



Remote Monitoring for COVID-19 Patients

Remote care management programs for patients with chronic disease have been successfully deployed across Ontario to remotely monitor and support the care of patients with chronic disease within their home environment. Many patients with probable or confirmed COVID-19 are self-isolating at home, in the community or in cohort settings with limited supports to monitor their health status and address emerging issues. Remote care management programs and platforms can be leveraged to monitor COVID-19 patients and assess symptoms, identify changes in health status and connect the patient with their health care team.

Ontario Health (OTN) has an existing provincial remote monitoring platform and care pathways that can be leveraged to monitor the care needs of COVID-19 patients remotely.

Clinical Model and COVID-19 Remote Monitoring Use Cases

Responding to urgent needs related to the COVID-19 pandemic, Michael Garron Hospital expressed interest in leveraging the existing provincial solution to enable remote monitoring of ongoing symptoms in a home, community or cohort setting for admitted patients ready to be discharged and have been confirmed or are probable for COVID-19.

Michael Garron Hospital will leverage a Bring-Your-Own Device (BYOD) offering to enable symptomatic patients with probable or confirmed COVID-19 to access the remote monitoring platform via an app to continue self-isolation at home, in the community or cohort setting. Clinical model and processes have been codesigned with the Michael Garron Project Team. Referrals can be made by any hospital staff by completing a program-specific referral and informed consent process, which are then sent to the 'virtual ward clinic team'.

Monitoring check-ins are scheduled once a day, 7 days a week. Patients receive an email or text notification (according to preference) on their own devices when check-ins are due. Patients simply check into the app to submit their responses to assessment questions, submit biometrics manually (e.g. temperature), connect via a video visit with their health care team, and receive just-in-time health messages.

Responses are automatically sent to a Care Team platform where dashboards display health scores and alerts generated by patients' response data in a hierarchical order. This allows for easy multi-modal trending to provide meaningful decision supports for alerts and caseload management.

Access to a one-stop database to review, monitor, and assess patient health survey responses allows for the dedicated 'virtual ward clinical team' to identify urgent and emergent issues that require follow-up by video visit via the app or by phone. This program has the potential to reduce demands on hospital beds and associated resources, while still providing important and timely care to patients symptomatic with COVID-19 at home, in community or cohort settings.



Rapid Deployment Process

Ontario Health (OTN) has the following resources and processes in place to facilitate participating sites to rapidly deploy this program, including:

1. Telehomecare Host Organization Agreement: Available for BYOD offering. The BYOD mobile application cost is \$25 per patient per month. Any potential BYOD discounts on monthly fees provided by the vendor will be passed on to participating organizations.
2. Privacy & Security: Ontario Health (OTN) has a letter of attestation outlining that due diligence regarding our Privacy Impact Assessment/Threat Risk Assessment recommendations has been completed and all critical issues have been addressed.
3. Site Engagement & Review: Implementation resources are available for site use. Depending on site availability, Ontario Health (OTN) can review the COVID-19 pathway with new sites within 1-5 days.
4. Referral Process and/or Form: Ontario Health (OTN) can review with the site the referral form and process within 1-5 days (during the Site Engagement & Review phase), plus an additional 1-3 days to prepare and/or support referral form and process customizations.
5. Training & Support: Ontario Health (OTN) will train with supporting materials, customize as required, and provide resources and tools to support post Go-Live operations.
6. Customization: Any additional customizations to the pathway can be supported but will have an impact on the minimum rapid deployment timeline.
7. Go Live Timeline: Ontario Health (OTN) solution vendor (Vivify Health) is prioritizing work related to COVID-19 and estimates a 3-5-day turnaround time to add new sites to the production environment for Go Live.

For More Information

For more information on the COVID-19 patient remote monitoring solution and pathways and how to implement, please contact Sandra Mierdel at smierdel@otn.ca.