

LETTERS

Participation of more community hospitals in randomized trials of treatments for COVID-19 is needed

In their *CMAJ* commentary, Cheng and colleagues highlight the importance of evaluating potential COVID-19 therapies systematically within randomized controlled trials (RCTs).¹ In addition to cost, another limiting factor for clinical trials is speed of enrolment. For researchers to derive robust conclusions, it is necessary to enrol large numbers of patients in RCTs, which can take years, depending on disease prevalence.

Historically, medical research has been conducted in academic hospitals. One major untapped resource for research in Canada is our community hospitals (accounting for 65% of hospital beds), which provide care to most Canadians and represent a broader cross-section of patients, especially in suburban and rural areas.² On Apr. 16, 2020, data from the Critical Care Information System confirmed that 70% of all critically ill patients with coronavirus disease 2019 (COVID-19) in Ontario were admitted to community intensive care units (ICUs). The ability to recruit patients from community hospitals would substantially expand the pool of patients being enrolled into RCTs, thereby accelerating scientific progress. Furthermore, enrolling a broader cross-section of patients would lead to more generalizable results. Finally, during a pandemic, it is impossible to predict which hospitals will see a surge of cases. By expanding the network of hospitals that are capable of randomly assigning patients, the likelihood of appropriate patients being enrolled is increased.

The Randomized, Embedded, Multifactorial, Adaptive Platform Trial for Community-Acquired Pneumonia (REMAP-CAP) is an RCT that was designed to anticipate a respiratory virus pandemic.³ The preexisting platform structure of REMAP-CAP allowed the investigators to start studying interventions related to COVID-19 as soon as the pandemic reached Canada. Currently, REMAP-CAP is enrolling patients in 21 academic and only 9 community hospitals (Dr. John Marshall,

St. Michael's Hospital, Toronto, Ont.; personal communication, 2020). Therefore, there is room to expand in community hospitals.

There are tremendous barriers to research implementation during a pandemic,^{4,5} and this is especially true in community hospitals. These barriers include lack of pre-existing research infrastructure, lack of experienced research staff, the need to redirect resources and redeploy staff to the front line for clinical work, and the desire to protect research staff from contact with patients who are infected as well as to conserve personal protective equipment.⁶

An important facilitator of pandemic research based in community hospitals is the pre-existence of a research program. Another strategy to improve research capacity in these hospitals is to create academic–community partnerships. For example, Brantford General Hospital and Niagara Health have partnered with St. Joseph's Healthcare Hamilton to develop their research programs. Networks that link community hospitals together can also facilitate research. The Canadian Community ICU Research Network (CCIRNet) connects 13 community-hospital systems across Canada, representing more than 300 ICU beds. This network provides support to physicians who are interested in setting up or expanding research programs and helps to link study investigators to community ICUs that may be interested in joining their studies. During the current pandemic, CCIRNet has been advising community ICUs on getting involved in COVID-19 clinical trials, thereby expanding the number of hospitals conducting COVID-19 research.

Cheng and colleagues have highlighted the importance of conducting RCTs to determine the effective therapies for COVID-19. By involving community hospitals in this effort, we can help expedite the completion of clinical trials and improve the generalizability of results. It is time to expand our research infrastructure from its historic roots in academic hospitals into the community hospitals where most Canadians receive

their care. At no other time in recent history has a greater research capacity been more urgently needed than during the COVID-19 pandemic.

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