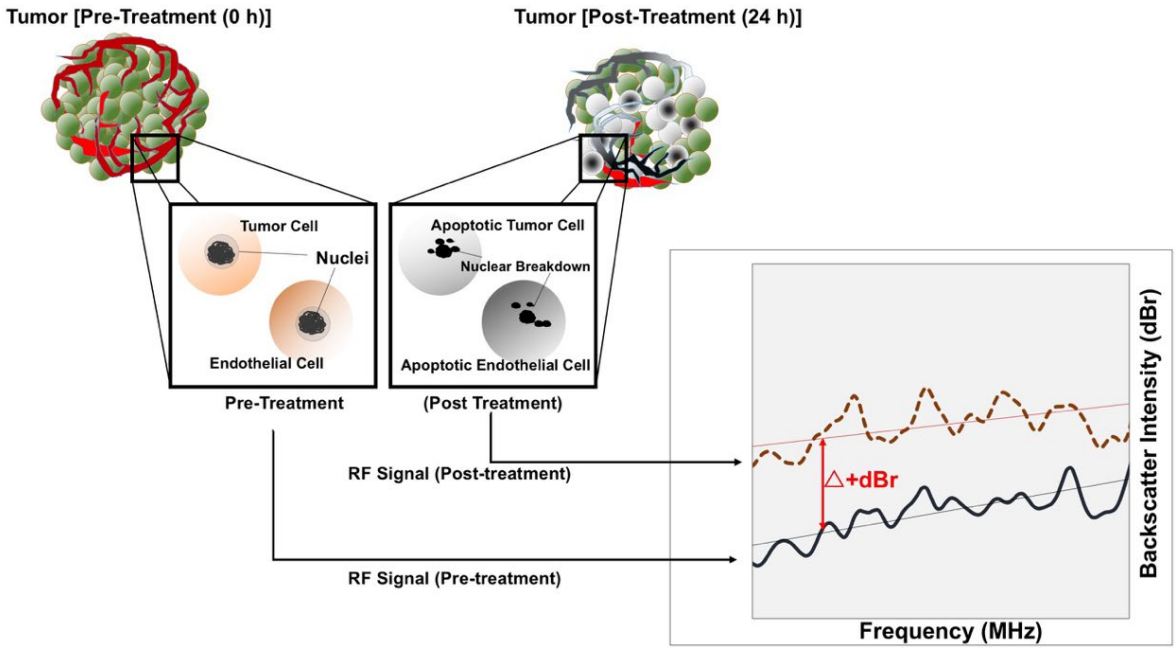


Figure 1: Quantitative ultrasound using spectral analysis can be used to estimate morphological changes in cells. Increased nuclear fragmentation caused by treatments can affect the intensity of the spectral form.

study was to use quantitative ultrasound (QUS) to monitor patient responses to chemoradiation in node-positive H&N patients before their treatment initiation.

Ongoing Clinical Study: Preliminary Results

We are carrying out an ongoing clinical study focussed on identifying QUS radiomic markers that can predict treatment response. Below are details of our preliminary results demonstrating early-response QUS radiomic markers.

There were 37 patients enrolled in the study following a biopsy confirmed diagnosis of H&N carcinoma, which included the following types: 1) squamous cell carcinoma (SCC); 2) non-keratinizing undifferentiated nasopharyngeal carcinoma and; 3) small cell carcinoma. Patients were treated with post-operative, platinum-based chemotherapy (Cisplatin, 100 mg/m2 IV, days 1, 22,43) concurrently with radiation (70 Gy/33 fractions). QUS data were collected in the lymph nodes at four time points: 1) before treatment, 2) 24-hours post the initial radiation treatment; 3) week 1 and; 4) week 4 of radiation treatment, using a custom-built ultrasound device, operating with a 4-D transducer, centre frequency of 8 MHz, and a sampling frequency of 40 MHz. Radiofrequency (RF) data were acquired from the acoustic backscatter signal, along 256 lateral scan lines and an axial distance (depth) of 5 cm. Spectral analysis of the RF data were completed to obtain spectral and backscatter coefficient parameters, as well as obtaining texture features from QUS parametric maps. Texture features were obtained from using a grey-level co-occurrence matrix (GLCM) analysis of the QUS parametric maps. Patients were evaluated for treatment response using radiological endpoints, and response-monitoring models were calculated from QUS and QUS-texture features. Classifier models included machine-learning algorithms from k-nearest neighbour (k-NN) and naïve Bayes classifiers.

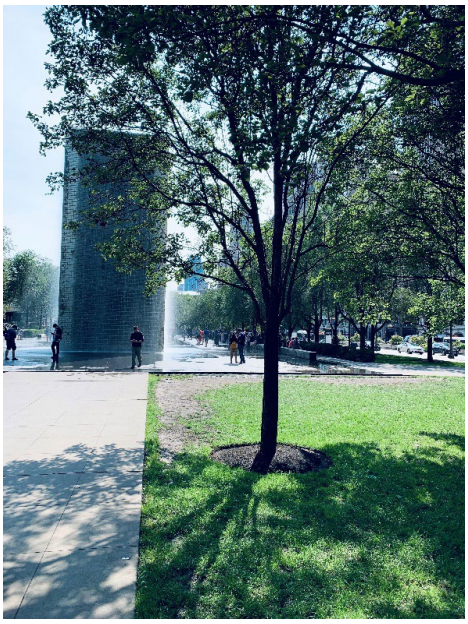
There were 14 complete responders (CR) and 23 partial responders (PR) based on radiological endpoints (RECIST 1.1), as determined from the patient's clinical magnetic resonance imaging (MRI) before and after treatments. Spectral Intercept (SI)-energy (p=0.044), and the SAS-homogeneity (p=0.021) demonstrated a significant difference between CR and PR, 24-hours after the initial radiation treatment. None of the QUS or QUS-texture features showed significant differences between CR and PR at week 1 or at week 4 of radiation treatment.

