

Rapid Scoping Exercise: Virtual Care

Key Messages for Decision-Makers

This rapid scoping exercise aimed to quickly identify the available evidence and knowledge gaps for the clinical effectiveness, harms, implementation considerations, and guideline recommendations for virtual health care. People of all ages accessing any health care service were of interest, including those from rural and remote settings and Indigenous Peoples. Much of the evidence identified centred on patient and caregiver perspectives, as well as on how virtual care affects patients' health outcomes and use of the health care system. Knowledge users from a variety of fields can use these findings to understand the current evidence landscape and to identify recommendations to consider when implementing virtual care.

Potential gaps where there was limited to no evidence identified include the effects of virtual care on changes in patients' care plans, clinical harms, as well as ethical and environmental considerations. In addition, recommendations for the use of virtual care in primary care and for those with mental health disorders and diabetes appear to be lacking. These areas can be used as a starting point for further research.

Context

The COVID-19 pandemic accelerated the adoption of virtual care in Canada. This rapid adoption has necessitated a review of the use of virtual care now that in-person care is rebounding with the ease of pandemic restrictions. There is a need for evidence to inform strategies and policies, and to aid in the development of standards, for the effective implementation and continuation of virtual care that is integrated seamlessly into the health care delivery continuum.

What Is a Rapid Scoping Exercise and How Can It Be Used?

We conducted a rapid scoping exercise, an adapted method of a scoping review, to quickly identify evidence to inform urgent decision-making regarding the appropriate use of virtual health care. A scoping review is a type of evidence synthesis that helps us understand the body of evidence about a certain topic. This review type can find key concepts related to the topic of interest, identifying areas where there is evidence available, and where there are potential gaps in the available evidence. Our rapid scoping exercise, which is an expedited and shortened version of this review type, identified and organized the available evidence and recommendations on virtual health care, revealing the types of information available.

At CADTH, we consider this scoping exercise a first step in determining the appropriate use of virtual care. From this report, health care decision-makers will be better positioned to make subsequent requests for evidence reviews in areas where the scoping exercise identified sufficient evidence to do so. It will also serve as a foundation for additional CADTH work to further support Canadian health care decision-makers on the topic of virtual care.

Where Did We Look for Information?

We searched for scoping reviews and evidence-based guidelines completed between January 1, 2020, and June 27, 2022, in published and grey literature, as well as through a targeted internet search.

What Information Did We Look for?

The following data were charted, if applicable, from each report included in the CADTH scoping exercise:

- Report characteristics: country or region of focus, year of publication, first author's surname, language (i.e., English or French), and study design (i.e., scoping review or evidence-based guideline)
- Population: age group, health condition, caregiver when representing patients, Indigenous Peoples, and location of residence (i.e., rural or remote settings)
- Concept (i.e., outcome of interest): evidence on clinical effectiveness and harms, as well as implementation considerations for scoping reviews, and recommendations from evidence-based guidelines from health or health care organizations
- Context: virtual care format (e.g., telephone calls, video)

What Did We Find?

Of the 242 included reports, 230 were scoping reviews (95%) and 12 represented 11 evidence-based guidelines (5%). The most common countries of focus in the scoping reviews and countries to which the guidelines were meant to apply were the US, Canada, and Australia.

A summary of the key highlights on the state of the evidence identified at the time of our scoping exercise is summarized in Table 1 and Table 2. These summary tables can be used to identify which populations, concepts, and virtual care formats were captured by the included scoping reviews and guidelines and where evidence and recommendations may be lacking in the literature (i.e., anything that was not mentioned or for which information was not found).

Table 1: Population Characteristics of Scoping Reviews and Guidelines

Report type	Population age group	Population type
Scoping reviews (n = 230)	123 (53.5%) scoping reviews reported the age of the population for at least 1 of the relevant studies included in the review: <ul style="list-style-type: none"> • Children (n = 61) • Adults (n = 74) • Older adults (n = 45) 	205 (89.1%) scoping reviews reported the health condition for at least 1 of the relevant studies included in the review. <p>Health condition:</p> <ul style="list-style-type: none"> • Mental health (n = 70) • Other health conditions (n = 47) • Cardiovascular (n = 38) • Cancer (n = 36) • Diabetes (n = 35) • Chronic (n = 25) • Infectious disease (n = 25) • Respiratory (n = 24) • Surgery (n = 21) • Musculoskeletal (n = 18) • Obstetrics and gynecology (n = 16) • Kidney and urinary (n = 14) • Neurological (n = 13) • Palliative (n = 13) • Substance use (n = 13) 108 (47.0%) scoping reviews reported other characteristics for at least 1 of the relevant studies included in the review. <p>Other characteristics:</p> <ul style="list-style-type: none"> • People from rural or remote settings (n = 79) • Caregiver when representing patients (n = 50) • Indigenous Peoples (n = 17)
Guidelines (n = 11)	2 (18.2%) guidelines provided recommendations based on age groups: <ul style="list-style-type: none"> • Children (n = 1) • Adults (n = 2) • Older adults (n = 0) 	9 (81.8%) guidelines provided recommendations for a target population based on health conditions. <p>Health condition:</p> <ul style="list-style-type: none"> • Cancer (n = 2) • Cardiovascular (n = 2) • Rheumatology (n = 2) • Obstetrics and gynecology (n = 2) • Pain during COVID-19 (n = 1) • Ear, nose, throat (n = 1) • Substance use (n = 1) 6 (54.5%) guidelines provided recommendations for a target population based on other characteristics. <p>Other characteristics:</p> <ul style="list-style-type: none"> • People from rural or remote settings (n = 5) • Caregiver when representing patients (n = 2) • Indigenous Peoples (n = 1)

Note The overlap between the scoping reviews was not investigated, and included studies are likely to have been captured by multiple scoping reviews.

Table 2: Main Concepts and Virtual Care Format of Scoping Reviews and Guidelines

Report type and CADTH research questions	Main concepts	Virtual care format
Scoping reviews (n = 230)	<p>165 (71.7%) scoping reviews reported on concepts regarding clinical effectiveness and harms for at least one of the included studies:</p> <ul style="list-style-type: none"> • Patient-focused outcomes (n = 132) • Health care utilization (n = 117) • Health service delivery (n = 54) • Clinical harm (n = 28) • Change in care plan (n = 14) <p>208 (90.4%) scoping reviews reported on concepts regarding implementation considerations for at least 1 of the included studies:</p> <ul style="list-style-type: none"> • Patient or caregiver perspectives (n = 157) • Operational aspects (n = 114) • Health care provider perspectives (n = 96) • Economics (n = 80) • Non-specified virtual care users' perspectives (n = 39) • Ethics (n = 33) • Environmental factors (n = 0) 	<p>205 (89.1%) scoping reviews reported on the virtual care format for at least 1 of the included studies:</p> <ul style="list-style-type: none"> • Video (n = 145) • Telephone (n = 143) • Other (n = 103) • Text/SMS (n = 72) • Email (n = 53)
Guidelines (n = 11)	<p>11 (100%) guidelines provided recommendations related to clinical practice or other considerations:</p> <ul style="list-style-type: none"> • Clinical practice recommendations (n = 11) • Other implementation recommendations (n = 8) • Other recommendations (n = 5) 	<p>6 (54.5%) guidelines provided recommendations related to virtual care format:</p> <ul style="list-style-type: none"> • Telephone (n = 6) • Video (n = 5) • Other (n = 3) • Email (n = 2) • Text/SMS (n = 1)

Note The overlap between the scoping reviews was not investigated, and included studies are likely to have been captured by multiple scoping reviews.

■ Disclaimer

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