BRIEF REPORT

How One eConsult Service Is Addressing Emerging COVID-19 Questions

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Introduction: **The COVID-19 pandemic has made innovative solutions to providing safe, effective care paramount. eConsult allows primary care providers to access specialist advice for their patients without necessitating an in-person visit. This study aims to explain how an eConsult service adapted to providing care for COVID-19 patients and examine its impact on patient care.**

Methods: **We conducted a cross-sectional analysis of cases submitted to COVID-19 specialties through the Ontario eConsult service between October 2020 and April 2021. Utilization data were extracted from all eligible cases to assess number of cases submitted, patterns of use, response times, and case outcomes (ie, whether eConsult resulted in new or additional information, whether or not a referral was needed).**

Results: **2783 eConsults were submitted to 5 COVID-19 specialty groups during the study period. 71% of the cases were for vaccine-related questions. The median response interval was 12 hours. Providers received advice for a new or additional course of action in 36% of cases. 84% of the cases did not require a referral.**

Conclusions: **Our study demonstrated the effectiveness of rapidly adapting eConsult for COVID-19 care and supports similar action for other services. (J Am Board Fam Med 2022;35:601–604.)**

Keywords: **Cross-Sectional Studies, eConsult, Family Medicine, Health Services Accessibility, Ontario, Pandemics, Patient Care, Primary Health Care, Telemedicine**

Introduction

The COVID-19 pandemic has required primary care providers (PCPs) to strike a difficult balance between caring for patients and mitigating risk of spreading the disease,[1] while public health measures have reduced capacity at many specialty clinics,[2] making it difficult for PCPs and their patients to access specialist advice.

Fortunately, there is a solution: eConsult,[3] an asynchronous form of communication that allows requesting providers (usually PCPs, but sometimes specialists) to submit clinical questions to specialists regarding their patients' care and receive a response within days, often removing the need for an in-person visit.[4]

In this report, we explain how an eConsult service adapted to providing access to COVID-19 specialist advice and examine the service's impact on patient care.

Methods

Design

We performed a cross-sectional descriptive analysis of eConsult cases submitted to COVID-19 specialties between October 1, 2020, and April 30, 2021.

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Competing interests: Dr. Liddy and Dr. Keely are co-founders of the Champlain BASE eConsult Service, but they have no commercial interest in the service and do not retain any proprietary rights. As Co-Executive Directors of the Ontario eConsult Centre of Excellence, they receive salary support from the Ontario Ministry of Health. Dr. Keely answers occasional eConsults (less than one per month) as a specialist through the service, for which she is reimbursed.

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Setting

This study took place in Ontario, a province of 14.6 million people.

Interventions

The Ontario eConsult Service was launched in 2018 with support from the Ministry of Health. Through its BASE specialty model, PCPs can submit cases to more than 100 specialty groups, which are assigned to individual specialists based on availability. Specialists respond within 7 days—median 0.9 days—with advice, recommendation of referral, or request for more information. PCPs complete a mandatory closeout survey assessing the eConsult's impact on their course of action and decision to refer. Built from 2 existing regional services, Ontario eConsult maintains a regional structure while offering service across the entire province. The service is offered at no cost to patients and providers, and specialists are reimbursed at a prorated hourly rate of $200 CAD ($156.27 USD) based on their time spent completing cases (median case cost was $50 CAD [$39.65 USD]). PCPs are also eligible for a flat fee payment using an existing fee code. A full description of the service is available online (https://econsultontario.ca).

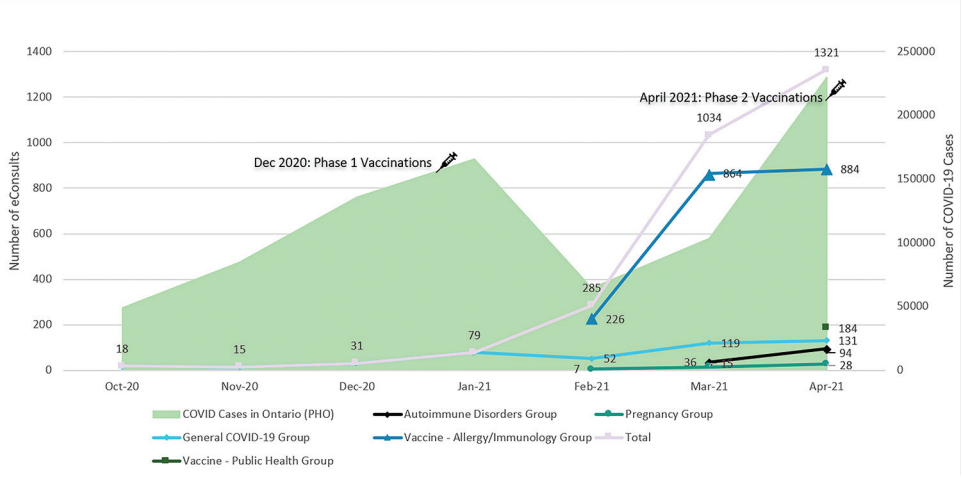
eConsult COVID-19 Intervention

At the onset of the pandemic, the eConsult team worked with lead specialists to develop new COVID-19-related specialty groups. These included COVID-19 General (Infectious Disease specialists), COVID-19 Vaccine Allergy/Immunology (Clinical Immunology & Allergy specialists), COVID-19 and Pregnancy (Obstetricians), COVID-19 and Autoimmune Disorders (Rheumatologists), and COVID-19 Vaccine – Public Health group (Public Health specialists). Though eConsult was originally designed to handle questions specific to a particular patient, the service was modified to allow providers to pose more general questions to COVID-19 specialties, such as requests on how to handle testing, personal protective equipment requirements, or what advice to provide regarding the vaccine. This modification was seen as a useful way to support providers in building knowledge in a difficult and fast-changing pandemic scenario.

