



Opening the digital front door: digital offerings in a pediatric emergency department

Daniel Rosenfield¹ · Lianne McLean¹ · Julia Clemens¹ · Jason Fischer¹

Received: 15 July 2021 / Accepted: 24 July 2021 / Published online: 5 August 2021

© The Author(s), under exclusive licence to Canadian Association of Emergency Physicians (CAEP)/ Association Canadienne de Médecine d'Urgence (ACMU) 2021

Dear CJEM,

The journal has published numerous articles highlighting the evolving role of virtual care in emergency department care since the start of the pandemic. While early virtual care models involved appointment-based bookings for non-urgent complaints, we wanted to highlight the implementation of a scalable pediatric virtual urgent care solution. Partnering with Think Andor and utilizing Microsoft Teams and Azure, the SickKids virtual triage and urgent care is fully integrated into our enterprise-wide electronic medical record (EMR). We have created a solution that allows patients and their families to access information 24 h a day, 7 days a week, and access providers for a virtual visit 15 h per day, 7 days a week, if eligible.

After procurement and development, our digital front door was launched in April 2021. After selecting a health-care solutions software company, we developed the symptom checker. The symptom checker is based on the Schmitt-Thompson triage protocols, which have been externally validated [1]. The symptom checker is a simple and efficient tool used by patients and families to establish their primary question or reason for seeking care. After selecting the primary complaint, they are then offered a drop-down selection for a secondary symptom, related to and streamlined from their primary complaint. Based on their primary and secondary symptoms, they are then directed to one of three encounter outcomes—to a local emergency department for

in-person care, to their primary care provider or to a virtual visit. Providers utilize a dashboard integrated into the EMR to connect with patients via secure videochat and document contemporaneously.

In the first 3 months since launch (April 7th–July 7th 2021), we have had 2875 unique encounters, resulting in 44% of patients being sent to their local ED, 28% being referred to their primary care provider and 27% being eligible for a virtual visit. The most common chief complaint was fever (24%), followed by rash (6%) and vomiting/diarrhea (6%). The majority of encounters occur between the hours of 6 and 8 PM. Two thirds of users reached out to their primary care provider prior to accessing our service. A more robust qualitative and quantitative evaluation is ongoing.

Our digital front door was launched during the peak of COVID-19's third wave. A unique way to access pediatric emergency services, the system allows families to access information and disposition information at anytime, as well as care from ED providers if required.

Reference

1. Semigran H, Linder J, Gidengil C, Mehrotra A. Evaluation of symptom checkers for self diagnosis and triage: audit study. *BMJ (Clin Res ed)*. 2015. <https://doi.org/10.1136/bmj.h3480>.

✉ Daniel Rosenfield
Daniel.rosenfield@sickkids.ca

¹ 555 University Avenue, 12th Floor, Toronto, ON M5G1X8, Canada