

Quality Improvement Plan (QIP)

Narrative for Health Care Organizations in Ontario

April 20, 2021



OVERVIEW

Mackenzie Health is a dynamic regional health care provider which includes Mackenzie Richmond Hill Hospital, Cortellucci Vaughan Hospital, the Reactivation Care Centre and a comprehensive network of community-based services. Guided by a vision to create a world-class health experience, Mackenzie Health has an unrelenting focus on the patient and is dedicated to patient need now and in the future. With more than 550,000 residents in western York Region, Mackenzie Health is proud to serve one of the fastest growing and most Diverse communities in Canada.

Mackenzie Health officially opened its Vaughan site, Cortellucci Vaughan Hospital on February 7th with an exclusive focus on creating additional ICU and acute care capacity to help address the surge in COVID-19 cases in Ontario. By opening in this way, Mackenzie Health will help alleviate capacity pressures faced by Ontario hospitals as they manage near full ICUs and increasing COVID-19 cases.

Mackenzie Health is committed to quality improvement and providing safe patient care. Our 2021/22 Quality Improvement Plan (QIP) continues to support our journey to “create a world class health experience”. Our commitment to ensuring timely access to care for all those within our community, and supporting smooth transitions throughout the healthcare system, supports our mission to “relentlessly improve care to create healthier communities”. As in past years, our QIP is developed in consideration of past and current performance and is informed by feedback from our patients and families, staff, and best practices including Accreditation Canada Standards’ Required Organizational Practices.

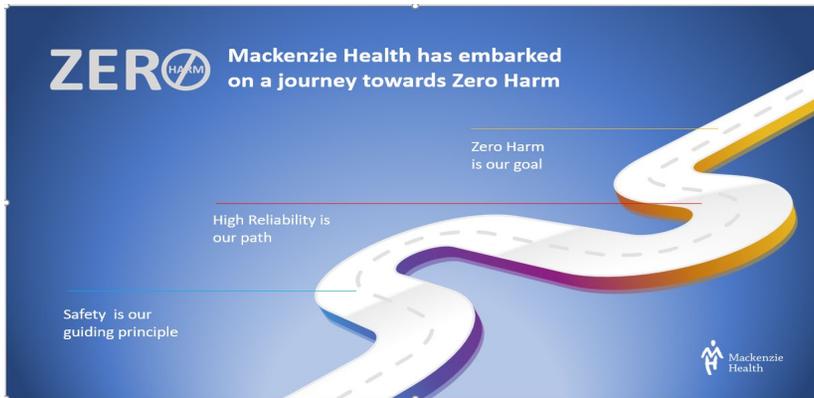
DESCRIBE YOUR ORGANIZATION'S GREATEST QI ACHIEVEMENT FROM THE PAST YEAR

Zero Harm Journey

In November 2019, Mackenzie Health embarked on a journey towards accelerating our efforts to improve patient safety with an explicit goal of achieving preventable zero harm. Driving culture change and process redesign to pursue zero harm and improve quality enables us to deliver on our strategic priority of quality and patient safety. To operationalize this priority, a plan was co-designed cascading from ‘boardroom to bedside’ to embrace a culture of high reliability. This plan was built on an existing quality and safety infrastructure with the following key strategies employed: 1) engaging stakeholders, including leadership support in planning and implementation process; 2) employing an evidence informed approach; 3) developing a quality and patient safety framework; 4) selecting meaningful quality aims with a standardized implementation; 5) evolving safety review process to enhance reporting and learning; and 6) having a comprehensive communication plan.

Despite the challenges of responding to the COVID-19 pandemic, Mackenzie Health adapted and advanced its overall quality agenda achieving most year one deliverables. A solid foundation has been created which is scalable to encompass the new Cortellucci Vaughan Hospital. The pragmatic, robust approach, outlined in Figure 1, is Mackenzie Health’s journey towards zero harm. It may serve as a blueprint for other organizations in their efforts toward a zero harm culture.