In general, univariate naïve Bayes classification performed better between the classifier models; for the 24-hour time point, average acoustic concentration (AAC)-Contrast (Gaussian) feature demonstrated a classification accuracy of 80.0% whereas an accuracy of 85.6% and 84.6% was demonstrated at week 1 and at week 4 of treatment for spectral slope(SS)- correlation and attenuation coefficient estimate (ACE), respectively.

For the k-NN classifier, multivariate models improved the classification accuracy at week 4 of radiation treatment; in the univariate case, acoustic scatterer diameter (ASD)-energy (Anderson) demonstrated a classification accuracy of 77.3%. Using two features, the accuracy increased to 78.8% (SS-energy + ASD-energy (Anderson)); whereas, using three features (SS-energy + SI-energy + ASD-energy (Anderson)) demonstrated an increase in the accuracy to 79.6%.

Future Directions and Forward Commentary

There are immense opportunities to further develop personalized radiation oncology, which include response-guided and/or radiomics-guided radiotherapy. At the forefront of these endeavours are clinician researchers, such as radiation oncologists, and radiation therapists that have the immense privilege of interacting with patients and attaining greater insight into the clinical challenges that impact our daily practice. As we move ahead with our research and within the scope of our clinical practice, we should be asking ourselves, "how can we do better for our patients?". This is the central motivating factor within my own research program. One of the most important aspects of a successful research program is the research team. I am fortunate to work with a multidisciplinary team, which comprises physicians, scientists, and other allied health professionals who provide unique insight and contribute



Millenium Park in Chicago (author photo)

meaningfully to a better understanding of clinical problems, designing robust and transparent clinical research, and tackling scientific problems with rigour. Collaboration and teamwork have been the most rewarding aspect aside from the potential impact that we can make for our patients.

In summary, aiming for high-impact research is very challenging and, in many cases, a very difficult path. However, there are great rewards, which include learning something new every day, potentially making a difference in patients' lives, and contributing to the future of radiation oncology practice. My hope is that our profession continues to be curious about improving treatments, and to fully implement individualized treatments for patients based on their intrinsic biology.

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Interested?

If you're interested in getting involved, send me an email at william.tran@sunnybrook.ca!

One to Watch! Nuclear Medicine Technologist: Shelby McNair

CAMRT member Shelby McNair was recently named as the Society of Nuclear Medicine and Molecular Imaging's "Ones to Watch" – 30 Early Career Professionals Making a Difference in 2019. SNMMI members were asked to identify early career professionals who are working to shape the future of nuclear medicine and molecular imaging, and Shelby was nominated and ultimately selected. Impressively, she is the only technologist on the list! Shelby is currently working as a Nuclear Medicine Manager at East Surrey Hospital in Redhill, UK; but in her short (but busy) career she has also worked in Manitoba, Alberta, and the United Arab Emirates. We asked her to tell us more about the responsibilities she took on after graduating in 2012 that led to her nomination.

Quite early after graduating from the Nuclear Medicine program at SAIT, I briefly worked as a receptionist/booking coordinator in the nuclear medicine department until other clinical positions were available. This position gave me an understanding of how to schedule patients to improve productivity and efficiency within the department. Following this, I obtained a position as a radiopharmacy technologist and researcher in the PIPE Project, researching alternative production methods of Tc99m. My time in the radiopharmacy and doing research gave me a more thorough understanding of the production of radiopharmaceuticals and how the environment in which they are produced can greatly affect their quality.

After 6 months in the radiopharmacy, I obtained a clinical position at the Royal Alexandra Hospital in Edmonton where I worked with amazing nuclear medicine physicians. In my 3 years at this department, I learned so much from the physicians—they were so eager to teach and challenge our thought processes to make us better technologists. I also had the opportunity to precept many students, which improved my knowledge as well as my teaching capabilities.

In January 2015, three and a half years after graduating, I started a position with Cleveland Clinic Abu Dhabi (CCAD). There had already been a manager, radiopharmacy manager, 2 NM physicians and three other staff there since October 2014, so when I started, I thought a lot of the procedures and processes would have been decided/set up. However, this was not the case! The radiopharmacy was not prepared, there were no standard operating procedures, nor was there a single imaging protocol. I played a pivotal role in setting up the radiopharmacy (thanks to my experience early in my career); and, with the assistance of my nominator, wrote all our imaging protocols.

Aside from writing and being responsible for all imaging protocols and standard operating procedures, I was also responsible for working with the Siemens application specialist to set up all our technical protocols on our cameras and maintain these protocols. Furthermore, I set up the processing applications and maintained/updated these as necessary. As we were getting ready to open the department in May 2015, I also played a central role in setting up the patient scheduling matrix to maximize productivity and efficiency (thanks to my first role after graduating). Since I created the matrix, I was also the person who trained our booking coordinators in scheduling patients and developing an understanding of how/why patients are booked in the manner that they are. This helped create independence for the booking coordinators, so that they did not need technologist input for when/where to book patients. During the following 2 years at CCAD, I continued to develop the service and update/maintain all areas of my current role.

What I love about this job is that it is ever evolving. If you compare nuclear medicine to other imaging modalities, the other modalities have not changed much in the last 20 years, apart from improved imaging technology. Although there are certain studies that are going the way of the dodo bird because the field is advancing, this also means that new studies are being introduced. This is thanks to the development of new tracers, mainly PET/CT tracers, but also thanks to the advancement of technology such as SPECT/CT (now using diagnostic CT in some instances) and PET/MRI. More specifically what I love about the job is the role I get to play in change management while the field evolves. I obtained my Bachelor of Business Administration December 2017 and have been thrilled that I have been able to apply this education in my current role as manager, but also to use the methods of change management to help my own department grow and evolve.

