

CADTH Health Technology Review

# Virtual Care Rapid Scoping: Supporting Information

**ISSN:** 2563-6596

**Cite As:** *Virtual Care Rapid Scoping*. Ottawa: CADTH; 2022 Nov (CADTH Health Technology Review).

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**Funding:** CADTH receives funding from Canada's federal, provincial, and territorial governments, with the exception of Quebec.

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## Reporting Checklist

**Table 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for 5 Scoping Reviews (PRISMA-ScR) Checklist**

Section	Item	PRISMA-ScR Checklist Item	Section Where Information is Reported
<b>Title</b>			
Title	1	Identify the report as a scoping review.	Title page
<b>Abstract</b>			
Structured summary	2	Provide a structured summary that includes (as applicable): background, objectives, eligibility criteria, sources of evidence, charting methods, results, and conclusions that relate to the review questions and objectives. Use the abstract reporting checklist (refer to Item 2 in PRISMA 2020).	Key Messages and Abstract
<b>Introduction</b>			
Rationale	3	Describe the rationale for the review in the context of what is already known. Explain why the review questions/objectives lend themselves to a scoping review approach.	Introduction and Rationale
Objectives	4	Provide an explicit statement of the questions and objectives being addressed with reference to their key elements (e.g., population or participants, concepts, and context) or other relevant key elements used to conceptualize the review questions and/or objectives.	Introduction and Rationale
<b>Methods</b>			
Protocol and registration	5	Indicate whether a review protocol exists; state if and where it can be accessed (e.g., a Web address); and if available, provide registration information, including the registration number. Report any protocol amendments (refer to item 24 in PRISMA 2020).	Methods – Protocol Development
Eligibility criteria	6	Specify characteristics of the sources of evidence used as eligibility criteria (e.g., years considered, language, and publication status), and provide a rationale.	Methods – Eligibility Criteria
Information sources	7	Describe all information sources in the search (e.g., databases with dates of coverage and contact with authors to identify additional sources), as well as the date the most recent search was executed.	Methods – Literature Search Strategy
Search	8	Present the full electronic search strategy for at least 1 database, including any limits used, such that it could be repeated. Include the full search strategies for all databases, registers, and websites (refer to item 7 in PRISMA 2020).	Supporting Information
Selection of sources of evidence	9	State the process for selecting sources of evidence (i.e., screening and eligibility) included in the scoping review. Describe if automation tools were used for study selection (refer to item 8 in PRISMA 2020).	Methods – Selection Process

Section	Item	PRISMA-ScR Checklist Item	Section Where Information is Reported
Data charting process	10	Describe the methods of charting data from the included sources of evidence (e.g., calibrated forms or forms that have been tested by the team before their use, and whether data charting was done independently or in duplicate) and any processes for obtaining and confirming data from investigators. If outcomes were included, describe how they were defined and which results were sought (refer to item 10 in PRISMA 2020).	Methods – Charting (Data Extraction)
Data items	11	List and define all variables for which data were sought and any assumptions and simplifications made.	Methods – Charting (Data Extraction)
Critical appraisal of individual sources of evidence	12	If done, provide a rationale for conducting a critical appraisal of included sources of evidence; describe the methods used and how this information was used in any data synthesis (if appropriate).	N/A
Synthesis of results	13	Describe the methods of handling and summarizing the data that were charted.	Methods – Descriptive Synthesis
<b>Results</b>			
Selection of sources of evidence	14	Give numbers of sources of evidence screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally using a flow diagram. Use the updated PRISMA 2020 flow diagram, which has optional boxes for review updates, as well as studies that were identified through means other than searching databases/registers and cite any studies that appeared to meet the inclusion criteria but were excluded (refer to item 16 in PRISMA 2020)	Results – Quantity of Research Available, Supporting Information
Characteristics of sources of evidence	15	For each source of evidence, present characteristics for which data were charted and provide the citations.	Results – Characteristics of Included Reports, Supporting Information
Critical appraisal within sources of evidence	16	If done, present data on critical appraisal of included sources of evidence (refer to item 12).	N/A
Results of individual sources of evidence	17	For each included source of evidence, present the relevant data that were charted that relate to the review questions and objectives.	Results, Supporting Information
Synthesis of results	18	Summarize and/or present the charting results as they relate to the review questions and objectives.	Results
<b>Discussion</b>			
Summary of evidence	19	Summarize the main results (including an overview of concepts, themes, and types of evidence available), link to the review questions and objectives, and consider the relevance to key groups.	Discussion
Limitations	20	Discuss the limitations of the scoping review process.	Discussion
Conclusions	21	Provide a general interpretation of the results with respect to the review questions and objectives, as well as potential implications and/or next steps.	Conclusion

Section	Item	PRISMA-ScR Checklist Item	Section Where Information is Reported
<b>Funding</b>			
Funding	22	Describe sources of funding for the included sources of evidence, as well as sources of funding for the scoping review. Describe the role of the funders of the scoping review. Report conflicts of interest (refer to item 26 in PRISMA 2020) 1	N/A

N/A = not applicable; PRISMA-ScR = Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews.

## Literature Search Methods

### Overview

**Interface:** Ovid

**Databases:**

- MEDLINE All (1946-present)
- Embase (1974-present)
- Note: Subject headings and search fields have been customized for each database. Duplicates between databases were removed in Ovid then manually in Endnote.

**Date of search:** June 27, 2022

**Search filters applied:** health technology assessments; guidelines; scoping reviews

**Limits:**

- Publication date limit: 2020 - present
- Humans
- Language limit: English- and French-language
- Excluded conference abstracts, preprints, editorials, newspaper articles, letters

**Table 2: Syntax Guide**

Syntax	Description
/	At the end of a phrase, searches the phrase as a subject heading
MeSH	Medical Subject Heading
exp	Explode a subject heading
*	Before a word, indicates that the marked subject heading is a primary topic; or, after a word, a truncation symbol (wildcard) to retrieve plurals or varying endings
?	Truncation symbol for one or no characters only
adj#	Requires terms to be adjacent to each other within # number of words (in any order)
.ti	Title

Syntax	Description
.ot	Original title
.ab	Abstract
.kf	Keyword heading word
.dq	Candidate term word (Embase)
.pt	Publication type
.rn	Registry number
.nm	Name of substance word (MEDLINE)
.jw	Journal title word (MEDLINE)
.jx	Journal title word (Embase)
freq = #	Requires terms to occur # number of times in the specified fields
medall	Ovid database code: MEDLINE All, 1946 to present, updated daily
oemezd	Ovid database code; Embase, 1974 to present, updated daily

## Multi-Database Strategy

1. exp Telemedicine/
2. (virtual adj3 (care or caring or visit\* or assessment\* or checkin or check-in or appointment\* or consult\*)).ti,ab,kf.
3. virtual intervention?.ti,ab,kf.
4. (virtual health\* or virtual medicine or telehealth\* or tele health\* or telemed\* or tele med\* or telecar\* or tele-car\*).ti,ab,kf.
5. (virtual model\* adj5 (care or caring or health)).ti,ab,kf.
6. (telenurs\* or tele-nurs\* or telepatholog\* or tele-patholog\* or telepsych\* or tele-psych\* or teleradiolog\* or tele-radialog\* or telerehab\* or tele-rehab\* or telemental or tele-mental).ti,ab,kf.
7. (e-health\* or ehealth\* or m-health\* or mhealth\* or digital health\* or digital medicine or digital intervention\*).ti,ab,kf.
8. (digital health\* or digital intervention? or digital medicine).ti,kf.
9. (digital health\* or digital intervention? or digital medicine).ab. /freq=2
10. (e-visit\* or evisit\*).ti,ab,kf.
11. (e-consult\* or econsult\* or teleconsult\* or tele-consult).ti,ab,kf.
12. ((tele or online or on-line or video or videoconference\* or video-conference\* or videocall\* or video-call\* or videochat\* or video-chat\* or teleconferenc\* or tele-conferenc\* or phone? or smartphone? or smart-phone? or telephone? or mobile? or e-mobile? or tablet? or cellular or text messag\* or texting or app or apps) adj3 (care or caring or visit\* or assessment\* or checkin or check-in or appointment\* or intervention\* or consult\* or patient consult\* or tool? or therap\* or treatment?)).ti,ab,kf.



13. ((internet-based or (internet adj2 deliver\*)) adj3 (care or caring or visit\* or assessment\* or checkin or check-in or appointment\* or intervention\* or consult\* or patient consult\* or tool? or therap\* or treatment?)).ti,ab,kf.
14. ((email or e-mail\*) adj3 (communication\* or messag\* or consult\* or patient consult\* or intervention\* or tool?)).ti,ab,kf.
15. (((web or internet) adj3 (application\* or app or apps)) and (care or caring or visit\* or assessment\* or checkin or check-in or appointment\* or intervention\* or consult\* or patient consult\* or tool? or therap\* or treatment?)).ti,ab,kf.
16. (remote\* adj2 (monitor\* or consult\*)).ti,ab,kf.
17. (telemonitor\* or tele-monitor\* or teleservic\* or tele-servic\* or telemanagement or tele-management).ti,ab,kf.
18. \*Videoconferencing/
19. or/1-18
20. 19 use medall
21. exp \*Telemedicine/
22. \*Videoconferencing/
23. (virtual adj3 (care or caring or visit\* or assessment\* or checkin or check-in or appointment\* or consult\*)).ti,ab,kf,dq.
24. virtual intervention?.ti,ab,kf,dq.
25. (virtual health\* or virtual medicine or telehealth\* or tele health\* or telemed\* or tele med\* or telecar\* or tele-car\*).ti,ab,kf,dq.
26. (virtual model\* adj5 (care or caring or health)).ti,ab,kf,dq.
27. (telenurs\* or tele-nurs\* or telepatholog\* or tele-patholog\* or telepsych\* or tele-psych\* or teleradiolog\* or tele-radialog\* or telerehab\* or tele-rehab\* or telemental or tele-mental).ti,ab,kf,dq.
28. (e-health\* or ehealth\* or m-health\* or mhealth\* or digital health\* or digital medicine or digital intervention\*).ti,ab,kf.
29. (digital health\* or digital intervention? or digital medicine).ti,kf.
30. (digital health\* or digital intervention? or digital medicine).ab. /freq=2
31. (e-visit\* or evisit\*).ti,ab,kf,dq.
32. (e-consult\* or econsult\* or teleconsult\* or tele-consult).ti,ab,kf.
33. ((tele or online or on-line or video or videoconference\* or video-conference\* or videocall\* or video-call\* or videochat\* or video-chat\* or teleconferenc\* or tele-conferenc\* or phone? or smartphone? or smart-phone? or telephone? or mobile? or e-mobile? or tablet? or cellular or text messag\* or texting or app or apps) adj3 (care or caring or visit\* or assessment\* or checkin or check-in or appointment\* or intervention\* or consult\* or patient consult\* or tool? or therap\* or treatment?)).ti,ab,kf.
34. ((internet-based or (internet adj2 deliver\*)) adj3 (care or caring or visit\* or assessment\* or checkin or check-in or appointment\* or intervention\* or consult\* or patient consult\* or tool? or therap\* or treatment?)).ti,ab,kf.

35. ((email or e-mail\*) adj3 (communication\* or messag\* or consult\* or patient consult\* or intervention\* or tool?)).ti,ab,kf.
36. (((web or internet) adj3 (application\* or app or apps)) and (care or caring or visit\* or assessment\* or checkin or check-in or appointment\* or intervention\* or consult\* or patient consult\* or tool? or therap\* or treatment?)).ti,ab,kf.
37. (remote\* adj2 (monitor\* or consult\*)).ti,ab,kf.
38. (telemonitor\* or tele-monitor\* or teleservic\* or tele-servic\* or telemanagement or tele-management).ti,ab,kf.
39. or/21-38
40. 39 not (conference paper or conference abstract).pt.
41. 40 use oemezd
42. 20 or 41
43. (guideline or practice guideline or consensus development conference or consensus development conference, NIH).pt.
44. (guideline\* or standards or consensus\* or recommendat\*).ti.
45. (practice parameter\* or position statement\* or policy statement\* or CPG or CPGs or best practice\*).ti.
46. (care adj2 (path or paths or pathway or pathways or map or maps or plan or plans or standard)).ti.
47. ((critical or clinical or practice) adj2 (path or paths or pathway or pathways or protocol\*)).ti.
48. (algorithm\* and (pharmacotherap\* or chemotherap\* or chemotreatment\* or therap\* or treatment\* or intervention\*)).ti.
49. (algorithm\* and (screening or examination or test or tested or testing or assessment\* or diagnosis or diagnoses or diagnosed or diagnosing)).ti.
50. (guideline\* or standards or consensus\* or recommendat\*).au.
51. (guideline\* or standards or consensus\* or recommendat\*).co.
52. (guideline\* or standards or consensus\* or recommendat\*).ca.
53. systematic review.ti,pt,kf,sh. and (practice guideline\* or treatment guideline\* or clinical guideline\* or guideline recommendation\*).ti,ab,kf.
54. or/43-53
55. (scoping adj2 review\*).ti,ab,kf.
56. (scoping study or scoping studies or scoping exercise\* or scoping report\* or mapping review\* or evidence mapping\* or literature mapping\* or systematic mapping\*).ti,ab,kf.
57. ((scope or scoping) adj3 evidence).ti.
58. or/55-57
59. exp technology assessment, biomedical/

60. (technology assessment\* or HTA or HTAs or technology overview\* or technology appraisal\*).ti,ab,kf.
61. ((health adj2 technology assessment) or evidence report).jw.
62. or/59-61
63. 54 or 58 or 62
64. 42 and 63 [Virtual Care and guidelines, HTAs, scoping reviews, before limits]
65. (comment or newspaper article or editorial or letter or note).pt.
66. preprint\*.pt.
67. 64 not 65
68. 67 not 66
69. exp animals/
70. exp animal experimentation/ or exp animal experiment/
71. exp models animal/
72. nonhuman/
73. exp vertebrate/ or exp vertebrates/
74. or/69-73
75. exp humans/
76. exp human experimentation/ or exp human experiment/
77. or/75-76
78. 74 not 77
79. 68 not 78
80. limit 79 to (english or french)
81. limit 80 to yr="2020 -Current"
82. remove duplicates from 81

## Grey Literature

**Search dates:** June 14 - July 7, 2022

**Keywords:** virtual care, virtual health care

**Limits:** Publication years: 2020-present

Relevant websites from the following sections of the CADTH grey literature checklist [Grey Matters: A Practical Tool for Searching Health-Related Grey Literature](#) were searched. The complete search archive of sites consulted for this report is available on request.

- Clinical Practice Guidelines
- Internet Search

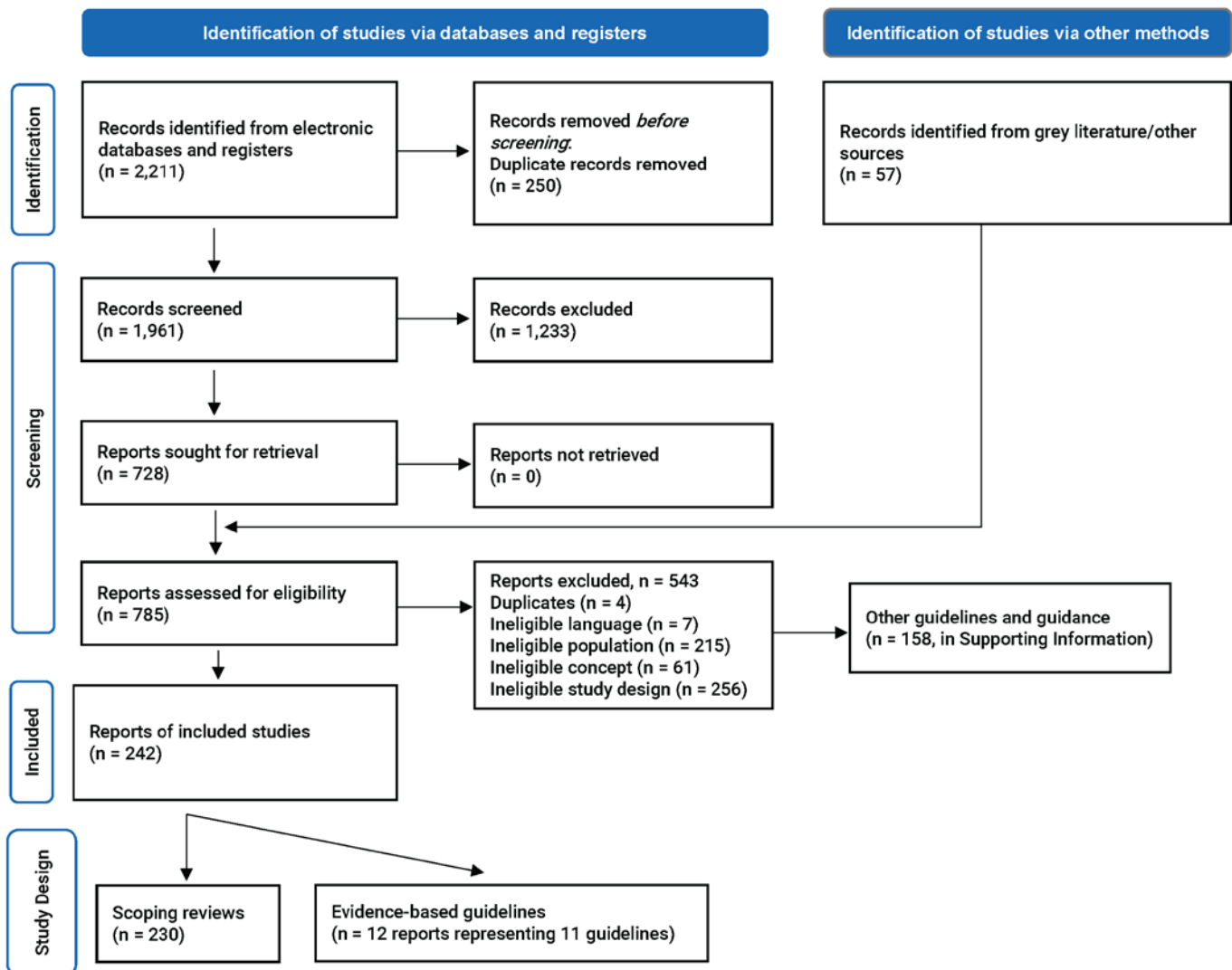
## Organizations

Various Canadian and international health and health care organizations with an interest in digital health, including:

- Canada Health Infoway
- Canadian Institute for Health Information (CIHI)
- Canadian Medical Association (CMA)
- Canadian Medical Protective Association (CMPA)
- College of Family Physicians of Canada
- College of Physicians and Surgeons of Alberta
- Health Canada
- Royal College of Physicians and Surgeons of Canada
- Women's College Hospital (Canada)
- WHO

## Selection of Included Reports

Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Flow chart of Selected Reports



## Included Reports and References of Potential Interest

### List of Included Scoping Reviews (n = 230)

Adcock AK, Haggerty T, Crawford A, et al. mHealth impact on secondary stroke prevention: a scoping review of randomized controlled trials among stroke survivors between 2010-2020. *Mhealth*. 2022;8:19.

Agnew JMR, Hanratty CE, McVeigh JG, et al. An investigation into the use of mHealth in musculoskeletal physiotherapy: scoping review. *JMIR Rehabil Assist Technol*. 2022;9(1):e33609.

Ali S, Kleib M, Paul P, et al. Compassionate nursing care and the use of digital health technologies: A scoping review. *Int J Nurs Stud*. 2022;127:104161.

Almuslim H, AlDossary S. Models of incorporating telehealth into obstetric care during the COVID-19 pandemic, its benefits and barriers: a scoping review. *Telemed J E Health*. 2022;28(1):24-38.

Aslani N, Garavand A, Jelvay S, et al. Advantages and challenges of telecardiology and providing solutions for its successful implementation: a scoping review. *Int Cardiovasc Res J*. 2022;16(1).

Beheshti L, Kalankesh LR, Doshmangir L, et al. Telehealth in primary health care: a scoping review of the literature. *Perspect Health Inf Manag*. 2022;19(1):1n.

Beks H, King O, Clapham R, et al. Community health programs delivered through information and communications technology in high-income countries: scoping review. *J Med Internet Res*. 2022;24(3):e26515.

Beland S, Dumont-Samson O, Hudon C. Case management and telehealth: a scoping review. *Telemed J E Health*. 2022;28(1):11-23.

Budhwani S, Fujioka J, Thomas-Jacques T, et al. Challenges and strategies for promoting health equity in virtual care: findings and policy directions from a scoping review of reviews. *J Am Med Inform Assoc*. 2022;29(5):990-999.

Buying R, Melville S, Chatur H, et al. Virtual care with digital technologies for rural Canadians living with cardiovascular disease. *CJC Open*. 2022;4(2):133-147.

Cardona M, Fien S, Myooran J, et al. Clinical and cost-effectiveness of telehealth for Indigenous and culturally and linguistically diverse (CALD) people: a scoping review. *Ethn Health*. 2022:1-22.

Chan B, Bougatsos C, Priest KC, et al. Opioid treatment programs, telemedicine and COVID-19: a scoping review. *Subst Abus*. 2022;43(1):539-546.

Cincidda C, Pizzoli SFM, Pravettoni G. Remote psychological interventions for fear of cancer recurrence: scoping review. *JMIR Cancer*. 2022;8(1):e29745.

Clarkson P, Stephenson A, Grimmett C, et al. Digital tools to support the maintenance of physical activity in people with long-term conditions: a scoping review. *Digit Health*. 2022;8:20552076221089778.

Davidow JB, Zide BS, Levin LL, et al. A scoping review of interventions for spousal bereavement in older adults. *Am J Geriatr Psychiatry*. 2022;30(3):404-418.

Davidson SK, Sanci L, de Nicolas Izquierdo C, et al. Best practice during teleconsultations with adolescents: a scoping review. *J Adolesc Health*. 2022;70(5):714-728.

Diaz MF, Colleen G, Gruver R, et al. Providing contraceptive health services to adolescents and young adults by telemedicine: a scoping review of patient and provider perspectives. *J Pediatr Adolesc Gynecol*. 2022;26:26.

DiFabio DL, O'Hagan R, Glista D. A scoping review of technology and infrastructure needs in the delivery of virtual hearing aid services. *Am J Audiol*. 2022;31(2):411-426.

Dostie R, Gaboury I, Cinar E, et al. Acceptability of pediatric telerehabilitation interventions provided by physical therapists and occupational therapists-a scoping review. *Phys Occup Ther Pediatr*. 2022:1-20.

Ebneter AS, Sauter TC, Christen A, et al. Feasibility, acceptability and needs in telemedicine for palliative care. *Swiss Med Wkly*. 2022;152(9-10):28.

Edwards KJ, Maslin K, Andrade J, et al. Mobile health as a primary mode of intervention for women at risk of, or diagnosed with, gestational diabetes mellitus: a scoping review. *JBI Evid Synth*. 2022;11:11.

Ewart C, Baharani J, Wilkie M, et al. Patient perspectives and experiences of remote consultations in people receiving kidney care: a scoping review. *J Ren Care*. 2022;25:25.

Fien S, Dowsett C, Hunter CL, et al. Feasibility, satisfaction, acceptability and safety of telehealth for First Nations and culturally and linguistically diverse people: a scoping review. *Public Health*. 2022;207:119-126.

Fu Y, Chapman EJ, Boland AC, et al. Evidence-based management approaches for patients with severe chronic obstructive pulmonary disease (COPD): a practice review. *Palliat Med*. 2022;36(5):770-782.

Furlepa K, Tenderenda A, Kozlowski R, et al. Recommendations for the development of telemedicine in Poland based on the analysis of barriers and selected telemedicine solutions. *Int J Environ Res Public Health*. 2022;19(3):22.

Gachabayov M, Latifi LA, Parsikia A, et al. The role of telemedicine in surgical specialties during the COVID-19 pandemic: a scoping review. *World J Surg*. 2022;46(1):10-18.

Ganjali R, Eslami S, Samimi T, et al. Clinical informatics solutions in COVID-19 pandemic: scoping literature review. *Inform Med Unlocked*. 2022;30:100929.

Gonzalez JN, Axiotakis LG, Jr, et al. Practice of telehealth in otolaryngology: a scoping review in the era of COVID-19. *Otolaryngol Head Neck Surg*. 2022;166(3):417-424.

Guillen AG, Reddy M, Saadat S, et al. Utilization of telehealth solutions for patients with opioid use disorder using buprenorphine: a scoping review. *Telemed J E Health*. 2022;28(6):761-767.

Hayotte M, Gioda J, d'Arripe-Longueville F. Effects and acceptability of technology-based physical activity interventions in bariatric surgery: a scoping review. *Obes Surg*. 2022;03:03.

Hilty DM, Serhal E, Crawford A. A telehealth and telepsychiatry economic cost analysis framework: scoping review. *Telemed J E Health*. 2022;30:30.

Houston E, Kennedy AG, O'Malley D, et al. Telemedicine in neurology: a scoping review of key outcomes in movement disorders. *Telemed J E Health*. 2022;28(3):295-308.

James-Palmer A, Anderson EZ, Daneault JF. Remote delivery of yoga interventions through technology: scoping review. *J Med Internet Res*. 2022;24(6):e29092.

Joo JY, Liu MF. A scoping review of telehealth-assisted case management for chronic illnesses. *West J Nurs Res*. 2022;44(6):598-611.

Kallas D, Sandhu N, Gandilo C, et al. Use of digital health technology in heart failure and diabetes: a scoping review. *J Cardiovasc Transl Res*. 2022;31:31.

Kemp Van Ee S, McKelvey H, Williams T, et al. Telemedicine Intensive Care Unit (Tele-ICU) implementation during COVID-19: a scoping review. *Cureus*. 2022;14(5):e25133.

Keyes B, McCombe G, Broughan J, et al. Enhancing GP care of mental health disorders post-COVID-19: a scoping review of interventions and outcomes. *Ir J Psychol Med*. 2022:1-17.

Kim PJ, Homsy HA, Sachdeva M, et al. Chronic wound telemedicine models before and during the COVID-19 pandemic: a scoping review. *Adv Skin Wound Care*. 2022;35(2):87-94.

Kostovich CT, Etingen B, Wirth M, et al. Outcomes of telehealth for wound care: a scoping review. *Adv Skin Wound Care*. 2022;35(7):394-403.

Lakeman R, King P, Hurley J, et al. Towards online delivery of dialectical behaviour therapy: a scoping review. *Int J Ment Health Nurs*. 2022;19:19.

Lampickiene I, Davoody N. Healthcare professionals' experience of performing digital care visits - a scoping review. *Life (Basel)*. 2022;12(6):17.

Leroux J, Johnston N, Brown AA, et al. Delivery of distance counselling to survivors of sexual violence: a scoping review of promising and best practices. *Inquiry*. 2022;59:469580221097427.

Linardon J, Messer M, Rodgers RF, et al. A systematic scoping review of research on COVID-19 impacts on eating disorders: a critical appraisal of the evidence and recommendations for the field. *Int J Eat Disord*. 2022;55(1):3-38.

Lindner-Rabl S, Wagner V, Matijevic A, et al. clinical interventions to improve nutritional care in older adults and patients in primary healthcare - a scoping review of current practices of health care practitioners. *Clin Interv Aging*. 2022;17:1-13.

Litvak M, Miller K, Boyle T, et al. Telemedicine use in disasters: a scoping review. *Disaster Med Public Health Prep*. 2022;16(2):791-800.



- Maramba ID, Jones R, Austin D, et al. The role of health kiosks: scoping review. *JMIR Med Inform.* 2022;10(3):e26511.
- Marwaa MN, Guidetti S, Ytterberg C, et al. Use of mobile/tablet and web-based applications to support rehabilitation after stroke: a scoping review. *J Rehabil Med.* 2022;54:jrm00269.
- May D, Litvin B, Allegrante J. Behavioral activation, depression, and promotion of health behaviors: a scoping review. *Health Educ Behav.* 2022:10901981221090157.
- Md Fadzil NH, Shahar S, Rajikan R, et al. A scoping review for usage of telerehabilitation among older adults with mild cognitive impairment or cognitive frailty. *Int J Environ Res Public Health.* 2022;19(7):28.
- Meng G, McAiney C, Perlman CM, et al. Service process factors affecting patients' and clinicians' experiences on rapid teleconsultation implementation in out-patient neurology services during COVID-19 pandemic: a scoping review. *BMC Health Serv Res.* 2022;22(1):534.
- Mohammadzadeh N, Rezayi S, Saeedi S. Telemedicine for patient management in remote areas and underserved populations. *Disaster Med Public Health Prep.* 2022:1-7.
- Mojtahedi Z, Shen JJ. Home palliative care during the COVID-19 pandemic: a scoping review. *Am J Hosp Palliat Care.* 2022:10499091221093314.
- Moon K, Sobolev M, Kane JM. Digital and mobile health technology in collaborative behavioral health care: scoping review. *JMIR Ment Health.* 2022;9(2):e30810.
- Murthy S, Kamath P, Godinho MA, et al. Digital health innovations for non-communicable disease management during the COVID-19 pandemic: a rapid scoping review. *BMJ Innovations.* 2022.
- Oter EG, Ozkan S, Cinar H. The effectiveness of using telemedicine to follow-up breast cancer during the COVID-19 pandemic: a scoping review. *Turk Onkoloji Dergisi.* 2022;37(1):93-99.
- Owolabi EO, Mac Quene T, Louw J, et al. Telemedicine in surgical care in low- and middle-income countries: a scoping review. *World J Surg.* 2022;15:15.
- Pang NQ, Lau J, Fong SY, et al. Telemedicine acceptance among older adult patients with cancer: scoping review. *J Med Internet Res.* 2022;24(3):e28724.
- Pantasri T. Expanded roles of community pharmacists in COVID-19: a scoping literature review. *J Am Pharm Assoc.* 2022;62(3):649-657.
- Poirier B, Jensen E, Sethi S. The evolution of the teledentistry landscape in Australia: a scoping review. *Aust J Rural Health.* 2022;14:14.
- Ramachandran HJ, Jiang Y, Teo JYC, et al. Technology acceptance of home-based cardiac telerehabilitation programs in patients with coronary heart disease: systematic scoping review. *J Med Internet Res.* 2022;24(1):e34657.
- Rodrigues NG, Han CQY, Su Y, et al. Psychological impacts and online interventions of social isolation amongst older adults during COVID-19 pandemic: a scoping review. *J Adv Nurs.* 2022;78(3):609-644.

Rosic T, Petrina N, Baysari M, et al. Patient and clinician use characteristics and perceptions of pulse oximeter use: a scoping review. *Int J Med Inform.* 2022;162:104735.

Ruiz-Cosignani D, Chen Y, Cheung G, et al. Adaptation models, barriers, and facilitators for cultural safety in telepsychiatry: a systematic scoping review. *J Telemed Telecare.* 2022;1357633X211069664.

Sakamaki T, Furusawa Y, Hayashi A, et al. Remote patient monitoring for neuropsychiatric disorders: a scoping review of current trends and future perspectives from recent publications and upcoming clinical trials. *Telemed J E Health.* 2022;24:24.

Shah SK, McElfish PA. Cancer screening recommendations during the COVID-19 pandemic: scoping review. *JMIR Cancer.* 2022;8(1):e34392.

Silva C, Lopes RH, de Goes Bay O, et al. Digital health opportunities to improve primary health care in the context of COVID-19: scoping review. *JMIR Hum Factors.* 2022;9(2):e35380.

Smith BG, Tumpa S, Mantle O, et al. Remote follow-up technologies in traumatic brain injury: a scoping review. *J Neurotrauma.* 2022;21:21.

Souza S, Pereira AP, Prandini NR, et al. Breastfeeding in times of COVID-19: a scoping review. *Rev Esc Enferm USP.* 2022;56:e20210556.

Stavropoulos KK, Bolourian Y, Blacher J. A scoping review of telehealth diagnosis of autism spectrum disorder. *PLoS ONE.* 2022;17(2):e0263062.

Suleman A, Vijenthira A, Berlin A, et al. The use of virtual care in patients with hematologic malignancies: a scoping review. *Curr Oncol.* 2022;29(2):892-900.

Sullivan SR, Myhre K, Mitchell EL, et al. Suicide and telehealth treatments: a PRISMA scoping review. *Arch Suicide Res.* 2022:1-21.

Toh G, Pearce E, Vines J, et al. Digital interventions for subjective and objective social isolation among individuals with mental health conditions: a scoping review. *BMC Psychiatry.* 2022;22(1):331.

van der Boom B, Boumparis N, Donker T, et al. Internet-delivered interventions for personality disorders - a scoping review. *Internet Interv.* 2022;28:100525.