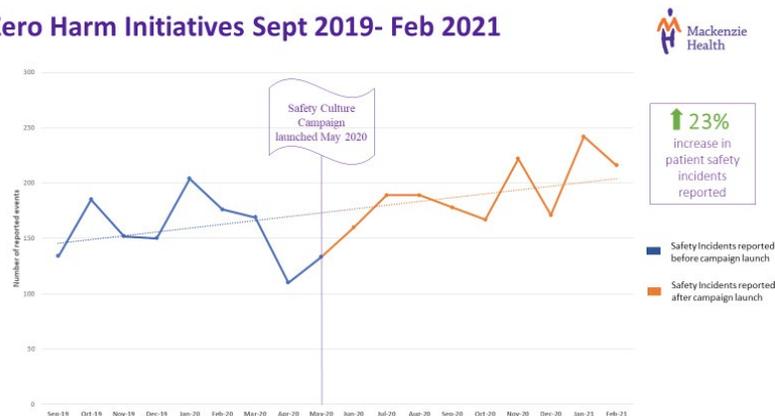
Figure 1



Over the last year, key activities included an initial diagnostic assessment phase that involved identifying gaps, creating a framework and roadmap in year one. The next planning phase focused on strategic directions and governance including Board of Directors and Senior Leadership Team engagement and establishing quality aims. With a focus on enhancing and sustaining a just culture, a structured patient safety review process has been enacted. Over the last year, Mackenzie Health incident safety reporting increased by 23% as shown in Figure 2.

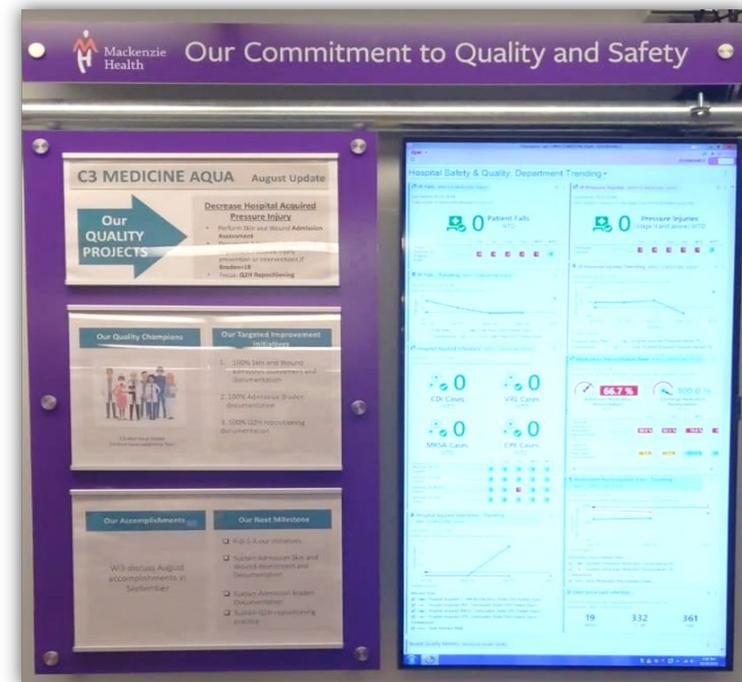
Figure 2

Zero Harm Initiatives Sept 2019- Feb 2021



This was followed by identifying Key Performance Indicators (KPIs) displayed on dashboards similar to the display shown in Figure 3, at unit, program, and corporate levels. To address data quality issues, the 4As plan was developed to ensure data was accurate, accessible, aligned, and actionable. Real-time unit specific data on Quality Aims is displayed on 17 units throughout the hospital. Relevant unit indicators form the basis of unit huddles, point of care team engagement and provide transparency for patients, families and all clinical staff and physicians. This initiative was developed in collaboration with Information Communication and Automation Technology, operational leads the Quality and Patient Safety Team.

Figure 3



Mackenzie Health Quality Aims

Foundational to the zero harm strategy was the selection of performance improvement aims. In January/February 2020, five organizational Quality Aims as shown in Figure 4, were chosen in collaboration with Mackenzie Health stakeholders. Selection criteria was based on issues that were high risk, high volume, high cost, problem prone and were in alignment with Mackenzie Health's strategic roadmap.