Fall Issue now Available

Listed below are great articles written by fellow CAMRT members in this issue. If you have any feedback on an article, consider writing a Letter to the Editor! Contact Carly at editor@camrt.ca to get published. As a CAMRT member, you have free access to all content published in the JMIRS. You must log-in through the CAMRT Members site to unlock the content as opposed to accessing it directly at www.jmirs.org, because articles on this site are blocked by a paywall.

A Qualitative Analysis of Human Error During the DIBH Procedure

This quality assurance study analyzed human errors that occurred during the radiation treatment delivery of the deep-inspiration breath hold (DIBH) technique at a tertiary cancer centre. The intention is to recommend solutions and system changes that have the potential to decrease the frequency of errors based on human factors principles.

Engaging the Health Care Professional

Health care leaders can help to engage their teams by using effective behavioral and leadership styles that will be received favourably by most staff. With the evolution of the generations occupying the workplace, managers must adapt and vary their leadership styles, if they hope to effectively engage their teams and provide world-class patient-centered care.

Utilizing Quality Improvement Methods to Examine the Radiation Therapy Pathway for Patients Requiring Palliative Radiation Therapy at a Community Cancer Center

At a community cancer center, during weekly quality improvement huddles, the radiation therapy team expressed stress and frustration with the pre-treatment pathway for patients requiring palliative radiotherapy. As the department was meeting provincial targets with respect to wait times, it was unknown why the consensus around the department reflected discomfort and stress. The team focused on the four principles of quality improvement: the patient, team, process, and data to address the expressed discomfort around this specific radiation therapy pathway.

Evaluation of Target Volume Location and Its Impact on Delivered Dose Using Cone-Beam Computed Tomography Scans for Patients with Head and Neck Cancer

Within radiation oncology, treatment of head and neck cancer is known for its unique challenges with patient weight loss and body contour changes. This study sought to quantify these changes through measuring the volume and position of specific target structures over the course of radiation treatment and determining if changes in these factors affected what dose was ultimately delivered.

Stability of Intracavitary Applicator Placement for HDR Brachytherapy of Cervix Cancer

Cervical cancer is often treated with a combination of external beam radiation therapy and high-dose-rate intracavitary brachytherapy. The goals of this study were to investigate the stability of intracavitary applicator placement during patient transfer and to evaluate the dosimetric impact of displacement.

Continuing Medical Education article!

This CME article provides the equivalent of 2 hours of continuing education that may be applied to your professional development credit system. A 12-question multiple-choice quiz follows this reading. Please note that no formalized credit (Category A) is available from CAMRT.

The Pathogenesis and Clinical Management of Cutaneous Melanoma: An Evidence-Based Review: Cutaneous malignant melanoma (CM) is the leading cause of skin cancer–related mortality and accounts for approximately 1,250 deaths in Canada each year. The past decade has brought significant growth in our understanding of the pathogenesis and clinical management of CM. This evidence-based review synthesizes that knowledge, beginning with a review of the epidemiology and etiology of the disease followed by a broad review of the roles of diagnostic imaging in its management.

JMIRS Studies in the news!

AI may facilitate personalized breast cancer treatment

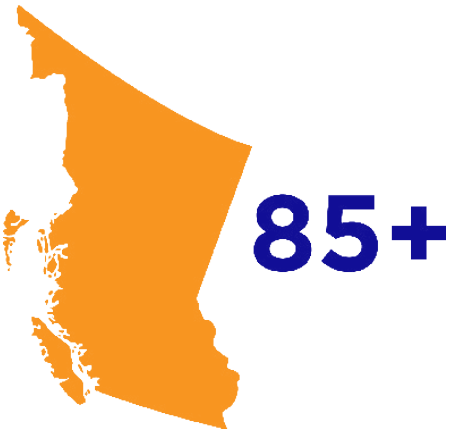
AuntMinnie.com @AuntMinnie · Aug 26

In a new paper, researchers discuss AI's potential for detecting breast cancer and for predicting treatment response and the risk of cancer-related mortality. #ImagingAI #radiology

CAMRT-BC Site Ambassador Program - An Example of Volunteer Engagement

Submitted by **Louise Kallhood, CAMRT-BC Provincial Manager**

Over the past eighteen months, the CAMRT-BC has been building and supporting a growing Site Ambassador program—a network of MRTs who are enthusiastic about their profession and keen to promote the values and activities of the CAMRT-BC. Starting in early 2018, when there were about ten site ambassadors, the team has grown to include 85 MRTs around the province.



What is a Site Ambassador?

The primary contribution of a site ambassador is to watch for information coming from the CAMRT-BC or directly from the Provincial Manager. This might be newsletters, flyers for educational events, MRT week promotional material or calls for volunteers. First and foremost, site ambassadors share this information with their coworkers. They talk about it, distribute information electronically or print off and post flyers.

Site ambassadors can also choose to engage on a deeper level. Through an online survey they complete when they join the team, a site ambassador can indicate interest in other areas of volunteering such as organizing educational events, setting up local journal clubs, giving presentations or doing research. Knowing what a site ambassador is most interested in helps the Provincial Manager focus ideas and requests to those that might be the most motivated to participate, and to see opportunities for further member engagement.

Recruitment, Onboarding and Support

Recruitment happens through ongoing advertising, direct discussion with members during site visits by the Provincial Manager, and through word of mouth. When a member expresses interest in becoming a site ambassador, a welcome letter is sent out by the volunteer site ambassador coordinator. The new site ambassador is added to various communication platforms, fills out a short survey and recognized for the important work they will do in connecting their coworkers with association news. In the background, the Provincial Manager and the site ambassador coordinator maintain the volunteer information collected from the survey the site ambassador fills out. In addition, the site ambassador name and location is posted on the list and interactive map on the CAMRT-BC webpage.