Villa G, Galli E, Azzimonti V, et al. Empowerment-based education in urological patients: a scoping review. *Clin Nurs Res.* 2022;31(4):666-689.

Wake E, Atkins H, Willock A, et al. Telehealth in trauma: a scoping review. *J Telemed Telecare.* 2022;28(6):412-422.

Wallace LM, Falla D, Rushton A, et al. Group and individual telehealth for chronic musculoskeletal pain: a scoping review. *Musculoskelet.* 2022;20(2):245-258.

Warmoth K, Lynch J, Darlington N, et al. Using video consultation technology between care homes and health and social care professionals: a scoping review and interview study during COVID-19 pandemic. *Age Ageing.* 2022;51(2).

- Washio Y, Hayashi Y, Atreyapurapu S, et al. A scoping review of computer-based and telecommunication technology interventions to address drug and alcohol misuse and smoking in women. *Subst Use Misuse*. 2022;57(8):1257-1272.
- Wikstrom L, Schildmeijer K, Nylander EM, et al. Patients' and providers' perspectives on e-health applications designed for self-care in association with surgery - a scoping review. *BMC Health Serv Res*. 2022;22(1):386.
- Willis VC, Thomas Craig KJ, Jabbarpour Y, et al. Digital health interventions to enhance prevention in primary care: scoping review. *JMIR Med Inform*. 2022;10(1):e33518.
- Yang A, Kim D, Hwang PH, et al. Telemedicine and telementoring in rhinology, otology, and laryngology: a scoping review. *OTO Open*. 2022;6(1):2473974X211072791.
- Yao R, Zhang W, Evans R, et al. Inequities in health care services caused by the adoption of digital health technologies: scoping review. *J Med Internet Res*. 2022;24(3):e34144.
- Zaman SB, Khan RK, Evans RG, et al. Exploring barriers to and enablers of the adoption of information and communication technology for the care of older adults with chronic diseases: scoping review. *JMIR Aging*. 2022;5(1):e25251.
- Abraham A, Jithesh A, Doraiswamy S, et al. Telemental health use in the COVID-19 pandemic: a scoping review and evidence gap mapping. *Front Psychiatr*. 2021;12:748069.
- Alipour J, Hayavi-Haghighi MH. Opportunities and challenges of telehealth in disease management during covid-19 pandemic: a scoping review. *Appl Clin Inform*. 2021;12(4):864-876.
- Almasi S, Asadi F. Telehealth in management of covid-19 pandemic: a scoping review. *Acta Med Iran*. 2021;59(11):629-640.
- Anil K, Freeman JA, Buckingham S, et al. Scope, context and quality of telerehabilitation guidelines for physical disabilities: a scoping review. *BMJ Open*. 2021;11(8):e049603.
- Armour R, Helmer J. Paramedic-delivered teleconsultations: a scoping review. *Australasian Journal of Paramedicine*. 2021;18:1-7.
- Bailey JE, Gurgol C, Pan E, et al. Early patient-centered outcomes research experience with the use of telehealth to address disparities: scoping review. *J Med Internet Res*. 2021;23(12):e28503.
- Ben-Omran MO, Livinski AA, Kopycka-Kedzierawski DT, et al. The use of teledentistry in facilitating oral health for older adults: a scoping review. *J Am Dent Assoc*. 2021;152(12):998-1011.e17.
- Bhochhibhoya S, Dobbs PD, Maness SB. Interventions using mHealth strategies to improve screening rates of cervical cancer: a scoping review. *Prev Med*. 2021;143:106387.
- Bouaoud J, Bertolus C, Zrounba P, et al. Digitalized healthcare for head and neck cancer patients. *J Stomatol Oral Maxillofac Surg*. 2021;122(4):434-440.

- Bucki FM, Clay MB, Tobiczyk H, et al. Scoping review of telehealth for musculoskeletal disorders: applications for the covid-19 pandemic. *J Manipulative Physiol Ther.* 2021;44(7):558-565.
- Cadel L, Marcinow M, Sandercock J, et al. A scoping review of patient engagement activities during COVID-19: more consultation, less partnership. *PLoS ONE.* 2021;16(9):e0257880.
- Carrillo-de-la-Pena MT, Gonzalez-Villar A, Trinanés Y. Effects of the COVID-19 pandemic on chronic pain in Spain: a scoping review. *Pain Rep.* 2021;6(1):e899.
- Chong JC, Tan CHN, Chen DZ. Teleophthalmology and its evolving role in a COVID-19 pandemic: a scoping review. *Ann Acad Med Singapore.* 2021;50(1):61-76.
- Choukou MA, Taha A, Qadeer A, et al. Digital health technology for remote care in response to the COVID-19 pandemic: a scoping review. *Eur Rev Med Pharmacol Sci.* 2021a;25(8):3386-3394.
- Choukou MA, Maddahi A, Polyvyana A, et al. Digital health technology for Indigenous older adults: a scoping review. *Int J Med Inform.* 2021b;148:104408.
- Cliffe B, Tingley J, Greenhalgh I, et al. mHealth Interventions for Self-Harm: scoping Review. *J Med Internet Res.* 2021;23(4):e25140.
- Comfort SM, Murata Y, Pierpoint LA, et al. Management of outpatient elective surgery for arthroplasty and sports medicine during the COVID-19 pandemic: a scoping review. *Orthop J Sports Med.* 2021;9(11):23259671211053335.
- Couturier J, Pellegrini D, Miller C, et al. The COVID-19 pandemic and eating disorders in children, adolescents, and emerging adults: virtual care recommendations from the Canadian consensus panel during COVID-19 and beyond. *J Eat Disord.* 2021;9(1):46.
- de Moraes EB, Santos Garcia JB, de Macedo Antunes J, et al. Chronic pain management during the COVID-19 pandemic: a scoping review. *Pain Manag Nurs.* 2021;22(2):103-110.
- De Vera K, Challa P, Liu RH, et al. Virtual primary care implementation during COVID-19 in high-income countries: a scoping review. *Telemedicine Journal & E Health.* 2021;29:29.
- Dewa LH, Lawrance E, Roberts L, et al. Quality social connection as an active ingredient in digital interventions for young people with depression and anxiety: systematic scoping review and meta-analysis. *J Med Internet Res.* 2021;23(12):e26584.
- Dionisi S, Giannetta N, Di Simone E, et al. The use of mHealth in orthopedic surgery: a scoping review. *Int J Environ Res Public Health.* 2021;18(23):28.
- Doraiswamy S, Jithesh A, Mamtani R, et al. Telehealth use in geriatrics care during the COVID-19 pandemic - a scoping review and evidence synthesis. *Int J Environ Res Public Health.* 2021;18(4):11.
- Dowson B, Schneider J. Online singing groups for people with dementia: scoping review. *Public Health.* 2021;194:196-201.
- Echelard JF. Use of telemedicine in depression care by physicians: scoping review. *JMIR Form Res.* 2021;5(7):e29159.

Elgert L, Steiner B, Saalfeld B, et al. Health-enabling technologies to assist patients with musculoskeletal shoulder disorders when exercising at home: scoping review. *JMIR Rehabil Assist Technol*. 2021;8(1):e21107.

Eslami P, Niakan Kalhori SR, Taheriyani M. eHealth solutions to fight against COVID-19: a scoping review of applications. *Med J Islam Repub Iran*. 2021;35:43.

Exner-Cortens D, Baker E, Gray S, et al. School-based suicide risk assessment using eHealth for youth: systematic scoping review. *JMIR Ment Health*. 2021;8(9):e29454.

Fisher L, Glasgow RE, Huebschmann A. A scoping review and general user's guide for facilitating the successful use of ehealth programs for diabetes in clinical care. *Diabetes Technol Ther*. 2021;23(2):133-145.

Forsyth JR, Chase H, Roberts NW, et al. Application of the National Institute for Health and Care Excellence Evidence standards framework for digital health technologies in assessing mobile-delivered technologies for the self-management of type 2 diabetes mellitus: scoping review. *JMIR Diabetes*. 2021;6(1):e23687

Gonzalez C, Early J, Gordon-Dseagu V, et al. Promoting culturally tailored mHealth: a scoping review of mobile health interventions in Latinx communities. *J Immigr Minor Health*. 2021;23(5):1065-1077.

Gunasekeran DV, Tseng R, Tham YC, et al. Applications of digital health for public health responses to COVID-19: a systematic scoping review of artificial intelligence, telehealth and related technologies. *NPJ Digit*. 2021;4(1):40.

Hamza M, Alisma J, Kellett J, et al. Can vital signs recorded in patients' homes aid decision making in emergency care? A scoping review. *Resusc Plus*. 2021;6:100116.

Hilty DM, Zalpuri I, Torous J, et al. Child and adolescent asynchronous technology competencies for clinical care and training: scoping review. *Fam Syst Health*. 2021;39(1):121-152.

Hoffer-Hawlik M, Moran A, Zerihun L, et al. Telemedicine interventions for hypertension management in low- and middle-income countries: a scoping review. *PLoS ONE*. 2021;16(7):e0254222.

Ingle MP, Valdovinos C, Ford KL, et al. patient portals to support palliative and end-of-life care: scoping review. *J Med Internet Res*. 2021;23(9):e28797.

Jonnagaddala J, Godinho MA, Liaw ST. From telehealth to virtual primary care in Australia? A rapid scoping review. *Int J Med Inform*. 2021;151:104470.

Juengst SB, Terhorst L, Nabasny A, et al. Use of mHealth technology for patient-reported outcomes in community-dwelling adults with acquired brain injuries: a scoping review. *Int J Environ Res Public Health*. 2021;18(4):23.

Kabukye JK, Kakungulu E, Keizer N, et al. Digital health in oncology in Africa: a scoping review and cross-sectional survey. *Int J Med Inform*. 2021;158:104659.

Kantorova L, Kantor J, Horejsi B, et al. Adaptation of music therapists' practice to the outset of the COVID-19 pandemic-going virtual: a scoping review. *Int J Environ Res Public Health*. 2021;18(10):12.

Khoja A, Ali NA, Feroz A. Telehealth as an important player in the management of Hepatitis C virus. *Gastroenterology Insights*. 2021;12(2).

Komariah M, Maulana S, Platini H, et al. A scoping review of telenursing's potential as a nursing care delivery model in lung cancer during the COVID-19 pandemic. *J Multidiscip Healthc*. 2021;14:3083-3092.

Leach R, Carreiro S, Shaffer PM, et al. Digital health interventions for mental health, substance use, and co-occurring disorders in the criminal justice population: a scoping review. *Front Psychiatr*. 2021;12:794785.

Leone E, Eddison N, Healy A, et al. Exploration of implementation, financial and technical considerations within allied health professional (AHP) telehealth consultation guidance: a scoping review including UK AHP professional bodies' guidance. *BMJ Open*. 2021;11(12):e055823.

Li CZ, Borycki EM, Kushniruk AW. Connecting the world of healthcare virtually: a scoping review on virtual care delivery. *Healthcare (Basel)*. 2021;9(10):05.

Lim J, Broughan J, Crowley D, et al. COVID-19's impact on primary care and related mitigation strategies: a scoping review. *Eur J Gen Pract*. 2021;27(1):166-175.

MacDougall S, Jerrott S, Clark S, et al. Text message interventions in adolescent mental health and addiction services: scoping review. *JMIR Ment Health*. 2021;8(1):e16508.

Majidova K, Handfield J, Kafi K, et al. Role of digital health and artificial intelligence in inflammatory bowel disease: a scoping review. *Genes (Basel)*. 2021;12(10):22.

Mastronardo C, Muddle LS, Grace S, et al. Digital health technologies for osteopaths and allied healthcare service providers: a scoping review. *Int J Osteopath Med*. 2021;41:37-44.

McCartan C, Adell T, Cameron J, et al. A scoping review of international policy responses to mental health recovery during the COVID-19 pandemic. *Health Res Policy Syst*. 2021;19(1):58.

Meherali S, Adewale B, Ali S, et al. Impact of the COVID-19 Pandemic on adolescents' sexual and reproductive health in low- and middle-income countries. *Int J Environ Res Public Health*. 2021;18(24):15.

Metzger G, Jatana K, Apfeld J, et al. State of telemedicine use in pediatric surgery in the USA-where we stand and what we can gain from the COVID-19 pandemic: a scoping review. *World J Pediatr Surg*. 2021;4(1).

Miller KA, Baird J, Lira J, et al. The use of telemedicine for home-based palliative care for children with serious illness: a scoping review. *J Pain Symptom Manage*. 2021;62(3):619-636.e6.

- Montagnoli C, Zanconato G, Ruggeri S, et al. Restructuring maternal services during the COVID-19 pandemic: early results of a scoping review for non-infected women. *Midwifery*. 2021;94:102916.
- Mosnaim G, Safioti G, Brown R, et al. Digital health technology in asthma: a comprehensive scoping review. *J Allergy Clin Immunol Pract*. 2021;9(6):2377-2398.
- Mulawa MI, Rosengren AL, Amico KR, et al. mHealth to reduce HIV-related stigma among youth in the United States: a scoping review. *Mhealth*. 2021;7:35.
- Munoz K, Nagaraj NK, Nichols N. Applied tele-audiology research in clinical practice during the past decade: a scoping review. *Int J Audiol*. 2021;60(sup1):S4-S12.
- Nascimento JCP, Santos K, Dantas J, et al. Non-pharmacological therapies for the treatment of post-traumatic stress disorder among emergency responders: a scoping review. *Rev Esc Enferm USP*. 2021;55:e03724.
- Navarro O, Escriva M, Faubel R, et al. Empowering patients living with chronic conditions using video as an educational tool: scoping review. *J Med Internet Res*. 2021;23(7):e26427.
- Negm AM, Salopek A, Zaide M, et al. Rehabilitation care at the time of coronavirus disease-19 (COVID-19) pandemic: a scoping review of health system recommendations. *Front Aging Neurosci*. 2021;13:781271.
- Negreiros F, Araujo AL, Mattos SM, et al. Digital technologies in the care of people with diabetes during the COVID-19 pandemic: a scoping review. *Rev Esc Enferm USP*. 2021;55:e20210295.
- Obro LF, Heiselberg K, Krogh PG, et al. Combining mHealth and health-coaching for improving self-management in chronic care. a scoping review. *Patient Educ Couns*. 2021;104(4):680-688.
- Osei E, Kuupiel D, Vezi PN, et al. Mapping evidence of mobile health technologies for disease diagnosis and treatment support by health workers in sub-Saharan Africa: a scoping review. *BMC Med Inform Decis Mak*. 2021;21(1):11.
- Oshni Alvandi A, Bain C, Burstein F. Understanding digital health ecosystem from Australian citizens' perspective: a scoping review. *PLoS ONE*. 2021;16(11):e0260058.
- Powis M, Milley-Daigle C, Hack S, et al. Impact of the early phase of the COVID pandemic on cancer treatment delivery and the quality of cancer care: a scoping review and conceptual model. *Int J Qual Health Care*. 2021;33(2):23.
- Purnamayanti NKD, Wicaksana AL. Digital health services among patients with diabetes during the COVID-19 pandemic: a scoping review. *Indian J Endocrinol Metab*. 2021;25(2):86-92.
- Ramage ER, Fini N, Lynch EA, et al. Look before you leap: interventions supervised via telehealth involving activities in weight-bearing or standing positions for people after stroke-a scoping review. *Phys Ther*. 2021;101(6):01.

- Rasmussen B, Wynter K, Rawson HA, et al. Self-management of diabetes and associated comorbidities in rural and remote communities: a scoping review. *Aust J Prim Health*. 2021;27(4):243-254.
- Raspa M, Moultrie R, Toth D, et al. Barriers and Facilitators to Genetic Service Delivery Models: Scoping Review. *Interact J Med Res*. 2021;10(1):e23523.
- Reinhardt G, Schwarz PE, Harst L. Non-use of telemedicine: a scoping review. *Health Inform J*. 2021;27(4):14604582211043147.
- Ritschl V, Ferreira RJO, Santos EJJ, et al. Suitability for e-health of non-pharmacological interventions in connective tissue diseases: scoping review with a descriptive analysis. *RMD Open*. 2021;7(2):07.
- Salsabilla A, Azzahra AB, Syafitri RIP, et al. Cost-effectiveness of telemedicine in Asia: a scoping review. *J Multidiscip Healthc*. 2021;14:3587-3596.
- Salvador Verges A, Cusi Sanchez MV, Bossio Grigera P, et al. Determinants in stakeholder opinions about telemedicine in palliative care: a scoping review. *Telemed J E Health*. 2021;06:06.
- Selick A, Bobbette N, Lunskey Y, et al. Virtual health care for adult patients with intellectual and developmental disabilities: a scoping review. *Disabil Health J*. 2021;14(4):101132.
- Senter MS, Patel SR, Dixon LB, et al. Defining and Addressing Gaps in Care for Obsessive-Compulsive Disorder in the United States. *Psychiatr Serv*. 2021;72(7):784-793.
- Shorey S, Lau LST, Tan JX, et al. Families with children with neurodevelopmental disorders during COVID-19: a scoping review. *J Pediatr Psychol*. 2021;46(5):514-525.
- Silva AB, Sindico SRF, Carneiro AC, et al. COVID-19 remote consultation services and population in health inequity-concentrating territories: a scoping review. *Telemed J E Health*. 2021;27(8):881-897.
- Skov Schacksen C, Henneberg NC, Muthulingam JA, et al. Effects of telerehabilitation interventions on heart failure management (2015-2020): scoping review. *JMIR Rehabil Assist Technol*. 2021;8(4):e29714.
- Spelten ER, Hardman RN, Pike KE, et al. Best practice in the implementation of telehealth-based supportive cancer care: using research evidence and discipline-based guidance. *Patient Educ Couns*. 2021;104(11):2682-2699.
- Sulz S, van Elten HJ, Askari M, et al. eHealth applications to support independent living of older persons: scoping review of costs and benefits identified in economic evaluations. *J Med Internet Res*. 2021;23(3):e24363.
- Taito S, Yamauchi K, Kataoka Y. Telerehabilitation in subjects with respiratory disease: a scoping review. *Respir Care*. 2021;66(4):686-698.
- Tan SHX, Lee CKJ, Yong CW, et al. Scoping review: facilitators and barriers in the adoption of teledentistry among older adults. *Gerodontology*. 2021a;38(4):351-365.



- Tan AJ, Rusli KD, McKenna L, et al. Telemedicine experiences and perspectives of healthcare providers in long-term care: a scoping review. *J Telemed Telecare*. 2021b;1357633X211049206.
- Tilahun B, Gashu KD, Mekonnen ZA, et al. Mapping the role of digital health technologies in the case detection, management, and treatment outcomes of neglected tropical diseases: a scoping review. *Trop Med Health*. 2021a;49(1):17.
- Tilahun B, Gashu KD, Mekonnen ZA, et al. Mapping the role of digital health technologies in prevention and control of COVID-19 pandemic: review of the literature. *Yearb Med Inform*. 2021b;30(1):26-37.
- Tokgoz P, Hrynyschyn R, Hafner J, et al. Digital health interventions in prevention, relapse, and therapy of mild and moderate depression: scoping review. *JMIR Ment Health*. 2021;8(4):e26268.
- Tolu LB, Feyissa GT, Jeldu WG. Guidelines and best practice recommendations on reproductive health services provision amid COVID-19 pandemic: scoping review. *BMC Public Health*. 2021;21(1):276.
- Tumuhimbise W, Musiimenta A. A review of mobile health interventions for public private mix in tuberculosis care. *Internet Interv*. 2021;25:100417.
- Unni EJ, Patel K, Beazer IR, et al. Telepharmacy during COVID-19: a scoping review. *Pharmacy (Basel)*. 2021;9(4):11.
- van Doorn M, Nijhuis LA, Egeler MD, et al. Online indicated preventive mental health interventions for youth: a scoping review. *Front Psychiatr*. 2021;12:580843.
- van Eck van der Sluijs A, Vonk S, van Jaarsveld BC, et al. Good practices for dialysis education, treatment, and eHealth: a scoping review. *PLoS ONE*. 2021;16(8):e0255734.
- van Leeuwen H, Sinnaeve R, Witteveen U, et al. Reviewing the availability, efficacy and clinical utility of Telepsychology in dialectical behavior therapy (Tele-DBT). *Borderline Personal Disord Emot Dysregul*. 2021;8(1):26.
- van Lotringen CM, Jeken L, Westerhof GJ, et al. Responsible relations: a systematic scoping review of the therapeutic alliance in text-based digital psychotherapy. *Front Digit Health*. 2021;3:689750.
- Whitelaw S, Pellegrini DM, Mamas MA, et al. Barriers and facilitators of the uptake of digital health technology in cardiovascular care: a systematic scoping review. *Eur Heart J Digit Health*. 2021;2(1):62-74.
- WHO. Scoping review of interventions to maintain essential services for maternal, newborn, child and adolescent health and older people during disruptive events. 2021: <https://www.who.int/publications/i/item/9789240038318> Accessed 2022 Sep 15.
- Widianti E, Suryani S, Sunjaya DK, et al. Telehealth and its prospective for improving serious mental illness conditions: a scoping review. *Open Access Maced J Med Sci*. 2021;9(T6):126-132.

Wies B, Landers C, Ienca M. Digital mental health for young people: a scoping review of ethical promises and challenges. *Front Digit Health*. 2021;3:697072.

Winwood JJ, Fitzgerald L, Gardiner B, et al. Exploring the social impacts of the COVID-19 pandemic on people living with HIV (PLHIV): A Scoping Review. *AIDS Behav*. 2021;25(12):4125-4140.

Wood T, Freeman S, Banner D, et al. Factors associated with teletrauma utilization in rural areas: a review of the literature. *Rural Remote Health*. 2021;21(1):6354.

Yasmin F, Shujauddin SM, Naeem A, et al. Exploring the impact of the COVID-19 pandemic on provision of cardiology services: a scoping review. *Rev Cardiovasc Med*. 2021;22(1):83-95.

Aapro M, Bossi P, Dasari A, et al. Digital health for optimal supportive care in oncology: benefits, limits, and future perspectives. *Support Care Cancer*. 2020;28(10):4589-4612.

Alfuraydan M, Croxall J, Hurt L, et al. Use of telehealth for facilitating the diagnostic assessment of Autism Spectrum Disorder (ASD): a scoping review. *PLoS ONE*. 2020;15(7):e0236415.

Aquino M, Munce S, Griffith J, et al. Exploring the use of telemonitoring for patients at high risk for hypertensive disorders of pregnancy in the antepartum and postpartum periods: scoping review. *JMIR Mhealth Uhealth*. 2020;8(4):e15095.

Baines R, Tredinnick-Rowe J, Jones R, et al. Barriers and enablers in implementing electronic consultations in primary care: scoping review. *J Med Internet Res*. 2020;22(11):e19375.

Baldwin A, Willis E, Harvey C, et al. Exploring the role of nurses in after-hours telephone services in regional areas; a scoping review. *PLoS ONE*. 2020;15(8):e0237306.

Bernard S, Boucher S, McLean L, et al. Mobile technologies for the conservative self-management of urinary incontinence: a systematic scoping review. *Int Urogynecol J*. 2020;31(6):1163-1174.

Campbell J, Theodoros D, Hartley N, et al. Implementation factors are neglected in research investigating telehealth delivery of allied health services to rural children: a scoping review. *J Telemed Telecare*. 2020;26(10):590-606.

Cao B, Bao H, Oppong E, et al. Digital health for sexually transmitted infection and HIV services: a global scoping review. *Curr Opin Infect Dis*. 2020;33(1):44-50.

Dosani A, Arora H, Mazmudar S. mHealth and perinatal depression in low-and middle-income countries: a scoping review of the literature. *Int J Environ Res Public Health*. 2020;17(20):21.

Elliott MJ, Love S, Donald M, et al. Outpatient interventions for managing acute complications of chronic diseases: a scoping review and implications for patients with CKD. *Am J Kidney Dis*. 2020;76(6):794-805.

Ellis MJ, Mendez I, Russell K. Preliminary clinical algorithm to optimise remote delivery of paediatric concussion care in Canada's North. *Int J Circumpolar Health*. 2020b;79(1):1832390.

Ellis LA, Augustsson H, Rodahl AI, et al. Implementation of e-mental health for depression and anxiety: a critical scoping review. *J Community Psychol*. 2020b;48(3):904-920.

Elnaem MH, Rosley NFF, Alhifany AA, et al. Impact of pharmacist-led interventions on medication adherence and clinical outcomes in patients with hypertension and hyperlipidemia: a scoping review of published literature. *J Multidiscip Healthc.* 2020;13:635-645.

Graham F, Boland P, Grainger R, et al. Telehealth delivery of remote assessment of wheelchair and seating needs for adults and children: a scoping review. *Disabil Rehabil.* 2020;42(24):3538-3548.

Harst L, Timpel P, Otto L, et al. Identifying barriers in telemedicine-supported integrated care research: scoping reviews and qualitative content analysis. *J Public Health (Germany).* 2020;28(5):583-594.

Hilty DM, Gentry MT, McKean AJ, et al. Telehealth for rural diverse populations: telebehavioral and cultural competencies, clinical outcomes and administrative approaches. *Mhealth.* 2020;6:20.

Hincapie MA, Gallego JC, Gempeler A, et al. Implementation and usefulness of telemedicine during the COVID-19 pandemic: a scoping review. *J Prim Care Community Health.* 2020;11:2150132720980612.

Ingemann C, Hansen NF, Hansen NL, et al. Patient experience studies in the circumpolar region: a scoping review. *BMJ Open.* 2020;10(10):e042973.

Intan Sabrina M, Defi IR. Telemedicine guidelines in South East Asia-a scoping review. *Front Neurol.* 2020;11:581649.

Jones C, Miguel-Cruz A, Smith-MacDonald L, et al. Virtual trauma-focused therapy for military members, veterans, and public safety personnel with posttraumatic stress injury: systematic scoping review. *JMIR Mhealth Uhealth.* 2020;8(9):e22079.

Kaur H, Kochhar AS, Gupta H, et al. Appropriate orthodontic appliances during the COVID-19 pandemic: a scoping review. *J Oral Biol Craniofac Res.* 2020;10(4):782-787.

Kemp J, Zhang T, Inglis F, et al. Delivery of compassionate mental health care in a digital technology-driven age: scoping review. *J Med Internet Res.* 2020;22(3):e16263.

Kermani F, Orooji A, Sheikhtaheri A. Teleoncology for children with cancer: a scoping review on applications and outcomes. *Int J Med Inform.* 2020;139:104118.

LeBlanc M, Petrie S, Paskaran S, et al. Patient and provider perspectives on eHealth interventions in Canada and Australia: a scoping review. *Rural Remote Health.* 2020;20(3):5754.

Lee Y, Raviglione MC, Flahault A. Use of digital technology to enhance tuberculosis control: scoping review. *J Med Internet Res.* 2020;22(2):e15727.

Magalhaes B, Fernandes C, Martinez-Galiano JM, et al. Exploring the use of Mobile applications by cancer patients undergoing chemotherapy: a scoping review. *Int J Med Inform.* 2020;144:104293.

McCord C, Bernhard P, Walsh M, et al. A consolidated model for telepsychology practice. *J Clin Psychol*. 2020;76(6):1060-1082.

Meinhart F, Stutz T, Sareban M, et al. Mobile technologies to promote physical activity during cardiac rehabilitation: a scoping review. *Sensors (Basel)*. 2020;21(1):24.

O'Cathail M, Sivanandan MA, Diver C, et al. The use of patient-facing teleconsultations in the National Health Service: scoping review. *JMIR Med Inform*. 2020;8(3):e15380.

O'Neil J, van Ierssel J, Sveistrup H. Remote supervision of rehabilitation interventions for survivors of moderate or severe traumatic brain injury: a scoping review. *J Telemed Telecare*. 2020;26(9):520-535.

Pham Q, Hearn J, Gao B, et al. Virtual care models for cancer survivorship. *NPJ Digit*. 2020;3:113.

Putranto D, Rochmawati E. Mobile applications for managing symptoms of patients with cancer at home: a scoping review. *Int J Nurs Pract*. 2020;26(4):e12842.

Reilly R, Stephens J, Micklem J, et al. Use and uptake of web-based therapeutic interventions amongst Indigenous populations in Australia, New Zealand, the United States of America and Canada: a scoping review. *Syst Rev*. 2020;9(1):123.

Santesteban-Echarri O, Piskulic D, Nyman RK, et al. Telehealth interventions for schizophrenia-spectrum disorders and clinical high-risk for psychosis individuals: a scoping review. *J Telemed Telecare*. 2020;26(1-2):14-20.

Shaffer KM, Tigershtroum A, Badr H, et al. Dyadic psychosocial ehealth interventions: systematic scoping review. *J Med Internet Res*. 2020;22(3):e15509.

Shafiee Hanjani L, Caffery LJ, Freeman CR, et al. A scoping review of the use and impact of telehealth medication reviews. *Res Social Adm Pharm*. 2020;16(8):1140-1153.

Siddiq MAB, Rathore FA, Clegg D, et al. Pulmonary rehabilitation in COVID-19 patients: a scoping review of current practice and its application during the pandemic. *Turk J Phys Med Rehabil*. 2020;66(4):480-494.

Smith-Turchyn J, Gravesande J, Sabiston CM. Exercise interventions for survivors of cancer living in rural or remote settings: a scoping review. *Rehabil Oncol*. 2020;38(2):61-80.

Snoswell CL, Taylor ML, Comans TA, et al. Determining if telehealth can reduce health system costs: scoping review. *J Med Internet Res*. 2020;22(10):e17298.

Steindal SA, Nes AAG, Godskesen TE, et al. Patients' experiences of telehealth in palliative home care: scoping review. *J Med Internet Res*. 2020;22(5):e16218.

Thiyagarajan A, Grant C, Griffiths F, et al. Exploring patients' and clinicians' experiences of video consultations in primary care: a systematic scoping review. *BJGP Open*. 2020;4(1):bjgpopen20X101020.

Thompson TA, Sonalkar S, Butler JL, et al. Telemedicine for family planning: a scoping review. *Obstet Gynecol Clin North Am*. 2020;47(2):287-316.

Vailati Riboni F, Comazzi B, Bercovitz K, et al. Technologically-enhanced psychological interventions for older adults: a scoping review. *BMC Geriatr.* 2020;20(1):191.

Vanhamel J, Rotsaert A, Reyniers T, et al. The current landscape of pre-exposure prophylaxis service delivery models for HIV prevention: a scoping review. *BMC Health Serv Res.* 2020;20(1):704.

Wattanapisit A, Tuangratananon T, Wattanapisit S. Usability and utility of eHealth for physical activity counselling in primary health care: a scoping review. *BMC Fam Pract.* 2020;21(1):229.

Yang Y, Chen H, Qazi H, et al. Intervention and evaluation of mobile health technologies in management of patients undergoing chronic dialysis: scoping review. *JMIR Mhealth Uhealth.* 2020;8(4):e15549.

Zaslavsky O, Roopsawang I, Chen AT. Promoting behavioral change in mobile health interventions for older adults: a scoping review. *Res Gerontol Nurs.* 2020;13(2):102-116.

## List of Included Evidence-Based Guidelines (n = 11 guidelines from 12 reports)

Ahmed S, Grainger R, Santosa A, et al. APLAR recommendations on the practice of telemedicine in rheumatology. *Int J Rheum Dis.* 2022;25(3):247-258.

Ontario Health (Cancer Care Ontario). Person-centred virtual cancer care clinical guidance. Toronto: Ontario Health (Cancer Care Ontario); 2022: <https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/69581>. Accessed 2022 Sept 14.

Gladstone DJ, Lindsay MP, Douketis J, et al. Canadian stroke best practice recommendations: secondary prevention of stroke update 2020. *Can J Neurol Sci.* 2022;49(3):315-337.

Peahl AF, Turrentine M, Barfield W, Blackwell SC, Zahn CM. Michigan plan for appropriate tailored healthcare in pregnancy prenatal care recommendations: a practical guide for maternity care clinicians. *J Womens Health.* 2022;12:12.

Perry C, Liberto J, Milliken C, et al. The management of substance use disorders: synopsis of the 2021 U.S. Department of Veterans Affairs and U.S. Department of Defense clinical practice guideline. *Ann Intern Med.* 2022;175(5):720-731.

Ziade N, Hmamouchi I, El Kibbi L, et al. Telehealth in rheumatology: the 2021 Arab League of Rheumatology best practice guidelines. *Rheumatol Int.* 2022;42(3):379-390.