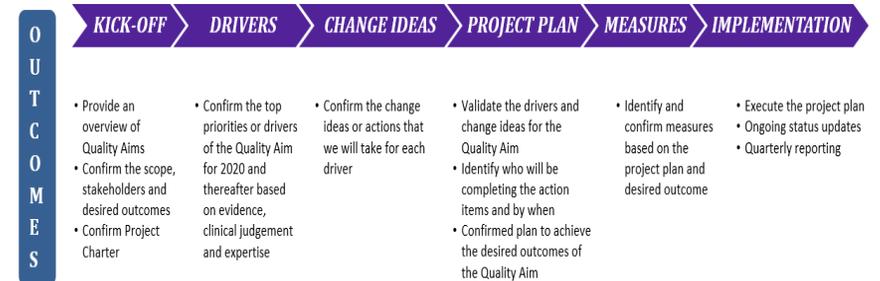
Figure 4



An overall standardized quality improvement methodology was embedded across all Quality Aims resulting in the identification of key drivers and the development of change ideas. Core to the standardized process was early and continuous stakeholder engagement, coupled with the use of evidence and best practices. Each Quality Aim had an associated clinical team supported by a quality improvement specialist. Team charters, project plans, and monitoring tools were developed and customized to the Quality Aims framework shown in Figure 5. From inception the teams'

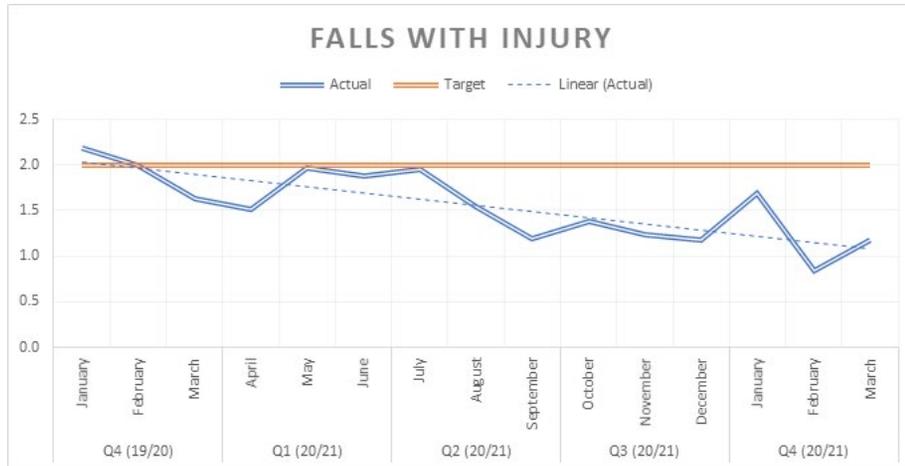
focus was on sustainability of efforts through development and implementation of user-friendly quality improvement tools and strategies.

Figure 5



In January/February 2020, as part of our Zero Harm Journey, zero falls with injury (minor, moderate, and death) was selected as one of the corporate Quality Aims. The falls prevention Quality Aim involved a series of evidence-based interventions including implementation of the Morse Falls Risk Assessment, a multi-factorial care plan; monitoring and tracking compliance using EPIC (electronic patient medical record); enhancing interdisciplinary communication using alerts and a standardized tool to communicate falls risk and falls prevention strategies; reinforcing routine toileting and mobility; monitoring medications; education and training on falls prevention; observing; and post falls response. In addition, a robust patient and family engagement component included having patients and family members in post fall huddles. Further, a home and community engagement component included the availability of a pre-discharge home visit and risk assessment by an occupational therapist and access to in-home exercise programs. This led to decrease in our falls with injury rate by 46% (See Figure 6).