Recently site ambassadors have been invited to a private Slack Community of Practice, where they can exchange ideas and questions among themselves. The CAMRT is actively promoting the use of Communities of Practice, and the new Site Ambassador group is a great example of how to use this tool. The Provincial Manager stays in regular touch with the site ambassador group—they now have their own newsletter! This keeps everyone informed of ongoing activities. The newsletters are uploaded to the Slack platform, providing a central repository for information.

This fall will see the first member recognition evening for CAMRT-BC volunteers, a casual event to network and meet fellow site ambassadors, advisory council members and other volunteers.

Benefits of the Site Ambassador Program

Volunteer participation in many organizations is the key to a vibrant and engaged membership. This is certainly true for the CAMRT-BC. The questions that must be answered when recruiting volunteers are: "How does the volunteer want to be engaged?", "what meaningful activities will the volunteer take part in" and "how can the association support and recognize the contributions of the volunteer?"

The CAMRT-BC Site Ambassador program demonstrates member engagement at a level that is tailored to each individual. It provides an extremely meaningful role for the association—one of direct connection between the "office" and the MRTs working in facilities around the province. This "closer to home" model of information dissemination means that MRTs at the site are more likely to read, remember and participate in conversations or other professional activities because it is being relayed by someone they know personally. In this way, the site ambassador plays a critical role as a key contact between the CAMRT-BC and the membership.

The program is a model of engagement that suits many MRTs since there is no committee commitment, they can join or resign at any time, and they can take on the minimum responsibility of information liaison…or do much more, if they choose. This model is turning out to be a win-win for both volunteer and association and the CAMRT-BC will be working hard to expand the program until every site has a site ambassador!

Terms of Reference

Site Ambassador List/Map

Reports from the CARO 2019 Conference

CARO 2019 was held in Halifax this past October. With the theme "Ablative radiation therapy – Mastering the art," attendees enjoyed a variety of presentations on topics relevant to the professionals working in therapeutic radiation sciences. We asked CAMRT members to report on sessions they attended and some key takeaways for our readership. Abstracts from the conference are available online, so be sure to check out the research from your fellow CAMRT members!

Impact of compliance on outcomes for patients on active surveillance for prostate cancer

Presenters: Dr. Jay Detsky et al
CAMRT Reporter:
Dilshad Nathoo, MRT(T), MSc

The prostate cancer-specific mortality for patients on active surveillance (AS) is under 2% and after 10 years, about two thirds of men in AS are free from treatment, avoiding side effects. However, compliance among men who are given a protocol to follow during AS is very poor. Thus, Detsky et al hypothesized that non-compliance with an AS protocol, specifically with confirmatory biopsy, would negatively affect recurrence-free survival (RFS), metastatic-free survival (MFS) and cause-specific free survival (CFS). They conducted a prospective single arm cohort study from 1995 to 2018. Regular AS protocol at OCC includes PSA's every 3 months for the first 2 years and twice a year thereafter followed by biopsies at 1, 4, 7 years and every 3 years thereafter. Compliance was defined as having confirmatory biopsies, which allowed for 6 months grace period after the year biopsies were requested. Outcomes included RFS, MFS, CFS and overall survival (OS). Among the 1275 men in this study, 75% were low-risk, 21% were low-intermediate risk and 4% were high-intermediate risk. Four hundred fifty-three (36%) men were treated, of which 150 (12%) men failed treatment, 38 (3%) men developed metastases and 22 (2%) men died of prostate cancer. In this study, compliance rates were 74%, 52% and 43% at years 1, 4 and 7. Compliance with PSA testing was better at 91%, 69% and 51% at years 1, 4 and 7.

This study showed that PSA compliance was not correlated with biopsy compliance. The men who were compliant were younger (knowing that older men suffer from more comorbidities) and demonstrated much higher rates of failure of treatment for non-compliant patients with confirmatory biopsy, higher risk of metastases, and death from prostate cancer. Multivariate analysis indicated that the risk of failure was significant among treated men over 70 years of age. Non-compliant men with a confirmatory biopsy were 2 times more likely to fail. The risk of developing metastases also increased with non-compliance and confirmatory biopsy. It was shown that there was a statistically significant difference at 10 years for RFS in compliant men (61%) versus non-compliant men (47%). Furthermore, MFS at 12 years was shown to be 11.1% for compliant men versus 4.9% with non-compliant men. There were no differences between compliance and non-compliance in CSS and OS. In conclusion, compliance with confirmatory biopsy with an AS protocol affects the risk of failing treatment and increases the risk of developing metastases. Thus, it becomes very important for physicians who follow prostate cancer patients on AS to stress the importance of following the AS protocol in order to achieve excellent outcomes.

Adaptation: the next logical step for stereotactic ablative radiotherapy (SABR)

Presenters: Dr. Robert Timmerman
CAMRT Reporter:
Dilshad Nathoo, MRT(T), MSc

This was a highly motivational and thought-provoking session. Dr. Timmerman was one of the first researchers in the world to use stereotactic body radiation therapy (SBRT) to treat cancers in the brain, which then led him to develop clinical trials showing how well SABR worked in different parts of the body. His passion and motivation is derived from delivering precision cancer ablative treatments with more tolerable and fewer side effects. Dr. Timmerman's greatest success was the development of a trial that demonstrated higher tumour control with SABR in inoperable lung cancer patients compared to conventional radiation treatment. With his gifted intellect and quick wit, he took the audience through the journey of radiation from 1928 to the 1990s. Technological innovations with hypofractionation emerged. In the 1950s, gamma knife was used in the treatment of brain tumours. Protons were then used with hyperfractionation. In the 1970s, split course treatments were used to reduce toxicity. That is, instead of delivering 40Gy in 20 fractions, patients were given 20Gy in 10 fractions with a 2-week break followed by an additional 20Gy in 10 fractions. This created a problem: the tumour actually proliferated and resisted so the split course was less toxic, but the tumour liked it better! Then came SABR where phase I studies came about to try and understand boundaries of this treatment. Now we have MRI capabilities to derive treatment techniques that can utilize adaptive planning.

