CLINICAL PRACTICE

Virtual connecting amid COVID-19: Mackenzie Health's experience

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ABSTRACT

This paper provides an overview on one health system's approach to enhancing visitor presence using an iPad-based virtual visit program for patients and their care partners amidst the COVID-19 outbreak. The challenges in safety and security and how they were overcome are detailed, as well as initiatives in attaining staff and patient buy-in. The outcomes from patients', care partners', and staff' perspectives are also discussed in this paper.

Key Words: Virtual care, Patient, Care partner experience

1. INTRODUCTION

Since the advent of the COVID-19 pandemic, health care organizations have been adapting their visitor policies to the evolving nature of the virus, the need for physical distancing, and supply chain capacity (e.g. availability of Personal Protection Equipment (PPE), and hand sanitizer).[1–5] Initial visitor access policies were quite restrictive in nature as maintaining public safety and the PPE supply necessitated the restriction of the physical presence of care partners (e.g. family members and other loved ones) for hospitalized patients.[1] Evidence quickly emerged on the detrimental effect of restricting visiting, including the social isolation with other potentially irreversible physical and psychological harm that patients and their care partners experienced.[2,6–10] There is also emerging evidence on the moral injury that staff are experiencing.[10] Given the integral role and support provided by care partners on quality of life and clinical outcomes, advocates and experts are calling for less restrictive visitor access policies.[11,12]

In efforts to support care partner presence, health systems had, and continue, to rapidly adapt their visitor policies and communication tools to support non-physical connections.[1–3,10] 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 in-person visits.[3,13] The virtual component enables a digitally secure application for patients, their care partners, and healthcare providers to see each other[3,10] which enhances the emotional connection through facial expressions and nonverbal communication.[14] Connecting virtually is showing promising signs globally with positive feedback from patients and their care partners.[2,13,15] Being able to see and hear their loved ones virtually helped improve patients' mental and emotional status.[2] For example, patients and care partners expressed gratitude, joy, happiness, relief and a sense of closure for those who lost loved ones by being able to see and speak to them.[2] Virtual care platforms are also enabling care partners to become more engaged in the care of their loved ones in a collaborative manner with

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healthcare professionals.[1, 2]

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2. VIRTUAL CARE SUPPORT PLAN DESCRIPTION

2.1 The context

With the COVID-19 pandemic, Mackenzie Health was forced to place restrictions on in-person visits of care partners to patients to mitigate the inherent risks involved in spreading the virus (e.g. droplet spread in close physical proximity, questionable PPE supply). At the time of Wave 1 in 2020, Mackenzie Health was comprised of 605 beds collectively with 1) 341 acute care beds including medical, ICU, surgical, mental health, pediatric, and obstetrics; 2) 96 complex continuing care/rehabilitation (CCC/Rehab) beds; 3)168 Long Term Care beds; and 4) 112 Reactivation Care Centre beds (54 Alternative Level of Care beds and 58 CCC/Rehab beds).

Responding to the directives set by Toronto Region COVID-19 Hospital Operations Table and Ontario Health [provincial oversight agency for health services], Mackenzie Health was forced to suspend its in-person visitor policy for what was deemed "non-essential" visitors in March 2020. This restrictive approach was counter to Mackenzie Health's organization quality aim nexus of patient-centred care with a focus on transforming patient experiences of care by more effectively communicating and engaging patients and care partners. This new challenge that COVID-19 had created necessitated a fast-paced implementation of a virtual care solution to connect patients with their care partners.

2.2 The planning

As part of the initial planning, the senior leadership brought together a working group to develop a virtual care support plan. 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. Key issues that surfaced in planning the virtual care solution were access to devices and limited human resources to assist patients in utilizing the virtual platform safely and effectively. Through this planning, the overall goal of the virtual care support plan emerged to "ensure that all patients and family caregivers have a method of communicating with their loved one via video calling (Zoom ^{TM})". The working group also developed a privacy guide document to be shared with patients and their care partners that is described in Figure 1.

Mackenzie Health Privacy Guide for Virtual Family Visits

To help patients, clients, residents and families maintain contact during the No Visitor restriction period, we are happy to facilitate virtual family visits for our patients, clients and residents who do not have their own phones or devices.

1. We may need to limit or end the virtual visit to protect the privacy concerns of other individuals and the care needs of our patients, clients and residents. Please do not record these visits.

2. All electronic communication may have some risk Mackenzie Health cannot be responsible for the security of the devices or platforms used for these visits.

3. The virtual family visit may not be used for family discussions with the health care team. If you have questions for the health care team, please speak to them directly and we will arrange for this conversation.