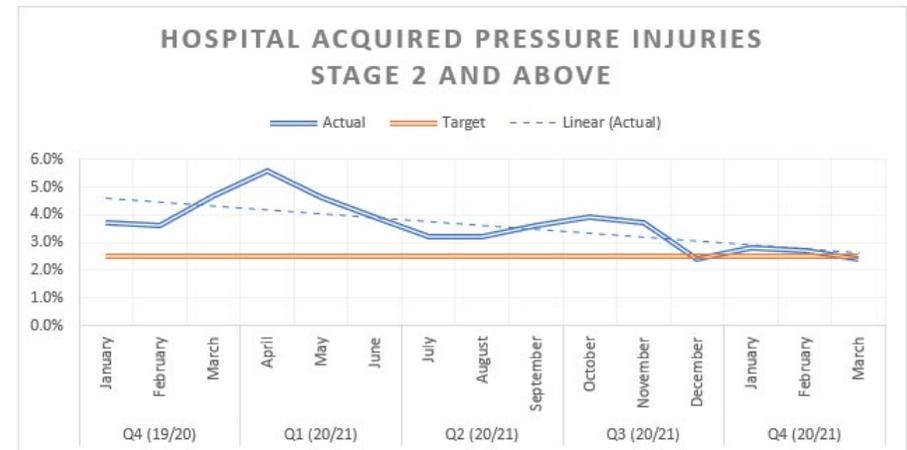
Figure 6



Since the inception of the Pressure Injury Quality Aim, a comprehensive work plan was created to guide implementation efforts to address pressure injuries corporately. Foundational work included establishing a governance and accountability structure that includes operational leadership and point of care unit engagement to oversee pressure injuries, including Hospital Acquired Pressure Injuries (HAPIs), across the entire organization. To guide improvements in clinical practice associated with reducing HAPIs, we engaged local expertise in wound, skin and ostomy including a team of three nurses who provide internal consultation for complex wounds (e.g. pressure injuries staged 3 or greater; diabetic foot ulcers; infected surgical wounds; difficult to manage or non-healing wounds; and new or challenging ostomies). Improvements were also guided by a multi-faceted evidence-based approach to prevent HAPIs, including risk and skin assessments (on admission and throughout the hospital stay); managing moisture; optimizing nutrition and hydration; offloading pressure points with regular positioning; using preventative devices and surfaces, including a three-step process (inspection, intervention, tracking) of assessing mattresses. Since

February 2020 with the launch of the Pressure Injury Quality Aim, our pressure injury rates have decreased by 35% (See Figure 7).

Figure 7



Cohorting Safely and Wisely

COVID-19 pandemic brought many challenges to the care of hospitalized patients. The need to enhance infection, prevention and control practices, including the management of patients in multi-bedded rooms created difficulties for patient admission and placement in an appropriate bed. This often delayed patient movement from the Emergency Department onto the inpatient units, created bottlenecks and delays in patients receiving care in the most appropriate space. To balance patient safety and hospital capacity needs, a working group involving physicians, nurses, infection prevention and control practitioners, patient flow and bed allocators, developed an innovative algorithm, as shown in Figure 8, for cohorting our patients safely and wisely.