Then Dr. Timmerman got the audience thinking. He probed our minds to think differently. When physicians decided on the fractionation schedule early on with SABR, physicians resorted to their comfort zones and customary dose fractionation schedules (every day or every other day); becoming too focused on the routine clinical schedule. He suggested that if intervals between treatments are intentionally long, there may be more opportunities to see changes in the tumour. That is, can SABR trigger a vaccine-like effect? He compared it to immunization (virus vs tumour). For viruses typically, an immunization shot is followed by several boosters given monthly because it works better. He conceptualized the idea of PULSAR (Personalized Ultra-fractionated Stereotactic Adaptive Radiotherapy). His idea was delivering large dose pulses given in a single treatment using SABR. More than one pulse can be given but could be isolated from each other in time - greater than 7 days, but often weeks. Pulses can behave like independent treatments and can be added as needed like a booster shot in immunization. Dr. Timmerman continues to transform the realm of radiation therapy, specifically SABR. His thought process and innovative ideas of extracting features of the tumour to drive PULSAR was motivating, riveting and inspiring!

ASRT Lecture Radiation Therapy Speaker Exchange: Technical Aspects of Proton Therapy

Presenters: Justin Pigg, ARRT, RT(R)(T)
CAMRT Reporter:
Christine Baillie, RTT, MHS

This ASRT-CAMRT exchange lecture covered the basics of the physics, clinical applications, and practical considerations involved in proton therapy, as well as an overview of the speaker's experience setting up a proton therapy clinic in the U.S. setting. With 33 proton therapy centres currently operational in the United States, and 9 under development, this is an increasingly popular modality in the American cancer treatment landscape. Some of the indications and case studies shared included pediatric CNS tumours (normal brain tissue sparing), left-sided breast treatment (heart sparing), head and neck cancers, and lymphoma (sparing breast tissue in adolescent patients). The US payer model often guides the radiation treatment modality selected, but the above indications are often approved for their reduction of acute and late normal tissue toxicities.

Innovative directions in proton therapy include pencil beam scanning (intensity modulated proton therapy), the ability to verify dose in vivo using PET imaging, and future techniques such as proton arcs, and high dose rate flash therapy. Challenges and limitations discussed include: greater sensitivity to changes in motion, separation and in homogeneities than photon EBRT; work flow issues related to shared use of the cyclotron between treatment units; motion management during longer treatment-delivery sessions; imaging challenges (such as the limited availability of CBCT with some treatment systems); and the high cost of technology investment. Efforts are being made to reduce the cost of establishing access to proton therapy -- building smaller centres with a single treatment unit can reduce start-up cost from $150M USD to $30M USD.

Evaluating Respiratory Motion of the Bony Thorax in the Context of Stereotactic Body Radiation Therapy (SBRT): Is It Necessary?

Presenters:
Darby Erler, MRT(T), MHSc
CAMRT Reporter:
Christine Baillie, RTT, MHS

Stereotactic body radiation therapy (SBRT) is increasing in use for local treatment of bone metastases. Breathing motion in thoracic bone metastases should be considered, as it has implications for appropriate immobilization, imaging at the time of simulation (i.e. 3DCT vs 4DCT) and selection of PTV margins. An assessment of 70 patients at a large centre measured motion difference in three axes, between inhale and exhale position to create a total linear distance vector (LD). Rib lesions were categorized as anterior, lateral, or posterior; and superior (ribs 1-4), middle (ribs 5-7) and inferior (ribs 8-12). Motion was compared using ANOVA.

In total, 47 rib lesions and 15 sternal lesions were assessed for motion (excluded cases had extensive bone destruction, which impacted contouring). Sternal lesions were found to have minimal motion (<1mm), while there was a significant variation in rib motion (0-8mm). There was a significant difference in motion based on location, with less motion in the sternum, posterior ribs, and inferior ribs. This study supports motion management as a necessary consideration in SBRT treatment of thoracic bony sites, as it is for the treatment of lung and abdominal sites.

Provincial Reports

Alberta

Standards of Practice

On September 1, 2019, a new version of the ACMDTT Standards of Practice came into effect thus repealing all previous versions of the document. The September 1, 2019 document incorporates a new Standard Area 5 and it is expected that all members understand and practice within its context.

Standard Area 5 provides new legally enforced concepts on –

- Who is considered to be a patient
- When a sexual relationship between a regulated member and a former member can occur
- When a person who is a spouse or in an interdependent adult relationship can also be a patient

New Legislation

As you may be aware, the Government of Alberta has introduced significant changes to the Health Professions Act (HPA). Introduced as Bill 21 – An Act to Protect Alberta Patients, Royal Assent was given on November 19, 2018. Bill 21 speaks specifically to sexual abuse and sexual misconduct by regulated health professionals and introduces a number of new requirements for regulatory health colleges, including us at the ACMDTT, and its members. Some portions of the Bill were in effect as of November 19, 2018 and some came into force on April 1, 2019.

The protection of the public is of paramount importance to the ACMDTT and it supports this legislation. The ACMDTT emphasizes that the vast majority of its members treat their patients with respect and professionalism, it will work with the community in recognizing and addressing concerns around the power imbalance between health professionals and patients that this legislation addresses. A quick summary of changes that are happening at the ACMDTT in response to Bill 21 is provided below in the 2018 ACMDTT Annual Report –

2018 Annual Report

The College's annual report is posted at acmdtt.com/about- us/annual-reports.