Cheung MC, Franco BB, Meti N, et al. Delivery of virtual care in oncology: province-wide interprofessional consensus statements using a modified Delphi process. *Curr Oncol.* 2021;28(6):5332-5345.

Kapoor S, Gupta A, Saidha PK. Ear, nose, and throat practice guidelines: an update for COVID-19. *Int Arch Otorhinolaryngol.* 2021;25(4):e621-e627.

Schwaab B, Bjarnason-Wehrens B, Meng K, et al. Cardiac rehabilitation in German speaking countries of Europe-evidence-based guidelines from Germany, Austria and Switzerland LLKardReha-DACH-Part 2. *J Clin Med.* 2021;10(14):12.

Zon RT, Kennedy EB, Adelson K, et al. Telehealth in oncology: ASCO standards and practice recommendations. *JCO Oncol Pract*. 2021;17(9):546-564.

Grimes CL, Balk EM, Dieter AA, et al. Guidance for gynecologists utilizing telemedicine during COVID-19 pandemic based on expert consensus and rapid literature reviews. *Int J Gynaecol Obstet*. 2020;150(3):288-298.

Shanthanna H, Strand NH, Provenzano DA, et al. Caring for patients with pain during the COVID-19 pandemic: consensus recommendations from an international expert panel. *Anaesthesia*. 2020;75(7):935-944.

## Lists of Other Guidance and Guideline Documents (n = 158)

### Policy, Frameworks, and Infrastructure

Deloitte LLP. Options for advancing a permanent virtual care compensation framework in Nova Scotia. Dartmouth (NS): Doctors Nova Scotia; 2022: <https://doctorsns.com/sites/default/files/Deloitte-report-virtual-care.pdf>. Accessed 2022 Sep 1.

Canadian Institute for Health Information. Virtual care in Canada: strengthening data and information. Ottawa (ON): CIHI; 2022: <https://www.cihi.ca/sites/default/files/document/virtual-care-in-canada-strengthening-data-information-report-en.pdf>. Accessed 2022 Sep 1.

Virtual Care Task Force. Virtual care in Canada: progress and potential. Mississauga (ON): College of Family Physicians of Canada; 2022: <https://www.royalcollege.ca/rcsite/documents/health-policy/report-virtual-care-task-force-2022-e.pdf>. Accessed 2022 Sep 1.

American Medical Association, Manatt Health Strategies. Return on health: moving beyond dollars and cents in realizing the value of virtual care. Chicago (IL): AMA; 2021: <https://www.ama-assn.org/system/files/2021-05/ama-return-on-health-report-may-2021.pdf>. Accessed 2022 Sep 1.

Health Canada. Enhancing equitable access to virtual care in Canada: principle-based recommendations for equity. Ottawa (ON): Health Canada; 2021: <https://www.canada.ca/content/dam/hc-sc/documents/corporate/transparency/health-agreements/bilateral-agreement-pan-canadian-virtual-care-priorities-covid-19/enhancing-access-principle-based-recommendations-equity/based-recommendations-equity-en.pdf>. Accessed 2022 Sep 1.

Ontario Health. Virtual visits solution requirements. Version 1.2. Toronto: Ontario Health; 2021: <https://otn.ca/wp-content/uploads/2020/03/Virtual-Visits-Solution-Standard-v1.2.pdf>. Accessed 2022 Sep 1.

WHO. Global strategy on digital health 2020-2025. 2021: <https://www.who.int/publications/i/item/9789240020924>. Accessed 2022 Sep 1.

Bhatia RS, Jamieson T, Shaw J, Piovesan C, Kelley LT, Falk W. Canada's virtual care revolution: a framework for success. (*Commentary no. 586*). Toronto: C.D. Howe Institute; 2020: [https://www.cdhowe.org/sites/default/files/attachments/research\\_papers/mixed/Commentary\\_586.pdf](https://www.cdhowe.org/sites/default/files/attachments/research_papers/mixed/Commentary_586.pdf). Accessed 2022 Sep 1.

Ontario Health. Important COVID-19 Information and Updates. 2020: <https://otn.ca/covid-19/>. Accessed 2022 Sep 1.

Labrique A, Agarwal S, Tamrat T, Mehl G. WHO Digital Health Guidelines: a milestone for global health. *NPJ Digit Med.* 2020;3:120.

Virtual Care Task Force. Virtual care recommendations for scaling up virtual medical services. Mississauga (ON): College of Family Physicians of Canada; 2020: <https://www.cfpc.ca/CFPC/media/Images/PDF/VCTF-report-Final-ENG-Feb-11-20.pdf>. Accessed 2022 Sep 1.

## Implementation

Al Knawy B, McKillop MM, Abduljawad J, et al. Successfully implementing digital health to ensure future global health security during pandemics: a consensus statement. *JAMA Netw.* 2022;5(2):e220214.

Cremers HP, Theunissen L, Hiddink J, et al. Successful implementation of ehealth interventions in healthcare: Development of an ehealth implementation guideline. *Health Serv Manage Res.* 2021;34(4):269-278.

Dichter JR, Devereaux AV, Sprung CL, et al. Mass critical care surge response during COVID-19: implementation of contingency strategies - a preliminary report of findings from the Task Force for Mass Critical Care. *Chest.* 2022;161(2):429-447.

Krist AH, Phillips R, Leykum L, Olmedo B. Digital health needs for implementing high-quality primary care: recommendations from the National Academies of Sciences, Engineering, and Medicine. *J Am Med Inform Assoc.* 2021;28(12):2738-2742.

WHO. Digital Implementation Investment Guide (DIIG): integrating digital interventions into health programmes. 2020: <https://www.who.int/publications/i/item/9789240010567>. Accessed 2022 Sep 1.

WHO. Implementing telemedicine services during COVID-19 : guiding principles and considerations for a stepwise approach. 2020: <https://www.who.int/publications/i/item/WPR-DSE-2020-032>. Accessed 2022 Sep 1.

## Toolkits

Canada Health Infoway, Healthcare Excellence Canada. Providing safe and high-quality virtual care: a guide for new and experienced users. Clinician Change Virtual Care Toolkit Ottawa (ON): Canada Health Infoway; 2022: <https://www.infoway-inforoute.ca/en/component/edocman/6378-clinician-change-virtual-care-toolkit/view-document?Itemid=101>. Accessed 2022 Sep 1.

Accreditation Canada. COVID-19 toolkit: Virtual care. Considerations for patients, health professionals and digital teams involved in Virtual Health. Ottawa (ON): Accreditation Canada; 2020: <https://store.accreditation.ca/products/virtual-care-toolkit> Alternative link: <https://sharedhealthmb.ca/files/covid-19-virtual-care-toolkit.pdf>. Accessed 2022 Sep 1.

Doctors Technology Office. Virtual care toolkit. Vancouver (BC): Doctors of BC; 2021: [https://www.doctorsofbc.ca/sites/default/files/dto\\_virtual\\_care\\_toolkit.pdf](https://www.doctorsofbc.ca/sites/default/files/dto_virtual_care_toolkit.pdf). Accessed 2022 Sep 1.

Doctors Nova Scotia. Getting started with virtual care. Dartmouth (NS): Doctors Nova Scotia; 2020: <https://doctorsns.com/sites/default/files/2020-06/toolkit-virtual-care-v2.pdf>. Accessed 2022 Sep 1.

## Clinical Practice – General

College of Physicians and Surgeons Alberta. Advice to the profession: virtual care. Edmonton (AB): CPSA; 2022: [https://cpsa.ca/wp-content/uploads/2020/06/AP\\_Virtual-Care-1.pdf](https://cpsa.ca/wp-content/uploads/2020/06/AP_Virtual-Care-1.pdf). Accessed 2022 Sep 1.

Casariago-Vales E, Palencia-Vizcarra R, Bolano J, Camera L, Valdez P, Group T-FW. Executive summary on the use of telemedicine in the hospital setting: Recommendations from the International Forum on Internal Medicine. *Rev Clin Esp (Barc)*. 2022;23:23.

Board of the College of Physicians and Surgeons of British Columbia. Practice standard: virtual care, version 8.3. Vancouver (BC): CPSBC; 2022: <https://www.cpsbc.ca/files/pdf/PSG-Virtual-Care.pdf>. Accessed 2022 Sep 1.

UHN Virtual Care Clinical Advisory Panel. Clinical guiding principles for virtual care. Toronto: University Health Network; 2022: [https://www.uhn.ca/corporate/AboutUHN/Virtual\\_Care/Documents/Clinical-Guiding-Principles-Virtual-Care.pdf](https://www.uhn.ca/corporate/AboutUHN/Virtual_Care/Documents/Clinical-Guiding-Principles-Virtual-Care.pdf). Accessed 2022 Sep 1.

BC Provincial Health Services Authority. Virtual health handbook: for PHSA staff. Vancouver (BC): PHSA; 2021: <http://www.phsa.ca/health-professionals-site/Documents/Office%20of%20Virtual%20Health/Virtual%20Health%20Handbook.pdf>. Accessed 2022 Sep 1.

College of Family Physicians of Canada. Virtual care in the patient's medical home. Mississauga (ON): College of Family Physicians of Canada; 2021: [https://patientsmedicalhome.ca/files/uploads/PMH\\_Virtual-Care-Supplement\\_ENG\\_FINAL\\_REV.pdf](https://patientsmedicalhome.ca/files/uploads/PMH_Virtual-Care-Supplement_ENG_FINAL_REV.pdf). Accessed 2022 Sep 1.

Drossman DA, Chang L, Deutsch JK, Ford AC, Halpert A, Kroenke K, et al. A review of the evidence and recommendations on communication skills and the patient-provider relationship: a Rome Foundation Working Team Report. *Gastroenterology*. 2021;161(5):1670-88.e7. doi: <https://dx.doi.org/10.1053/j.gastro.2021.07.037>. PubMed PMID: 34331912.

Galpin K, Sikka N, King SL, Horvath KA, Shipman SA, Committee ATA. Expert consensus: telehealth skills for health care professionals. *Telemed J E Health*. 2021;27(7):820-824.

College of Physicians and Surgeons of Manitoba. Standard of practice: virtual medicine. Winnipeg (MB): College of Physicians & Surgeons of Manitoba; 2021: <https://cpsm.mb.ca/assets/Standards%20of%20Practice/Standard%20of%20Practice%20Virtual%20Medicine.pdf>. Accessed 2022 Sep 1.

College of Physicians and Surgeons of Nova Scotia. Professional standards regarding virtual care. Bedford (NS): CPSNS; 2021: <https://cpsns.ns.ca/wp-content/uploads/2021/05/Virtual-Care.pdf>. Accessed 2022 Sep 1.

Postal KS, Bilder RM, Lanca M, et al. InterOrganizational practice committee guidance/ recommendation for models of care during the novel coronavirus pandemic. *Clin Neuropsychol*. 2021;35(1):81-98.

Queen's University. Patient care during the COVID-19 pandemic: use of virtual care. A comprehensive, practical guide for health care providers in Canada and globally. Kingston (ON): Queen's University in partnership with Canada Health Infoway; 2021: <https://www.infoway-inforoute.ca/en/component/edocman/3881-patient-care-during-the-covid-19-pandemic-use-of-virtual-care/view-document?Itemid=101>. Accessed 2022 Sep 1.



Doctors of BC. New guides for physicians on using virtual care. 2020: <https://www.doctorsofbc.ca/news/doctors-technology-office-virtual-care-support-response>. Accessed 2022 Sep 1.

Ontario Health. Adopting and integrating virtual visits into care: draft clinical guidance for health care providers in Ontario. Toronto: Ontario Health Quorum; 2020: [https://quorum.hqontario.ca/Portals/0/Users/170/54/10154/Draft%20Clinical%20Guidance\\_Adopting%20and%20integrating%20virtual%20visits%20into%20care\\_V1.pdf?ver=2020-03-13-091936-370](https://quorum.hqontario.ca/Portals/0/Users/170/54/10154/Draft%20Clinical%20Guidance_Adopting%20and%20integrating%20virtual%20visits%20into%20care_V1.pdf?ver=2020-03-13-091936-370). Accessed 2022 Sep 1.

Canadian Medical Association. Virtual care guide for patients. Ottawa (ON): CMA; 2020: <https://www.cma.ca/sites/default/files/pdf/Patient-Virtual-Care-Guide-E.pdf>. Accessed 2022 Sep 1.

Virtual care playbook for Canadian physicians. In: Ottawa (ON): Canadian Medical Association (CMA); 2020: [https://www.cma.ca/sites/default/files/pdf/Virtual-Care-Playbook\\_mar2020\\_E.pdf](https://www.cma.ca/sites/default/files/pdf/Virtual-Care-Playbook_mar2020_E.pdf). Accessed 2022 Jul 18.

## Clinical Practice – Various Specialties

Telehealth Workgroup of the NACNS Professional Development Committee. NACNS white paper on telehealth competency for the Clinical Nurse Specialist: gap analysis and recommendations. *Clin Nurse Spec*. 2022;36(1):E1-E7.

Rajeswaran R, Tavora-Vieira D, Mertens G, et al. Audiological practice and COVID-19: recommendations that audiological centers can use to maintain the safety and quality of service-expert opinion. *Eur Arch Otorhinolaryngol*. 2022;279(3):1251-1256.

Di Spirito F, Iacono VJ, Alfredo I, Amato A, Sbordone L, Lanza A. Evidence-based recommendations on periodontal practice and the management of periodontal patients during and after the covid-19 era: challenging infectious diseases spread by airborne transmission. *Open Dentistry Journal*. 2021;15(1):325-336.

Gallo G, Grossi U, Sturiale A, et al. E-consensus on telemedicine in proctology: a RAND/UCLA-modified study. *Surgery*. 2021;170(2):405-411.

Huyghe E, Graziana JP, Methorst C, et al. Recommandations du Comité d'andrologie et de médecine sexuelle de l'AFU concernant la prise en charge andrologique et en médecine sexuelle en contexte et en sortie de crise sanitaire liée au COVID-19. [Recommendations of the Committee of Andrology and Sexual Medicine of the AFU concerning the management of andrological and sexual medicine pathologies during the COVID-19 crisis]. *Prog Urol*. 2021;31(8-9):495-502.

Noble-Jones R, Thomas MJ, Lawrence P, Pike C. Guidelines for managing people with lymphoedema remotely: a post-COVID-19 response document. *Br J Nurs*. 2021;30(4):218-225.

Ozmen MN, Dicle O, Senol U, Aydingoz U. TSR guidelines for the practice of teleradiology: 2021 update. *Diagn Interv Radiol*. 2021;27(4):504-510.

Zhu S, Zhang L, Xie S, et al. Reconfigure rehabilitation services during the Covid-19 pandemic: best practices from Southwest China. *Disabil Rehabil*. 2021;43(1):126-132.

Cohen SP, Baber ZB, Buvanendran A, et al. Pain management best practices from multispecialty organizations during the COVID-19 pandemic and public health crises. *Pain Med.* 2020;21(7):1331-1346.

Kelly JT, Allman-Farinelli M, Chen J, et al. Dietitians Australia position statement on telehealth. *Nutr Diet.* 2020;77(4):406-415.

Kirana PS, Gudeloglu A, Sansone A, et al. E-Sexual health: a position statement of the European Society for Sexual Medicine. *J Sex Med.* 2020;17(7):1246-1253.

South West Frail Senior Strategy. Providing geriatric virtual care across the South West: guidance document for health care and community support services providers. London (ON): St. Joseph's Health Care London; 2020: <https://www.sjhc.london.on.ca/media/8411/download> Accessed 2022 Sep 1.

Stawicki SP, Jeanmonod R, Miller AC, et al. The 2019-2020 novel coronavirus (Severe Acute Respiratory Syndrome Coronavirus 2) Pandemic: a joint American College of Academic International Medicine-World Academic Council of Emergency Medicine Multidisciplinary COVID-19 Working Group Consensus Paper. *J Glob Infect Dis.* 2020;12(2):47-93

## Cardiovascular Conditions

Gijon-Conde T, Rubio E, Gorostidi M, et al. 2021 Spanish Society of Hypertension position statement about telemedicine. *Hipertens.* 2021;38(4):186-196.

Hsieh MJ, Chen YJ, Tang SC, et al. 2020 Guideline for prehospital management, emergency evaluation and treatment of patients with acute ischemic stroke: a guideline for healthcare professionals from the Taiwan Society of Emergency Medicine and Taiwan Stroke Society. *J Acute Med.* 2021;11(1):12-17.

Pandian JD, Kusuma Y, Kiemas LS, et al. Stroke care during the COVID-19 pandemic: Asian Stroke Advisory Panel Consensus Statement. *J Stroke Med.* 2021;4(1):7-14.

Barrios V, Cosin-Sales J, Bravo M, et al. Telemedicine consultation for the clinical cardiologists in the era of COVID-19: present and future. Consensus document of the Spanish Society of Cardiology. *Rev Esp Cardiol (Engl).* 2020;73(11):910-918.

Gruska M, Aigner G, Altenberger J, et al. Recommendations on the utilization of telemedicine in cardiology. *Wien Klin Wochenschr.* 2020;132(23-24):782-800.

Kemps HMC, Brouwers RWM, Cramer MJ, et al. Recommendations on how to provide cardiac rehabilitation services during the COVID-19 pandemic. *Neth Heart J.* 2020;28(7-8):387-390.

Lakkireddy DR, Chung MK, Gopinathannair R, et al. Guidance for cardiac electrophysiology during the COVID-19 pandemic from the Heart Rhythm Society COVID-19 Task Force; Electrophysiology Section of the American College of Cardiology; and the Electrocardiography and Arrhythmias Committee of the Council on Clinical Cardiology, American Heart Association. *Heart Rhythm.* 2020;17(9):e233-e241.

Olszanecka-Glinianowicz M, Dudek D, Filipiak KJ, et al. Treatment of overweight and obesity during and after a pandemic. Let's not wait for the development of complications - new guidelines for doctors. *Arterial Hypertension (Poland).* 2020;24(3):93-105.

Omboni S, McManus RJ, Bosworth HB, et al. Evidence and Recommendations on the Use of Telemedicine for the Management of Arterial Hypertension: An International Expert Position Paper. *Hypertension*. 2020;76(5):1368-1383.

Shaheen S, Awwad O, Shokry K, et al. Rapid guide to the management of cardiac patients during the COVID-19 pandemic in Egypt: "a position statement of the Egyptian Society of Cardiology". *Egypt Heart J*. 2020;72(1):30.

Tay EL, Hayashida K, Chen M, et al. Transcatheter aortic valve implantation during the COVID-19 pandemic: Clinical expert opinion and consensus statement for Asia. *J Card Surg*. 2020;35(9):2142-2146.

Canadian Cardiovascular Society. The new "Virtual Reality": practical approaches to the delivery of cardiac rehabilitation care during the COVID-19 crisis. (*Guidance from the CCS COVID-19 Rapid Response Team*). Ottawa (ON): CCS; 2020: [https://ccs.ca/app/uploads/2020/12/Cardiac\\_Rehab\\_In\\_Covid\\_v2.4\\_Final\\_17\\_May\\_313.pdf](https://ccs.ca/app/uploads/2020/12/Cardiac_Rehab_In_Covid_v2.4_Final_17_May_313.pdf). Accessed 2022 Sep 1.

Varma N, Marrouche NF, Aguinaga L, et al. HRS/EHRA/APHRS/LAHRs/ACC/AHA worldwide practice update for telehealth and arrhythmia monitoring during and after a pandemic. *Heart Rhythm*. 2020;17(9):e255-e268.

Varma N, Marrouche NF, Aguinaga L, et al. HRS/EHRA/APHRS/LAHRs/ACC/AHA worldwide practice update for telehealth and arrhythmia monitoring during and after a pandemic. *J Am Coll Cardiol*. 2020;76(11):1363-1374.

Zanotto G, Melissano D, Baccillieri S, et al. Intrahospital organizational model of remote monitoring data sharing, for a global management of patients with cardiac implantable electronic devices: a document of the Italian Association of Arrhythmology and Cardiac Pacing. *J Cardiovasc Med (Hagerstown)*. 2020;21(3):171-181.

## Dermatology

Deda LC, Goldberg RH, Jamerson TA, Lee I, Tejasvi T. Dermoscopy practice guidelines for use in telemedicine. *NPJ Digit Med*. 2022;5(1):55.

Augustin M, Djamei V, Elsner P, et al. S2k-Guideline for Teledermatology. *J Dtsch Dermatol Ges*. 2021.

Abbott LM, Miller R, Janda M, et al. A review of literature supporting the development of practice guidelines for teledermatology in Australia. *Australas J Dermatol*. 2020;61(2):e174-e183.

Abbott LM, Miller R, Janda M, et al. Practice guidelines for teledermatology in Australia. *Australas J Dermatol*. 2020;61(3):e293-e302.

Nguyen JK, Huang A, Siegel DM, Jagdeo J. Variability in wound care recommendations following dermatologic procedures. *Dermatol Surg*. 2020;46(2):186-191.

## Ear, Nose, and Throat

Bertholon P, Thai-Van H, Bouccara D, Esteve-Fraysse MJ, Wiener-Vacher SR, Ionescu E. Guidelines of the French Society of Otorhinolaryngology (SFORL) for teleconsultation in

patients with vertigo during the COVID-19 pandemic. *Eur Ann Otorhinolaryngol Head Neck Dis.* 2021;138(6):459-465.

Shaikh AG, Bronstein A, Carmona S, et al. Consensus on virtual management of vestibular disorders: urgent versus expedited care. *Cerebellum.* 2021;20(1):4-8.

Thai-Van H, Bakhos D, Bouccara D, et al. Telemedicine in Audiology. Best practice recommendations from the French Society of Audiology (SFA) and the French Society of Otorhinolaryngology-Head and Neck Surgery (SFORL). *Eur Ann Otorhinolaryngol Head Neck Dis.* 2021;138(5):363-375.

Lavinsky J, Kosugi EM, Baptistella E, et al. An update on COVID-19 for the otorhinolaryngologist - a Brazilian Association of Otolaryngology and Cervicofacial Surgery (ABORL-CCF) Position Statement. *Rev Bras Otorrinolaringol (Engl Ed).* 2020;86(3):273-280.

Mattei A, Amy de la Breteque B, Crestani S, et al. Guidelines of clinical practice for the management of swallowing disorders and recent dysphonia in the context of the COVID-19 pandemic. *Eur Ann Otorhinolaryngol Head Neck Dis.* 2020;137(3):173-175.

## Endocrinology

Sarveswaran G, Rangamani S, Ghosh A, et al. Management of diabetes mellitus through teleconsultation during COVID-19 and similar scenarios - Guidelines from Indian Council of Medical Research (ICMR) expert group. *Diabetes Metab Syndr.* 2021;15(5):102242.

Thivolet C, Benhamou PY, Penfornis A, et al. Telehealth monitoring and diabetes: position statement of the French-speaking Diabetes Society (SFD). *Medecine des Maladies Metaboliques.* 2021;15(4):437-448.

Fleming GA, Petrie JR, Bergenstal RM, Holl RW, Peters AL, Heinemann L. Diabetes digital app technology: benefits, challenges, and recommendations. a consensus report by the European Association for the Study of Diabetes (EASD) and the American Diabetes Association (ADA) Diabetes Technology Working Group. *Diabetes Care.* 2020;43(1):250-260.

Ghosh A, Gupta R, Misra A. Telemedicine for diabetes care in India during COVID19 pandemic and national lockdown period: Guidelines for physicians. *Diabetes Metab Syndr.* 2020;14(4):273-276.

## Gastroenterology

Costantino A, Bortoluzzi F, Giuffre M, et al. Correct use of telemedicine in gastroenterology, hepatology, and endoscopy during and after the COVID-19 pandemic: Recommendations from the Italian association of hospital gastroenterologists and endoscopists (AIGO). *Dig Liver Dis.* 2021;53(10):1221-1227.

Magro F, Rahier JF, Abreu C, et al. inflammatory bowel disease management during the COVID-19 outbreak: the ten Do's and Don'ts from the ECCO-COVID Taskforce. *J Crohns Colitis.* 2020;14(14 Suppl 3):S798-S806.

## Neurology

Demleitner AF, Wolff AW, Erber J, et al. Best practice approaches to outpatient management of people living with Parkinson's disease during the COVID-19 pandemic. *J Neural Transm.* 2022;04:04.

Cerqueira JJ, Ladeira AF, Silva AM, et al. Multiple sclerosis patient management during the COVID-19 pandemic: practical recommendations from the Portuguese Multiple Sclerosis Study Group (GEEM). *Front Neurol*. 2021;12:613769.

Chapman KM, Berger MJ, Doherty C, et al. Recommendations for patients with complex nerve injuries during the COVID-19 pandemic. *Can J Neurol Sci*. 2021;48(1):50-55.

Cysique LA, Lojek E, Cheung TC, et al. Assessment of neurocognitive functions, olfaction, taste, mental, and psychosocial health in COVID-19 in adults: recommendations for harmonization of research and implications for clinical practice. *J Int Neuropsychol Soc*. 2021:1-19.

Hatcher-Martin JM, Busis NA, Cohen BH, et al. American Academy of Neurology Telehealth Position Statement. *Neurology*. 2021;97(7):334-339.

Madaan P, Sahu JK, Wanigasinghe J, et al. Teleneurology based management of infantile spasms during COVID-19 pandemic: a consensus report by the South Asia Allied West syndrome research group. *Epilepsy Behav Rep*. 2021;15:100423.

Reyes S, Cunningham AL, Kalincik T, et al. Update on the management of multiple sclerosis during the COVID-19 pandemic and post pandemic: an international consensus statement. *J Neuroimmunol*. 2021;357:577627.

Stipa G, Gabrielli F, Rabbito C, et al. The Italian technical/administrative recommendations for telemedicine in clinical neurophysiology. *Neurol Sci*. 2021;42(5):1923-1931.

Bikson M, Hanlon CA, Woods AJ, et al. Guidelines for TMS/tES clinical services and research through the COVID-19 pandemic. *Brain Stimul*. 2020;13(4):1124-1149.

Geddes MR, O'Connell ME, Fisk JD, et al. Remote cognitive and behavioral assessment: report of the Alzheimer Society of Canada Task Force on dementia care best practices for COVID-19. *Alzheimers Dement (Amst)*. 2020;12(1):e12111.

Manto M, Dupre N, Hadjivassiliou M, et al. Medical and paramedical care of patients with cerebellar ataxia during the COVID-19 outbreak: seven practical recommendations of the COVID 19 Cerebellum Task Force. *Front Neurol*. 2020;11:516.

Manto M, Dupre N, Hadjivassiliou M, et al. Management of patients with cerebellar ataxia during the COVID-19 pandemic: current concerns and future implications. *Cerebellum*. 2020;19(4):562-568.

Radder DLM, Nonnekes J, van Nimwegen M, et al. Recommendations for the organization of multidisciplinary clinical care teams in Parkinson's disease. *J Parkinsons Dis*. 2020;10(3):1087-1098.

## Obstetrics and Gynecology

Peahl AF, Zahn CM, Turrentine M, et al. The Michigan Plan for Appropriate Tailored Healthcare in Pregnancy prenatal care recommendations. *Obstet Gynecol*. 2021;138(4):593-602.

Priya G, Bajaj S, Kalra B, et al. Clinical practice recommendations for the detection and management of hyperglycemia in pregnancy from South Asia, Africa and Mexico during COVID-19 pandemic. *J Family Med Prim Care*. 2021;10(12):4350-4363.

Torlone E, Sculli MA, Bonomo M, et al. Recommendations and management of hyperglycaemia in pregnancy during COVID-19 pandemic in Italy. *Diabetes Res Clin Pract.* 2020;166:108345.

Vivanti AJ, Deruelle P, Picone O, et al. Follow-up for pregnant women during the COVID-19 pandemic: French national authority for health recommendations. *J Gynecol Obstet Hum Reprod.* 2020;49(7):101804.

Stifani BM, Madden T, Micks E, Moayedi G, Tarleton J, Benson LS. Society of Family Planning clinical recommendations: contraceptive care in the context of pandemic response. *Contraception.* 2022;18:18.

## Oncology

Sugalski JM, Franco T, Shulman LN, et al. COVID-19 and Cancer Center Operations: Lessons Learned From the NCCN Best Practices Committee. *J Natl Compr Canc Netw.* 2022:1-4.

Ben-Arye E, Paller CJ, Lopez AM, et al. The Society for Integrative Oncology Practice Recommendations for online consultation and treatment during the COVID-19 pandemic. *Support Care Cancer.* 2021;29(10):6155-6165.

McCarthy CE, Fedele S, Ho M, Shaw R. UK consensus recommendations on the management of oral epithelial dysplasia during COVID-19 pandemic outbreaks. *Oral Oncol.* 2021;112:105110.

Milch V, Wang R, Der Vartanian C, et al. Cancer Australia consensus statement on COVID-19 and cancer care: embedding high value changes in practice. *Med J Aust.* 2021;215(10):479-484.

Battisti NML, Mislant AR, Cooper L, et al. Adapting care for older cancer patients during the COVID-19 pandemic: Recommendations from the International Society of Geriatric Oncology (SIOG) COVID-19 Working Group. *J Geriatr Oncol.* 2020;11(8):1190-1198.

Catanese S, Pentheroudakis G, Douillard JY, Lordick F. ESMO Management and treatment adapted recommendations in the COVID-19 era: Pancreatic Cancer. *ESMO Open.* 2020;5(Suppl 3):05.

Ciavattini A, Delli Carpini G, Giannella L, et al. European Federation for Colposcopy (EFC) and European Society of Gynaecological Oncology (ESGO) joint considerations about human papillomavirus (HPV) vaccination, screening programs, colposcopy, and surgery during and after the COVID-19 pandemic. *Int J Gynecol Cancer.* 2020;30(8):1097-1100.

Curigliano G, Banerjee S, Cervantes A, et al. Managing cancer patients during the COVID-19 pandemic: an ESMO multidisciplinary expert consensus. *Ann Oncol.* 2020;31(10):1320-1335.

Damani A, Ghoshal A, Salins N, et al. Approaches and best practices for managing cancer pain within the constraints of the COVID-19 pandemic in India. *Indian J Palliat Care.* 2020;26(Suppl 1):S106-S115.

de Azambuja E, Trapani D, Loibl S, et al. ESMO Management and treatment adapted recommendations in the COVID-19 era: Breast Cancer. *ESMO open.* 2020;5(Suppl 3):05.

Dovey Z, Mohamed N, Gharib Y, et al. Impact of COVID-19 on Prostate cancer management: guidelines for urologists. *Eur Urol Open Sci.* 2020;20:1-11.

Pothuri B, Alvarez Secord A, Armstrong DK, et al. Anti-cancer therapy and clinical trial considerations for gynecologic oncology patients during the COVID-19 pandemic crisis. *Gynecol Oncol.* 2020;158(1):16-24.

Terpos E, Engelhardt M, Cook G, et al. Management of patients with multiple myeloma in the era of COVID-19 pandemic: a consensus paper from the European Myeloma Network (EMN). *Leukemia.* 2020;34(8):2000-2011.

Vecchione L, Stintzing S, Pentheroudakis G, Douillard JY, Lordick F. ESMO management and treatment adapted recommendations in the COVID-19 era: colorectal cancer. *ESMO open.* 2020;5(Suppl 3):05.

Zaorsky NG, Yu JB, McBride SM, et al. Prostate cancer radiation therapy recommendations in response to COVID-19. *Adv Radiat Oncol.* 2020;5(4):659-665.

## Ophthalmology

Vashist P, Senjam SS, Gupta V, et al. Community eye-health and vision center guidelines during COVID-19 pandemic in India. *Indian J Ophthalmol.* 2020;68(7):1306-1311.

Boucher MC, Qian J, Brent MH, et al. Evidence-based Canadian guidelines for tele-retina screening for diabetic retinopathy: recommendations from the Canadian Retina Research Network (CR2N) Tele-Retina Steering Committee. *Can J Ophthalmol.* 2020;55(1 Suppl 1):14-24.

Horton MB, Brady CJ, Cavallerano J, et al. Practice guidelines for ocular telehealth-diabetic retinopathy, third edition. *Telemed J E Health.* 2020;26(4):495-543.

## Pediatrics

Curfman A, Hackell JM, Herendeen NE, et al. Telehealth: opportunities to improve access, quality, and cost in pediatric care. *Pediatrics.* 2022;149(3):01.

Keder RD, Mittal S, Stringer K, Wallis KE, Wallace JE, Soares NS. Society for Developmental & Behavioral Pediatrics Position Statement on Telehealth. *J Dev Behav Pediatr.* 2022;43(1):55-59.