Figure 8

PHYSICIANS Select the appropriate reason for COVID-19 testing in EPIC for our Bed Allocators to cohort the patients appropriately and safely.	TYPICAL (screen shots below). BED ALLOCATORS Place patients as indicated in the cohorting algorithm.	INPATIENT NURSING Use appropriate precautions with all isolated patients.
ASYMPTOMATIC <ul style="list-style-type: none"> - Pre-surgery - Pre-procedure - Cancer chemotherapy - Hemodialysis - Transfer to LTCH/RH/Other facility 	ASYMPTOMATIC <ul style="list-style-type: none"> - Patient to be placed in any room (semi-private preferred) 	ASYMPTOMATIC <ul style="list-style-type: none"> - Initiate droplet/contact precautions at the bedside - Patients may be placed with non isolated patients - Curtain must be drawn around the patient - Gown and gloves should be removed and hand hygiene should occur when moving from an isolated to a non-isolated patient
ATYPICAL <ul style="list-style-type: none"> - Delirium - Unexplained or increased number of falls - Acute functional decline - Pink eye (conjunctivitis) - Headaches - Unexplained fatigue, malaise, muscle aches - Abdominal pain 	ATYPICAL <ul style="list-style-type: none"> - Patient may be cohorted with other patients pending an Atypical swab - Only two patients should be cohorted, ward rooms should not be used 	ATYPICAL <ul style="list-style-type: none"> - Initiate droplet/contact precautions - Curtain must be drawn between the patients - Gown and gloves should be changed and hand hygiene should occur between every patient interaction
TYPICAL <ul style="list-style-type: none"> - Fever - Cough (new onset or worsening) - Shortness of breath/difficulty breathing (new onset or worsening) - Sore throat - Nasal congestion - Loss of taste or smell - Nausea, vomiting, diarrhea - Chills - Runny nose - Clinical/radiological evidence of pneumonia - Contact of a confirmed case of COVID-19 OR part of outbreak investigation* 	TYPICAL <ul style="list-style-type: none"> - No cohorting with others - Private room or semi with bed blocked 	TYPICAL <ul style="list-style-type: none"> - Initiate droplet/contact precautions <div style="border: 1px solid blue; padding: 5px; margin-top: 10px;"> <p>i The IPAC team reviews and assesses all isolated patients. Precautions will be removed when clinically appropriate</p> </div>

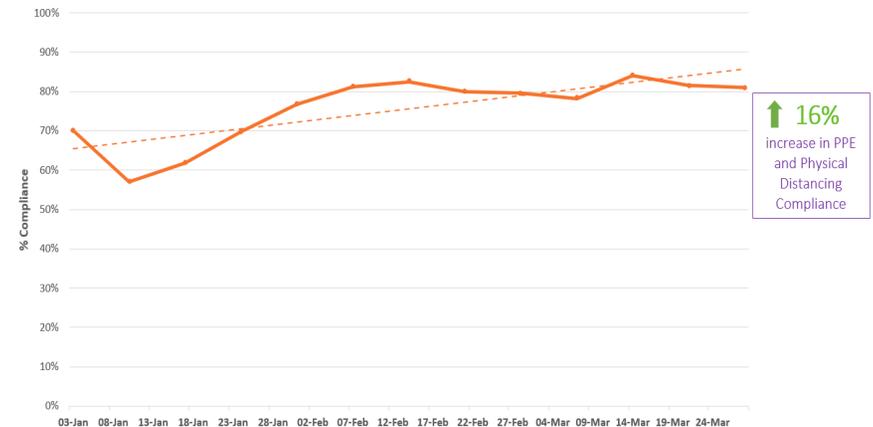
Personal Protective Equipment

As part of our ongoing efforts and journey towards zero harm, Mackenzie Health created a robust Personal Protective Equipment (PPE) audit process to ensure adherence to standards of donning and doffing PPE. Audits are completed on all inpatient units on all 3 hospital sites. Audits are completed on iPads and the results are displayed in real-time onto electronic dashboards for unit managers as shown in Figure 9. The goal of this initiative is to provide managers and direct care staff with the ability to continuously promote safe practices at Mackenzie

Health. We have demonstrated improved adherence with standards of PPE use.