This year's creative approach to the Annual Report showcases public artwork from across Alberta. We encourage you to read it and welcome your feedback.

CONNECT 2019 – Annual Conference

The event was held on May 10 & 11, 2019 in Edmonton and we received overwhelming support from the community in response to our call for collaboration.

Through our partnership with the CAMRT, we brought together over 450 diagnostic and therapeutic professionals including technologists, students, employers and industry from across Canada to learn and share knowledge of the five currently regulated specialties of the College and our colleagues in diagnostic medical sonography.

2019 Membership Meeting

The College's first Membership Meeting was held on May 11, 2019 in Edmonton. For the first time, attendees had the option of attending in-person or view the meeting online. A Q&A session was held at the end of the meeting and all attendees, in-person or online, had an opportunity to ask direct questions to members of Council.

2019 ACMDTT Awards

The annual ACMDTT Awards were presented on Saturday May 11, 2019, recognizing and celebrating excellence in their chosen profession.

Strategic Plan 2019-2022

ACMDTT Council and staff collaboratively developed a three-year strategic plan to set direction for the College. The three focus areas and nine strategic objectives set by this plan will determine the priorities for our programs and activities, and enable their implementation.

Gender Neutrality

The ACMDTT has implemented a gender neutrality policy, meaning that the ACMDTT will not be distinguishing between roles according to a member's sex or gender. The ACMDTT wants to emphasize transcending the perspective of gender altogether through the following initiatives:

- Eliminating gender identifying words in the terms of describing people. The ACMDTT has discontinued the use of "he" or "she" and has replaced them with gender-neutral language such as "they" in places where the gender of the person is both known and unknown. This will be seen in registration applications, decisions and reasons and any other ACMDTT communication

- Applicants or former members applying for registration with the ACMDTT can now identify within three gender categories – Male, Female and X

Public Register

The ACMDTT maintains an online public register of its current members with a live link to its database. Information displayed by this system always shows a time stamp to ensure transparency and integrity of information. The ACMDTT's public register has been updated to display information of former members for a 2-year period and in perpetuity if there are disciplinary findings.

Volunteer Opportunities

ACMDTT is looking for regulated members to join various committees:
• Conference Scientific Program Committee
• Council positions

More information about these opportunities can be found on the ACMDTT website: acmdtt.com/members/volunteer.

For more information about the College please contact:

Pree Tyagi, MBA ACMDTT Registrar & CEO
ptyagi@acmdtt.com

Manitoba

MAMRT Board Updates:

The MAMRT would love to see the Nuclear Medicine Representative Board Position filled: If interested, please contact: admin@mamrt.ca. Volunteers are also needed for the Self-Regulation Committee: Contact: selfreg@mamrt.ca .Member assistance sought for the 90th Anniversary events on November 22-23: Contact: admin@mamrt.ca

We have moved! Sharing space with the College of Dental Hygienists Manitoba and the newly formed College of Paramedics Manitoba, our address is now **#610-1445 Portage Avenue, Winnipeg, R3G 3P4**. Open House for members is in the works!

After the successful June "Triad" event, July 2019 saw the launch for "MAMRT at the September Banjo Bowl" and in August, the installation of two Bus Shelter ads; bringing members together and highlighting to the public the important work MRTs perform!

The installation of two Bus Shelter ads

The MAMRT continues to provide recognition to our profession and MRTs who have made a difference through their leadership, teamwork, patient care, and more. On November 23, 2019, in conjunction with the 90th Anniversary Celebrations, the MAMRT Honorary Awards Ceremony took place. Receiving awards are:

Life Membership:
Sandra Luke, RTR, RTMR,ACR

(Wm) Bill Doern Service Award:
Crystal Kobe, RTT

Claude Bodle Memorial Lecture Award:
Pamela Sparkes, RTT

MAMRT Award for Early Professional Development:
Tynnille Chomenchuk Bouchard, RTT

MAMRT Award for Team Excellence:
School of Radiation Therapy Staff (CancerCare Manitoba)

Rita Eyer Leadership Award:
Lorraine Gendre, RTR, ACR

We have also "resurrected" the ancient "President's Plaque and Gavel", which was presented at this Ceremony to Past MAMRT Presidents, Chris Zeller, Dayna (Wlasichuk) McTaggart, Jenna (Bruderer) MacLaine and Sandra Iftody.

Our Competitive Award winners, (presentation has taken place) are:

Registration Award Nuclear Medicine and Proficiency Award Nuclear Medicine: Emily Griffin

Registration Award MRI Technology and Education Award MRI and Spectroscopy Technology:
Dylan Swereda

Registration Award Radiological Technology: Ashley Tkachyk

Education Award Radiological Technology: Alexis Vickers

Registration Award Radiation Therapy and Proficiency Award Radiation Therapy: Alexandra Warburton

To learn more about the new MAMRT Awards Program, click here. And to learn more about how the MAMRT celebrated its 90th Anniversary, please visit: www.mamrt90.com. CHEERS TO 90 YEARS!

Provincial Reports

British Columbia

CAMRT-BC Provincial Report

2019 has been a busy year! Now that the move to the new organizational model is finalized, it's exciting to be offering new and expanded services to our members under the CAMRT-BC banner.

Site Ambassador Program
Through ongoing site visits by the Provincial Manager, and the power of word of mouth we are up to 85 Site Ambassadors. Site Ambassadors make a real difference, ensuring information about CAMRT-BC activities reach members in a personal and timely manner. With a new Site Ambassador Coordinator and the use of the Slack platform, the program will continue to grow in the months to come. Visit for Site Ambassadors for more information.