Figure 1. Mackenzie Health privacy guide for virtual family visits

To achieve the intended overall goal for virtual care implementation, a detailed work plan was developed including key objectives with aligned tactics and key performance indicators (KPIs) with ongoing status updates outlined in Table 1.

A key component of the implementation plan was detailed flowcharts that outline the overall process of enacting the virtual care support plan during the day, evening and weekend shift involving support staff, unit clerk (days only), and nursing staff. Key enablers of the virtual care support plan was the development of two roles (scheduler and virtual caller) to enable video calling between patients and their care partners. The scheduler role focuses on taking a patient's request for a video call and registers them into a timeslot. The virtual caller instructs the patient and family on how to initiate the

call and assists with ending the call and ensuring privacy. A detailed description for both roles to ensure responsibilities were clearly defined were developed and outlined in Table 2. Existing staff were redeployed in these new connecting roles to assist with the virtual care support plan.

Table 1. Virtual care support plan work plan

Objective	Tactics	KPI	Status
Ensure each family caregiver has been offered Zoom^{TM} video calling	• Call designated family caregivers to offer Zoom^{TM} video calling • Assist family caregivers in downloading Zoom^{TM} • Provide all interested family caregivers with Meeting ID and password • Develop and implement process that ensures family members of new admissions are contacted and offered Zoom^{TM}	• % of designated family caregivers contacted • % of family caregivers who have opted for Zoom^{TM} and have downloaded application • % of family caregivers who have received their meeting ID and password	• 100% of designated family members have been called • 100% of interested family members have been set-up with Zoom^{TM} • Support staff calling all designated family members of new admissions as a part of their daily work
Distribute iPads to each unit for utilization	• Set-up each iPad with unit specific email • Create daily Zoom^{TM} schedule for each unit • Educate ward-clerk how to start video call with family member • Provide Tip Sheet to each unit on starting Zoom^{TM} calls	• % iPads set up with unit specific email • % of iPads configured with list of patients/caregivers who have downloaded Zoom^{TM} • % of designated person on each unit educated on new process	• 100% of iPads (17) have been set up with unit specific email • 100% of iPads configured with list of patients/caregivers who have downloaded Zoom^{TM} • 100% of units have one designated person trained on new process • ED given one iPad to facilitate patient calls
Update iPads with up-to-date and accurate patient information	• Input every unit's patients on unit specific iPad (those interested in Zoom^{TM}) • Develop and implement process to complete daily checks on units to ensure patient list is up to date and accurate	• % of iPads that have been configured with accurate and up-to-date patient lists • % of milestone completion	• 100% of iPads that have been configured with accurate and up-to-date patient lists • 100% of milestone completion
Ensure daily security check is complete	• Develop and implement process that ensures security of iPads on each unit	• % of milestone completion	• 100% of Milestone completion • 100% of iPads accounted for during security audits
Create awareness on MH Zoom^{TM} video calling as part of enhancing patient experience	• Collaborate with communications to ensure Zoom^{TM} availability and instructions are on the website	• % of milestone completion	• 100% of Milestone completion • Communications has uploaded all materials to the website

Mackenzie Health employed several strategies to increase awareness around the virtual care support plan prior to launching. Presentations and train the trainer huddles on the virtual care support plan were made to all patient-facing staff and unit leadership.

Email and notices identifying visitor restrictions were in-

dicated to staff that Video calls were utilized as an alternative method to in-person visits, alongside updated FAQs documents. A standardized letter was also provided to patients and their care partners. The hospital received 32 iPads that were deployed to clinical areas, outpatient dialysis and chemotherapy clinics. Each ipad was designated a Mackenzie Health email to enable the use of ZOOM^{TM}. This information was then shared with the family to login to the platform using a unique login and password for security. Dedicated staff are assigned to deliver the iPads mounted on roller stands on each unit. To encourage staff engagement, the Incident Management Structure provided funding towards a weekly award consisting of a $100 gift card given to the unit with the most video calls for patients and their care partners.

2.3 The launch

The 'go live' of the virtual care support plan using Zoom^{TM} was launched in early April with a series of activities taking place over the first week that are outlined in Figure 2.