Figure 9

Combined PPE and Physical Distancing Compliance



COLLABORATION AND INTEGRATION

MackenzieHelps

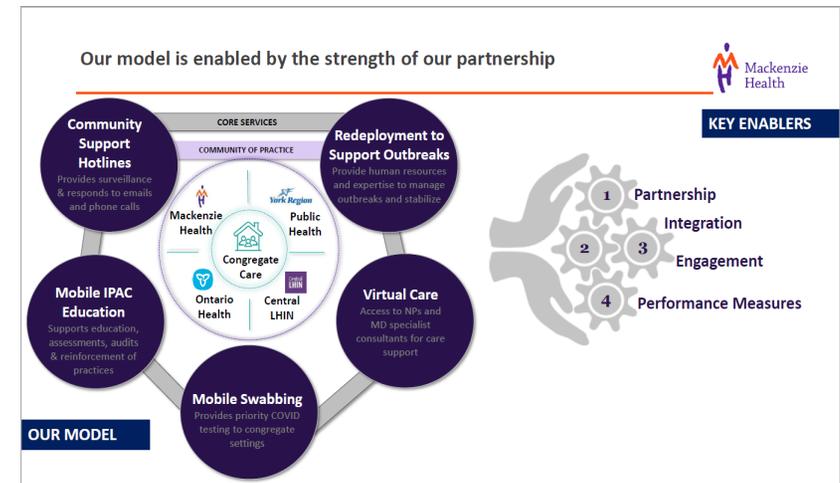
The MackenzieHelps program, launched in 2019, continued this year to support patients transitioning from hospital to home after their acute admission. The MackenzieHelps program is a partnership between Mackenzie Health, Saint Elizabeth Health and CHATS-Community and Home Assistance to Seniors. The integrated team consists of patient navigators, community care leads, nurses, personal support workers, occupational therapists, physiotherapists, caregiver counselors, social workers, and dietitians. The team works closely with patients and their families to ensure that the care plan at home will meet all the patient's needs and that they are well supported once home. This year, the program surpassed its target and supported 176 patients in

returning home with enhanced care, reducing Alternate Level of care (ALC) days in the hospital. Building on this success, the hospital also launched MackenzieHelps Plus in December 2020, a high intensity needs program for patients whose care needs are greater than what the base program offers. With our partners we were able to successfully transition eight high needs patients back to their homes and families in our community.

Transcending COVID-19 and building partnerships through an innovative model of collaboration

During the first wave of the COVID-19 pandemic, Mackenzie Health experienced an influx of patients with COVID-19 infection from the community and congregate care settings. A Community Support Centre was created, and telephone support hotline was put in place to address the rising number of questions on how to deal with multiple demands caused by the pandemic and fear of the unknown. Pressing issues such as PPE and staffing shortages, proper PPE use, swabbing guidelines, funding pressures and other concerns required prompt actions. Subsequently, in response to the ongoing challenges of the COVID-19 pandemic, Mackenzie Health created the Western York Region Infection Prevention and Control (IPAC) Hub to support the community and congregate settings. The IPAC Hub utilized an innovative model of partnerships based on intentional collaboration between multisectoral stakeholders, including Mackenzie Health, York Region Public Health (YRPH), Ministry of Health of Ontario, Central LHIN, and 117 congregate settings. The innovative partnership model aims to empower, support, and build internal capacity within these congregate settings. The IPAC mobile team is an integral part of IPAC Hub and provides various tools and strategies to effectively address issues related to COVID-19 outbreak as displayed in Figure 10. The goal is to enable and reinforce a community partner's self-management.

Figure 10



Assessment Centre and Vaccination Clinic

Mackenzie Health opened two COVID-19 Assessment Centres to help ease pressures being experienced by the Emergency Department (ED) teams who had been previously coordinating the testing and assessment of suspected COVID-19 cases. A Cold and Flu Clinic was opened at Mackenzie Health's Urgent Care Centre to provide access to patients with symptoms of upper respiratory illness that could not be managed by their primary care providers. In December 2020, Mackenzie Health opened a COVID-19 Vaccination Clinic at Cortellucci Vaughan Hospital to support the rollout of the provincial vaccine program by administering vaccines to eligible York Region residents. Mackenzie Health is proud and excited to be part of this significant step forward in tackling the COVID-19 pandemic.

CCHL's Honouring Health Leadership event and 3M Awards

Mackenzie Health's Improving Stroke Outcomes Utilizing Data and Technology project was named the recipient of the 3M Health Care Quality Team Award (Across a Health System). Mackenzie Health's Stroke Team held a LEAN event to identify opportunities to streamline the hyperacute stroke process. They leveraged a multidisciplinary approach by utilizing EMR technology and data-driven process improvements as an enabler to achieve better functional outcomes for stroke patients. The development, customization, and optimization of the Stroke Program not only standardized how care was delivered to stroke patients but allowed for comprehensive structured documentation, improved reporting, and data-driven process improvement initiatives.