InfoShare Educational Events
CAMRT-BC hosted three educational events this year – InfoShare North in Prince George, InfoShare Okanagan in Kelowna and Infoshare Vancouver Island in Victoria. These evening events include time for light refreshments (thank you to our vendor support!) and networking, followed by 2 hours of presentations. All sessions are complimentary to members and have been well attended. With the bonus of being able to attend on line, InfoShare has opened up educational opportunities for our members around the province. It is anticipated that in 2020 these venues will be repeated in addition to events in Vancouver. Stay tuned!

Commencement 2019
After a five-year lapse, commencement is back! For the first time the ceremonies took place at program sites around the province: College of New Caledonia in Prince George, BCIT in Vancouver and Camosun College in Victoria. It was exciting to work with the student representatives and CAMRT-BC volunteers to welcome these student members into the profession. With family and friends present, a pinning ceremony and reciting of the CAMRT pledge, they were special events for everyone.

Regulatory Update
CAMRT-BC continues to work with our partners in advocating for the establishment of a regulatory college. While efforts have recently been stalled by the Harry Cayton Report, we will continue our efforts to impress on the government the importance of self-regulation for MRTs. For more information visit Regulatory Updates

MRT Week
Ambassadors are working together to generate ideas for a "made in BC" approach to celebrating MRT week. The goal is to engage the MRT community and encourage all members to "shout out" about all the amazing work done by MRTs. Our new presence on social media (Instagram, Facebook and Twitter accounts) will help us to spread the word!

2019 CAMRT Roadshow and Awards Luncheon
CAMRT-BC volunteers assisted with the programming for this year's Radiological Technology Roadshow held in Vancouver on October 19th. As part of the activities, the CAMRT-BC will be hosting a casual volunteer recognition evening and a refreshed Awards ceremony during the Roadshow luncheon.

Congratulations to our 2019 Awards Recipients:

WQ Stirling Award and Lecture: Jenny Soo, RTT

Bracco Imaging Canada Paragon Award: Alisa Lattanzio, RTNM

Innovative Leadership Award: Nicole Bemister, RTR

Excellence in Teaching Award: David Campbell, RTR

Award of Excellence: Andrea Pastuch RTT

Award of Excellence: Laura Barlow RTMN

Announcements and events

CAMRT 2020
May 30-31, 2020
Ottawa, Ontario

CAIR Annual Meeting
May 28-30 2020,
Montreal, QC

ISRRT 21st World Congress - Call for abstracts
August 26-29, 2020,
Dublin, Ireland

Seeking Course Instructor/Mentor: Fundamentals of Quality Management Course

The CAMRT is looking for a health leader to take over the mentorship of the Fundamentals of Quality Management course, effective Fall 2020.

The preferred applicant will have extensive knowledge and experience with quality management processes including, but not limited to: quality management models, quality tools, Accreditation Canada requirements, strategic and operational planning, project management, team development, data collection and survey design related to improving quality of care.

- A CAMRT course mentor is responsible for Recommending content updates (course, assignments and final examination) to ensure the continued relevance and currency of the subject matter.
- Monitoring and responding to student enquiries in a timely fashion during two annual pre-determined terms.

This course is offered solely on a Learning Management System and requires no marking of assignments. Successful incumbent will be responsible for the marking of the course candidates' final examinations. Payment is based on the number of examinations marked plus an additional payment based on the number of course registrants.

Interested applicants must submit a comprehensive CV and a cover letter highlighting their education and leadership experience related to Quality Management **no later than March 15, 2020.**

For a list of course objectives or to submit your application, please contact mberube@camrt.ca.

CAMRT Competitive Awards Program

The CAMRT invites submissions on any radiological technology, radiation therapy, magnetic resonance, or nuclear medicine subject matter related to topic areas/categories listed in the chart below.

There are three (3) topic areas: education, technical and non-technical. Submissions for each topic can take the format of a scientific paper, a narrative paper or an exhibit.

Submissions are open to practicing medical radiation technologists and students studying in accredited programs. The competition for practicing technologists is separate from students with each having their own competition, however the categories and topics remain the same.

Entries to the competition should:

- Advance the practice of medical radiation technology
- Enhance understanding of an aspect of medical radiation technology
- Capture the reader's attention and interest

The deadline for submission is **February 15th, 2020.** Visit the Competitive Awards page on our website, for more details

2019 Continuing Professional

REVISED/UPDATED 2020: THE CHEST IMAGE

This newly updated course is designed to provide the practicing medical radiation technologist with added knowledge to critically evaluate the chest image. The learner will build on their anatomical and technical expertise of the normal chest image and critically evaluate the atypical chest image, localize lesions, and have greater understanding of commonly seen pulmonary and cardiac disease processes. Course content covers historical information, pathophysiology, incidence, causes, symptoms, treatments, imaging diagnosis, radiographic signs and case studies with some CT correlation.

CAMRT VIRTUAL CLASSROOM LECTURE SERIES

CAMRT VIRTUAL CLASSROOM – LECTURE SERIES

Now Available

CARDIAC CATHETERIZATION FOR THE RADIOLOGICAL TECHNOLOGIST

The future is IR! Discover the less invasive interventional radiography world in Interventional Cardiology. Establish a foundational knowledge and a base understanding of the cardiac procedures and platforms involved within Cardiac IR. Suited for any Radiological Technologist who wishes to enhance their knowledge base and widen their scope of practice. Follow the patient's journey through a cardiac catheterization from beginning to end and discover radiation safety measures and imaging practices in cardiac catheterization, IVUS, OCT, FFR and right heart studies.

Presenter: Kerri Smith RTR, PID, CVT

PET/MRI: instrumentation, current status and potential applications

Indications for PET/MRI clinical referrals and how to best utilize these systems are evolving. This lecture provides a technical overview of PET/MRI, including PET radiopharmaceutical production, PET instrumentation, MRI instrumentation, unique considerations of departmental design, current PET/MRI implementations and potential clinical PET/MRI applications. Sequence diagrams, scan parameters and protocols will be covered for both serial and parallel PET / MRI acquisitions.