Table 2. Scheduler and virtual caller roles and responsibilities

Scheduler	Virtual Caller
• Schedule patients and caregivers in the indicated time slots • Inform the family that the caller will call 15 minutes prior to the scheduled call to inform them of the meeting ID and password • Call *Zoom Caller* at their cell-phone to inform them if any patients were added to their list	• Connect with the nurse prior to entering patient's room • Ensure proper PPE is worn • Ensure the correct patient is in the room • Enter the patient's room and introduce yourself • Conduct 2 patient identifiers: Patient's first and last name, and MRN number • Gain consent from the patient that they would like to connect with their loved one • Read the privacy script to the patient and family once the meeting has started • Ensure the patient understands and acknowledges the outlined privacy terms • Wipe down the iPad/Phone between each patient visit using the Green Clorox Wipes • As demonstrated at the start of shift • Inform the nurse that the call has ended and how the virtual call went with the patient
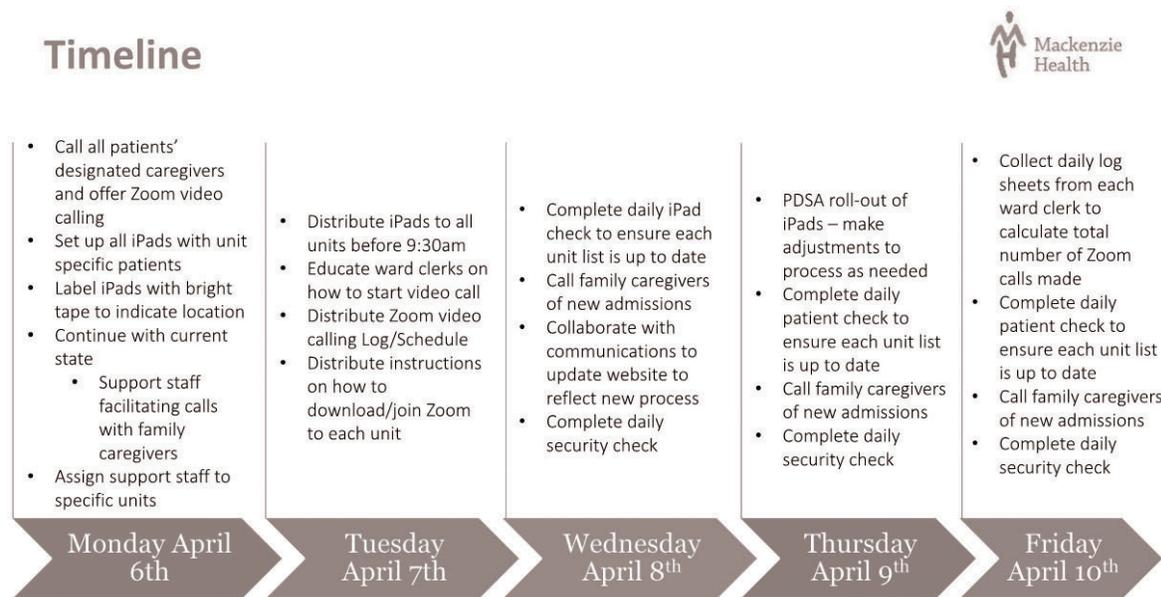
Figure 2. Virtual care support plan using Zoom^{TM} Launch

The current process includes that tablets are distributed to units to aid patients who did not have their own devices and are kept safe to ensure privacy. A security system was developed specifically for the devices to ensure they are safely locked up after use. Devices are sanitized after each use prior to securely being stored.

3. PROGRESS, PROMISING SIGNS AND KEY INSIGHTS

The use of Zoom^{TM} was implemented after receiving to patient feedback that they they loved the enhaced ability to connect virtually with their loved ones during limitied physical connection attributed to the pandemic. A sustainability plan was established in collaboration with the information technology team to ensure ongoing accessibility for patients and their families to connect during continued visitor restrictions.

The outcomes of Mackenzie Health's virtual care support plan are promising. In the initial few months of implementation, 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). In terms of staff compliance, Mackenzie Health has seen 100% compliance on both information sharing and privacy policies. Patients have shared they are very satisfied with being able to virtually connect with their loved ones. Mackenzie Health is also leveraging social media to share success stories of patients connecting virtually with their care partners as seen in Figure 3.

Figure 3. Social Media

4. MOVING FORWARD

As Mackenzie Health continues to work on enhancing patient and family-centered care, many lessons have been learned through their experience with the COVID-19 pandemic. These lessons include the ongoing need to ensure that patient and family continue to be engaged in meaningful ways, whether through virtual connections or helping to co-design programs and services. The virtual connection experience has helped to inform the co-designing and implementing of the Patient Experience Strategy. Aligned with Mackenzie Health's strategic priority of "we value what matters to you", the key aim is to "deliver an excellent care experience by engaging and collaborating with patients, families, and partners in co- designing quality and safety initiatives." Overall, efforts to date have shown promising signs in patients' and care partners' satisfaction associated with enhancing care partner presence using an iPad-based virtual visit program amidst the COVID-19 outbreak.

CONFLICTS OF INTEREST DISCLOSURE

The authors declare that there is no conflict of interest.

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