McDonagh JE, Tattersall R, Clinch J, Swan J, Foster HE, McCann L. Developmentally appropriate transitional care during the Covid-19 pandemic for young people with juvenile-onset rheumatic and musculoskeletal diseases: the rationale for a position statement. *Pediatr.* 2021;19(1):136.

Taylor JB, Oermann CM, Deterding RR, et al. Innovating and adapting in pediatric pulmonology and sleep medicine during the COVID-19 pandemic: ATS pediatric assembly web committee consensus statement for initial COVID-19 virtual response. *Pediatric Pulmonology.* 2021;56(2):539-550.

Wood E, Bhalloo I, McCaig B, Feraru C, Molnar M. Towards development of guidelines for virtual administration of paediatric standardized language and literacy assessments: considerations for clinicians and researchers. *SAGE Open Med.* 2021;9:20503121211050510.

Spitzer R, Brain P, SOGC Canadian Paediatric and Adolescent Gynaecology and Obstetrics Committee. Statement on pediatric and adolescent gynecologic care during and after the COVID-19 pandemic. Ottawa (ON): Society of Obstetricians and Gynaecologists of Canada (SOGC); 2020: [https://www.sogc.org/common/Uploaded%20files/Covid%20Information/R1\\_PAG\\_COVID\\_Statement201210.Dec.15.2020.pdf](https://www.sogc.org/common/Uploaded%20files/Covid%20Information/R1_PAG_COVID_Statement201210.Dec.15.2020.pdf). Accessed 2022 Sep 1.

d'Annunzio G, Maffei C, Cherubini V, et al. Caring for children and adolescents with type 1 diabetes mellitus: Italian Society for Pediatric Endocrinology and Diabetology (ISPED) statements during COVID-19 pandemia. *Diabetes Res Clin Pract*. 2020;168:108372.

Dansecu E, Kurzawa J, Krygier-Bartz M. Transition to virtual care: an evaluation of changes to child and youth mental health service delivery in Ontario in response to COVID-19. Final technical report. Ottawa (ON): Ontario Centre of Excellence for Child and Youth Mental Health; 2020: <https://iknow-occe.solutionsgroup.ca/api/ServiceItem/GetDocument?clientId=A1B5AA8F-88A1-4688-83F8-FF0A5B083EF3&documentId=3503254d-5e5b-4ee1-8091-3634800c64ee>. Accessed 2022 Sep 1.

## Pharmacy

Standards of practice for virtual care. Edmonton (AB): Alberta College of Pharmacy; 2022: [https://abpharmacy.ca/sites/default/files/Standards\\_Virtual.pdf](https://abpharmacy.ca/sites/default/files/Standards_Virtual.pdf). Accessed 2022 Sep 1.

Morillo-Verdugo R, Margusino-Framinan L, Monte-Boquet E, et al. Spanish Society of Hospital Pharmacy Position Statement on Telepharmacy: recommendations for its implementation and development. *Farmacia Hospitalaria*. 2020;44(4):174-181.

## Psychiatry

Alqahtani MMJ, Alkhamees HA, Alkhalaf AM, et al. Toward establishing telepsychology guideline. Turning the challenges of COVID-19 into opportunity. *Ethics Med Public Health*. 2021;16:100612.

Bean MK, Adams EL, Buscemi J, et al. Society of Behavioral Medicine (SBM) Position Statement: increase access to mental health services due to COVID-19-related parent and family stress. *Transl Behav Med*. 2021;11(8):1635-1637.

Gaebel W, Lukies R, Kerst A, et al. Upscaling e-mental health in Europe: a six-country qualitative analysis and policy recommendations from the eMEN project. *Eur Arch Psychiatry Clin Neurosci*. 2021;271(6):1005-1016.

Jauhar S, Lai S, Bonoldi I, et al. Early intervention in psychosis during the COVID-19 pandemic: Maudsley recommendations. *Eur Neuropsychopharmacol*. 2021;47:130-135.

Rina K, Padhy SK, Chadda RK. The Telepsychiatry Operational Guidelines 2020 in India: a welcome step. *BJPsych Int*. 2021;18(4):E12.

Tice JA, Whittington MD, Campbell JD, Pearson SD. The effectiveness and value of digital health technologies as an adjunct to medication-assisted therapy for opioid use disorder. *J Manag Care Spec Pharm*. 2021;27(4):528-532.

Fineberg NA, Hollander E, Pallanti S, et al. Clinical advances in obsessive-compulsive disorder: a position statement by the International College of Obsessive-Compulsive Spectrum Disorders. *Int Clin Psychopharmacol*. 2020;35(4):173-193.



Van Daele T, Karekla M, Kassianos AP, et al. Recommendations for policy and practice of telepsychotherapy and e-mental health in Europe and beyond. *J Psychother Integr*. 2020;30(2):160-173.

Wang L, Fagan C, Yu CL. Popular mental health apps (MH Apps) as a complement to telepsychotherapy: Guidelines for consideration. *J Psychother Integr*. 2020;30(2):265-273.

Xiang YT, Zhao N, Zhao YJ, et al. An overview of the expert consensus on the mental health treatment and services for major psychiatric disorders during COVID-19 outbreak: China's experiences. *Int J Biol Sci*. 2020;16(13):2265-2270.

## Rheumatology

Barber CEH, Levy DM, Ahluwalia V, et al. Best practices for virtual care: a consensus statement from the Canadian Rheumatology Association. *J Rheumatol*. 2022;49(4):408-418.

Best practices for virtual care in rheumatology: consensus statement from the Canadian Rheumatology Association. Tecumseh (ON): Canadian Rheumatology Association; 2021: [https://rheum.ca/wp-content/uploads/2021/09/FINAL\\_EN\\_CRA-Consensus-Statement-on-Virtual-Care-Best-Practices\\_Sept\\_2021.pdf](https://rheum.ca/wp-content/uploads/2021/09/FINAL_EN_CRA-Consensus-Statement-on-Virtual-Care-Best-Practices_Sept_2021.pdf). Accessed 2022 Sep 1.

Canadian Rheumatology Association position statement on virtual care. Tecumseh (ON): Canadian Rheumatology Association; 2021: [https://rheum.ca/wp-content/uploads/2021/04/EN-CRA-Position-Statement-on-Virtual-Care\\_April-29\\_2021.pdf](https://rheum.ca/wp-content/uploads/2021/04/EN-CRA-Position-Statement-on-Virtual-Care_April-29_2021.pdf). Accessed 2022 Sep 1.

Tam LS, Tanaka Y, Handa R, et al. Updated APLAR consensus statements on care for patients with rheumatic diseases during the COVID-19 pandemic. *Int J Rheum Dis*. 2021;24(6):733-745.

## Sleep Medicine

Gupta R, Kumar VM, Tripathi M, et al. Guidelines of the Indian Society for Sleep Research (ISSR) for practice of sleep medicine during COVID-19. *Sleep Vigil*. 2020;4(2):61-72.

Insalaco G, Dal Farra F, Braghiroli A, Sacco, Salvaggio A, on behalf of the Italian Thoracic Society. Sleep breathing disorders in the COVID-19 era: Italian Thoracic Society organizational models for a correct approach to diagnosis and treatment. *Respiration*. 2020;99(8):690-694.

## Surgery

Gallo G, Picciariello A, Di Tanna GL, et al. E-consensus on telemedicine in colorectal surgery: a RAND/UCLA-modified study. *Updates Surg*. 2022;74(1):163-170.

Boccalatte LA, Larranaga JJ, Perez Raffo GM, et al. Brief guideline for the prevention of COVID-19 infection in head and neck and otolaryngology surgeons. *Am J Otolaryngol*. 2020;41(3):102484.

Castelnuovo P, Turri-Zanoni M, Karligkiotis A, et al. Skull-base surgery during the COVID-19 pandemic: the Italian Skull Base Society recommendations. *Int Forum Allergy Rhinol*. 2020;10(8):963-967.

Couloigner V, Schmerber S, Nicollas R, et al. COVID-19 and ENT Surgery. *Eur Ann Otorhinolaryngol Head Neck Dis*. 2020;137(3):161-166.

Kassir R, Rebibo L, Genser L, et al. SOFFCO-MM guidelines for the resumption of bariatric and metabolic surgery during and after the Covid-19 pandemic. *J Visc Surg.* 2020;157(4):317-327.

Kassir R, Rebibo L, Genser L, et al. Recommandations de la SOFFCO-MM en vue de la reprise de l'activité de chirurgie bariatrique et métabolique pendant et après la pandémie Covid-19 [SOFFCO-MM guidelines for the resumption of bariatric and metabolic surgery during and after the Covid-19 pandemic] [in French]. *J Chir Visc.* 2020;157(4):323-334.

Quaranta-Leoni FM, Paridaens D, Verity D. European Society of Ophthalmic Plastic and Reconstructive Surgery (ESOPRS) recommendations for oculoplastic surgeons during the COVID-19 pandemic: a challenge for the future. *Orbit.* 2020;39(6):460-462.

Tan KA, Thadani VN, Chan D, Oh JY, Liu GK. Addressing Coronavirus Disease 2019 in spine surgery: a rapid National Consensus using the Delphi Method via teleconference. *Asian Spine J.* 2020;14(3):373-381.

Unadkat SN, Andrews PJ, Bertossi D, et al. Recovery of elective facial plastic surgery in the post-coronavirus disease 2019 era: recommendations from the European Academy of Facial Plastic Surgery Task Force. *Facial Plast Surg Aesthet Med.* 2020;22(4):233-237.

## Urology & Nephrology

Scotland KB, Tailly T, Chew BH, Bhojani N, Smith D, Initiative T. Consensus statement on urinary stone treatment during a pandemic: a Delphi Process from the Endourological Society TOWER Research Initiative. *J Endourol.* 2022;36(3):335-344.

Chan CT, Collins K, Ditschman EP, et al. Overcoming barriers for uptake and continued use of home dialysis: an NKF-KDOQI Conference Report. *Am J Kidney Dis.* 2020;75(6):926-934.

Colares VS, Miranda SM, Andrade LGM, et al. COMDORA-SBN recommendations for patients with rare kidney diseases in relation to the Covid-19 pandemic. *Jornal Brasileiro de Nefrologia.* 2020;42(2 suppl 1):36-40.

Gomez Rivas J, Rodriguez-Serrano A, Loeb S, et al. Telemedicine and smart working: Spanish adaptation of the European Association of Urology recommendations. *Actas Urol Esp (Engl Ed).* 2020;44(10):644-652.

Rodriguez Socarras M, Loeb S, Teoh JY, et al. Telemedicine and smart working: recommendations of the European Association of Urology. *Eur Urol.* 2020;78(6):812-819.

Simonato A, Giannarini G, Abrate A, et al. Clinical pathways for urology patients during the COVID-19 pandemic. *Minerva Urol Nefrol.* 2020;72(3):376-383.

## Previous CADTH Reports of Relevance (n = 3)

Nayakarathna R, Neilson H, MacDougall D, Cowling T. Virtual Care Use in Primary Care or Specialty Care Settings. (CADTH Rapid Review). Ottawa (ON): CADTH; 2022: <https://www.cadth.ca/sites/default/files/pdf/htis/2022/RC1444-Virtual-Care.pdf>. Accessed 2022 Aug 22.

Khangura SD, Severn M. Virtual oncology visits. (CADTH reference list: summary of abstracts). Ottawa (ON): CADTH; 2022: <https://www.cadth.ca/sites/default/files/pdf/htis/2022/RB1618Virtual-Oncology-Visits-Final.pdf>. Accessed 2022 Aug 22.

Santos C, Ryce A. Virtual clinical assessments for adults with back pain. (CADTH reference list). Ottawa (ON): CADTH; 2022: <https://www.cadth.ca/sites/default/files/pdf/htis/2022/RA1219%20Virtual%20Assessments%20for%20Back%20pain%20Final.pdf>. Accessed 2022 Aug 22.

## Summary Tables of Included Reports

Table begins on the next page.

**Table 3: Summary of 230 Included Scoping Reviews That Addressed Research Question 1**

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Clinical effectiveness and harms					Context: VC Format
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
Adcock	2022	N/A	NR	Cardio-vascular	NR	NR	NR	Yes	Yes	NR	NR	NR	Telephone, video, SMS, email, other
Agnew	2022	N/A	NR	Musculo-skeletal	NR	NR	NR	Yes	Yes	NR	NR	NR	Telephone, video, SMS, other
Ali	2022	N/A	NR	NR/general population	NR	NR	NR	NR	NR	NR	NR	NR	NR, video, other
Almuslim	2022	N/A	NR	Obstetrics/gynecology	NR	NR	Yes	NR	Yes	Yes	NR	NR	NR, telephone, video, SMS
Aslani	2022	N/A	NR	Cardio-vascular	NR	NR	Yes	NR	NR	NR	NR	NR	NR
Beheshti	2022	N/A	NR, children, adults, older adults	NR/general population, cancer, cardio-vascular, diabetes, kidney/urinary, mental health, respiratory, other	Yes	NR	Yes	Yes	Yes	Yes	NR	NR	NR, telephone, video, email, other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Clinical effectiveness and harms					Context: VC Format
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
Beks	2022	N/A	NR	NR/general population, cancer, cardiovascular, chronic, diabetes, infectious disease, mental health, musculo-skeletal, respiratory, other	Yes	NR	Yes	Yes	Yes	NR	NR	NR	Telephone, video, SMS, email, other
Beland	2022	N/A	NR, adults, older adults	NR/general population, cancer, chronic, diabetes, mental health, substance use, other	NR	NR	NR	Yes	Yes	NR	NR	NR	Telephone, video, email
Budhwani	2022	High-income countries	Older adults	NR/general Population	NR	Yes	Yes	NR	NR	NR	NR	NR	Telephone, video, SMS, email, other
Buyting	2022	Canada	NR	Cardio-vascular	NR	Yes	Yes	Yes	Yes	Yes	NR	Yes	NR, video, SMS

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Clinical effectiveness and harms					Context: VC Format
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
Cardona	2022	N/A	Adults, older adults	Cardio-vascular, diabetes, mental health, other	NR	Yes	Yes	Yes	Yes	Yes	Yes	NR	Telephone, video
Chan	2022	US or High-Income countries	NR	Substance use	NR	NR	Yes	Yes	Yes	NR	Yes	Yes	Telephone, video, email
Cincidda	2022	N/A	NR	Cancer	NR	NR	NR	Yes	NR	NR	NR	NR	NR, telephone, email
Clarkson	2022	N/A	NR	NR/general population	NR	NR	NR	Yes	NR	NR	NR	NR	NR, telephone, SMS, other
Davidow	2022	N/A	Adults, older adults	NR/general population, mental health	NR	NR	NR	Yes	NR	NR	NR	NR	Other
Davidson	2022	N/A	Children	NR/general population, cancer, chronic, diabetes, mental health, palliative, other	Yes	NR	Yes	Yes	Yes	Yes	NR	NR	NR, telephone, video, SMS, email, other
Diaz	2022	N/A	Children, adults	NR/general population	NR	NR	Yes	NR	NR	NR	NR	NR	Video, other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Clinical effectiveness and harms					Context: VC Format
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
DiFabio	2022	N/A	Children, adults	NR/general population	Yes	NR	Yes	NR	Yes	Yes	NR	NR	Telephone, video, SMS, other
Dostie	2022	N/A	Children	Musculo-skeletal	Yes	NR	NR	NR	NR	NR	NR	NR	Telephone, video, SMS, email, other
Ebnetter	2022	N/A	Adults	Palliative	Yes	NR	Yes	NR	Yes	Yes	NR	NR	NR, telephone, video, SMS, other
Edwards	2022	N/A	NR	Diabetes, obstetrics/gynecology	NR	NR	NR	Yes	Yes	NR	NR	NR	Other
Ewart	2022	N/A	NR, children	Kidney/urinary	Yes	NR	NR	NR	NR	NR	NR	NR	Telephone, video
Fien	2022	N/A	NR, children, older adults	NR/general population, cancer, cardiovascular, chronic, diabetes, infectious disease, mental health, other	NR	Yes	Yes	Yes	Yes	Yes	NR	Yes	Telephone, video, email, other
Fu	2022	N/A	NR	Respiratory	NR	NR	NR	Yes	Yes	NR	NR	NR	NR

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Clinical effectiveness and harms					Context: VC Format
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
Furlepa	2022	Poland	NR	NR/general population	NR	NR	NR	NR	NR	NR	NR	NR	NR, telephone, video, email, other
Gachabayov	2022	N/A	NR	Surgery	NR	NR	NR	NR	Yes	NR	NR	NR	NR
Ganjali	2022	N/A	NR, children	NR/general population, cancer, diabetes, infectious disease, kidney/urinary, mental health, musculo-skeletal, palliative, surgery, other	NR	NR	NR	Yes	Yes	Yes	NR	NR	Telephone, video, other
Gonzalez	2022	N/A	NR, older adults	Surgery	Yes	NR	Yes	NR	Yes	Yes	NR	NR	Telephone, video, SMS
Guillen	2022	N/A	NR	Substance use	NR	NR	Yes	NR	Yes	Yes	Yes	NR	NR, video
Hayotte	2022	N/A	NR	Surgery	NR	NR	NR	Yes	Yes	NR	NR	NR	Telephone, video
Hilty	2022	N/A	NR	NR/general population	NR	NR	NR	Yes	NR	NR	NR	NR	NR, video



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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
Houston	2022	N/A	NR, children	Neurologic	Yes	NR	Yes	Yes	Yes	Yes	Yes	Yes	NR, video, other
James-Palmer	2022	N/A	Adults	NR/general population, cancer, cardiovascular, chronic, diabetes, kidney/urinary, mental health, neurologic, obstetrics/gynecology, respiratory	NR	NR	NR	Yes	Yes	NR	NR	Yes	NR, video
Joo	2022	N/A	NR, children, adults, older adults	NR/general population, cardiovascular, chronic, diabetes, infectious disease, kidney/urinary, mental health, respiratory	Yes	NR	Yes	Yes	Yes	Yes	NR	NR	NR, telephone, video, SMS, email, other

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
Kallas	2022	N/A	NR	Cardio-vascular, diabetes	NR	NR	NR	Yes	Yes	NR	Yes	NR	Telephone, SMS
Kemp Van Ee	2022	N/A	Adults	Other	NR	NR	NR	NR	NR	NR	Yes	NR	NR
Keyes	2022	N/A	Children, adults	Mental health	NR	NR	NR	Yes	Yes	Yes	NR	NR	Telephone, video, other
Kim	2022	N/A	NR	Other	NR	NR	NR	Yes	NR	NR	NR	NR	Telephone
Kostovich	2022	N/A	NR, children, older adults	NR/general population, diabetes, surgery, other	NR	NR	NR	Yes	Yes	NR	NR	Yes	Telephone, video, other
Lakeman	2022	N/A	NR, adults	Chronic, mental health, substance use	NR	NR	NR	Yes	Yes	NR	NR	NR	Telephone, video, SMS, email, other
Lampickiene	2022	N/A	NR	NR/general population, mental health, surgery, other	Yes	NR	Yes	NR	NR	NR	NR	NR	Tele-phone, video
Leroux	2022	N/A	NR, adults. Older adults	Mental health	NR	NR	Yes	Yes	Yes	NR	NR	Yes	NR, tele-phone, video
Linardon	2022	N/A	Children, adults	Mental health	Yes	NR	NR	Yes	NR	NR	NR	NR	NR, tele-phone, video

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Lindner-Rabl	2022	Europe	Older adults	Other	NR	NR	NR	Yes	Yes	NR	NR	NR	Telephone
Litvak	2022	N/A	NR	NR/general population	NR	NR	NR	NR	NR	Yes	NR	NR	Telephone, video
Maramba	2022	N/A	NR, older adults	NR/general population	NR	NR	NR	NR	Yes	Yes	NR	NR	Other
Marwaa	2022	N/A	NR	Cardio-vascular, other	NR	NR	NR	Yes	Yes	NR	NR	NR	NR, video, other
May	2022	N/A	NR	Mental health	NR	NR	NR	Yes	NR	NR	NR	NR	Telephone, other
Md Fadzil	2022	N/A	Older adults	Other	Yes	NR	NR	NR	NR	NR	NR	NR	Telephone, video, SMS, email, other
Meng	2022	N/A	Adults	NR/general population	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, video
Mohammadzadeh	2022	Other (forested and mountainous areas)	NR	NR/general population	NR	NR	Yes	NR	NR	NR	NR	NR	NR
Mojtahedi	2022	N/A	NR	Palliative	Yes	NR	NR	NR	NR	NR	NR	NR	Telephone, video
Moon	2022	N/A	NR	Mental health	NR	NR	NR	NR	Yes	NR	NR	NR	NR, video, SMS, other

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Murthy	2022	N/A	NR	Cancer, cardiovascular, diabetes, mental health, neurologic	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, video, email, other
Oter	2022	N/A	NR	Cancer	NR	NR	NR	NR	Yes	NR	NR	Yes	Telephone, video, other
Owolabi	2022	LMICs	NR	NR/general population, surgery	NR	NR	NR	Yes	Yes	NR	NR	NR	Telephone, video, SMS, email, other
Pang	2022	High-income countries	Older adults	Cancer	NR	NR	Yes	NR	NR	NR	NR	NR	NR, telephone, video
Pantasri	2022	N/A	NR	NR/general population, infectious disease	NR	NR	NR	NR	Yes	Yes	NR	Yes	NR
Poirier	2022	Australia	NR	Other	NR	NR	Yes	Yes	Yes	Yes	NR	NR	Telephone, video, email, other
Ramachandran	2022	N/A	NR, adults, older adults	Cardio-vascular	NR	NR	Yes	NR	NR	NR	NR	NR	NR, telephone, video, SMS, email, other

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
Rodrigues	2022	N/A	Older adults	NR/general population, mental health	Yes	NR	NR	Yes	Yes	NR	NR	NR	Telephone, video
Rosic	2022	N/A	NR, children	NR/general population, cardiovascular, respiratory	NR	NR	NR	NR	NR	NR	NR	NR	NR
Ruiz-Cosignani	2022	N/A	NR	Mental health	NR	Yes	Yes	NR	NR	Yes	NR	NR	Telephone, video
Sakamaki	2022	N/A	NR	Neurologic	NR	NR	NR	Yes	Yes	NR	NR	Yes	Telephone, video, other
Shah	2022	N/A	NR	Cancer	NR	NR	NR	NR	NR	NR	NR	NR	NR
Silva	2022	N/A	NR	NR/general population	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, video, SMS, email, other
Smith	2022	N/A	Children, adults	Other	NR	NR	Yes	Yes	Yes	Yes	NR	NR	Telephone, video, SMS, other
Souza	2022	N/A	NR	Obstetrics/gynecology	NR	NR	NR	Yes	Yes	NR	NR	NR	NR
Stavropoulos	2022	N/A	Children, adults	Mental health	Yes	Yes	Yes	NR	NR	NR	NR	NR	Video
Suleman	2022	N/A	NR	Cancer	NR	NR	Yes	Yes	Yes	Yes	Yes	NR	NR, telephone, video, other

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Sullivan	2022	N/A	Children, adults	Mental health	NR	NR	NR	Yes	Yes	NR	NR	NR	Telephone
Toh	2022	N/A	Children, adults	Mental health	NR	NR	NR	Yes	NR	NR	NR	Yes	Telephone, email, other
van der Boom	2022	N/A	NR	Mental health	NR	NR	NR	Yes	Yes	NR	NR	NR	NR, email
Villa	2022	N/A	Adults	Kidney/urinary	Yes	NR	NR	Yes	NR	NR	NR	NR	NR, telephone, email
Wake	2022	N/A	Children, adults	Mental health	Yes	NR	Yes	Yes	Yes	NR	NR	Yes	Telephone, video, email, other
Wallace	2022	N/A	NR	Chronic	NR	NR	Yes	NR	NR	NR	NR	NR	Telephone, video
Warmoth	2022	N/A	Adults	Mental health, musculo-skeletal, neurologic, palliative, surgery, other	NR	NR	NR	NR	NR	NR	NR	NR	Video
Washio	2022	N/A	Children, adults	Substance use	NR	NR	Yes	Yes	Yes	NR	NR	NR	NR, telephone, SMS, other
Wikstrom	2022	N/A	NR, adults, older adults	Surgery	NR	NR	NR	NR	NR	NR	NR	NR	NR, SMS

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Willis	2022	US	NR, children	NR/general population, respiratory, substance use	NR	NR	Yes	Yes	Yes	Yes	NR	NR	Telephone, video, SMS, email
Yang	2022	N/A	NR	Surgery	NR	NR	Yes	Yes	Yes	Yes	Yes	NR	NR, telephone, video
Yao	2022	N/A	NR, older adults	NR/general population, cancer, chronic, diabetes	NR	NR	Yes	NR	NR	NR	NR	NR	NR
Zaman	2022	N/A	Older adults	Cardio-vascular, chronic, diabetes, mental health, respiratory	NR	NR	NR	Yes	Yes	NR	NR	NR	NR, video, SMS
Abraham	2021	N/A	NR	Mental health, substance use, other	NR	NR	Yes	Yes	Yes	NR	NR	NR	Telephone, video, SMS, email, other
Alipour	2021	N/A	NR, children	NR/general population, cancer, cardio-vascular, diabetes, infectious	Yes	NR	NR	Yes	Yes	Yes	NR	Yes	NR, telephone, video, SMS, email, other

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC	
				disease, kidney/urinary, mental health, musculo-skeletal, neurologic, obstetrics/gynecology, palliative, respiratory, surgery, other										
Almasi	2021	N/A	NR	NR/general population	NR	NR	NR	NR	NR	NR	NR	NR	NR	Video
Anil	2021	N/A	NR, children, adults	Musculo-skeletal, surgery	Yes	NR	NR	NR	NR	NR	NR	NR	NR	NR, telephone, video, other
Armour	2021	N/A	NR	NR/general population	NR	NR	NR	NR	NR	NR	NR	NR	NR	Telephone
Bailey	2021	N/A	Children, adults	NR/general population, cardiovascular, chronic, diabetes, infectious disease, kidney/urinary,	Yes	NR	Yes	NR	NR	NR	NR	NR	NR	NR, telephone, video, SMS, other



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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
				mental health, neurologic, respiratory, substance use, other									
Ben-Omran	2021	N/A	Adults, older adults	Other	NR	NR	Yes	Yes	Yes	Yes	NR	Yes	NR, telephone, video, SMS, other
Bhochhibhoya	2021	N/A	Adults	Infectious disease, obstetrics/gynecology	NR	NR	NR	Yes	Yes	NR	NR	NR	Telephone
Bouaoud	2021	N/A	NR	Cancer	Yes	NR	NR	Yes	Yes	Yes	NR	NR	NR, video, other
Bucki	2021	N/A	Adults	Musculo-skeletal	NR	NR	NR	Yes	NR	NR	NR	NR	Video
Cadel	2021	N/A	NR	NR/general population	Yes	NR	Yes	NR	NR	Yes	NR	NR	Telephone, video, other
Carrillo-de-la-Pena	2021	Spain	NR	Chronic	NR	NR	NR	NR	NR	NR	NR	NR	NR, telephone
Chong	2021	N/A	NR	Other	NR	NR	NR	Yes	Yes	Yes	NR	NR	NR, telephone, video, other

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Choukou	2021a	N/A	NR, children	Cardio-vascular, infectious disease, kidney/urinary, musculo-skeletal	Yes	NR	NR	Yes	Yes	NR	NR	NR	NR, telephone, other
Choukou	2021b	N/A	Older adults	NR/general population	NR	Yes	NR	NR	NR	NR	NR	NR	NR, telephone, video
Cliffe	2021	N/A	NR, children, adults	Mental health, substance use	NR	NR	NR	Yes	NR	NR	NR	NR	Telephone, SMS, other
Comfort	2021	N/A	NR	Surgery	NR	NR	NR	Yes	NR	NR	NR	NR	NR
Couturier	2021	N/A	Children, adults	Mental health	Yes	NR	NR	Yes	NR	Yes	NR	NR	Telephone, video, SMS, email, other
de Moraes	2021	N/A	NR	Chronic	NR	NR	NR	NR	NR	NR	NR	NR	Video
De Vera	2021	High-income countries	NR	NR/general population	NR	NR	Yes	NR	NR	NR	NR	NR	Telephone, video, SMS, email, other
Dewa	2021	N/A	Children, adults	NR/general population, mental health, other	NR	NR	NR	Yes	NR	NR	NR	NR	NR, SMS, other

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
Dionisi	2021	N/A	NR	Surgery	NR	NR	NR	NR	NR	NR	Yes	NR	Video, SMS, other
Doraiswamy	2021	N/A	Older adults	NR/general population, mental health	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, video
Dowson	2021	N/A	NR	Mental health	NR	NR	NR	Yes	NR	NR	NR	NR	Video
Echelard	2021	N/A	NR, older adults	Cancer, mental health	Yes	NR	Yes	Yes	Yes	Yes	Yes	NR	NR, Telephone, video
Elgert	2021	N/A	NR	NR/general population, musculo-skeletal	NR	NR	NR	Yes	NR	NR	NR	NR	NR, video, SMS, email
Eslami	2021	N/A	NR, older adults	NR/general population, chronic, infectious disease, mental health, obstetrics/ gynecology, other	NR	NR	NR	Yes	Yes	Yes	NR	NR	NR, telephone, video, SMS, email, other
Exner-Cortens	2021	N/A	Children	Mental health	Yes	Yes	Yes	NR	NR	NR	NR	NR	NR, video, SMS
Fisher	2021	N/A	NR	Diabetes	NR	NR	NR	NR	NR	NR	NR	NR	NR

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
Forsyth	2021	N/A	NR, adults, older adults	Diabetes	NR	NR	Yes	Yes	Yes	NR	NR	NR	NR, SMS, other
Gonzalez	2021	US	Children	NR/general population, diabetes, substance use	NR	NR	NR	Yes	NR	NR	NR	Yes	NR, other
Gunasekeran	2021	N/A	NR	NR/general population	NR	NR	NR	Yes	NR	NR	NR	NR	NR
Hamza	2021	N/A	Adults	NR/general population, cardiovascular	NR	NR	NR	Yes	Yes	NR	NR	NR	Telephone
Hilty	2021	N/A	Children	NR/general population	Yes	NR	NR	NR	NR	NR	NR	NR	NR, video, SMS, email
Hoffer-Hawlik	2021	LMICs	Adults	Cardio-vascular	NR	NR	Yes	Yes	NR	NR	NR	NR	Telephone, video, other
Ingle	2021	N/A	NR, adults, older adults	NR/general population, palliative	NR	NR	NR	NR	Yes	NR	NR	NR	Other
Jonnagaddala	2021	Australia	NR	NR/general population	NR	NR	Yes	Yes	NR	Yes	NR	NR	Telephone, video
Juengst	2021	N/A	Adults	Other	NR	NR	NR	Yes	NR	NR	NR	NR	Other

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC	
Kabukye	2021	Africa	NR	Cancer	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Kantorova	2021	N/A	NR, children, adults, older adults	NR/general population, mental health, neurologic, other	Yes	NR	NR	Yes	NR	NR	NR	NR	NR	Video
Khoja	2021	N/A	NR	Infectious disease	NR	NR	Yes	Yes	Yes	Yes	NR	Yes	Yes	Telephone, video
Komariah	2021	N/A	NR	Cancer	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR, telephone, other
Leach	2021	N/A	NR, children, adults	Mental health, substance use	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR, video, other
Leone	2021	N/A	NR, adults, older adults	NR/general population, cancer, musculo-skeletal, surgery, other	Yes	NR	Yes	NR	NR	NR	NR	NR	NR	NR, video
Li	2021	N/A	NR, adults	NR/general population, neurologic, surgery	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR, telephone, video
Lim	2021	Any	NR, older adults	NR/general population, mental health,	NR	NR	Yes	Yes	Yes	Yes	NR	Yes	NR	NR