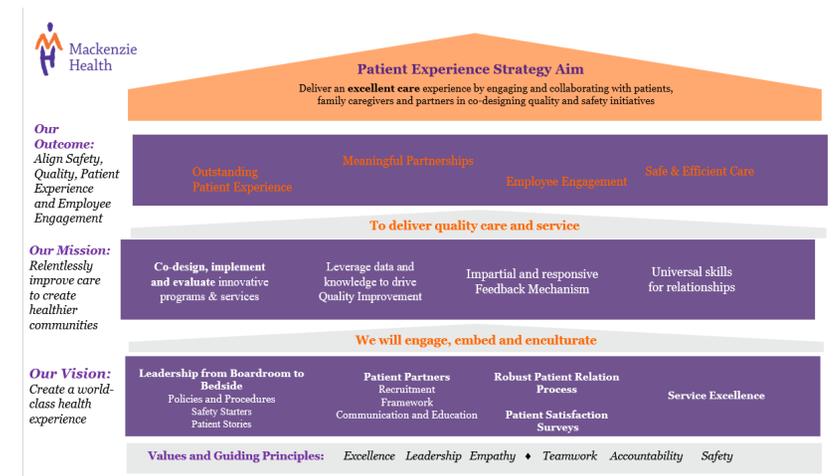
As a result of the implemented incremental changes, door-to-needle (DTN) and door-in-door-out (DIDO) times were drastically reduced by 51% and 27%, respectively. This resulted in 36% of patients achieving higher levels of functional status, as evidenced by the improvement in AFIM scores, and 52% more patients were discharged home. The team also saw an overall estimated cost avoidance of \$360,326 per year.

PATIENT/CLIENT/RESIDENT PARTNERING AND RELATIONS

To further align with one of Mackenzie Health's strategic priorities of "we value what matters to you", we have expanded our Patient Experience program and developed our three-year Patient Experience Strategy in collaboration with our patient partners. Our Patient Experience Strategy was designed in alignment with best practices and recommendations and action plans developed

for our Patient Experience Strategy, including processes and roles & responsibilities related to the Patient Partners Program. The development of this strategy is in line with Mackenzie Health's philosophy of continuous process and quality improvement that specifically focuses on what matters to patients and families seen in Figure 11.

Figure 11



WORKPLACE VIOLENCE PREVENTION

Mackenzie Health will continue the mandatory indicator for Number of Workplace Violence for 2021/22. This is of critical importance to our organization as we continue to standardize actions relating to prevention of workplace violence.

Mackenzie Health is committed to the prevention of workplace violence across the continuum of care, including staff, patients, volunteers, and visitors. Mackenzie Health ensures a safe environment through its Workplace Violence Prevention Policy and Program. Members of the multidisciplinary Workplace Violence

Committee meet regularly to ensure a safe environment and to identify all potential sources of violence.

The organization conducts annual risk assessments to identify all potential sources of violence and implement measures to eliminate or mitigate risk. The intent of regular review is to identify new or elevated risks resulting from changes in facility design, workflow, and recommended actions to be taken to address these risks. Staff are provided with training on identifying and reporting hazards and incidents related to workplace violence in the RL Safety Reporting System. Managers/supervisors are offered training on how to investigate incidents and document actions to prevent recurrence.

The organization continues to add and expand the depth of its awareness and education programs (Safety Talks, Practice Pearls, e-learning modules, Corporate Onboarding, and Interprofessional Orientation, as well as courses on de-escalating and managing violent behaviours). The Professional Practice and Education portfolio is investigating expanding Gentle Persuasive Approaches training to Emergency and Medicine units, where there is a significant number of incidents as a result of treating patients with responsive behaviours. Through the multidisciplinary Workplace Violence Prevention Committee and Joint Health and Safety Committees, the organization identifies and implements opportunities for continuous improvement to our Workplace Violence Prevention Program. Professional Practice, in collaboration with Occupational Health and Safety and Clinical Informatics, has built and continues to improve upon behavioural risk assessments, risk interventions and care planning tools in the Electronic Medical Record, EPIC. This allows nurses to identify (flag) and treat violent behaviours in patients while implementing protective measures for all staff.