Presenter: Robert Miner PhD (candidate), MSc (NM), MSc(MI), MP, BSc(MRS), MRT(N), BSc, EET, CA/P

Personal Leadership: Empowering Self

The rapid pace of change in the healthcare system requires leaders who can adapt quickly, lead through change and develop high-performing teams. The purpose of this virtual lecture is to explore ways to develop your personal leadership skills so you may be prepared to lead in complex environments. Self-leadership change management and conflict resolution are a sampling of topics addressed in the first lecture of our leadership series.

Presenter: Mona Delisle MRT(T), BA, MA

Coming Soon!

Fragility Fractures and Fracture Risk Determination

Fragility fractures are a major health care burden, particularly in the setting of an aging population, causing substantial morbidity, mortality, and health care costs. Reducing fragility fractures is dependent on determining an individual's fracture risk. Bone Mineral Density (BMD) assessment is a key component in fracture risk models, but current models also incorporate clinical risk factors, including prior fragility fractures. In this virtual lecture, the presenter describes the clinical burden of fragility fractures, addresses which fractures are considered fragility fractures and presents models used to determine future fracture risk, including the importance of BMD and the role of the BMD technologist.

Presenter: Dr. Steven Burrell, MD, FRCPC

Coming 2020

MRI Simulation and Treatment Planning

CT simulation is the current standard of care for radiation therapy treatment planning. Given MRIs superior soft tissue visualization, there has been increased utilization of MRI imaging within the simulation and treatment planning process. This virtual lecture will explore the possibilities of MR simulation and how to integrate MR simulation into Radiation therapy treatment planning.

Presenter: Ling Ho, MRT(T), MR, MRSO

Visit our website for more information or contact cpd@camrt.ca.

Development Highlights

Theranostics - Diagnosis and Treatment of Neuroendocrine Tumors - Coming 2020

Breast Imaging Certificate Program Changes in Effect January 2020

Starting January 2020, an experience requirement will be part of the CBI programs.
For the CBIS – Certificate in Breast Imaging – Screening, the candidate will require a minimum of 1450 hours as a practicing mammography technologist over the 3 years preceding entry into the CBIS program.
For the CBID – Certificate in Breast Imaging – Diagnostic, the candidate will require a minimum of 1750 hours as a practicing mammography technologist over the 3 years preceding entry into the CBID program.

CT Imaging Certificate Program Changes in Effect Fall 2020

The CTIC and PET/CT programs are being revised considering changes to the entry-to-practice requirements and to ensure the programs continue to reflect current and emerging practice. The revisions will ensure these certificate programs continue to provide MRTs an opportunity to enhance their knowledge and gain recognition for their clinical expertise in CT and PET/CT imaging.

One of the key changes coming to both programs is a mandatory Sectional Anatomy Exam.

This new sectional anatomy requirement **will be a pre-requisite for the CT Imaging 2 (CT2) and CT Imaging 3 (CT3) courses**. It will be delivered in a self-directed format and will be accompanied by a study guide, recommended textbooks and sample exam questions.

The sectional anatomy pre-requisite exam will be **available Fall 2020**. This means, anyone wanting to register in CT2 or CT3 in Winter 2021, must first successfully complete the pre-requisite sectional anatomy exam.

As sectional anatomy will be offered as a self-study exam as of Fall 2020, the sectional anatomy content in CT2 and CT3 will be replaced with enhanced coverage of CT procedures, pathologies and emerging practices. These changes to CT2 and CT3 will come into effect Winter 2021.

Additionally, for PET/CT:

Starting 2021, the new didactic requirements for the PET/CT program will as follows:

CT1, Sectional Anatomy Exam, **CT2, CT3** and PET/CT Theory & Applications. This change is to reflect the increasing importance and prevalence of diagnostic CT in the nuclear medicine environment.

The PET/CT Theory and applications course will also be revised. Areas for revision and new content additions include:

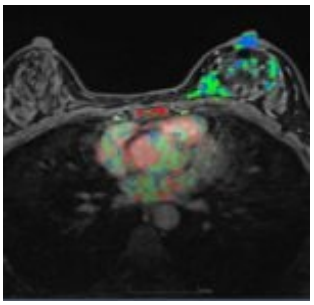
- The role of generators in PET/CT - 82Rb, 68Ga
- Digital detectors
- New Radiopharmaceuticals: 68Ga PSMA, 68Ga DOTA TATE, 68Ga DOTA NOC, 68Ga DOTA TOC, 68Ga FAPI
- Applications in PET oncology, inflammation, cardiology, neurology, pediatrics, and radiation therapy: Additional cases and images will be added along with course content and readings expanding on each of these sections.

Revisions to the PET/CT course will come into effect Fall 2020

For any questions regarding the upcoming changes to the Certificate programs, please contact specialtycertificates@camrt.ca or call 800-463-9729 ext. 226

New!

The Basics of Breast MRI - New Quick Self Study



The Breast MR Quick Self-Study (QSS) is an introduction to the use and benefits of evaluating the breast tissue with magnetic resonance imaging.

This course is written for all breast imaging technologists, as well as MRI technologists. It will cover some basic MRI physics to understand how breast MRI works for the non-MRI technologists; but also gives good information for MRI technologists about the basic principles of breast imaging. In this course the learner will review how breast morphology and blood flow patterns are analyzed with MRI. Indications for breast MRI and criteria for screening and diagnostic scans will be covered. In addition, this course will address the unique requirements for technical preparation, including patient positioning, hormone interactions and contrast usage. The course will conclude with a brief overview of MRI-guided interventions, including biopsies and hook wire placement.

It's time to renew your CAMRT membership

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