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
				substance use									
MacDougall	2021	N/A	Children	Mental health, substance use	NR	NR	NR	Yes	Yes	NR	NR	Yes	SMS
Majidova	2021	N/A	NR	Other	NR	NR	NR	Yes	Yes	Yes	Yes	NR	NR, telephone
Mastronardo	2021	N/A	NR	Chronic, musculo-skeletal	NR	NR	Yes	Yes	NR	Yes	NR	Yes	Telephone, video
McCartan	2021	N/A	Children	Mental health	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, video, other
Meherali	2021	LMICs	Children	Infectious disease, obstetrics/gynecology	NR	NR	Yes	NR	Yes	NR	NR	NR	NR, telephone, video, other
Metzger	2021	N/A	Children	Surgery	Yes	NR	NR	Yes	Yes	Yes	NR	NR	Telephone
Miller	2021	N/A	Children	Palliative	Yes	NR	Yes	Yes	Yes	NR	NR	NR	NR, telephone, video
Montagnoli	2021	N/A	NR	Obstetrics/gynecology	NR	NR	NR	NR	NR	NR	NR	NR	NR
Mosnaim	2021	N/A	Children, adults, older adults	Respiratory	Yes	NR	NR	Yes	Yes	NR	NR	NR	NR, SMS, other

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
Mulawa	2021	N/A	Children, adults	NR/general population, infectious disease	NR	NR	NR	Yes	Yes	NR	NR	NR	NR, video, SMS, email, other
Munoz	2021	N/A	Children, adults	NR/general population, other	Yes	NR	Yes	Yes	Yes	NR	NR	NR	NR, telephone, video, SMS
Nascimento	2021	N/A	NR	Mental health	NR	NR	NR	Yes	NR	NR	NR	NR	Video
Navarro	2021	N/A	Adults, older adults	Cardio-vascular, chronic, respiratory	NR	NR	Yes	Yes	Yes	NR	NR	NR	Video
Negm	2021	N/A	NR, older adults	NR/general population, cardio-vascular, infectious disease, respiratory	Yes	NR	NR	NR	NR	NR	NR	NR	NR, telephone, video, SMS, email, other
Negreiros	2021	N/A	NR, children	Diabetes	Yes	NR	NR	Yes	Yes	Yes	NR	Yes	NR, telephone, video, SMS, email, other
Obro	2021	N/A	NR	Cardio-vascular, chronic, diabetes,	NR	NR	NR	NR	NR	NR	NR	NR	NR, telephone, SMS, email, other

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				respiratory, other									
Osei	2021	sub-Saharan Africa	NR	NR/general population, cancer, cardiovascular, infectious disease	NR	NR	Yes	Yes	Yes	NR	NR	NR	Telephone, SMS, other
Oshni	2021	Australia	NR, children, older adults	NR/general population, cardiovascular, chronic, diabetes, mental health musculo-skeletal, other	NR	Yes	Yes	NR	NR	NR	NR	NR	Video
Powis	2021	N/A	NR	Cancer	NR	NR	NR	NR	NR	Yes	NR	NR	NR
Purnamayanti	2021	N/A	NR	Diabetes	NR	NR	NR	Yes	NR	NR	NR	NR	NR, telephone, video
Ramage	2021	N/A	Adults	Cardio-vascular	NR	NR	NR	NR	NR	NR	NR	NR	NR, telephone, video
Rasmussen	2021	N/A	Adults, older adults	Diabetes, mental health	NR	NR	Yes	Yes	Yes	NR	NR	NR	NR, telephone



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Raspa	2021	N/A	NR	NR/general population	NR	NR	NR	Yes	NR	Yes	NR	NR	Telephone, video
Reinhardt	2021	N/A	NR	Cancer, cardiovascular, chronic, diabetes, mental health, respiratory	NR	NR	Yes	NR	NR	NR	NR	NR	NR, telephone, video, SMS, email, other
Ritschl	2021	N/A	NR	NR/general population	NR	NR	NR	Yes	NR	NR	NR	NR	NR
Salsabilla	2021	Asia	NR	NR/general population, chronic, diabetes, musculo-skeletal	NR	NR	Yes	NR	NR	NR	NR	NR	NR, telephone
Salvador	2021	N/A	NR	Palliative	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, video
Selick	2021	N/A	Adults	NR/general population, other	Yes	Yes	Yes	NR	NR	Yes	NR	NR	Telephone, video, other
Senter	2021	US	NR, children, adults	Mental health	NR	NR	NR	NR	Yes	NR	NR	NR	Telephone, video, email, other
Shorey	2021	N/A	Children	Other	Yes	NR	NR	NR	NR	NR	NR	NR	SMS, other

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Silva	2021	Other (territories with high degrees of inequities)	Children, adults, older adults	Mental health, neurologic, obstetrics/ gynecology, other	Yes	NR	NR	Yes	Yes	Yes	Yes	NR	Telephone, video
Skov Schacksen	2021	N/A	Adults	Cardio-vascular	NR	NR	NR	Yes	Yes	NR	NR	NR	NR, telephone, video, SMS
Spelten	2021	Australia, Canada, US, UK	NR, adults	Cancer, palliative	NR	NR	Yes	Yes	NR	NR	NR	NR	Telephone, video, email, other
Sulz	2021	N/A	NR	NR/ general population, cardiovascular, chronic, diabetes, mental health, neurologic, palliative, respiratory, surgery, other	Yes	NR	NR	Yes	Yes	NR	NR	NR	NR, telephone, video, email
Taito	2021	N/A	NR	Respiratory	NR	NR	NR	Yes	Yes	NR	NR	Yes	NR, video
Tan	2021a	N/A	Older adults	Other	Yes	NR	Yes	Yes	Yes	Yes	NR	NR	NR, video
Tan	2021b	N/A	NR	NR/general population	NR	NR	NR	NR	NR	NR	NR	NR	Video, other

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Tilahun	2021a	N/A	NR	NR/general population, chronic, infectious disease, respiratory	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, video, email, other
Tilahun	2021b	N/A	NR	Infectious disease	NR	NR	Yes	NR	Yes	Yes	NR	NR	NR, video, SMS
Tokgoz	2021	N/A	NR	Mental health	NR	NR	NR	Yes	Yes	NR	NR	NR	NR, telephone, SMS, email, other
Tolu	2021	N/A	NR	Obstetrics/gynecology	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, video
Tumuhimbise	2021	N/A	NR	Infectious disease	NR	NR	Yes	NR	Yes	Yes	NR	NR	Telephone, SMS
Unni	2021	N/A	NR, older adults	NR/ general population, cancer	NR	NR	NR	NR	Yes	NR	NR	NR	Telephone, video, SMS, other
van Doorn	2021	N/A	Children adults	Mental health	NR	NR	NR	Yes	Yes	NR	NR	NR	NR, other
van Eck van der Sluijs	2021	N/A	Adults	Kidney/urinary	NR	NR	NR	Yes	Yes	NR	NR	NR	NR, telephone, video
van Leeuwen	2021	N/A	NR, adults	Mental health	NR	NR	NR	Yes	NR	NR	NR	NR	Telephone, video, other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Clinical effectiveness and harms					Context: VC Format
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
van Lotringen	2021	N/A	Children, adults, older adults	Mental health	NR	NR	NR	Yes	Yes	NR	NR	NR	NR, SMS, email, other
Whitelaw	2021	N/A	NR	Cardio-vascular	Yes	NR	NR	NR	NR	NR	NR	NR	NR, video
WHO	2021	N/A	NR, older adults	Diabetes, obstetrics/ gynecology	Yes	NR	NR	NR	Yes	NR	NR	NR	NR, telephone, video, SMS, other
Widianti	2021	N/A	NR	Mental health	NR	NR	NR	Yes	Yes	Yes	NR	NR	Telephone
Wies	2021	N/A	Children, adults	Mental health	NR	NR	Yes	Yes	Yes	NR	NR	NR	NR, SMS, other
Winwood	2021	OECD countries	NR	Infectious disease	NR	NR	NR	NR	NR	NR	NR	NR	NR
Wood	2021	N/A	Children	Other	NR	NR	Yes	NR	Yes	NR	NR	NR	Telephone
Yasmin	2021	N/A	NR	Cardio-vascular	NR	NR	NR	Yes	Yes	NR	NR	NR	NR, video
Aapro	2020	N/A	Adults	Cancer	NR	NR	NR	NR	NR	NR	NR	NR	NR, telephone, video, SMS
Alfuraydan	2020	N/A	NR, children, adults	Mental health	Yes	NR	NR	Yes	Yes	NR	NR	NR	NR, video, other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Clinical effectiveness and harms					Context: VC Format
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
Aquino	2020	N/A	NR	Obstetrics/gynecology	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, SMS, other
Baines	2020	N/A	NR	NR/general population	NR	NR	NR	NR	Yes	NR	NR	NR	NR, other
Baldwin	2020	Other (geographically isolated locations)	NR, children, older adults	NR/ general population, cancer, cardiovascular, chronic, diabetes, infectious disease, mental health, obstetrics/gynecology, palliative	Yes	NR	Yes	Yes	Yes	NR	NR	Yes	NR, telephone, video
Bernard	2020	N/A	Adults	Kidney/urinary	NR	NR	NR	Yes	Yes	NR	NR	NR	NR
Campbell	2020	N/A	Children	NR/general population, mental health, other	Yes	Yes	Yes	Yes	Yes	NR	NR	NR	Telephone, video, other
Cao	2020	N/A	Adults	Infectious disease	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, SMS
Dosani	2020	LMICs	NR, adults	Mental health	NR	NR	NR	Yes	Yes	NR	NR	NR	NR, telephone, other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Clinical effectiveness and harms					Context: VC Format
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
Elliott	2020	N/A	Adults	Respiratory	NR	NR	NR	Yes	Yes	NR	NR	NR	Telephone, video
Ellis	2020a	Canada's North	Children	Other	NR	Yes	Yes	Yes	NR	NR	NR	NR	Video
Ellis	2020b	N/A	NR, children, adults	Mental health	Yes	Yes	NR	NR	NR	NR	NR	NR	Telephone, video, email, other
Elnaem	2020	N/A	NR	Cardio-vascular	NR	NR	NR	Yes	Yes	NR	NR	NR	Telephone, SMS
Graham	2020	N/A	Children, adults	NR/general population, other	NR	NR	Yes	Yes	NR	Yes	NR	NR	Telephone, video
Harst	2020	N/A	NR	NR/general population	NR	NR	Yes	Yes	Yes	NR	NR	NR	NR
Hilty	2020	N/A	NR	NR/general population, mental health	NR	Yes	Yes	Yes	NR	NR	NR	NR	NR, telephone, video, SMS, email, other
Hincapie	2020	N/A	NR	NR/general population, cancer, cardio-vascular, diabetes, infectious disease, kidney/	NR	NR	Yes	NR	Yes	Yes	NR	NR	NR, telephone, video, SMS, email, other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Clinical effectiveness and harms					Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC	
				urinary, mental health, musculo-skeletal, neurologic, surgery, other										
Ingemann	2020	Other (circumpolar region)	NR	NR/general population	NR	Yes	Yes	NR	NR	NR	NR	NR	NR	Telephone
Intan Sabrina	2020	N/A	NR	NR/ general population	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Jones	2020	N/A	NR	Mental health	NR	NR	Yes	Yes	Yes	NR	NR	NR	NR	Telephone, video
Kaur	2020	N/A	NR	Other	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Kemp	2020	N/A	NR	Mental health	NR	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, video, other
Kermani	2020	N/A	Children, adults	Cancer	Yes	NR	NR	Yes	NR	Yes	NR	NR	NR	Telephone, video, email, other
LeBlanc	2020	Australia, Canada	NR	NR/general population	NR	NR	Yes	NR	NR	NR	NR	NR	NR	Video
Lee	2020	N/A	NR	Infectious disease	NR	NR	Yes	NR	Yes	Yes	NR	NR	NR	Telephone, SMS, other
Magalhaes	2020	N/A	NR	Cancer	NR	NR	NR	NR	NR	NR	NR	Yes	NR	Other

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC	
McCord	2020	N/A	NR	Mental health	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Meinhart	2020	N/A	Adults	Cardio-vascular	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR, telephone, SMS, email, other
O'Cathail	2020	UK	NR, children, older adults	Cancer, cardio-vascular, kidney/urinary, mental health, musculo-skeletal, neurologic, respiratory, surgery, other	NR	NR	NR	Yes	Yes	NR	NR	Yes	Yes	Video
O'Neil	2020	N/A	Adults	Other	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	Telephone video
Pham	2020	N/A	NR, children	Cancer	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	Telephone, video, SMS, email, other
Putranto	2020	N/A	NR	Cancer	NR	NR	NR	NR	NR	NR	NR	NR	NR	Other
Reilly	2020	Australia, Canada, New Zealand, US	NR, adults	Diabetes, obstetrics/gynecology	NR	Yes	NR	Yes	Yes	NR	NR	NR	NR	Telephone, SMS, other



First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Clinical effectiveness and harms					Context: VC Format
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
Santesteban-Echarri	2020	N/A	Children, adults, older adults	Mental health	Yes	NR	Yes	Yes	Yes	NR	NR	Yes	Video
Shaffer	2020	N/A	NR	Cancer	Yes	NR	NR	NR	Yes	NR	NR	NR	Other
Shafiee Hanjani	2020	N/A	NR	NR/general population, cancer, cardiovascular, chronic, diabetes, mental health	NR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Telephone, video, SMS, email
Siddiq	2020	N/A	NR	Infectious disease, respiratory	NR	NR	NR	Yes	NR	NR	NR	NR	NR
Smith-Turchyn	2020	N/A	NR	Cancer	NR	NR	Yes	Yes	Yes	NR	NR	NR	Telephone, email
Snoswell	2020	N/A	NR, children	NR/general population, cardiovascular, musculo-skeletal, surgery, other	NR	NR	Yes	Yes	NR	NR	NR	NR	NR, video, SMS, email

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Clinical effectiveness and harms					Context: VC Format
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
Steindal	2020	N/A	Adults, older adults	Palliative	NR	NR	Yes	Yes	Yes	NR	NR	Yes	NR, telephone, video, SMS, email, other
Thiyagarajan	2020	N/A	NR	NR/general population, musculo-skeletal, respiratory	NR	NR	NR	NR	NR	Yes	NR	NR	Video
Thompson	2020	N/A	Adults	Obstetrics/gynecology	NR	NR	NR	Yes	Yes	NR	Yes	Yes	Telephone, video, other
Vailati	2020	N/A	Older adults	Mental health	NR	NR	NR	Yes	NR	NR	NR	NR	Telephone, email
Vanhamel	2020	N/A	NR	Infectious disease	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, video, SMS
Wattanapisit	2020	N/A	Adults	NR/general population, chronic, diabetes, respiratory, other	NR	NR	NR	NR	NR	NR	NR	NR	NR, telephone
Yang	2020	N/A	NR	Kidney/urinary	NR	NR	NR	NR	NR	Yes	NR	NR	Other
Zaslavsky	2020	N/A	Older adults	NR/general population, diabetes,	NR	NR	NR	Yes	NR	NR	NR	NR	Telephone, SMS

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Patient-focused outcomes	Health care utilization	Health care service delivery	Change in medication	Clinical harms	Type of VC
				respiratory, other									

LMIC = Low and Middle Income Countries; N/A = Not applicable; NR = not reported; OECD = Organization for Economic Co-operation and Development; SMS = Short Message Service; VC = virtual care.

Notes: Citations are in reverse chronological then alphabetical order. For "Concepts: Clinical effectiveness and harms", "Yes" identifies scoping reviews that contained studies examining the categories (i.e., indicates evidence found and not the directionality of findings [e.g., "Yes" in the "Clinical harms" column means that there was evidence on clinical harms and not that there was evidence of clinical harms]); "NR" indicates scoping reviews that did not contain studies examining the categories.

<sup>a</sup>CADTH reported the country/region if the scoping review focused on a country/region. If the scoping review did not focus on a particular country or region, CADTH reported this as N/A.

Table 4: Summary of 230 Included Scoping Reviews That Addressed Research Question 2

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Adcock	2022	N/A	NR	Cardio-vascular	NR	NR	NR	NR	Yes	NR	NR	NR	Yes	NR	Telephone, video, SMS, email, other
Agnew	2022	N/A	NR	Musculo-skeletal	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	Telephone, video, SMS, other
Ali	2022	N/A	NR	NR/general population	NR	NR	NR	NR	NR	Yes	NR	NR	Yes	NR	NR, video, other
Almuslim	2022	N/A	NR	Obstetrics/gynecology	NR	NR	Yes	Yes	Yes	Yes	NR	NR	Yes	NR	NR, telephone, video, SMS
Aslani	2022	N/A	NR	Cardio-vascular	NR	NR	Yes	NR	Yes	Yes	NR	NR	NR	NR	NR

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Beheshti	2022	N/A	NR, children, adults, older adults	NR/general population, cancer, cardiovascular, diabetes, kidney/urinary, mental health, respiratory, other	Yes	NR	Yes	Yes	Yes	Yes	Yes	NR	Yes	NR	NR, telephone, video, email, other
Beks	2022	N/A	NR	NR/general population, cancer, cardiovascular, chronic, diabetes, infectious disease, mental health, musculo-skeletal,	Yes	NR	Yes	Yes	Yes	NR	NR	NR	Yes	NR	Telephone, video, SMS, email, other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
				respiratory, other											
Beland	2022	N/A	NR, adults, older adults	NR/general population, cancer, chronic, diabetes, mental health, substance use, other	NR	NR	NR	Yes	Yes	Yes	NR	NR	NR	NR	Telephone, video, email
Budhwani	2022	High-income countries	Older adults	NR/general Population	NR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NR	Telephone, video, SMS, email, other
Buying	2022	Canada	NR	Cardio-vascular	NR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NR	NR, video, SMS

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Cardona	2022	N/A	Adults, older adults	Cardio-vascular, diabetes, mental health, other	NR	Yes	Yes	Yes	NR	NR	NR	NR	NR	NR	Telephone, video
Chan	2022	US or High-Income countries	NR	Substance use	NR	NR	Yes	NR	Yes	NR	NR	NR	NR	NR	Telephone, video, email
Cincidda	2022	N/A	NR	Cancer	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR, telephone, email
Clarkson	2022	N/A	NR	NR/general population	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR, telephone, SMS, other
Davidow	2022	N/A	Adults, older adults	NR/general population, mental health	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Davidson	2022	N/A	Children	NR/general population, cancer, chronic, diabetes, mental health, palliative, other	Yes	NR	Yes	Yes	Yes	Yes	NR	NR	Yes	NR	NR, telephone, video, SMS, email, other
Diaz	2022	N/A	Children, adults	NR/general population	NR	NR	Yes	NR	Yes	Yes	NR	NR	NR	NR	Video, other
DiFabio	2022	N/A	Children, adults	NR/general population	Yes	NR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NR	Telephone, video, SMS, other
Dostie	2022	N/A	Children	Musculo-skeletal	Yes	NR	NR	NR	Yes	NR	NR	NR	NR	NR	Telephone, video, SMS, email, other



First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Ebnetter	2022	N/A	Adults	Palliative	Yes	NR	Yes	NR	Yes	Yes	NR	NR	Yes	NR	NR, telephone, video, SMS, other
Edwards	2022	N/A	NR	Diabetes, obstetrics/gynecology	NR	NR	NR	NR	Yes	NR	NR	NR	NR	NR	Other
Ewart	2022	N/A	NR, children	Kidney/urinary	Yes	NR	NR	NR	Yes	NR	NR	NR	NR	NR	Telephone, video
Fien	2022	N/A	NR, children, older adults	NR/general population, cancer, cardiovascular, chronic, diabetes, infectious disease, mental health, other	NR	Yes	Yes	NR	Yes	NR	NR	Yes	Yes	NR	Telephone, video, email, other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Fu	2022	N/A	NR	Respiratory	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR	NR
Furlepa	2022	Poland	NR	NR/general population	NR	NR	NR	Yes	NR	NR	NR	Yes	Yes	NR	NR, telephone, video, email, other
Gachabayov	2022	N/A	NR	Surgery	NR	NR	NR	NR	NR	NR	Yes	NR	NR	NR	NR
Ganjali	2022	N/A	NR, children	NR/general population, cancer, diabetes, infectious disease, kidney/urinary, mental health, Musculo-skeletal, palliative, surgery, other	NR	NR	NR	NR	Yes	NR	Yes	NR	NR	NR	Telephone, video, other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Gonzalez	2022	N/A	NR, older adults	Surgery	Yes	NR	Yes	Yes	Yes	Yes	Yes	NR	Yes	NR	Telephone, video, SMS
Guillen	2022	N/A	NR	Substance use	NR	NR	Yes	Yes	Yes	NR	Yes	Yes	Yes	NR	NR, video
Hayotte	2022	N/A	NR	Surgery	NR	NR	NR	NR	Yes	NR	NR	NR	NR	NR	Telephone, video
Hilty	2022	N/A	NR	NR/general population	NR	NR	NR	Yes	NR	NR	Yes	NR	NR	NR	NR, video
Houston	2022	N/A	NR, children	Neurological	Yes	NR	Yes	Yes	Yes	Yes	Yes	NR	Yes	NR	NR, video, other
James-Palmer	2022	N/A	Adults	NR/general population, cancer, cardiovascular, chronic, diabetes, kidney/urinary,	NR	NR	NR	NR	NR	NR	NR	NR	Yes	NR	NR, video

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
				mental health, neurological, obstetrics/gynecology, respiratory											
Joo	2022	N/A	NR, children, adults, older adults	NR/general population, cardiovascular, chronic, diabetes, infectious disease, kidney/urinary, mental health, respiratory	Yes	NR	Yes	Yes	Yes	Yes	NR	NR	Yes	NR	NR, telephone, video, SMS, email, other
Kallas	2022	N/A	NR	Cardiovascular, diabetes	NR	NR	NR	Yes	Yes	NR	NR	NR	Yes	NR	Telephone, SMS

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Kemp Van Ee	2022	N/A	Adults	Other	NR	NR	NR	NR	NR	NR	NR	NR	Yes	NR	NR
Keyes	2022	N/A	Children, adults	Mental health	NR	NR	NR	NR	Yes	Yes	NR	NR	Yes	NR	Telephone, video, other
Kim	2022	N/A	NR	Other	NR	NR	NR	NR	NR	Yes	NR	NR	NR	NR	Telephone
Kostovich	2022	N/A	NR, children, older adults	NR/general population, diabetes, surgery, other	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR	Telephone, video, other
Lakeman	2022	N/A	NR, adults	Chronic, mental health, substance use	NR	NR	NR	NR	Yes	Yes	Yes	NR	NR	NR	Telephone, video, SMS, email, other
Lampickiene	2022	N/A	NR	NR/general population, mental health,	Yes	NR	Yes	NR	Yes	Yes	Yes	NR	NR	NR	Telephone, video

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
				surgery, other											
Leroux	2022	N/A	NR, adults. Older adults	Mental health	NR	NR	Yes	NR	Yes	Yes	Yes	Yes	Yes	NR	NR, telephone, video
Linardon	2022	N/A	Children, adults	Mental health	Yes	NR	NR	NR	Yes	NR	NR	NR	Yes	NR	NR, telephone, video
Lindner-Rabl	2022	Europe	Older adults	Other	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Telephone
Litvak	2022	N/A	NR	NR/general population	NR	NR	NR	Yes	NR	Yes	NR	NR	Yes	NR	Telephone, video
Maramba	2022	N/A	NR, older adults	NR/general population	NR	NR	NR	Yes	Yes	NR	Yes	NR	Yes	NR	Other
Marwaa	2022	N/A	NR	Cardio-vascular, other	NR	NR	NR	Yes	Yes	NR	NR	NR	Yes	NR	NR, video, other
May	2022	N/A	NR	Mental health	NR	NR	NR	NR	NR	NR	NR	NR	Yes	NR	Telephone, other

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Md Fadzil	2022	N/A	Older adults	Other	Yes	NR	NR	NR	Yes	NR	NR	NR	NR	NR	Telephone, video, SMS, email, other
Meng	2022	N/A	Adults	NR/general population	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	Telephone, video
Mohammadzadeh	2022	Other-forested and mountainous areas	NR	NR/general population	NR	NR	Yes	NR	NR	NR	Yes	NR	Yes	NR	NR
Mojtahedi	2022	N/A	NR	Palliative	Yes	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	Telephone, video
Moon	2022	N/A	NR	Mental health	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR, video, SMS, other

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Murthy	2022	N/A	NR	Cancer, cardiovascular, diabetes, mental health, neurological	NR	NR	NR	Yes	NR	NR	NR	NR	Yes	NR	Telephone, video, email, other
Oter	2022	N/A	NR	Cancer	NR	NR	NR	NR	Yes	NR	NR	NR	NR	NR	Telephone, video, other
Owolabi	2022	LMICs	NR	NR/general population, surgery	NR	NR	NR	Yes	Yes	Yes	NR	NR	Yes	NR	Telephone, video, SMS, email, other
Pang	2022	High-income countries	Older adults	Cancer	NR	NR	Yes	NR	Yes	NR	NR	NR	NR	NR	NR, telephone, video



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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Pantasri	2022	N/A	NR	NR/general population, infectious disease	NR	NR	NR	Yes	Yes	NR	NR	NR	Yes	NR	NR
Poirier	2022	Australia	NR	Other	NR	NR	Yes	Yes	Yes	Yes	NR	NR	Yes	NR	Telephone, video, email, other
Ramachandran	2022	N/A	NR, adults, older adults	Cardio-vascular	NR	NR	Yes	NR	Yes	NR	NR	NR	NR	NR	NR, telephone, video, SMS, email, other
Rodrigues	2022	N/A	Older adults	NR/general population, mental health	Yes	NR	NR	NR	Yes	NR	NR	NR	Yes	NR	Telephone, video
Rosic	2022	N/A	NR, children	NR/general population, cardio--	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR

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									Patient/care-giver	Health care provider	Non-specified VC user				
				vascular, respiratory											
Ruiz-Cosignani	2022	N/A	NR	Mental health	NR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NR	Telephone, video
Sakamaki	2022	N/A	NR	Neurological	NR	NR	NR	NR	NR	NR	NR	NR	Yes	NR	Telephone, video, other
Shah	2022	N/A	NR	Cancer	NR	NR	NR	NR	NR	NR	Yes	NR	Yes	NR	NR
Silva	2022	N/A	NR	NR/general population	NR	NR	NR	NR	NR	NR	Yes	NR	NR	NR	Telephone, video, SMS, email, other
Smith	2022	N/A	Children, adults	Other	NR	NR	Yes	NR	Yes	Yes	Yes	NR	NR	NR	Telephone, video, SMS, other

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									Patient/care-giver	Health care provider	Non-specified VC user				
Souza	2022	N/A	NR	Obstetrics/gynecology	NR	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR
Stavropoulos	2022	N/A	Children, adults	Mental health	Yes	Yes	Yes	NR	NR	NR	Yes	NR	Yes	NR	Video
Suleman	2022	N/A	NR	Cancer	NR	NR	Yes	NR	Yes	Yes	NR	Yes	Yes	NR	NR, telephone, video, other
Sullivan	2022	N/A	Children, adults	Mental health	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Telephone
Toh	2022	N/A	Children, adults	Mental health	NR	NR	NR	NR	Yes	NR	NR	NR	Yes	NR	Telephone, email, other
van der Boom	2022	N/A	NR	Mental health	NR	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR, email
Villa	2022	N/A	Adults	Kidney/urinary	Yes	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR, telephone, email

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									Patient/care-giver	Health care provider	Non-specified VC user				
Wake	2022	N/A	Children, adults	Mental health	Yes	NR	Yes	Yes	Yes	Yes	NR	NR	Yes	NR	Telephone, video, email, other
Wallace	2022	N/A	NR	Chronic	NR	NR	Yes	NR	Yes	NR	NR	NR	NR	NR	Telephone, video
Warmoth	2022	N/A	Adults	Mental health, musculo-skeletal, neurological, palliative, surgery, other	NR	NR	NR	NR	NR	Yes	NR	NR	NR	NR	Video
Washio	2022	N/A	Children, adults	Substance use	NR	NR	Yes	NR	NR	NR	NR	NR	NR	NR	NR, telephone, SMS, other

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									Patient/care-giver	Health care provider	Non-specified VC user				
Wikstrom	2022	N/A	NR, adults, older adults	Surgery	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR, SMS
Willis	2022	US	NR, children	NR/general population, respiratory, substance use	NR	NR	Yes	NR	Yes	NR	NR	NR	NR	NR	Telephone, video, SMS, email
Yang	2022	N/A	NR	Surgery	NR	NR	Yes	Yes	Yes	Yes	NR	NR	Yes	NR	NR, telephone, video
Yao	2022	N/A	NR, older adults	NR/general population, cancer, chronic, diabetes	NR	NR	Yes	NR	NR	NR	NR	Yes	Yes	NR	NR
Zaman	2022	N/A	Older adults	Cardio-vascular, chronic, diabetes, mental	NR	NR	NR	Yes	Yes	NR	NR	Yes	Yes	NR	NR, video, SMS

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									Patient/care-giver	Health care provider	Non-specified VC user				
				health, respiratory											
Abraham	2021	N/A	NR	Mental health, substance use, other	NR	NR	Yes	Yes	Yes	Yes	NR	NR	Yes	NR	Telephone, video, SMS, email, other
Alipour	2021	N/A	NR, children	NR/general population, cancer, cardiovascular, diabetes, infectious disease, kidney/urinary, mental health, Musculo-skeletal, neurological,	Yes	NR	NR	Yes	Yes	Yes	NR	Yes	Yes	NR	NR, telephone, video, SMS, email, other

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
				obstetrics/gynecology, palliative, respiratory, surgery, other											
Almasi	2021	N/A	NR	NR/general population	NR	NR	NR	NR	NR	Yes	NR	NR	NR	NR	Video
Anil	2021	N/A	NR, children, adults	Musculo-skeletal, surgery	Yes	NR	NR	NR	NR	Yes	NR	Yes	Yes	NR	NR, telephone, video, other
Armour	2021	N/A	NR	NR/general population	NR	NR	NR	NR	NR	Yes	NR	NR	NR	NR	Telephone
Bailey	2021	N/A	Children, adults	NR/general population, cardiovascular, chronic, diabetes, infectious disease,	Yes	NR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	NR	NR, telephone, video, SMS, other

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									Patient/care-giver	Health care provider	Non-specified VC user				
				kidney/urinary, mental health, neurological, respiratory, substance use, other											
Ben-Omran	2021	N/A	Adults, older adults	Other	NR	NR	Yes	Yes	Yes	NR	NR	NR	Yes	NR	NR, telephone, video, SMS, other
Bhochhibhoya	2021	N/A	Adults	Infectious disease, obstetrics/gynecology	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Telephone
Bouaoud	2021	N/A	NR	Cancer	Yes	NR	NR	Yes	Yes	NR	NR	NR	Yes	NR	NR, video, other
Bucki	2021	N/A	Adults	Musculo-skeletal	NR	NR	NR	NR	Yes	Yes	NR	NR	Yes	NR	Video



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									Patient/care-giver	Health care provider	Non-specified VC user				
Cadel	2021	N/A	NR	NR/general population	Yes	NR	Yes	NR	Yes	Yes	NR	Yes	Yes	NR	Telephone, video, other
Carrillo-de-la-Pena	2021	Spain	NR	Chronic	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR, telephone
Chong	2021	N/A	NR	Other	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR	NR, telephone, video, other
Choukou	2021a	N/A	NR, children	Cardio-vascular, infectious disease, kidney/urinary, musculo-skeletal	Yes	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR, telephone, other
Choukou	2021b	N/A	Older adults	NR/general population	NR	Yes	NR	NR	Yes	Yes	Yes	NR	NR	NR	NR, telephone, video

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									Patient/care-giver	Health care provider	Non-specified VC user				
Cliffe	2021	N/A	NR, children, adults	Mental health, substance use	NR	NR	NR	NR	NR	NR	Yes	NR	NR	NR	Telephone, SMS, other
Comfort	2021	N/A	NR	Surgery	NR	NR	NR	NR	NR	NR	Yes	NR	Yes	NR	NR
Couturier	2021	N/A	Children, adults	Mental health	Yes	NR	NR	Yes	Yes	Yes	NR	NR	Yes	NR	Telephone, video, SMS, email, other
de Moraes	2021	N/A	NR	Chronic	NR	NR	NR	NR	NR	NR	NR	NR	Yes	NR	Video
De Vera	2021	High-income countries	NR	NR/general population	NR	NR	Yes	Yes	Yes	Yes	NR	Yes	Yes	NR	Telephone, video, SMS, email, other
Dewa	2021	N/A	Children, adults	NR/general population, mental health, other	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR, SMS, other

