

The Impact of COVID-19 on
Family Medicine Competencies
and Educational Design:
An Outcomes of Training
Project evidence summary

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## Background

The COVID-19 pandemic has significantly altered the delivery of medical education and health care. As part of the Outcomes of Training Project, the literature was searched to gauge the impact of these changes on family medicine competencies and educational design.

# Objective

The purpose of this review was to identify residency training competencies and educational directions that reflect the new realities of family medicine education and practice resulting from the COVID-19 pandemic.

## Methods

A rapid review of the literature was conducted using MEDLINE for the following search terms and their variations: COVID-19; family physician/medicine; primary care; general practice; and medical education. General terms corresponding to the College of Family Physicians of Canada (CFPC)'s Certificates of Added Competence domains were also included in the search.

A further online search using Google was conducted targeting newly developed competencies not yet published in the literature.

Reference mining of relevant publications from the rapid review was also conducted.

# **Findings**

Very few of the roughly 800 results of the literature search pertained directly to the above-stated search objectives. Most of the results related to the epidemiology, public health measures, diagnostic methods, and screening tools associated with COVID-19.

Articles discussing the implications of the COVID-19 pandemic for resident learning focus mainly on experiences with virtual care and education. Little to no research has been published thus far on the impact of COVID-19 on family medicine training and competencies; however, some medical education

organizations have described telehealth competencies or produced preliminary guidelines for virtual care, teaching, and learning.

In a commentary by general practitioner educators in the United Kingdom, the authors provide the following reflections on trainees' and trainers' experiences:1

- Some trainees reported a loss of learning opportunities and peer support as well as a loss of skills with the shift to virtual education
- Trainers reported providing less formal teaching and more opportunistic education
- Tutorials became shorter and more frequent
- Remote clinical supervision was not seen as affecting patient safety
- Assessments of learners must adapt to include virtual techniques

In a Canadian commentary on the impact of COVID-19 on postgraduate medical education, the authors argue that novel technology in medical education, including online learning, should be embraced moving forward.<sup>2</sup> They posit that competency-based education and selfdirected learning will become ever more important as decreased interactions between supervisors and residents will require learners to identify gaps in their knowledge and skills themselves.

A commentary from the Unites States calls for a systemsbased approach to adapting medical education to pandemic realities.3 The three recommendations provided were: focusing on outcomes; developing innovative assessment methods; and facilitating the transition from undergraduate to postgraduate training. Regarding outcomes-based education, the authors argue the pandemic has offered an opportunity to advance the implementation of competency-based medical education given the disruptions to and limitations of more traditional, time-based models. Similarly, current assessment methods should pivot to less formalized, more workplace-based tools. Both recommendations would require a clearly defined and mutual understanding of training outcomes on the parts of educators and learners and would ideally result in a more flexible learning experience. The third recommendation is less relevant to the scope of this review, but it suggests postgraduate programs consider a broader array of assessment data that reflect student progress over time when considering readiness to enter residency training.

A small qualitative study was conducted at the Stanford-O'Connor family medicine residency site in California to evaluate a telemedicine curriculum.4 After attending the course, residents reported significantly increased confidence in conducting a virtual physical exam, in documenting a telemedicine visit, and in staffing with an attending physician virtually.4

The CFPC developed a similar guidance document tailored to supervisors of family medicine learners.5 This resource was based on a tool that a team of family physicians developed at McGill University and was previously described in a journal article.<sup>6,7</sup> The topics covered in the guidance document include:

- Asking the learner about their understanding of the use and limitations of virtual care
- Determining the learner's level of experience and the corresponding level of supervision required
- Managing the logistics of multiple participants in a visit and of other learning activities
- Obtaining patient consent for virtual care
- Reviewing key features of virtual care in a patient's presentation
- Documenting virtual visits
- Providing formative assessment

The Association of American Medical Colleges released a telehealth competencies document defining domains and providing examples of their curricular integration.8 The telehealth competency domains are elaborated across the learning continuum and include:

- Patient safety and the appropriate use of telehealth
- Access and equity
- Communication
- Data collection and assessment
- Technology
- Ethical practices and legal requirements

## Conclusion

While there is recognition in the literature that virtual care and learning are now indispensable components of residency training and medical education in general, family medicine-specific competencies for telehealth and the realities of learning during a pandemic have yet to be robustly studied, defined, or widely adopted. Although the CFPC has created some materials to support supervisors of family medicine learners, the further development and refinement of telehealth competencies for learners are warranted.

The commentaries included in this review highlighted the need for flexibility and adaptability in medical education resulting from the COVID-19 pandemic, particularly in the context of advancing competencybased frameworks in the United States.

## **Further information**

To read the full report—Preparing Our Future Family Physicians: An educational prescription for strengthening health care in changing times—and related evidence and scholarship, please visit https://www.cfpc.ca/futurefp.

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