

COVID-19 Screening EMR Tool for Primary Care: A case study on efficiently screening for COVID-19 in Northern Ontario

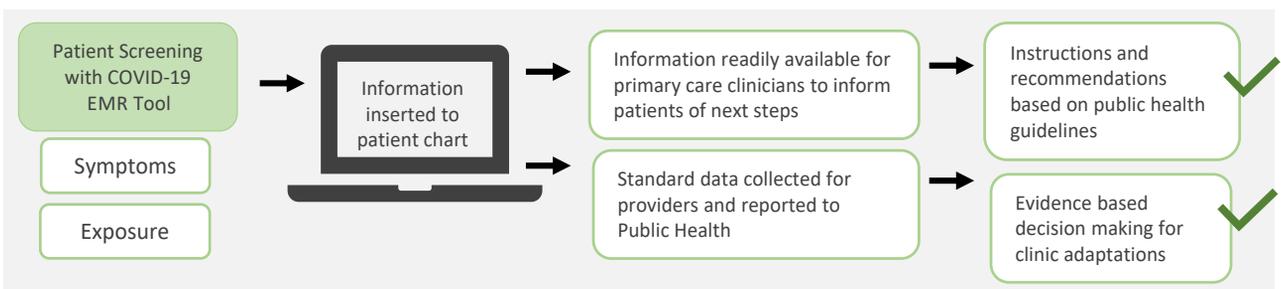
The COVID-19 EMR Screening Tool integrates seamlessly into primary care office workflows, allowing staff to screen patients efficiently and establish the appropriate course of action. The tool has limited the need for ongoing education for staff due to rapidly changing guidelines, with the aggregated data facilitating insights that can be used to inform clinic services and procedures.

The novel coronavirus (COVID-19) pandemic has created a great deal of concern across the globe. In the province of Ontario alone, there have been over three million tests completed between January 2020 and October 2020.¹ In response to the pandemic, primary care clinicians have had to adapt to rapidly changing conditions in order to ensure safety for their patients, staff, and themselves, and to reduce the risk of community transmission of the virus.

Although virtual care options (video, chat messaging, and audio calls) are being used to limit the number of patients in clinics, for patients who need to be seen in person, various levels of screening take place to establish a patient’s risk of COVID-19 infection.^{2,3} As patient screening is required before an in-person visit, it is essential that the screening process is efficient and provides complete, accurate information to the primary care provider and staff members.

The eHealth Centre of Excellence translated the Ministry of Health and Long-Term Care’s guidelines for COVID-19 screening into an electronic medical record decision support tool (for TELUS and OSCAR EMRs). The tool is updated regularly to ensure alignment with the Ministry guidelines. Eighteen primary care clinicians implemented the COVID-19 screening tool in April 2020 to integrate efficient screening across a group of Northern Ontario clinics.

Figure 1. Dual Purpose Uses for COVID-19 Screening Tool: Patient Management and Information Collection



The COVID-19 EMR screening tool was easy to integrate into staff workflows for COVID-19 screening, facilitating clinics across City of Lakes Family Health Team in Sudbury & Area to adopt the tool during a rapidly changing and busy period with minimal effort and disruption to their practice. The team highlighted several benefits to adoption, such as: easy access in the main EMR toolbar, ease of working through screening questions, and ability to access the result on their computer screen quickly without having to take the extra step of completing additional searches in patient EMRs.

This group of primary care clinicians has been able to leverage the data collected from the standardized forms to make informed decisions regarding pandemic issues. The information collected was extracted from patient EMRs and used to inform public health and for internal reporting. For example, the team sorts patients by levels of risk according to their answers to the screening questions and cross-references the groups to see how many patients go in for testing. The percentage of patients who screen positive is also used as a discussion point during internal meetings regarding the reinstatement of services and the ordering of personal protective equipment. In addition, the clinics use this information to observe symptoms over time and at key time periods (for example, peaks in provincial cases and seasonal changes, to help strategize next steps for the clinics' response).

Figure 2. Benefits for Staff and Patients

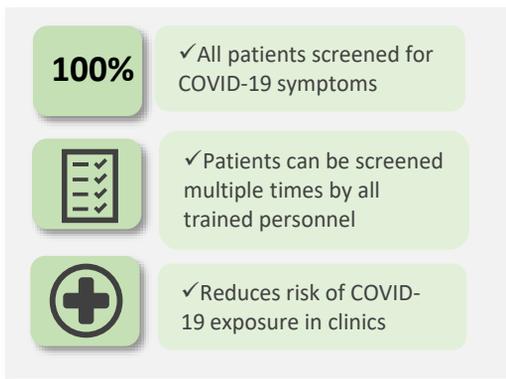


Figure 3. Benefits for Analysis and Data Collection



The COVID-19 screening tool was developed to meet our needs across multiple clinics in our region. Prior to the screening tool, clinics were finding it difficult to screen patients efficiently, adding extra tasks to their workflow. Now, screening is simple for our staff and the results are easy to pull up in the EMR.

- Meghan Peters, City of Lakes Family Health Team

If you have any questions or would like further information on this case study, contact communications@ehealthce.ca.

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Works Cited:

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2. A. Mehrotra, K. Ray, D. M. Brockmeyer, M. L. Barnett and J. A. Bender, "Rapidly converting to "virtual practices": Outpatient care in the era of Covid-19," *NEJM Catalyst*, vol. 20, no. DOI: 10.1056/CAT.20.0091, pp. 1-5, 2020.
3. J. E. Hollander and B. G. Carr, "Virtually perfect? Telemedicine for Covid-19," *The New England Journal of Medicine*, vol. 382, no. 18, pp. 1679-1681, 2020.

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