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									Patient/care-giver	Health care provider	Non-specified VC user					
Dionisi	2021	N/A	NR	Surgery	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Video, SMS, other
Doraiswamy	2021	N/A	Older adults	NR/general population, mental health	NR	NR	NR	NR	NR	Yes	NR	NR	Yes	NR	NR	Telephone, video
Dowson	2021	N/A	NR	Mental health	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Video
Echelard	2021	N/A	NR, older adults	Cancer, mental health	Yes	NR	Yes	Yes	Yes	Yes	NR	NR	Yes	NR	NR	NR, telephone, video
Elgert	2021	N/A	NR	NR/general population, musculo-skeletal	NR	NR	NR	NR	Yes	Yes	NR	NR	Yes	NR	NR	NR, video, SMS, email
Eslami	2021	N/A	NR, older adults	NR/general population, chronic, infectious disease, mental health,	NR	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR	NR, telephone, video, SMS, email, other

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									Patient/care-giver	Health care provider	Non-specified VC user				
				obstetrics/gynecology, other											
Exner-Cortens	2021	N/A	Children	Mental health	Yes	Yes	Yes	NR	Yes	NR	NR	Yes	Yes	NR	NR, video, SMS
Fisher	2021	N/A	NR	Diabetes	NR	NR	NR	Yes	NR	Yes	NR	NR	NR	NR	NR
Forsyth	2021	N/A	NR, adults, older adults	Diabetes	NR	NR	Yes	NR	Yes	NR	NR	NR	Yes	NR	NR, SMS, other
Gonzalez	2021	US	Children	NR/general population, diabetes, substance use	NR	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR, other
Gunasekeran	2021	N/A	NR	NR/general population	NR	NR	NR	NR	Yes	Yes	NR	NR	Yes	NR	NR

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									Patient/care-giver	Health care provider	Non-specified VC user				
Hamza	2021	N/A	Adults	NR/general population, cardiovascular	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Telephone
Hilty	2021	N/A	Children	NR/general population	Yes	NR	NR	NR	Yes	NR	Yes	NR	Yes	NR	NR, video, SMS, email
Hoffer-Hawlik	2021	LMICs	Adults	Cardio-vascular	NR	NR	Yes	NR	NR	NR	NR	NR	NR	NR	Telephone, video, other
Ingle	2021	N/A	NR, adults, older adults	NR/general population, palliative	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Other
Jonnagaddala	2021	Australia	NR	NR/general population	NR	NR	Yes	Yes	Yes	Yes	NR	NR	Yes	NR	Telephone, video
Juengst	2021	N/A	Adults	Other	NR	NR	NR	NR	Yes	NR	NR	NR	Yes	NR	Other
Kabukye	2021	Africa	NR	Cancer	NR	NR	NR	NR	NR	NR	Yes	NR	NR	NR	NR

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									Patient/care-giver	Health care provider	Non-specified VC user				
Kantorova	2021	N/A	NR, children, adults, older adults	NR/general population, mental health, neurological, other	Yes	NR	NR	NR	Yes	Yes	Yes	Yes	Yes	NR	Video
Khoja	2021	N/A	NR	Infectious disease	NR	NR	Yes	NR	Yes	NR	NR	Yes	Yes	NR	Telephone, video
Komariah	2021	N/A	NR	Cancer	NR	NR	NR	NR	Yes	Yes	NR	NR	Yes	NR	NR, telephone, other
Leach	2021	N/A	NR, children, adults	Mental health, substance use	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR, video, other
Leone	2021	N/A	NR, adults, older adults	NR/general population, cancer, musculo-skeletal,	Yes	NR	Yes	Yes	Yes	Yes	NR	Yes	Yes	NR	NR, video

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									Patient/care-giver	Health care provider	Non-specified VC user				
				surgery, other											
Li	2021	N/A	NR, adults	NR/general population, neurological, surgery	NR	NR	NR	Yes	Yes	Yes	Yes	NR	NR	NR	NR, telephone, video
Lim	2021	Any	NR, older adults	NR/general population, mental health, substance use	NR	NR	Yes	Yes	Yes	Yes	Yes	NR	Yes	NR	NR
MacDougall	2021	N/A	Children	Mental health, substance use	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR	SMS
Majidova	2021	N/A	NR	Other	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR	NR, telephone
Mastronardo	2021	N/A	NR	Chronic, musculo-skeletal	NR	NR	Yes	NR	Yes	NR	NR	NR	NR	NR	Telephone, video

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			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
McCartan	2021	N/A	Children	Mental health	NR	NR	NR	NR	NR	Yes	NR	Yes	Yes	NR	Telephone, video, other
Meherali	2021	LMICs	Children	Infectious disease, obstetrics/gynecology	NR	NR	Yes	NR	Yes	NR	NR	NR	NR	NR	NR, telephone, video, other
Metzger	2021	N/A	Children	Surgery	Yes	NR	NR	NR	Yes	NR	NR	NR	Yes	NR	Telephone
Miller	2021	N/A	Children	Palliative	Yes	NR	Yes	Yes	Yes	Yes	NR	NR	Yes	NR	NR, telephone, video
Montagnoli	2021	N/A	NR	Obstetrics/gynecology	NR	NR	NR	NR	Yes	Yes	NR	Yes	Yes	NR	NR
Mosnaim	2021	N/A	Children, adults, older adults	Respiratory	Yes	NR	NR	Yes	Yes	NR	NR	NR	NR	NR	NR, SMS, other



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									Patient/care-giver	Health care provider	Non-specified VC user				
Mulawa	2021	N/A	Children, adults	NR/general population, infectious disease	NR	NR	NR	NR	Yes	NR	NR	NR	Yes	NR	NR, video, SMS, email, other
Munoz	2021	N/A	Children, adults	NR/general population, other	Yes	NR	Yes	Yes	Yes	NR	NR	NR	Yes	NR	NR, telephone, video, SMS
Nascimento	2021	N/A	NR	Mental health	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Video
Navarro	2021	N/A	Adults, older adults	Cardio-vascular, chronic, respiratory	NR	NR	Yes	NR	NR	NR	NR	NR	Yes	NR	Video
Negm	2021	N/A	NR, older adults	NR/general population, cardio-vascular, infectious disease, respiratory	Yes	NR	NR	NR	Yes	Yes	NR	Yes	Yes	NR	NR, telephone, video, SMS, email, other

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									Patient/care-giver	Health care provider	Non-specified VC user				
Negreiros	2021	N/A	NR, children	Diabetes	Yes	NR	NR	NR	NR	NR	Yes	NR	Yes	NR	NR, telephone, video, SMS, email, other
Obro	2021	N/A	NR	Cardio-vascular, chronic, diabetes, respiratory, other	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR, telephone, SMS, email, other
Osei	2021	sub-Saharan Africa	NR	NR/general population, cancer, cardio-vascular, infectious disease	NR	NR	Yes	NR	Yes	Yes	NR	NR	NR	NR	Telephone, SMS, other
Oshni	2021	Australia	NR, children, older adults	NR/general population, cardio-vascular, chronic,	NR	Yes	Yes	NR	NR	NR	Yes	NR	Yes	NR	Video

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									Patient/care-giver	Health care provider	Non-specified VC user				
				diabetes, mental health musculo-skeletal, other											
Powis	2021	N/A	NR	Cancer	NR	NR	NR	NR	Yes	NR	Yes	Yes	Yes	NR	NR
Purnamayanti	2021	N/A	NR	Diabetes	NR	NR	NR	NR	Yes	NR	NR	NR	Yes	NR	NR, telephone, video
Ramage	2021	N/A	Adults	Cardio-vascular	NR	NR	NR	NR	Yes	Yes	NR	NR	Yes	NR	NR, telephone, video
Rasmussen	2021	N/A	Adults, older adults	Diabetes, mental health	NR	NR	Yes	NR	Yes	NR	NR	NR	Yes	NR	NR, telephone
Raspa	2021	N/A	NR	NR/general population	NR	NR	NR	NR	Yes	Yes	NR	NR	Yes	NR	Telephone, video

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Reinhardt	2021	N/A	NR	Cancer, cardiovascular, chronic, diabetes, mental health, respiratory	NR	NR	Yes	NR	Yes	NR	NR	NR	NR	NR	NR, telephone, video, SMS, email, other
Ritschl	2021	N/A	NR	NR/general population	NR	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR
Salsabilla	2021	Asia	NR	NR/general population, chronic, diabetes, Musculo-skeletal	NR	NR	Yes	Yes	NR	NR	NR	NR	NR	NR	NR, telephone
Salvador	2021	N/A	NR	Palliative	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	Telephone, video
Selick	2021	N/A	Adults	NR/general population, other	Yes	Yes	Yes	NR	Yes	Yes	NR	Yes	Yes	NR	Telephone, video, other

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									Patient/care-giver	Health care provider	Non-specified VC user				
Senter	2021	US	NR, children, adults	Mental health	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR	Telephone, video, email, other
Shorey	2021	N/A	Children	Other	Yes	NR	NR	NR	Yes	NR	NR	NR	Yes	NR	SMS, other
Silva	2021	Other (territories with high degrees of inequities)	Children, adults, older adults	Mental health, neurological, obstetrics/gynecology, other	Yes	NR	NR	NR	Yes	NR	Yes	Yes	Yes	NR	Telephone, video
Skov Schacksen	2021	N/A	Adults	Cardio-vascular	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR, telephone, video, SMS
Spelten	2021	Australia, Canada, US, UK	NR, adults	Cancer, palliative	NR	NR	Yes	Yes	Yes	Yes	NR	NR	NR	NR	Telephone, video,

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									Patient/care-giver	Health care provider	Non-specified VC user				
															email, other
Sulz	2021	N/A	NR	NR/general population, cardiovascular, chronic, diabetes, mental health, neurological, palliative, respiratory, surgery, other	Yes	NR	NR	Yes	NR	NR	NR	NR	Yes	NR	NR, telephone, video, email
Taito	2021	N/A	NR	Respiratory	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR	NR, video
Tan	2021a	N/A	Older adults	Other	Yes	NR	Yes	Yes	Yes	Yes	Yes	Yes	NR	NR	NR, video
Tan	2021b	N/A	NR	NR/general population	NR	NR	NR	NR	NR	Yes	NR	NR	NR	NR	Video, other

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									Patient/care-giver	Health care provider	Non-specified VC user				
Tilahun	2021a	N/A	NR	NR/general population, chronic, infectious disease, respiratory	NR	NR	NR	NR	NR	NR	NR	NR	Yes	NR	Telephone, video, email, other
Tilahun	2021b	N/A	NR	Infectious disease	NR	NR	Yes	Yes	NR	NR	NR	NR	Yes	NR	NR, video, SMS
Tokgoz	2021	N/A	NR	Mental health	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR	NR, telephone, SMS, email, other
Tolu	2021	N/A	NR	Obstetrics/gynecology	NR	NR	NR	NR	NR	NR	NR	NR	Yes	NR	Telephone, video
Tumuhimbise	2021	N/A	NR	Infectious disease	NR	NR	Yes	NR	NR	NR	NR	NR	Yes	NR	Telephone, SMS

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									Patient/care-giver	Health care provider	Non-specified VC user				
Unni	2021	N/A	NR, older adults	NR/general population, cancer	NR	NR	NR	Yes	Yes	Yes	NR	NR	Yes	NR	Telephone, video, SMS, other
van Doorn	2021	N/A	Children, adults	Mental health	NR	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR, other
van Eck van der Sluijs	2021	N/A	Adults	Kidney/urinary	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR, telephone, video
van Leeuwen	2021	N/A	NR, adults	Mental health	NR	NR	NR	NR	Yes	NR	NR	NR	Yes	NR	Telephone, video, other
van Lotringen	2021	N/A	Children, adults, older adults	Mental health	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR, SMS, email, other
Whitelaw	2021	N/A	NR	Cardio-vascular	Yes	NR	NR	NR	NR	NR	NR	NR	Yes	NR	NR, video



First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
WHO	2021	N/A	NR, older adults	Diabetes, obstetrics/gynecology	Yes	NR	NR	Yes	Yes	Yes	Yes	NR	Yes	NR	NR, telephone, video, SMS, other
Widianti	2021	N/A	NR	Mental health	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	Telephone
Wies	2021	N/A	Children, adults	Mental health	NR	NR	Yes	NR	Yes	NR	NR	Yes	Yes	NR	NR, SMS, other
Winwood	2021	OECD countries	NR	Infectious disease	NR	NR	NR	Yes	Yes	NR	NR	NR	Yes	NR	NR
Wood	2021	N/A	Children	Other	NR	NR	Yes	NR	NR	NR	NR	NR	NR	NR	Telephone
Yasmin	2021	N/A	NR	Cardio-vascular	NR	NR	NR	NR	Yes	NR	NR	Yes	Yes	NR	NR, video
Aapro	2020	N/A	Adults	Cancer	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR, telephone, video, SMS
Alfuraydan	2020	N/A	NR, children, adults	Mental health	Yes	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR, video, other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format		
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC	
									Patient/care-giver	Health care provider	Non-specified VC user					
Aquino	2020	N/A	NR	Obstetrics/gynecology	NR	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR	Telephone, SMS, other
Baines	2020	N/A	NR	NR/general population	NR	NR	NR	Yes	Yes	Yes	NR	Yes	Yes	NR	NR	NR, other
Baldwin	2020	Other geographically isolated locations	NR, children, older adults	NR/general population, cancer, cardiovascular, chronic, diabetes, infectious disease, mental health, obstetrics/gynecology, palliative	Yes	NR	Yes	Yes	Yes	Yes	Yes	NR	Yes	NR	NR	NR, telephone, video
Bernard	2020	N/A	Adults	Kidney/urinary	NR	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR	NR

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Campbell	2020	N/A	Children	NR/general population, mental health, other	Yes	Yes	Yes	Yes	Yes	NR	NR	NR	NR	NR	Telephone, video, other
Cao	2020	N/A	Adults	Infectious disease	NR	NR	NR	NR	Yes	NR	NR	NR	NR	NR	Telephone, SMS
Dosani	2020	LMICs	NR, adults	Mental health	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR, telephone, other
Elliott	2020	N/A	Adults	Respiratory	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, video
Ellis	2020a	Canada's North	Children	Other	NR	Yes	Yes	Yes	Yes	Yes	NR	NR	Yes	NR	Video
Ellis	2020b	N/A	NR, children, adults	Mental health	Yes	Yes	NR	NR	Yes	NR	NR	NR	NR	NR	Telephone, video, email, other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format		
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC	
									Patient/care-giver	Health care provider	Non-specified VC user					
Elnaem	2020	N/A	NR	Cardio-vascular	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, SMS
Graham	2020	N/A	Children, adults	NR/general population, other	NR	NR	Yes	Yes	Yes	Yes	NR	NR	NR	NR	NR	Telephone, video
Harst	2020	N/A	NR	NR/general population	NR	NR	Yes	Yes	NR	Yes	NR	NR	Yes	NR	NR	NR
Hilty	2020	N/A	NR	NR/general population, mental health	NR	Yes	Yes	Yes	Yes	NR	NR	Yes	Yes	NR	NR	NR, telephone, video, SMS, email, other
Hincapie	2020	N/A	NR	NR/general population, cancer, cardio-vascular, diabetes, infectious disease, kidney/	NR	NR	Yes	NR	Yes	Yes	NR	NR	NR	NR	NR	NR, telephone, video, SMS, email, other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
				urinary, mental health, musculo-skeletal, neurological, surgery, other											
Ingemann	2020	Other - circum-polar region	NR	NR/general population	NR	Yes	Yes	NR	Yes	NR	NR	NR	NR	NR	Telephone
Intan Sabrina	2020	N/A	NR	NR/general population	NR	NR	NR	Yes	Yes	NR	NR	Yes	Yes	NR	NR
Jones	2020	N/A	NR	Mental health	NR	NR	Yes	NR	Yes	Yes	NR	NR	NR	NR	Telephone, video
Kaur	2020	N/A	NR	Other	NR	NR	NR	NR	NR	NR	Yes	NR	Yes	NR	NR
Kemp	2020	N/A	NR	Mental health	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	Telephone, video, other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Kermani	2020	N/A	Children, adults	Cancer	Yes	NR	NR	Yes	Yes	Yes	Yes	NR	Yes	NR	Telephone, video, email, other
LeBlanc	2020	Australia, Canada	NR	NR/general population	NR	NR	Yes	NR	Yes	Yes	NR	NR	NR	NR	Video
Lee	2020	N/A	NR	Infectious disease	NR	NR	Yes	Yes	Yes	NR	NR	NR	Yes	NR	Telephone, SMS, other
Magalhaes	2020	N/A	NR	Cancer	NR	NR	NR	NR	Yes	NR	NR	NR	NR	NR	Other
McCord	2020	N/A	NR	Mental health	NR	NR	NR	NR	NR	Yes	NR	NR	Yes	NR	NR
Meinhart	2020	N/A	Adults	Cardio-vascular	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR	NR, telephone, SMS, email, other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations							Context: VC Format
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
O'Cathail	2020	UK	NR, children, older adults	Cancer, cardiovascular, kidney/urinary, mental health, musculo-skeletal, neurological, respiratory, surgery, other	NR	NR	NR	Yes	Yes	Yes	NR	NR	Yes	NR	Video
O'Neil	2020	N/A	Adults	Other	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR	Telephone video
Pham	2020	N/A	NR, children	Cancer	NR	NR	NR	NR	NR	Yes	NR	NR	Yes	NR	Telephone, video, SMS, email, other
Putranto	2020	N/A	NR	Cancer	NR	NR	NR	NR	NR	NR	NR	NR	Yes	NR	Other

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Reilly	2020	Australia, Canada, New Zealand, US	NR, adults	Diabetes, obstetrics/gynecology	NR	Yes	NR	NR	Yes	Yes	NR	NR	NR	NR	Telephone, SMS, other
Santesteban-Echarri	2020	N/A	Children, adults, older adults	Mental health	Yes	NR	Yes	Yes	Yes	Yes	NR	NR	Yes	NR	Video
Shaffer	2020	N/A	NR	Cancer	Yes	NR	NR	NR	NR	NR	NR	NR	NR	NR	Other
Shafiee Hanjani	2020	N/A	NR	NR/general population, cancer, cardiovascular, chronic, diabetes, mental health	NR	Yes	Yes	Yes	Yes	Yes	NR	NR	NR	NR	Telephone, video, SMS, email
Siddiq	2020	N/A	NR	Infectious disease, respiratory	NR	NR	NR	NR	NR	NR	Yes	NR	NR	NR	NR



First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Smith-Turchyn	2020	N/A	NR	Cancer	NR	NR	Yes	Yes	Yes	NR	NR	NR	NR	NR	Telephone, email
Snowell	2020	N/A	NR, children	NR/general population, cardiovascular, musculo-skeletal, surgery, other	NR	NR	Yes	Yes	NR	NR	NR	NR	NR	NR	NR, video, SMS, email
Steindal	2020	N/A	Adults, older adults	Palliative	NR	NR	Yes	Yes	Yes	NR	NR	NR	Yes	NR	NR, telephone, video, SMS, email, other
Thiyagarajan	2020	N/A	NR	NR/general population, musculo-skeletal, respiratory	NR	NR	NR	Yes	Yes	Yes	NR	NR	Yes	NR	Video

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
Thompson	2020	N/A	Adults	Obstetrics/gynecology	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR	Telephone, video, other
Vailati	2020	N/A	Older adults	Mental health	NR	NR	NR	Yes	NR	NR	NR	NR	NR	NR	Telephone, email
Vanhamel	2020	N/A	NR	Infectious disease	NR	NR	NR	NR	Yes	NR	NR	Yes	NR	NR	Telephone, video, SMS
Wattanapisit	2020	N/A	Adults	NR/general population, chronic, diabetes, respiratory, other	NR	NR	NR	NR	Yes	Yes	NR	NR	NR	NR	NR, telephone
Yang	2020	N/A	NR	Kidney/urinary	NR	NR	NR	NR	Yes	NR	NR	NR	NR	NR	Other
Zaslavsky	2020	N/A	Older adults	NR/general population, diabetes,	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	Telephone, SMS

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Implementation considerations						Context: VC Format	
			Age Group	Type	Care-giver	Indigenous	Rural or remote settings	Economics	Perspectives, competency, and experiences			Ethics	Operational aspects	Environmental aspects	Type of VC
									Patient/care-giver	Health care provider	Non-specified VC user				
				respiratory, other											

LMIC = Low and Middle Income Countries; N/A = Not applicable; NR = not reported; OECD = Organization for Economic Co-operation and Development; SMS = Short Message Service; VC = virtual care.

Notes: Citations are in reverse chronological then alphabetical order. For "Concepts: Implementation considerations", "Yes" identifies scoping reviews that contained studies examining the categories (i.e., indicates evidence found and not the directionality of findings); "NR" indicates scoping reviews that did not contain studies examining the categories.

<sup>a</sup>CADTH reported the country/region if the scoping review focused on a country/region. If the scoping review did not focus on a particular country or region, CADTH reported this as N/A.

**Table 5: Summary of 11 Included Evidence-Based Guidelines That Addressed Research Question 3**

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Recommendations			Context: VC Format
			Age Group	Type	Caregiver	Indigenous	Rural or remote settings	Clinical practice recommendations	Other implementation recommendations	Other virtual care recommendations	Type of VC
Ahmed	2022	Asia Pacific region	NR	Rheumatology	NR	NR	Yes	Yes	Yes	NR	NR, telephone, video, text, email
Ontario Health (CCO) Cheung	2022 2021	Canada	Adult	Cancer	Yes	Yes	Yes	Yes	Yes	Yes	NR, telephone, video, email, other
Gladstone	2022	Canada	NR	Cardio-vascular conditions	NR	NR	Yes	Yes	Yes	Yes	NR
Peahl	2022	US	NR	Obstetrics/Gynecology	NR	NR	NR	Yes	Yes	NR	NR, telephone, video
Perry	2022	US	NR	Substance Use	NR	NR	NR	Yes	NR	NR	Telephone, other
Ziade	2022	Arab region	NR	Rheumatology	NR	NR	Yes	Yes	Yes	Yes	NR
Kapoor	2021	India	Children, adults	ENT	NR	NR	Yes	Yes	NR	NR	NR
Schwaab	2021	Europe	NR	Cardio-vascular conditions	NR	NR	NR	Yes	NR	NR	NR
Zon	2021	US	NR	Cancer	Yes	NR	NR	Yes	Yes	Yes	NR, telephone, video, other
Grimes	2020	US	NR	Obstetrics/Gynecology	NR	NR	NR	Yes	Yes	NR	NR, telephone, video

First author's surname	Year published	Country/region of focus <sup>a</sup>	Population					Concepts: Recommendations			Context: VC Format
			Age Group	Type	Caregiver	Indigenous	Rural or remote settings	Clinical practice recommendations	Other implementation recommendations	Other virtual care recommendations	Type of VC
Shanthanna	2020	International	NR	Pain during COVID-19	NR	NR	NR	Yes	Yes	Yes	NR

CCO = Cancer Care Ontario; COVID-19 = coronavirus disease 2019; ENT = ear, nose, throat; N/A = Not applicable; NR = not reported; VC = virtual care.

Notes: Citations are in reverse chronological then alphabetical order. For "Concepts: Recommendations", "Yes" identifies guidelines that contained recommendations belonging to the categories; "NR" identifies guidelines that did not contain recommendations belonging to the categories.

## Supplementary Report on Included Guidelines

### Abbreviations

APLAR = Asia Pacific League of Associations for Rheumatology

ArLAR = Arab League of Associations for Rheumatology

ASCO = American Society of Clinical Oncology

CCO = Cancer Care Ontario

COVID-19 = coronavirus disease 2019

DoD = Department of Defense

EC = expert consensus

EE = existing evidence

ENT = ear, nose, and throat

GRADE = Grading of Recommendations, Assessment, Development and Evaluation

LLKardReha-DACH = refers to “Cardiac Rehabilitation Guidelines of German Speaking Countries in Europe”

LOE = Level of Evidence

MiPATH = Michigan Plan for Appropriate Tailored Health care in Pregnancy

WHO = WHO

### Summary of Evidence

#### Summary of Guideline Characteristics

Overall, 12 reports that were published between 2020 and 2022 and representing 11 evidence-based guidelines met the eligibility criteria and were included in this report. Of the 11 included guidelines, 2 were for oncology (based on 3 reports)<sup>1-3</sup>; 2 were for obstetrics/gynecology<sup>4,5</sup>; 2 were for rheumatology<sup>6,7</sup>; 2 were for cardiovascular conditions<sup>8,9</sup>; 1 was for ear, nose, and throat (ENT)<sup>10</sup>; 1 was for pain during COVID-19<sup>11</sup>; and 1 was for substance use.<sup>12</sup> Characteristics of the included guidelines are summarized below and in [Table 6](#).

**Table 6: Characteristics of Included Evidence-Based Guidelines**

Intended users, target population	Intervention and practice considered	Major outcomes considered	Evidence collection, selection, and synthesis	Evidence quality assessment	Recommendations development and evaluation	Guideline validation
<b>Oncology: Ontario Health (CCO) (2022)<sup>1</sup></b>						
<p><b>Intended users:</b> Oncology clinicians in Ontario<sup>1</sup>; any health care professional involved in providing oncology virtual care to adult patients in an ambulatory/outpatient setting<sup>2</sup></p> <p><b>Target population:</b> Patients with cancer in Ontario</p>	<p>Person-centred virtual cancer care<sup>2,a</sup></p>	<p>Demographics, logistics, implementation, diagnosis, prognosis, clinical characteristics, active management, and follow-up<sup>1</sup>; factors essential for quality-driven, person-centred cancer care, clinical and non-clinical characteristics that make patients suitable for virtual care, relative contraindications to virtual cancer care, virtual care variations in different stages of cancer care<sup>2</sup></p>	<p>Systematic literature review, searching Embase and MEDLINE for peer reviewed articles and including grey literature, and a modified Delphi consensus process</p>	<p>NR</p>	<p>The process was directed by a 10-member Steering Committee. The Consensus Group consisted of clinicians, patient representatives, and administrators. There were “two rounds of anonymous modified Delphi surveys and a final synchronous virtual consensus meeting”. (p.5334)<sup>1</sup> Statements that did not achieve ≥ 75% consensus in Round 1 were modified. Statements that did not achieve ≥ 75% consensus in Round 2 but had clear suggestions for improvement were presented at a final consensus meeting for a simple majority vote. Strength of recommendations: NR</p>	<p>NR</p>

Intended users, target population	Intervention and practice considered	Major outcomes considered	Evidence collection, selection, and synthesis	Evidence quality assessment	Recommendations development and evaluation	Guideline validation
<b>Oncology: ASCO (2021)<sup>3</sup></b>						
<p><b>Intended Users:</b> Oncologists, nurses, advanced practice providers, allied health professionals, and administrators involved in the delivery of cancer care</p> <p><b>Target Population:</b> Individuals undergoing diagnosis, treatment, survivorship, or palliative care for cancer</p>	Standards for telehealth* in oncology	<p>Patient outcomes for in-person vs. telehealth visits, workflow and implementation considerations for telehealth applications, patient selection, standards, establishing physician patient relationship, role of advanced practice providers and allied health professionals in oncology telehealth interventions, virtual multidisciplinary cancer conferences, teletrials and/or virtual participation in oncology clinical trials</p>	<p>Following an initial scoping review and consensus on oncology-specific topics to be included, a systematic literature search was conducted for systematic reviews or primary studies using PubMed and Cochrane Database of Systematic Reviews from 2016 to December 2020. Article screening and data extraction was done by 1 researcher and reviewed by a second researcher.</p>	<p>The included studies were assessed with a variety of instruments, including adaptation of Critical Appraisal Skill Programme checklist for qualitative research, modified Hawker <i>et al</i> tool, adapted Cochrane Collaboration Back Review Group Checklist, GRADE, Cochrane risk of bias tool, Downs and Black checklist. However, the quality of evidence was not reported.</p>	<p>The results of the literature search were combined with expert panel consensus to develop standards.</p> <p>Strength of recommendations: NR</p>	<p>After development, the standards underwent 2 weeks of an open-comment period, which allowed public to review and comment, and were subsequently reviewed by expert panel and the ASCO quality of care council and approved by the ASCO board of directors.</p>
<b>Obstetrics/Gynecology: MiPATH (2022)<sup>4</sup></b>						
<p><b>Intended users:</b> Clinicians caring for pregnant patients and their infants</p> <p><b>Target population:</b> Pregnant patients and their infants</p>	Telemedicine* in routine prenatal care	Changes in prenatal care delivery during the COVID-19 pandemic; pre-existing knowledge of the importance of	Panel used the RAND-UCLA <sup>13</sup> appropriateness method, a Delphi approach that incorporated existing evidence synthesized	NR	Panel convened virtually to consider several key aspects of prenatal care delivery that have remained unchanged in the US for many years,	NR



Intended users, target population	Intervention and practice considered	Major outcomes considered	Evidence collection, selection, and synthesis	Evidence quality assessment	Recommendations development and evaluation	Guideline validation
		individualized care plans; the promise of telemedicine; and the influence of social and structural determinants of health on pregnancy outcomes	through a systematic review with expert opinion where data are lacking.		including the integration of telemedicine into routine prenatal care. Strength of recommendations: NR	
<b>Obstetrics/Gynecology: guidance for gynecologists (2020)<sup>5</sup></b>						
<b>Intended users:</b> Gynecologists <b>Target population:</b> Outpatient gynecology patients	Management of common outpatient gynecology scenarios via telemedicine <sup>b</sup>	Guidance regarding management of common outpatient gynecology scenarios via telemedicine: Abnormal uterine bleeding, chronic pelvic pain and endometriosis, vaginal discharge and vaginal infections, and postoperative care	Literature searches were conducted for articles on telemedicine and abnormal uterine bleeding, chronic pelvic pain, endometriosis, vaginitis, and postoperative care. Searches were conducted in PubMed, the Cochrane Central Register of Controlled Trials, and the Cochrane Database of Systematic Reviews.	Not performed	Results from a literature search were supplemented with key articles, online society guidelines specific to COVID-19 as of April 20, 2020, and expert consensus from authors. Strength of recommendations: NR	A draft manuscript was made available to the entire Society of Gynecologic Surgeons membership for review and to the Society's Executive Committee for final approval. Feedback was incorporated into the final manuscript.
<b>Rheumatology: APLAR (2022)<sup>6</sup></b>						
<b>Intended Users:</b> Rheumatologists in the Asia Pacific region <b>Target Population:</b> Rheumatology patients and clinicians in the Asia Pacific region	Evidence-based recommendations for telemedicine <sup>c</sup> in rheumatology practice	Primary outcomes included disease remission determined by physician global assessment, disease activity	Systematic literature review of clinical trials (phase I to IV), observational / real-world studies, non-controlled trials, cohort and other	Quality of evidence was graded according to GRADE (ranging from A [highest] to D [very low]) and Oxford Levels of Evidence	Sub-working groups drafted preliminary guidance statements and presented recommendations and supporting evidence. After grading evidence,	NR

Intended users, target population	Intervention and practice considered	Major outcomes considered	Evidence collection, selection, and synthesis	Evidence quality assessment	Recommendations development and evaluation	Guideline validation
		<p>indices, and patient reported outcomes.</p> <p>Secondary outcomes included adverse events, patient satisfaction, drug compliance, drug dosage optimization, improvement in knowledge, attitude, practices, and cost-effectiveness.</p> <p>Other outcomes included latency to diagnosis and latency to rheumatology referral.</p>	<p>comparative studies, case series, and case reports published from database inceptions to May 2021.</p> <p>The search was conducted in MEDLINE/ PubMed, Web of Science and Scopus databases. Only English language articles and conference abstracts were included.</p> <p>Articles were matched according to relevance with each clinical question. Four sub-working groups were assigned with different research questions.</p>	<p>(ranging from 1 [systematic review of randomized trials] to 5 [mechanism-based reasoning]).</p>	<p>the full working group reviewed and generated recommendations.</p> <p>A modified Delphi method was used by a voting group. A consensus was reached for <math>\geq 70\%</math> agreement. After further editing, a second vote took place for recommendation statements that did not reach a consensus in the first round or that had been significantly re-worded.</p> <p>Strength of recommendations: NR</p>	
<b>Rheumatology: ArLAR (2022)<sup>7</sup></b>						
<p><b>Intended Users:</b> Rheumatologists in the Arab region</p> <p><b>Target Population:</b> Population with rheumatology conditions in the Arab region</p>	<p>Best practices for the use of teleconsultation<sup>d</sup> in rheumatology</p>	<p>General principals, best practices guidelines, barriers/ facilitators to telehealth in rheumatology, and practical toolkit for the implementation of telehealth</p>	<p>Literature review to identify available guidelines and studies published between 2001 and 2021.</p> <p>The search was conducted in PubMed and websites of American College of Rheumatology, American Telemedicine</p>	<p>Levels of evidence were indicated according to the Oxford Centre for Evidence-Based Medicine (ranging from 1 [highest] to 5 [lowest]).</p>	<p>Based on the available published guidelines, general principles and best practice statements were drafted by 2 authors. After validation, a multidisciplinary task force convened to assess the Best Practice Guidelines using three</p>	<p>The draft was validated by the core steering committee and reviewed and edited by the ArLAR scientific committee, a law firm advisor, and an American College of Rheumatology telemedicine expert.</p>

Intended users, target population	Intervention and practice considered	Major outcomes considered	Evidence collection, selection, and synthesis	Evidence quality assessment	Recommendations development and evaluation	Guideline validation
			Association, and the WHO. Only articles published in English were included.		rounds of voting by a modified Delphi process. Strength of recommendations: NR	
<b>Cardiovascular conditions: LLKardReha-DACH (2021)<sup>8</sup></b>						
<p><b>Intended users:</b> Exercise-based cardiac rehabilitation clinical practitioners in German speaking countries</p> <p><b>Target population:</b> Telemedical patients</p>	Exercise based cardiac rehabilitation, offered face-to-face or via tele-rehabilitation* facilities, as treatment for secondary prevention of cardiovascular diseases	Physical activity and exercise training in different patient cohorts; Psychological interventions; Patient education; Special patient groups; Telemedical- and home-based- rehabilitation	<p>A steering committee developed the recommendations based on a systematic review and formal consensus.</p> <p>Steps: 1. Content determination by Lead Management and Steering Committee; 2. Selection of leading authors with topic-related expertise; 3. Internal control and reviewing of topic-related chapters; 4. External control and reviewing of topic-related chapters, grading and final approval of recommendations</p> <p>Evidence generation: 1. Topic-related structured literature search and review plus meta-analysis (high</p>	Quality of evidence was assessed in accordance with the GRADE Evidence-to-Decision framework (range or ratings: NR).	<p>The content of the guidelines was defined by the steering committee. The recommendations were based on the scientific evidence derived from the literature and a formal consensus process of all members of the steering committee.</p> <p>Recommendations were “strong” (is [not] recommended [ ] [ ]), “medium” (is [not] suggested [ ] [ ]), or “neutral” (may be considered [ ]).</p> <p>Grading was based on the relevance of outcomes and quality of evidence for each relevant outcome; consistency of study results; directness / applicability of the</p>	External supervision and review by AWMF

Intended users, target population	Intervention and practice considered	Major outcomes considered	Evidence collection, selection, and synthesis	Evidence quality assessment	Recommendations development and evaluation	Guideline validation
			grade) 2. Topic-related semi-structured literature search and review without meta-analysis; recommendations by a predefined, supervised consenting process (medium grade) 3. Topic-related summaries of the most recent scientific guidelines published by medical societies (narrative evidence)		evidence to the target population; PICO specifics; precision of effect estimates regression confidence intervals; magnitude of the effects; balance of benefits and harms; ethical, legal, economic considerations; and patient preferences.	
<b>Cardiovascular conditions: Canadian Stroke Recommendations (2022)<sup>9</sup></b>						
<b>Intended users:</b> Health care professionals <b>Target population:</b> Patients that are managed in a variety of care settings for index ischemic stroke or transient ischemic attack	Reducing the risk of recurrent stroke following an index ischemic stroke or transient ischemic attack through virtual care* for stroke prevention or smoking cessation	Treatable risk factors, evidence-based treatment interventions to minimize risk, patient education, shared decision-making, patient adherence and persistence with treatment recommendations	Systematic review of evidence in the literature to build evidence tables, which were then used for working group discussions	Evidence supporting each recommendation was assigned a level from A (highest) to C (lowest), defined by the working group as: A: Evidence from a meta-analysis of RCTs or consistent findings from two or more RCTs. B: Evidence from a single RCT or	An interdisciplinary group of experts was convened and participated in reviewing, drafting, and revising all recommendation statements. A panel of people with lived experience participated in a parallel review process. Strength of recommendations: NR	Guidelines underwent extensive internal review and objective external review. Consensus was achieved for all content.