Data Collection and Analysis

Data for this study was drawn from 2 sources: routinely collected utilization data obtained from the service (user ID, region, billing time, response interval cost, specialty), and responses to a

Figure 1. Number of COVID-19 eConsults Sent on the Ontario eConsult Program and the Number of COVID-19 Cases reported in Ontario *Ontario's Phase 1 vaccination rollout targeted high-risk populations. Eligible groups included: congregate living for seniors; health care workers; adults in First Nations, Métis, and Inuit populations; adult chronic home care recipients; and adults ages 80 and older. †Ontario's Phase 2 vaccination rollout expanded access. Eligible groups included: Adults aged 55 and older, in decreasing increments; high-risk congregate settings (such as shelters, group homes); individuals with certain health conditions; certain essential caregivers; people who live in hot spot communities; and those who cannot work from home.



mandatory closeout survey completed by PCPs before closing each eConsult case. The survey included questions that 1) assessed whether the eConsult* confirmed an existing course of action, provided information for a new or additional course of action, or had no benefit; and 2) asked whether or not the PCP had originally contemplated a referral, and whether or not the advice they received changed their decision to refer. The survey is only available for a subset of closed eConsults.

Descriptive statistics were used to analyze the data.

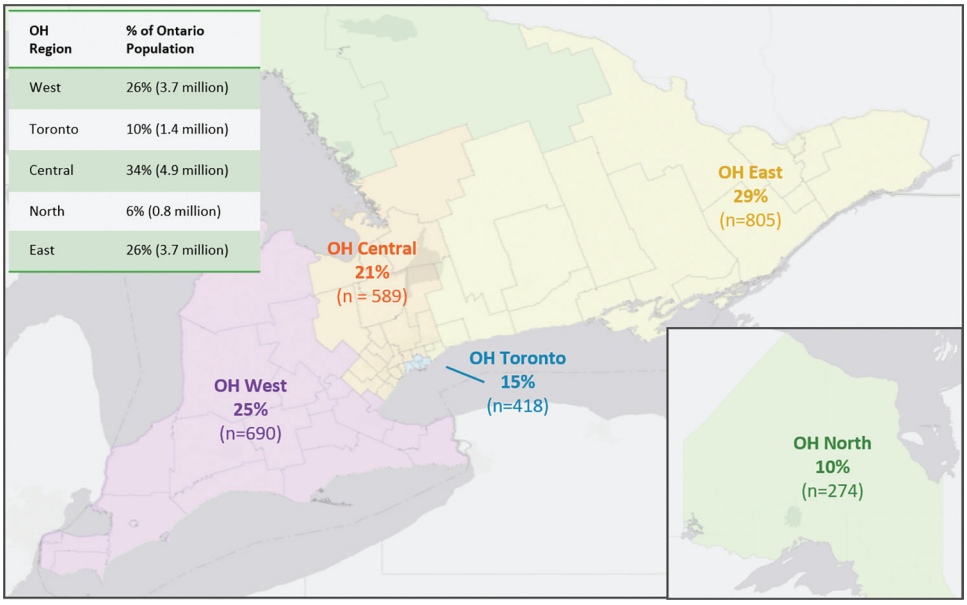
Results

A total of 1419 providers submitted 2783 eConsult cases to the 5 COVID-19 specialties during the study period. The highest utilized group was the vaccine – allergy/immunology group, accounting for 71% of the overall cases (Figure 1). Providers submitted eConsults from all health regions in Ontario, with the largest portion (29%) coming from Ontario Health East, and the smallest portion (10%) from Ontario Health North (Figure 2). The median response interval was 12 hours (range: 2 minutes – 33 days, with 97.7% of responses completed in ≤ 7 days and 99.9% completed in ≤ 30 days) and the median time billed by the specialist was 15 minutes (range: 0 minutes – 165 minutes). Survey results indicated that 60% of providers were able to confirm a course of action they had in mind and in 36% of the cases providers received advice for a new or additional course of action, although 4% responded that the eConsult had no clear benefit. In addition, 84% of cases were resolved without the patient requiring a face-to-face specialist visit. In the remaining 16% of cases, the PCP decided to refer the patient based on the specialist's recommendations. This includes 2% of cases where the PCP instigated a referral they hadn't originally considered.

Discussion

We launched COVID-19 specialties on an existing eConsult service, providing much-needed advice during a public health crisis. The initial group, launched in March 2020, was established within 1 week of the public health lockdown measures and provided an opportunity for requesting providers to seek support in the context of limited scientific information. The addition of the other COVID-19 groups evolved alongside the needs of the community, as exemplified by the high numbers of

Figure 2. Percentage of COVID-19 eConsult cases submitted from the 5 Ontario Health Regions. Seven cases were reported without a region.



eConsults now being sent to the vaccine allergy group, which was launched to align with the introduction of mass vaccination clinics in Ontario. We are now in the process of launching a group for patients with "Long COVID," in anticipation of questions related to chronic issues arising from COVID-19 infections.

Based on our findings and observations, we recommend that all regions with systems comparable to our eConsult service consider providing COVID-19-specific services. Adopting such specialties allowed us to promptly respond to a sudden and unexpected gap in care, supporting the call to reduce in-person contact without sacrificing much needed specialist advice. However, it is worth noting that our success stemmed in part from our experience implementing and expanding eConsult, and robust partnerships between different groups (eg, PCPs, specialists, governmental bodies, and public health and medical organizations). Collaboration between these groups is vital to ensure accurate and consistent messaging, as the influx of new and ever-changing information during a pandemic can make even the smallest implementation attempt a struggle.

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To see this article online, please go to: http://jabfm.org/content/35/3/601.full.

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