VIRTUAL CARE

In efforts to support care partner presence during the pandemic, we had to rapidly adapt our visitor policies and communication tools to support non-physical connections. This includes the increased utilization and swift adoption of innovative virtual care platforms including internet-enabled devices and communication applications to connect patients to their families in instances where it is unsafe for the usual face-to-face visits. Being able to see and hear their loved ones virtually helped improve patients' mental and emotional well-being. Our patients and care partners expressed gratitude, joy, happiness, relief, and a sense of closure for those who lost loved ones for being able to see and speak with their loved ones. During the pandemic, our Virtual care platforms also enabled our care partners to become more engaged in the care of their loved ones in a collaborative manner with healthcare professionals.

The working group used a quality improvement approach that included process mapping of what is working well and what is not and an accelerated Plan Do Study Act (PDSA) with point-of-care staff and managers. Through this planning, the overall goal of the virtual care support plan emerged as *“ensure that all patients and family caregivers have a method of communicating with their loved one via video calling (Zoom)”*.

The outcomes of Mackenzie Health's virtual care support plan were promising. In the initial few months of implementing, patient complaints decreased by 9% and compliments increased by over 200%. The volume of patient calls carried weekly has more than quintupled since the first week (116 to 604 with the highest 693 on week 7). Patients have shared they are very satisfied with being able to virtually connect with their loved ones. Mackenzie Health is also leveraged social media to share success stories of patients connecting virtually with their care partners as seen in Figure 12.

Figure 12



Remote Care Program

Over 2,800 patients enrolled in our Remote Care Program. This innovative program provides home for monitoring to COVID-19 patients through Mackenzie Health's Acute Respiratory Clinic (ARC). 6,300 virtual visits were conducted by Mackenzie Health hospital physician and 750 patients were placed on home monitoring. Overall, the program enabled patients to receive the care they need from home and empowered them to self manage by providing the tools and education to do so.

Next Steps

Mackenzie Health will continue with QIP last years 2020/21 indicators.

As outlined in the workplan and given the unprecedented pressure related to the COVID-19 pandemic, two (2) additional indicators will be added to our 2021/22 QIP this year. Those indicators will be Repeat Emergency visits for Mental Health & Personal Protective Equipment compliance. We will continue our efforts in managing COVID response, supporting long-term care homes and enhancing our staff & patient experience.

EXECUTIVE COMPENSATION

Mackenzie Health has a comprehensive executive performance-based plan. The plan has an allocated pay for performance percentage that exceeds the industry average and extends to the Director level and above.

The Mackenzie Health performance-based plan is linked to the achievement of strategic goals and objectives and includes patient centred service excellence QIP targets. Total compensation, which is benchmarked to market rates of peer hospitals, equals base salary plus performance-based pay, also referred to 'at risk' pay. The at risk pay component is:

- up to 15% of base pay for the President and Chief Executive Officer (CEO)
- up to 15% of base pay for Senior Management reporting directly to the CEO (Executive Vice President & COO, CNE, Executive Vice President & CAO, Vice President, Strategy and Redevelopment, Vice President, People Services and CHRO, Vice President, Finance and CFO and Vice President, Public Affairs, Stakeholder Relations and Chief Communications Officer)
- up to 15% of base pay for the Vice President, Medical Planning and Chief of Staff (COS)

All management staff complete annual Accountability Agreements incorporating corporate targets, program targets and individual targets. The Accountability Agreement objectives further align with the QIP.

SIGN-OFF

It is recommended that the following individuals review and sign-off on your organization's Quality Improvement Plan (where applicable):

I have reviewed and approved our organization's Quality Improvement Plan on April 30, 2021



Board Chair



Board Quality Committee Chair



Chief Executive Officer

Other leadership as appropriate

CONTACT INFORMATION

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