Intended users, target population	Intervention and practice considered	Major outcomes considered	Evidence collection, selection, and synthesis	Evidence quality assessment	Recommendations development and evaluation	Guideline validation
				<p>consistent findings from two or more well-designed non-randomized and/or noncontrolled trials, and large observational studies</p> <p>C: Writing group consensus and/or supported by limited research evidence. When developing “C-Level” recommendations, consensus was obtained within the group and validated through the internal and external review process.</p>		
<b>ENT: ENT guideline (2021)<sup>10</sup></b>						
<p><b>Intended users:</b> ENT practitioners (otorhinolaryngologists), other health care staff</p> <p><b>Target population:</b> Patients requiring ENT treatments</p>	<p>Teleconsultation* protocols for ENT practitioners during the COVID-19 pandemic</p>	<p>COVID-19 protocol for all practicing doctors in ENT; aimed not to hamper their routine practice while protecting them from exposure to the COVID-19 virus</p>	<p>Systematic review and meta-analysis of the available studies on ENT practice during pandemic with an emphasis on ENT outpatient department, emergency, and ENT doctors.</p> <p>Search was conducted</p>	NR	NR	NR

Intended users, target population	Intervention and practice considered	Major outcomes considered	Evidence collection, selection, and synthesis	Evidence quality assessment	Recommendations development and evaluation	Guideline validation
			in PubMed and Google Scholar. Keywords: COVID-19, SARS-CoV-2, otorhinolaryngology, and ENT			
<b>Pain: COVID-19 pain guideline (2020)<sup>11</sup></b>						
<p><b>Intended users:</b> Physicians and health care providers for patients with pain during COVID-19</p> <p><b>Target population:</b> Chronic pain patients</p>	Potential practice implications based on either the pathology or nature of chronic pain treatment and the use of telehealth/telemedicine <sup>e</sup>	Continuity of care and pain medications, especially opioids; use of telemedicine; maintaining biopsychosocial management; use of anti-inflammatory drugs; use of steroids; and prioritizing necessary procedural visits	A systematic search was conducted in Medline using keywords: 'COVID-19' (*Coronavirus Infections/or *SARS Virus/or SARS.mp. or *Coronavirus/or *Severe Acute Respiratory Syndrome/COVID-19) and 'chronic pain/pain. Next, an expert panel of physicians and psychologists formulated practice recommendations.	NR	Physicians and psychologists (with experience/training in clinical research) who had previously participated in formulating guideline statements and practice recommendations developed themes and recommendations based on the literature. Strength of recommendations: NR	NR
<b>Substance use: DoD substance use guideline (2022)<sup>12</sup></b>						
<p><b>Intended users:</b> Clinical practitioners that manage substance use disorders</p> <p><b>Target population:</b> Patients with substance use disorder within the US Department of VA veterans</p>	Management of alcohol use disorder, use of buprenorphine in opioid use disorder, contingency management, and use of technology and telehealth* to	Screening and brief alcohol intervention, treatment setting, stabilization and withdrawal, treatment, group mutual help involvement, mindfulness-based	An independent third party (ECRI) did a systematic evidence review that the guideline panel used to develop recommendations.	The quality of evidence was assessed using GRADE (range or ratings: NR).	In conjunction with VA and DoD leadership, the Work Group selected a multidisciplinary panel of practicing clinicians and treatment researchers to update the guidelines. Through a consensus process,	NR

Intended users, target population	Intervention and practice considered	Major outcomes considered	Evidence collection, selection, and synthesis	Evidence quality assessment	Recommendations development and evaluation	Guideline validation
and the US DoD active-duty personnel	manage patients remotely	therapies, and telehealth			12 key questions were framed to guide the evidence review.  Strength of the recommendations was reported as “strong for”, “weak for”, or “neither for nor against”.	

AWMF = Association of the Scientific Medical Societies in Germany; APLAR = Asia Pacific League of Associations for Rheumatology; ArLAR = Arab League of Associations for Rheumatology; ASCO = American Society of Clinical Oncology; CCO = Cancer Care Ontario; Canadian Stroke = Canadian Stroke Best Practice Recommendations; COVID-19 = coronavirus disease 2019; DoD = Department of Defense; ECRI = Emergency Care Research Institute; ENT = Ear, nose and throat; GRADE = Grading of Recommendations, Assessment, Development and Evaluations; MiPATH = Michigan Plan for Appropriate Tailored Health care in pregnancy; NR = Not reported; PICO = Population, Intervention, Control, Outcome; RAND-UCLA = research and development – University of California, Los Angeles; RCT = randomized controlled trial; VA = Veterans Affairs; WHO = WHO.

\*Definition not reported

<sup>a</sup>Defined as the “interaction between patients and health care providers, occurring remotely, using any forms of communication or information technologies (computer, phone (either landline or cellular)), with the aim of facilitating or maximizing the quality and effectiveness of patient care” (p.4)<sup>2</sup>

<sup>b</sup>Defined as the technology used to connect a patient to provider to administer care through telephone or video interactions (p.289)<sup>5</sup>

<sup>c</sup>Defined as “the delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities” (p.248)<sup>6</sup>

<sup>d</sup>Defined as the “synchronous exchange of medical information between a patient and a rheumatologist via audio or audiovisual electronic communication, to improve the patient’s health status” (p.381).<sup>7</sup>

<sup>e</sup>Defined as follows: “Telehealth and telemedicine are related terms that define telecommunication and the electronic exchange of information through a variety of platforms. This includes such services as: telehealth visits; virtual encounters; and e-visits.”(p.938)<sup>10</sup>

## **Guideline Development Process**

### **Oncology**

Two reports on a single guideline developed by Ontario Health (Cancer Care Ontario [CCO])<sup>1</sup> reflected a clinical guideline for person-centred virtual cancer care in oncology. Authors developed recommendations based on a systematic review of published and grey literature followed by a Delphi consensus process. The papers did not report on guideline validation, the quality of evidence, or strength of the recommendations.

The American Society of Clinical Oncology (ASCO) Standards and Practice Recommendations for telehealth in oncology<sup>3</sup> considered evidence from a literature search combined with an expert panel consensus. Authors conducted a systematic literature search for relevant systematic reviews or primary studies following an initial scoping review and consensus on oncology-specific topics. Authors used a variety of instruments (e.g., adaptation of Critical Appraisal Skill Program checklist for qualitative research; modified Hawker et al. tool; adapted Cochrane Collaboration Back Review Group Checklist; GRADE; Cochrane risk of bias tool; Downs and Black checklist) to assess the quality of included studies. Following the literature search and expert panel consensus, authors allowed a 2-week period for the public to review and comment. The paper did not report on the quality of evidence or strength of the recommendations. An expert panel, ASCO Quality of Care Council, and the ASCO Board of Directors subsequently reviewed the Standards.

### **Obstetrics/Gynecology**

The Michigan Plan for Appropriate Tailored Health care in Pregnancy (MiPATH) recommendations<sup>4</sup> is a guide for maternity care clinicians. To develop the recommendations, a panel of developers used the RAND-UCLA process,<sup>13</sup> which is a Delphi approach that combined expert opinion with existing evidence synthesized through a systematic rapid review. The paper did not report on guideline validation, the quality of evidence, or strength of the recommendations.

Guidance for Gynecologists<sup>5</sup> considered evidence from a systematic rapid literature review and an expert consensus. The authors did not assess the quality of evidence or strength of the recommendations, as this was a rapid review process. The Society of Gynecologic Surgeons' membership and the Society's executive committee reviewed the draft manuscript and provided feedback for the final version.

### **Rheumatology**

The Asia Pacific League of Associations for Rheumatology (APLAR) guideline<sup>6</sup> focused on the practice of telemedicine in rheumatology. The authors conducted a systematic literature review and considered evidence from randomized controlled trials and observational studies. The authors used GRADE (ranging from A [highest] to D [very low]) to appraise quality of evidence, and the Oxford Levels of Evidence (ranging from 1 [systematic review of randomized trials] to 5 [mechanism-based reasoning]) to appraise the level of evidence. They developed recommendations using a modified Delphi technique to establish consensus, and when evidence was limited, recommendations were from clinical expertise and practical experience of working group members. The paper did not report on guideline validation or the strength of the recommendations.

The Arab League of Associations for Rheumatology (ArLAR) Best Practice Guideline<sup>7</sup> for telehealth in rheumatology, considered evidence from a literature review of available guidelines and studies. The Oxford Centre for Evidence Based Medicine (ranging from 1



[highest] to 5 [lowest]) appraised the levels of evidence (LOEs). Two authors drafted general principles and best practice statements, based on the available literature. A multidisciplinary task force then assessed the guideline using a modified Delphi process. A core steering committee validated the final draft, and subsequently another committee, advisor, and expert reviewed the draft. The paper did not report on the strength of the recommendations.

### **Cardiovascular Conditions**

The Cardiac Rehabilitation Guidelines of German Speaking Countries in Europe (LLKardReha-D-A-CH)<sup>8</sup> consisted of an evidence-based guideline for exercise-based cardiac rehabilitation in German speaking countries of Europe. A steering committee developed the recommendations based on a systematic review and formal consensus. The committee categorized the strength of the recommendations as strong, medium, or neutral based on the scientific evidence from the literature and a formal consensus process of all members, in accordance with the GRADE Evidence-to-Decision framework. The Association of the Scientific Medical Societies in Germany conducted external supervision and review.

The Canadian Stroke Best Practice Recommendations<sup>9</sup> consisted of evidence-based recommendations for secondary prevention of stroke. An interprofessional expert group developed the recommendations based on a systematic literature search. The working group developed a table of criteria to assess the quality of evidence supporting each recommendation (ranging from A [highest] to C [lowest]). Internal and external reviewers subsequently reviewed the recommendations to achieve consensus for all content. The paper did not report on the strength of the recommendations.

### **Other**

The ENT practice guideline<sup>10</sup> consisted of a protocol for ENT practitioners during the COVID-19 pandemic. The authors conducted a systematic review and meta-analysis of the available literature on ENT practice during the pandemic. The paper did not report on the recommendations' development and evaluation, guideline validation, quality of evidence, or the strength of the recommendations.

The recommendations for caring for patients with pain during COVID-19<sup>11</sup> considered evidence from a systematic literature review and an expert consensus. The paper did not report on guideline validation, quality of evidence, or strength of the recommendations.

The Department of Defense (DoD) substance use guideline<sup>12</sup> considered evidence from an independent third-party systematic literature review and an expert consensus. The authors used GRADE (range not reported) to appraise the quality of evidence. The strength of recommendations was reported as "strong for", "weak for", or "neither for nor against". The paper did not report on guideline validation.

### ***Country of Origin***

The ASCO recommendations,<sup>3</sup> MiPATH Recommendations,<sup>4</sup> guidance for gynecologists using telemedicine during COVID-19 pandemic,<sup>5</sup> and DoD substance use guideline<sup>12</sup> are for use in the US.

The Canadian Stroke Recommendations<sup>9</sup> are for use in Canada, and the Ontario Health (CCO)<sup>1</sup> guideline is for use in Ontario, Canada specifically.

The LLKardReha-DACH guideline for cardiology<sup>8</sup> are for use in German-speaking countries of Europe (e.g., Germany, Austria, Switzerland).

The APLAR guideline<sup>6</sup> are for clinical practice in the Asia Pacific region; the ArLAR guideline<sup>7</sup> are for use in the Arab region; and the ENT guideline<sup>10</sup> are for use in India. An international panel of experts from the US, Canada, the UK, Netherlands, and Portugal developed recommendations for caring for patients with pain during COVID-19.<sup>11</sup>

## ***Target Population and Intended Users***

### **Oncology**

The target population for the Ontario Health (CCO)<sup>1</sup> guideline is for patients in the Ontario cancer system receiving virtual care, and the intended users are any health care professional involved in providing oncology virtual care.

The target population for the ASCO recommendations<sup>3</sup> is individuals undergoing diagnosis, treatment, survivorship, or palliative care for cancer. The intended users are oncologists, nurses, advanced practice providers, allied health professionals, and administrators involved in cancer care delivery.

### **Obstetrics/Gynecology**

The target population for the MiPATH Recommendations<sup>4</sup> is pregnant patients and their infants. The intended users are clinicians caring for pregnant patients and their infants.

The target population for the guidance for gynecologists using telemedicine during COVID-19 pandemic<sup>5</sup> is outpatient gynecology patients, and the intended users are gynecologists.

### **Rheumatology**

The target population for the APLAR guideline<sup>6</sup> is rheumatology patients in the Asia Pacific region, and the intended users are clinicians in that region.

The target population for the ArLAR guideline<sup>7</sup> is patients with rheumatology conditions in the Arab region, and the intended users are rheumatologists in that region.

### **Cardiovascular Conditions**

The target population for the LLKardReha-DACH guideline<sup>8</sup> is telemedical patients, and the intended users are exercise-based cardiac rehabilitation clinical practitioners in German-speaking countries.

The target population for the Canadian Stroke Recommendations<sup>9</sup> is patients that are managed in a variety of care settings for an index ischemic stroke or a transient ischemic attack. The intended users are health care professionals.

### **Other**

The target population for the ENT guideline<sup>10</sup> is patients requiring ear, nose, and throat treatments, and the intended users are ENT practitioners (otorhinolaryngologists) and other health care staff.

The target population for the recommendations for caring for patients with pain during the COVID-19 pandemic<sup>11</sup> is chronic pain patients. The intended users are physicians and health care providers for patients with pain during COVID-19.

The target population for the DoD substance use guideline<sup>12</sup> is patients with substance use disorders within the US Department of Veterans Affairs veterans and US Department of

Defense active-duty personnel. The intended users are clinical practitioners that manage substance use disorders.

## ***Virtual Care Interventions***

### **Oncology**

The Ontario Health (CCO)<sup>1,2</sup> guideline considered person-centred virtual cancer care, where virtual care was defined as the “interaction between patients and health care providers, occurring remotely, using any forms of communication or information technologies (computer, phone (either landline or cellular)), with the aim of facilitating or maximizing the quality and effectiveness of patient care” (p.4).<sup>2</sup>

The ASCO recommendations<sup>3</sup> considered interventions for telehealth in oncology; the paper did not report the definition for telehealth.

### **Obstetrics/Gynecology**

The MiPATH Recommendations<sup>4</sup> considered telemedicine in routine prenatal care. The paper did not report the definition for telemedicine.

The guidance for gynecologists using telemedicine during COVID-19 pandemic considered management of common outpatient gynecology scenarios via telemedicine, which was defined as “technology used to connect a patient to provider to administer care through telephone or video interactions” (p.289).<sup>5</sup>

### **Rheumatology**

The APLAR guideline<sup>6</sup> considered telemedicine in rheumatology practice, where telemedicine was defined as “the delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities” (p.248).<sup>6</sup>

The ArLAR guideline<sup>7</sup> considered best practice interventions for teleconsultation in rheumatology, where teleconsultation was defined as the “synchronous exchange of medical information between a patient and a rheumatologist via audio or audiovisual electronic communication, to improve the patient's health status” (p.381).<sup>7</sup>

### **Cardiovascular Conditions**

The LLKardReha-DACH cardiac guideline<sup>8</sup> considered exercise-based cardiac rehabilitation, offered face-to-face or via tele-rehabilitation facilities, as a treatment for secondary prevention of cardiovascular diseases. The paper did not report the definition for tele-rehabilitation.

The Canadian Stroke Recommendations<sup>9</sup> considered ways to reduce the risk of recurrent stroke following an index ischemic stroke or transient ischemic attack through virtual care for stroke prevention or smoking cessation. The paper did not report the definition for virtual care.

### **Other**

The ENT guideline<sup>10</sup> considered teleconsultation protocols for ENT practitioners during the COVID-19 pandemic. The paper did not report the definition for teleconsultation.

The recommendations for caring for patients with pain during the COVID-19 pandemic<sup>11</sup> considered potential practice implications based on the pathology or nature of chronic pain treatment and the use of telehealth/telemedicine, where telemedicine was defined as “telehealth and telemedicine are related terms that define telecommunication and the electronic exchange of information through a variety of platforms. This included such services as: telehealth visits; virtual encounters; and e-visits.” [p.938]<sup>11</sup>

The DoD substance use Guideline<sup>12</sup> considered the management of alcohol use disorder, use of buprenorphine in opioid use disorder, contingency management, and the use of technology and telehealth to manage patients remotely. The paper did not define telehealth.

## ***Outcomes Considered When Developing Recommendations***

### **Oncology**

The Ontario Health (CCO)<sup>1</sup> guideline considered demographics, logistics, implementation, diagnosis, prognosis, clinical characteristics, active management, and follow-up in virtual care. The Ontario Health (CCO) report also described considering factors essential for quality-driven, person-centred cancer care; clinical and non-clinical characteristics that make patients suitable for virtual care; relative contraindications to virtual cancer care; and virtual care variations in different stages of cancer care.<sup>2</sup>

The ASCO recommendations<sup>3</sup> considered the outcomes of in-person versus telehealth visits on patient outcomes, workflow and implementation considerations for telehealth applications, patient selection, standards, establishing physician patient relationship, the roles of advanced practice providers and allied health professionals in oncology telehealth interventions, virtual multidisciplinary cancer conferences, and teletrials and/or virtual participation in oncology clinical trials.

### **Obstetrics/Gynecology**

The MiPATH Recommendations<sup>4</sup> considered important changes in prenatal care delivery during the COVID-19 pandemic, pre-existing knowledge of the importance of individualized care plans, the potential of telemedicine, and the influence of social and structural determinants of health on pregnancy outcomes.

The guidance for gynecologists using telemedicine during COVID-19 pandemic<sup>5</sup> considered the management of common outpatient gynecology scenarios, such as abnormal uterine bleeding, chronic pelvic pain and endometriosis, vaginal discharge and vaginal infections, and postoperative care via telemedicine.

### **Rheumatology**

The primary outcomes considered within the APLAR guideline<sup>6</sup> were disease remission, disease activity indices, and patient-reported outcomes. Secondary outcomes included adverse events, patient satisfaction, drug compliance, drug dosage optimization, improvement in knowledge, attitude, practices, and cost-effectiveness. Additional outcomes were latency to diagnosis and latency to rheumatology referral.

The outcomes considered within the ArLAR guideline<sup>7</sup> included the main barriers and facilitators to telehealth in the Arab region, general principles, best practice guideline, and a practical toolkit for implementing telehealth services in rheumatology clinics.

### Cardiovascular Conditions

The LLLKardReha-DACH cardiac guideline<sup>8</sup> considered physical activity and exercise training, psychological interventions, patient education, special patient groups, and telemedical- and home-based-rehabilitation.

The Canadian Stroke Recommendations<sup>9</sup> considered treatable risk factors, evidence-based treatment interventions to minimize risk, patient education, shared decision-making, and patient adherence and persistence with treatment recommendations.

### Other

The ENT guideline<sup>10</sup> considered strategies (teleconsultation and other non-virtual practices) for all practicing ENT doctors to conduct their regular practice while protecting themselves from exposure to the virus during the COVID-19 pandemic.

The recommendations for caring for patients with pain during COVID-19<sup>11</sup> considered continuity of care and pain medications (especially opioids), use of telemedicine, maintaining biopsychosocial management, use of anti-inflammatory drugs, use of steroids, and prioritizing necessary procedural visits.

The DoD substance use guideline<sup>12</sup> considered screening and brief alcohol intervention, treatment setting, stabilization and withdrawal, treatment, group mutual help involvement, mindfulness-based therapies, and telehealth.

### Summary of Recommendations

This section summarizes the recommendations provided by the 11 included guidelines. [Table 7](#) provides the recommendations.

#### *Recommendations for Oncology Practice*

Two guidelines (based on 3 reports<sup>1-3</sup>) provided recommendations or standards for oncology practice on different aspects of virtual care. The publications did not report on the strength of the recommendations or quality of evidence informing the recommendations.

**Clinical practice recommendations:** The Ontario Health (CCO)<sup>1</sup> guideline recommended use of video over telephone, if available, and paying attention to camera placement, purpose of the conversation, introductions, visual aids sharing, and teach-back techniques. The guideline recommended in-person appointments if physical examinations and/or investigations essential for diagnosis/prognosis, symptom management, and/or choice of treatment could not be obtained through a virtual appointment. They also recommended that patients seen virtually should also be referred for clinical trial eligibility assessment. For surgical cancer patients, radiation oncology patients, and medical and hematological oncological patients, the guideline recommended that the first appointment should be in-person if there is a requirement for physical examination or other in-person investigations. They indicated further that virtual care is suitable for surgical planning and post-operative/treatment follow-up of patients, when appropriate. For patients living in remote areas, the guideline indicated that virtual surgical care consultations are only appropriate if the surgeon is able and willing to utilize the assessment from physical examinations performed by local health care providers. Additionally, the guideline recommended the use of virtual care for symptom and pain management, nutrition assessment, drug toxicity, psychosocial factors, and exercise prescriptions and to communicate a diagnosis, investigations (e.g., results of staging, blood tests) and prognosis.

**Table 7: Summary of Recommendations in Included Evidence-Based Guidelines**

Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
<b>Oncology: Ontario Health (CCO) (2022)<sup>1</sup></b>	
<p><b>Consensus statements on the following:</b>  <b>“Demographics, implementation, and logistics</b>  Demographics and Implementation</p> <ul style="list-style-type: none"> <li>• A1a. All patients should be considered and, if clinically feasible, offered the option of virtual cancer care regardless of demographics (e.g., gender, race/ethnicity, language spoken, income, education, rurality, physical and/or mental disabilities, indigenous identity). Special effort should be made toward patients without good access to technology, or those who are uncomfortable with using technology.</li> <li>• A1b. It is recommended that resources be created and disseminated to all health care providers and patients to overcome barriers to virtual cancer care. These can include written, video, and/or verbal guidance provided by a member of the oncology team (e.g., clinical administrator) in advance of the virtual visit or point of care resources.</li> <li>• A1c. Efforts should be made to ensure that virtual cancer care systems are made as easily accessible as possible. For example, health care providers and/or patients who may not have easy access to computer/internet platforms should be provided the option for a telephone visit instead, where appropriate.</li> <li>• A1d. One suboptimal or unsuccessful technology encounter does not exclude a patient from future technology encounters as long both patient and provider deem clinically and logistically feasible.</li> <li>• A1e. Caregivers are encouraged to attend virtual visits, especially for patients with language barriers, self-reported lack of comfort with teleoncology, hearing impairment, or cognitive impairment, it may be helpful to organize a family member to be on the teleoncology encounter at the same time. Health care providers should ensure patient privacy and consent is obtained to discuss details of their care with additional persons.</li> <li>• A1f. A pre-determined and dedicated time period should be allocated for virtual visits. Both health care providers and patients should ensure an environment that is distraction free and provides confidentiality.</li> <li>• A1g. Adequate time for health care providers before and following a virtual care visit should be planned as additional steps (e.g., electronic requests for outside labs, imaging, prescriptions) may increase the amount of time required per visit.</li> </ul> <p>Equipment and Environment</p> <ul style="list-style-type: none"> <li>• A2a. Health care providers should have access to reliable internet connection and an electronic device (e.g., computer, tablet, or smartphone) if using video technology for virtual care.</li> <li>• A2b. Back-up systems, such as telephone (landline or cellular), should be available during virtual care visits, should technical difficulties arise. Landline telephone is preferred for call quality/stability, if available. If not, then cellular/mobile phone can be used.</li> <li>• A2c. All visits should be documented using the same standards as in-person.</li> <li>• A2d. Documentation should state that the visit was carried out virtually and that the patient has consented to a virtual assessment, understanding the limitations of virtual visits, including lack of physical examination.</li> </ul>	<p>NR</p>

Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
<ul style="list-style-type: none"> <li>• A2e. Electronic medical record systems that allow health care providers to access system-wide investigations (including biochemical, radiological, pathological data—that may have been completed outside the institution) and relevant documentation are critical to facilitate virtual visits with patients.</li> <li>• 2f. To optimize the delivery of virtual cancer care, health care providers and patients should have access to training options (e.g., teleoncology modules and programs). This training should be supported and disseminated by institutions, provincial entities, and/or in collaboration with other virtual cancer care networks (e.g., Ontario Telehealth Network).</li> <li>• A2g. If video-based technologies are not available and/or if telephone communication is preferred by health care providers and/or patients, then telephone communication may be reasonable.</li> </ul> <p><b>Collaborative and Interdisciplinary Care</b></p> <ul style="list-style-type: none"> <li>• A3a. Multidisciplinary tumour boards and case conferences involving medical oncologists, surgeons, radiation oncologists, general practitioners, radiologists, pathologists, nursing, pharmacists, and allied health professionals are feasible and should remain standard of care for discussing cancer patients. Confidential and secure platforms should be chosen to host conferences and discussions as per standards. A3b. Involvement of local health care providers in teleoncology encounters should be supported, if possible and available. Administrative support may be required.</li> </ul> <p><b>Local Health Care Resources</b></p> <ul style="list-style-type: none"> <li>• A4a. If a care plan is initiated via virtual platforms, a health care provider must be available at the treatment centre to guide and support treatments (e.g., chemotherapy and infusion reactions).</li> <li>• A4b. Delivery of virtual cancer care should include efforts to link patients with local laboratory (i.e., blood test) and/or imaging services when appropriate. However, test results should be available to the health care provider and comparable to previous investigations (e.g., comparing imaging scans at follow up visits). If not available, then testing should be carried out at the health care provider's institution. To ensure this is completed in an efficient manner, administrator support is encouraged.</li> <li>• A4c. Access to primary care and emergent care must be included in the discussion of risks and benefits of virtually managed cancer care. Patients receiving virtual cancer care should be counselled on possible risks specific to their care (e.g., chemotherapy toxicity, lymphedema, post-surgical complications) and cancer (e.g., visceral crisis) and appropriate avenues to reach care. Therefore, we encourage that the patient's local health care provider is made aware of ongoing cancer care and that patients are aware of local resources in the event of complications." (p.5335 to 5337)<sup>1</sup></li> </ul> <p><b>"Diagnosis and prognosis</b></p> <p><b>Preparation</b></p> <ul style="list-style-type: none"> <li>• B1a. Prior to and during virtual cancer care visits (especially initial consultation), health care teams are encouraged to assess the patient's ability to understand, process and follow up on the communication of health information delivered virtually (digital and/or over the telephone).</li> <li>• B1b. When clinically appropriate, patient preferences regarding method of communication (phone, videoconference, in person) to hear diagnostic and</li> </ul>	

Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
<p>prognostic information should be understood by the health care provider before diagnosis/prognosis is conveyed. Moreover, effort should be made to have a caregiver present, depending on patient preference.</p> <ul style="list-style-type: none"> <li>• B1c. When there is uncertainty about definitive diagnosis and/or prognosis, collaborating among health care providers/disciplines should occur before telecommunication with the patient such that a clear plan of care can be shared virtually.</li> <li>• B1d. If after collaboration uncertainty is still present, a clear plan should be constructed to communicate to the patient how this uncertainty will be clarified. This plan can be communicated virtually to the patient by one or more health care providers involved.</li> </ul> <p>Communication</p> <ul style="list-style-type: none"> <li>• B2a. The discussion of initial cancer diagnosis and prognosis may occur over virtual care platforms, if that would meet the needs of the patient (e.g., more timely discussions, better family support or patient inability to travel). <i>In addition to in-person standards of communication (e.g., ensuring caregiver and/or supports are available), key elements of an effective virtual interaction regarding cancer diagnosis include (but are not limited to):</i></li> <li>• B2b. Use of video over telephone, if available</li> <li>• B2c. Placement of camera should be at eye level so that the health care provider does not appear above the patient.</li> <li>• B2d. Explain at the outset that the conversation is about diagnosis and next steps.</li> <li>• B2e. Introduce all health care providers present and ask for an introduction of all family/friends that are part of the virtual conversation.</li> <li>• B2f. If using video-based platforms (that allow sharing digital information on the screen) to conduct a virtual visit, virtual aids that complement the discussion (e.g., imaging, pathology reports, prediction tool outputs) can be shared with the patient, depending on patient preference and feasibility.</li> <li>• B2g. Allow for pauses for question asking and answering.</li> <li>• B2h. Confirm understanding using the teach back method (i.e., ask patient to explain plan back to the health care provider).</li> </ul> <p>Communication of Treatment Plans</p> <ul style="list-style-type: none"> <li>• B2i. Plan for the interaction and have information on hand that you anticipate patients may ask (e.g., avenues for treatment access, potential start dates, treatment delivery site).</li> <li>• B2j. Discuss and execute referrals to other services dependent on patient need and treatment plan, e.g., social work, nursing, pharmacy, drug reimbursement or dietician.</li> <li>• B2k. Include prognosis information as part of the discussion in accordance with patient preference</li> <li>• B2l. All interactions about diagnosis and prognosis should be supplemented with educational material (e.g., drug information sheets, disease information, written care plan), and an avenue (e.g., incoming phone line, patient portal, follow up appointment, email) should be provided for questions after review of information and literature.</li> </ul> <p>New diagnoses and prognoses with anticipated limited life expectancies</p>	



Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
<ul style="list-style-type: none"> <li>• B3a. The health care provider should exercise discretion as to whether to convey a metastatic/palliative diagnosis virtually or in-person. The provider should consider the nature of the patient/provider relationship, the expected response to the metastatic/palliative diagnosis, as well as the level of support available to the patient. <i>Exceptions to this statement may include:</i></li> <li>• B3b. Situations where there is urgency to initiate treatment and virtual care facilitates expediency.</li> <li>• B3c. The patient has a high symptom burden where they cannot physically attend appointment.</li> <li>• B3d. A virtual interaction enables a local health care provider to be part of the interaction, where they will be key in co-managing patients and treatment moving forward.” (p. 5338 to 5339)<sup>1</sup></li> </ul> <p><b>“Clinical characteristics, active management, and follow-up</b></p> <p>General Clinical Considerations</p> <ul style="list-style-type: none"> <li>• C1a. If physical examinations and/or investigations (e.g., bloodwork, imaging, pathology) essential for diagnosis/prognosis, symptom management, and/or choice of treatment could not be obtained through a virtual consult, an in-person face-to-face consult is required.</li> <li>• C1b. Appropriateness of engaging individual patients in virtual care visits for active management depends on the health care provider, as well as patient preference when clinically appropriate.</li> <li>• C1c. Both curative and non-curative intent virtual management of patients with cancer is appropriate, unless in-person assessment is required by either the health care provider or the patient.</li> <li>• C1d. When available (depending on treatment centre infrastructure), allied health care (e.g., nursing, pharmacy, social work) support should be offered to ensure optimal patient care.</li> <li>• C1e. General practitioners who actively follow your patients with cancer should be engaged in the virtual discussions, if possible and appropriate, to facilitate optimal longitudinal patient care.</li> <li>• C1f. Health care providers using virtual assessment tools should ensure patients are assessed at the same frequency of visits as in-person assessments.</li> <li>• C1g. Patients assessed virtually should still be referred for clinical trial eligibility where appropriate.</li> <li>• C1h. Virtual care could be used for cancer prevention, symptom and pain management, and the assessment of nutrition, drug toxicity, and psychosocial factors (e.g., psychological counselling, activities of daily living, etc.).</li> <li>• C1i. Virtual follow-up visits that require discussion about recurrent or progressive disease and/or change of treatment due to treatment failure should prompt the health care provider to request that the patient be accompanied on the telephone or video conference by a caregiver.</li> </ul> <p>Surgical Oncology</p> <ul style="list-style-type: none"> <li>• C2a. First consultations with potential surgical cancer patients should be held in-person if there is a requirement for formal physical examination of relevant organ system or other in-person investigations. Otherwise, virtual consult is appropriate.</li> <li>• C2b. Surgical planning and post-operative follow up of patients with cancer</li> </ul>	

Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
<p>could be conducted virtually, either when no additional physical examinations or investigations (e.g., bloodwork, imaging, pathology) are needed, or when these examinations and investigations could be completed locally for patients living in remote areas. In the latter case, such consultations are only appropriate if the surgeon is comfortable with the extent of physical examinations performed by local health care providers and their experiences and skills.</p> <ul style="list-style-type: none"> <li>• C2c. Post-surgical patients can be assessed virtually unless the need for wound assessment and/or physical examination is required to provide optimal care. If virtual care is performed, we recommend engaging in homecare to patients with active wound issues (i.e., wound care).</li> </ul> <p>Radiation Therapy</p> <ul style="list-style-type: none"> <li>• C3a. First consultations with potential radiation oncology cancer patients should be held in person if formal physical examination of relevant organ system is necessary. Otherwise, virtual care is appropriate.</li> <li>• C3b. Patients on surveillance or observation following definitive radiation therapy with curative intent can be followed virtually, unless symptoms arise on review of systems that trigger an in-person assessment. Engagement of allied health and family health care providers is recommended.</li> <li>• C3c. Discussion of radiation treatments can be conducted virtually, as long as there is no requirement for an in-person assessment.</li> </ul> <p>Medical Therapy</p> <ul style="list-style-type: none"> <li>• C4a. First consultations with potential medical and hematology oncology cancer patients should be held in-person for formal physical examination of relevant organ systems and/or any pre-treatment procedures, if necessary. If not, then virtual assessment is appropriate.</li> <li>• C4b. Patients with cancer receiving active systemic anti-cancer therapy (IV and/or oral) can be followed virtually. However, if assessment of tumour lesion is necessary (e.g., neoadjuvant breast cancer treatment), an in-person visit should be facilitated.</li> <li>• C4c. Patients on surveillance/observation following definitive systemic therapy with curative intent can be followed virtually, unless symptoms arise on review of systems that trigger an in-person assessment. Engagement of locally accessible health care providers is recommended to arrange in-person physical examinations if indicated.</li> <li>• C4d. Decisions to continue or discontinue systemic treatments that have been previously initiated could be made virtually, if deemed appropriate by health care provider and patient</li> </ul> <p>Survivorship</p> <ul style="list-style-type: none"> <li>• C5a. Cancer survivors under surveillance following curative intent treatment can be safely followed using virtual platforms unless physical examination is indicated and/or required.</li> <li>• C5b. Virtual inclusion and engagement with family medicine providers can be considered to optimize surveillance.</li> <li>• C5c. Primary care providers and cancer survivors should be <i>formally</i> notified, in a survivorship care plan or similar document, of the transition to virtual survivorship care.</li> </ul> <p>Remote and Rural Communities</p>	

Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
<ul style="list-style-type: none"> <li>• C6a. Virtual care could be used for urgent consultation for distant patients who are either unable to visit a specialist in a timely manner or the severity of their symptoms prevent them from travelling long distances. Such visits could be accompanied by the attendance of local health care professionals (e.g., nurses, GPs, etc.).” (p. 5340 to 5341)<sup>1</sup></li> </ul>	
<b>Oncology: ASCO (2021)<sup>3</sup></b>	
<p><b>“1. Patient selection and implementation of telehealth in oncology</b></p> <p><b>Standard 1.1:</b> Where appropriate infrastructure and personnel are available, telehealth via telephone or videoconferencing, delivered by health professionals who are certified and participating in routine maintenance of certification activities, is a reasonable option for:</p> <p>Treatment or long-term management</p> <ul style="list-style-type: none"> <li>• New patient consultations...may be followed by face-to-face visits; Medication prescribing and management; Prechemotherapy or other pretherapy evaluations; Acute care issues that could be addressed via routine outpatient care rather than emergency department visits and admissions; Discussion of results, such as laboratory and imaging studies; Supportive care visits including financial, social work, and nutrition visits; Oral drug compliance and adherence evaluations; Distress screening and interventions; Chronic care management; Patient education on chemotherapy and other treatments; Counseling; Management of long-term treatment; Post discharge coordination, supported by remote monitoring capabilities; Routine follow-up; Survivorship visits; Wellness interventions; Palliative care, including hospice consults and follow-up visits; Advance care planning visits.</li> </ul> <p>Others</p> <ul style="list-style-type: none"> <li>• When care access issues exist; Consent form discussions pre research trials before signatures; Family conferences when multiple family members would like to join and patient desires; Genetic counseling visits and evaluations; Second opinion evaluations to facilitate treatment in a timely manner</li> </ul> <p>In-person consultations may be preferred by clinicians and/or patients for:</p> <ul style="list-style-type: none"> <li>• Initial consultations; Initial delivery of antineoplastic treatment; Delivery of key information, including new cancer diagnosis or treatment plan, disease relapse or progression, and no further cancer treatment decisions; Complex cancer needs as identified by the health care provider; Physical examination for diagnosis or follow-up (However, where the necessary infrastructure is in place, physical examinations may be performed by local health professionals during a teleconsultation or findings from an examination may be summarized in a referral communication to a specialist before the telehealth appointment. In addition, some components of the physical examination might be achieved through telehealth.); Patients with hearing, vision, or cognition limitations for whom there are no alternative support or technologies available to assist in telehealth encounters; Patients with inadequate broadband, limited technological capacity, or lower levels of health literacy.</li> </ul> <p><b>Standard 1.2:</b> Diagnosis via asynchronous transmission of images:</p> <ul style="list-style-type: none"> <li>• Skin lesions can be evaluated with sufficient diagnostic accuracy through the asynchronous transmission of images, which may facilitate more timely diagnosis.</li> </ul> <p><b>Standard 1.3:</b> Practices should develop policies and procedures that outline preferred frequency of telehealth vs. in-person visits during the cancer care continuum and consider patient preferences. Frequency of telehealth vs. in-person visits may evolve</p>	<p>NR</p>

Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
<p>as outcome or impact data become available.</p> <p><b>Standard 1.4:</b> All clinical visits conducted via telehealth should be documented, including but not limited to the following information:</p> <ul style="list-style-type: none"> <li>• Has the patient agreed to the telehealth visit (yes or no)?; Date of visit; Location of the visit (health provider office or other location); Participants attending the visit; Location of the patient and other caregivers present (home or other location); Type of visit (audio only or audio and video); Was the telehealth visit completed (yes or no)?</li> </ul> <p><b>Standard 1.5:</b> Before participation in telehealth visits, individualized orientation should be provided to patients and health care professionals for the specific type of technology that will be used to deliver the intervention (e.g., mobile phone, web-based, etc.) on topics including but not limited to instructions to access the platform, navigation of the platform, and provider-specific instructions on the video if needed to physically assess an area of the body. Note: Although orientation is required, there is no formal telehealth certification required on the part of health care professionals before engaging in telehealth clinical visits with patients. The Expert Panel does not suggest or endorse formal certification for telehealth competencies.</p> <p><b>Standard 1.6:</b> For clinical visits conducted via synchronous videoconferencing, a staff member or external technology support person should be available to troubleshoot technology issues, potentially via telephone, and to facilitate workflow.</p> <p><b>Standard 1.7:</b> Practices should evaluate key performance indicators for oncology telehealth initiatives and quality of care.</p> <p><b>Standard 1.8:</b> For interventions delivered asynchronously, for example, online patient symptom reporting systems, standard operating procedures should be in place that outline appropriate and timely responses to patient-reported outcomes.</p> <p><b>Standard 1.9:</b> To optimize adherence to and minimize discontinuation of treatment regimens, asynchronously delivered interventions, such as automated reminders delivered via text message, should be tailored to the individual patient.</p> <p><b>Standard 1.10:</b> Where possible, patients and caregivers should be involved in user testing of new interventions (e.g., apps)</p> <p><b>2. Establishment of the doctor-patient relationship</b></p> <p><b>Standard 2.1:</b> State and federal policies permitting telemedicine to cross state lines should include a provision requiring that the doctorpatient relationship is established before provision of any telemedicine service</p> <p><b>3. Advanced practice providers (APPs)</b></p> <p><b>Standard 3.1:</b> Practices should develop standards, algorithms, or policies that govern when patients may see an advanced practice provider or require a physician telehealth visit on the basis of disease, treatment, or decision inflection points.</p> <p><b>4. Allied health professionals</b></p> <p><b>Standard 4.1:</b> The ASCO Telehealth Standards Expert Panel endorses the recommendations from the Clinical Oncology Society of Australia (COSA) Teleoncology Guidelines. These recommendations are reproduced subsequently:</p> <ol style="list-style-type: none"> <li>1. Telephone-based support systems are feasible and can help facilitate changed behaviours (e.g., diet and exercise), improved function (e.g., fitness and health-related function), and improved psychological or psychosocial states.</li> </ol>	

Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
<p>2. Computerized screening or assessment is feasible and can be used as a model of care to collect information on patient status and assist referral to allied health oncology services.</p> <p>3. Hybrid telepractice systems can offer alternative models of care for the provision of allied health education and support to oncology patients.</p> <p>4. Videoconferencing services can be used to deliver allied health assessment and treatment services for oncology patients.</p> <p><b>5. Virtual multidisciplinary cancer conferences (MCCs)</b></p> <p><b>Standard 5.1:</b> Where appropriate technology and supports are in place, such as those outlined below, virtual MCCs via videoconferencing are recommended. The Expert Panel endorses the following recommendations from Dharmarajan et al. for implementation of a virtual MCC meeting:</p> <ul style="list-style-type: none"> <li>• Agenda and cases to be discussed should be finalized at least a day in advance; Participants must have access to secure videoconferencing software; It may be necessary to allow more time than would be needed for in-person meetings; Prioritize more advanced or complicated cases earlier in the meeting as they may take more time and members are more likely to be available; Documentation of discussion must be systematic, included in patient's electronic medical record, and accessible to members who could not make the call; Consider including assessments and evaluations of the multidisciplinary team (MDT) using a validated tool, such as the Cancer MDT Meeting Observational Tool; In addition, the ASCO Expert Panel recommends that decisions regarding the maximum number of participants are left to the discretion of local institutions and that the discussion is directed by the individual who is responsible for presenting the case.</li> </ul> <p><b>6. Teletrials and/or virtual participation in oncology clinical trials</b></p> <p><b>Standard 6.1:</b> Teletrials and/or virtual participation in oncology clinical trials are recommended as a method of increasing recruitment and reducing the burden of trial participation on patients. To facilitate the conduct of teletrials, the following are recommended:</p> <ul style="list-style-type: none"> <li>• Virtual initial discussion of trial and eligibility assessment; Incorporating remote methods of reviewing symptoms and adverse events, such as patient portals, e-mail, telephone, and video; Remote study initiation and monitoring from sponsors and contract research organizations; Shipping oral drugs directly to patients with a follow-up call to ensure the delivery and integrity of the agents and patient comprehension of the dosing schedule; Increasing support for secure virtual platforms; Allowing laboratory, for example, blood tests and biopsies, to be conducted at a site that is local to the trial participant; Reconsidering the necessity of frequent testing, including imaging; Increasing the use of patient-reported outcomes as study outcomes." (p. 547 to 550)<sup>3</sup></li> </ul>	
<b>Obstetrics/Gynecology: MiPATH (2022)<sup>4</sup></b>	
<ul style="list-style-type: none"> <li>• "Integrate telemedicine into routine prenatal care, including the use of home devices" (p.920)<sup>4</sup></li> <li>• Clinicians interested in adding telemedicine services to their practice should reference "ACOG Committee Opinion" for details on telemedicine considerations, including legal and regulatory issues, billing and payment, and licensing and equipment requirements.</li> <li>• All scheduled prenatal visits (except required in-person visits for physical exams and</li> </ul>	NR

Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
<p>scans) may be delivered through telemedicine if the patient prefers this mode, both parties have the necessary technology to complete the visit through telemedicine, and the patient has access to home devices to check relevant pregnancy parameters and has been appropriately trained to use them.</p>	
<b>Obstetrics/Gynecology: guidance for gynecologists (2020)<sup>5</sup></b>	
<p><b>“Counseling on Abnormal uterine bleeding (AUB) in telemedicine</b></p> <ul style="list-style-type: none"> <li>• The quality of information on online sites about bleeding disorders and AUB is limited. Women should be given professional guidance to websites that are useful and accurate (EC), such as pamphlets from the American College of Obstetricians and Gynecologists (ACOG) at <a href="http://acog.org/patient-resources/faqs">acog.org/patient-resources/faqs</a> or <a href="http://misforwomen.com">misforwomen.com</a>.</li> <li>• Social media platforms have been shown to increase awareness of undiagnosed bleeding disorders. Women could be directed to social media groups or platforms that might increase their awareness (EC).</li> <li>• Telephone or video chat counseling of patients has been demonstrated to increase patient satisfaction, lower anxiety score, and not alter treatment complication or outcomes. Telephone or video counseling with patients is encouraged to help manage their care (EC).</li> </ul> <p><b>Assessment of AUB via telemedicine</b></p> <ul style="list-style-type: none"> <li>• Women with anovulatory bleeding are optimal candidates for telemedicine management as first-line management is hormonal treatment (EC).</li> <li>• Bleeding timing and quantity can be collected through text message or mobile applications (such as Glow™, Clue™, GP™ apps, Period tracker Free Menstrual calendar™, and Pink Pad Period Tracker and Fertility Tracker Pro™) rather than paper forms, facilitating evaluation by telemedicine.</li> <li>• Standard physical exam or testing components for assessment of AUB can be accomplished by home urine pregnancy test, guiding patients to take their own pulse and blood pressure, capillary refill time with a stopwatch, home pad weight or photos of pad saturation, or sending photos or video assessment to look for conjunctival pallor as an indicator of anemia (EC).</li> <li>• If lab services are not the safest option during the pandemic, a reliable alternative is smartphone-based evaluation of conjunctival pallor.</li> <li>• There is no literature available regarding the accuracy of screening for anemia with symptoms, but screening assessment of the patient is recommended with questions regarding common symptoms of anemia (shortness of breath, dizziness, chest pain, headache, light-headedness, etc.) (EC).</li> </ul> <p><b>Counseling on CPP in telemedicine</b></p> <ul style="list-style-type: none"> <li>• Online pages for endometriosis, interstitial cystitis/bladder pain syndrome (IC/BPS), and dysmenorrhea are frequently incomplete, inaccurate, and poorly written with inadequate information to guide women on when to seek urgent care.</li> <li>• During the pandemic, online resources can be considered if patients can be directed to credible sources of quality information that are accurate and easy to read</li> </ul> <p><b>Evaluation of CPP via telemedicine</b></p> <ul style="list-style-type: none"> <li>• Physical exams via telemedicine are limited; additional virtual tools such as Internet-based questionnaires and apps have demonstrated usefulness.</li> <li>• An Internet-based survey has shown that vulvodynia can be predicted with excellent</li> </ul>	<p>NR</p>

Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
<p>reliability without a physical exam.</p> <ul style="list-style-type: none"> <li>• Objective assessment of the patient’s condition can be performed virtually using health-related quality of life (HRQOL) questionnaires such as the Short Form-36 Health Status Questionnaire (SF-36) or those specific to endometriosis, such as the Endometriosis Health Profile-30, Short Form Endometriosis Health Profile Questionnaire (EHP-5), EuroQOL (EQ-5D), and Endometriosis Impact Questionnaire (EIQ).</li> <li>• Pelvic imaging for evaluation of CPP may be delayed during the pandemic (EC)</li> </ul> <p><b>Management of CPP</b></p> <ul style="list-style-type: none"> <li>• Telemedicine is well-accepted among patients for treatment of CPP and has been shown to improve pain acceptance and overall function.</li> <li>• Mobile health apps and online resources can be used as adjuncts to treatment of CPP.</li> <li>• During the COVID-19 pandemic, pelvic physical therapy clinics can offer telemedicine sessions for pelvic wellness (EC).</li> <li>• CPP: In the absence of the ability to perform a pelvic exam, in-person pelvic floor therapy, or surgery, providers could consider outpatient management strategies such as short-term vaginal diazepam, transcutaneous electrical nerve stimulation (TENS) units, at home pelvic physical therapy, cognitive behavioural therapy, yoga, topical anesthetics, vaginal estrogen, tricyclic antidepressants, and anticonvulsants. Short-term vaginal diazepam might be helpful before physical therapy and intercourse, but a RCT did not find self-administered vaginal diazepam beneficial after 4 weeks. Due to the potential for abuse and likely poor long-term effectiveness, diazepam should be used with caution (EC).</li> <li>• Endometriosis: Online support groups may be useful. They have demonstrated positive therapeutic outcomes such as emotional support, reduced isolation, improved coping, reassurance, knowledge, and empowerment.</li> <li>• Vaginismus: Internet-based guided self-help strategies (involving psychoeducation, relaxation exercises, sensate focus, graduated dilators, and written feedback from an eCoach) have shown promising effects and high treatment satisfaction.</li> <li>• IC/BPS: Most first- and second-line treatments can be conducted via telemedicine including: patient education; self-care counseling and behavioural modification (including diet changes); stress management techniques; and multimodal pain management using amitriptyline, cimetidine, hydroxyzine, or pentosan polysulfate. Caution should be used when prescribing pentosan polysulfate as long-term use has recently been associated with macular disease. Self-administered bladder instillations could be recommended for flares (EC).</li> <li>• Dysmenorrhea and premenstrual syndrome: Most conservative treatment guidelines can be conducted via telemedicine, including lifestyle modifications (e.g., exercise and stress reduction), non-steroidal anti-inflammatory drugs, hormonal suppression, or a combination of treatments. Self-acupressure can be recommended for patients with primary dysmenorrhea.</li> <li>• Endometriosis-related pain: Most conservative treatments can be recommended via telemedicine including hormonal therapy (e.g., combined hormonal contraceptives, progestins, anti-progestins, oral GnRH agonists up to 12 months with add-back therapy, and GnRH antagonists), analgesic medications, and neuroleptics.</li> <li>• Symptomatic endometriomas: Though these are best treated surgically, medical</li> </ul>	

Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
<p>therapy may still have some benefit and may lead to a temporary reduction in size of the cysts.</p> <p><b>Vaginal discharge and vulvar irritation</b></p> <ul style="list-style-type: none"> <li>• Although telephone diagnosis of vulvovaginal complaints is poor, bacterial vaginosis, candidiasis, and trichomonas are the most common causes of vulvovaginal symptoms; thus, it is reasonable to start with empiric treatment if these are suspected (EC).</li> </ul> <p><b>Sexually transmitted infections (STI)</b></p> <ul style="list-style-type: none"> <li>• If there is concern for STIs based on sexual history or symptoms, consider empiric therapy for chlamydia, gonorrhea, and possible co-infection with <i>Trichomonas vaginalis</i> (EC).</li> <li>• Self-obtained vaginal swabs are easy, convenient, confidential, and accurate; therefore, women experiencing signs and symptoms of STI could be directed to websites that offer mail-based home-testing for STIs, such as <a href="http://www.iwantthekit.org">www.iwantthekit.org</a> or <a href="https://www.everlywell.com">https://www.everlywell.com</a>.</li> </ul> <p><b>Herpes simplex virus (HSV)</b></p> <ul style="list-style-type: none"> <li>• No literature guides empiric treatment of HSV without an in-person exam, but it is considered reasonable to empirically treat symptoms reported by patients with a history of genital HSV that are consistent with a secondary outbreak (EC).</li> </ul> <p><b>Postoperative care</b></p> <ul style="list-style-type: none"> <li>• In lieu of the ability to perform a physical examination, telemedicine may provide a safe and cost-effective option for providers to be able to assess pain, need for analgesia, return to normal function (urinary, gastrointestinal, activities of daily living), and identify complications needing an in-person visit (EC).</li> <li>• Based on limited evidence, telemedicine may lead to similar or improved patient-related outcomes compared to in-person postoperative care. Telemedicine could be used to supplement usual postoperative care and limit the number of visits during the pandemic.</li> <li>• Internet-based programs to assist in postoperative recovery after hysterectomy and laparoscopic adnexal surgery are cost-effective and may shorten recovery time.</li> <li>• Surgical pathology results can be reviewed over the telephone/video (EC).</li> <li>• Providers may consider extending pelvic rest in patients who are not able to be seen in person for evaluation of vaginal cuff and/or vaginal/vulvar incision (EC).</li> </ul> <p><b>Complications</b></p> <ul style="list-style-type: none"> <li>• Limited evidence suggests that postoperative virtual visits are not associated with increased or delayed postoperative complications.</li> <li>• After appropriate provider training, telephone assessment for wound infection after open abdominal gynecologic surgery can be effective in diagnosing wound complications. Providers could consider video or photographs for wound examination as appropriate (EC).</li> <li>• For patients who do not respond to empiric treatment for suspected acute cystitis postoperatively, refer to COVID-19 FPMRS expedited review.</li> <li>• Postoperative questionnaires for telemedicine have been developed and shown to be effective at screening for complications</li> </ul> <p><b>Patient/provider satisfaction</b></p>	



Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
<ul style="list-style-type: none"> <li>• Patients found an automated interactive voice response system helpful and acceptable in monitoring for postoperative complications.” (p.290 to 294)<sup>5</sup></li> </ul>	
<b>Rheumatology: APLAR (2022)<sup>6</sup></b>	
<p>“1. All patients can be assessed for suitability of telemedicine follow-up and, if suitable, offered teleconsultations over a period not exceeding 12 months.” (p. 250 to 251)<sup>6</sup></p>	<p>Grade of Evidence: B; Level of Evidence: 3; Strength of Recommendation: NR</p>
<p>“2. In a new patient without a confirmed rheumatic disease diagnosis, telemedicine consultation should be limited to early guidance to a healthcare practitioner treating the patient regarding diagnostic work-up, interim management and appropriate timing of an in-person assessment by a rheumatologist.” (p. 250 to 251)<sup>6</sup></p>	<p>Grade of Evidence: C; Level of Evidence: 4; Strength of Recommendation: NR</p>
<p>“3. Having a pre-teleconsultation triage system may help in scheduling in-person visits earlier for patients unlikely to benefit from teleconsultation alone.” (p. 250 to 251)<sup>6</sup></p>	<p>Grade of Evidence: C; Level of Evidence: 4; Strength of Recommendation: NR</p>
<p>“4. When normal health services are disrupted, scheduled telemedicine consultations are recommended over unsupervised medication changes.” (p. 250 to 251)<sup>6</sup></p>	<p>Grade of Evidence: B; Level of Evidence: 3; Strength of Recommendation: NR</p>
<p>“5. The adoption of video consultation over other forms of teleconsultation such as telephone or asynchronous messaging via email, short message services and other internet-based services, is conditionally recommended.” (p. 250 to 251)<sup>6</sup></p>	<p>Grade of Evidence: C; Level of Evidence: 4; Strength of Recommendation: NR</p>
<p>“6. Scheduling of an in-person consultation with the patient at an earliest possible date if the consulting rheumatologist comes across unexplained symptoms or has difficulty in assessing the patient or if the rheumatologist or the patient perceives a gap in communication during the telemedicine consultation, is conditionally recommended.” (p. 250 to 251)<sup>6</sup></p>	<p>Grade of Evidence: C; Level of Evidence: 4; Strength of Recommendation: NR</p>
<p>“7. Teleconsultations with a healthcare professional adequately trained in rheumatology examination, co-located with the patient, is preferred when and if feasible.” (p. 250 to 251)<sup>6</sup></p>	<p>Grade of Evidence: C; Level of Evidence: 4; Strength of Recommendation: NR</p>
<p>“8. Patient data privacy, integrity and security should be protected according to local expectations and regulations.” (p. 250 to 251)<sup>6</sup></p>	<p>Grade of Evidence: B; Level of Evidence: 3; Strength of Recommendation: NR</p>
<p>“9. Routine patient-reported outcome collection is suggested to ensure the quality of care and may be used for pre-consultation triage.” (p. 250 to 251)<sup>6</sup></p>	<p>Grade of Evidence: B; Level of Evidence: 3; Strength of Recommendation: NR</p>
<p>“10. In rheumatic diseases where a treat-to-target approach is recommended for in-person care, a similar approach for telemedicine should be practiced.” (p. 250 to 251)<sup>6</sup></p>	<p>Grade of Evidence: C; Level of Evidence: 2; Strength of Recommendation: NR</p>
<p>“11. Rheumatologists practicing telemedicine should be acquainted with the process and technology used. Training of rheumatologists in telemedicine is conditionally recommended.” (p. 250 to 251)<sup>6</sup></p>	<p>Grade of Evidence: N/A (no published evidence); Level of Evidence: 5; Strength of Recommendation: NR</p>
<p>“12. Beyond patient care, telemedicine may also include training of healthcare workers (general practitioners or nurse practitioners).” (p. 250 to 251)<sup>6</sup></p>	<p>Grade of Evidence: N/A (no published evidence); Level of Evidence: 4; Strength of Recommendation: NR</p>
<p>“13. The potential of telemedicine platforms may be developed to provide patient education and other activities to benefit patients.” (p. 250 to 251)<sup>6</sup></p>	<p>Grade of Evidence: N/A (no published evidence); Level of Evidence: 5; Strength of Recommendation: NR</p>

Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
<b>Rheumatology: ArLAR (2022)<sup>7</sup></b>	
<p><b>“General principles:</b> A definition of a teleconsultation: A rheumatology teleconsultation is a synchronous exchange of medical information between a patient and a rheumatologist via audio or audiovisual electronic communication, to improve the patient’s health status” (p. 382)<sup>7</sup></p>	Level of Evidence: 5; Strength of Recommendation: NR
<p>“B Access and Continuity of Care: Telehealth may improve the access and continuity of care for patients with rheumatic diseases who are home-bound, live in remote areas or under-served communities, or who need to adhere to social distancing restrictions.” (p. 382)<sup>7</sup></p>	Level of Evidence: 3; Strength of Recommendation: NR
<p>“C Improving disease outcomes: Telehealth can help some patients adhere to the management plan, and this is likely to improve disease outcomes in some selected disease states” (p. 382)<sup>7</sup></p>	Level of Evidence: 2; Strength of Recommendation: NR
<p>“D Quality of medical care: Rheumatologists need to use professional experience and judgment to assess whether telehealth is suitable in each situation” (p. 382)<sup>7</sup></p>	Level of Evidence: 5; Strength of Recommendation: NR
<p><b>“Best Practice Statements:</b> 1 Informed consent: Before the teleconsultation visit, an informed consent should be obtained from the patient, in writing or verbally; it should include an explanation, in a simple language, of the benefits and risks of telehealth encounters, as well as the conditions under which telehealth services may be terminated and a referral made to in-person care” (p. 382)<sup>7</sup></p>	Level of Evidence: 5; Strength of Recommendation: NR
<p>“2 Confidentiality: The use of telehealth services must ensure the patient’s information security and confidentiality” (p. 382)<sup>7</sup></p>	Level of Evidence: 5; Strength of Recommendation: NR
<p>“3 Documentation: The provision of telehealth services should be well documented in the patient’s file, similarly to any in-person medical visit. The decision to assess the patient remotely should be justified and recorded in the patient’s file” (p. 382)<sup>7</sup></p>	Level of Evidence: 5; Strength of Recommendation: NR
<p>“4 Shared decision and choice: The choice of using telehealth services should be based on a shared decision between the patient and the physician. Patients should have a choice of their provider of medical teleconsultation” (p. 382)<sup>7</sup></p>	Level of Evidence: 5; Strength of Recommendation: NR
<p>“5 Patient’s physical examination: Some parts of the physical exam might be performed remotely, e.g., inspection and evaluation of the range of motion. The patient should be instructed on how to be prepared for a remote physical exam, using appropriate educational material” (p. 382)<sup>7</sup></p>	Level of Evidence: 2; Strength of Recommendation: NR
<p>“6 Patient-reported outcomes: In some chronic rheumatic diseases, the use of patient-reported outcomes by means of self-completed questionnaires adapted for telehealth can help the physician make informed clinical decisions and improve the quality of care” (p. 382)<sup>7</sup></p>	Level of Evidence: 3; Strength of Recommendation: NR
<p>“7 Safe Prescription: The prescription should be transmitted in a safe and confidential manner to the patient with a particular attention to avoiding abuse (of opioids and narcotics’ prescriptions in particular)” (p. 382)<sup>7</sup></p>	Level of Evidence: 5; Strength of Recommendation: NR
<p>“8 Fees and reimbursement: The teleconsultation is subject to medical fees and reimbursement similar to an in-person visit. Fees should be set before the teleconsultation” (p. 382)<sup>7</sup></p>	Level of Evidence: 5; Strength of Recommendation: NR

Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
"9 Ethical considerations: Telehealth practice should conform to the same professional ethics that govern in-person care and comply with local jurisdictional laws and regulations of the physician's location" (p. 382) <sup>7</sup>	Level of Evidence: 5; Strength of Recommendation: NR
"10 Rheumatologist training: The rheumatologists are encouraged to receive proper training through seminars, workshops, and conferences to familiarize with the advantages and disadvantages of telehealth and to acquire strategies about the most productive approach to remote medical care" (p. 382) <sup>7</sup>	Level of Evidence: 5; Strength of Recommendation: NR
"11 Technical infrastructure and equity: The technical infrastructure should be improved for patients and physicians, to enable efficient and equitable access to telehealth services across the countries and in vulnerable populations" (p. 382) <sup>7</sup>	Level of Evidence: 5; Strength of Recommendation: NR
"12 Research: Local and regional research projects to assess the implementation of telehealth and the resulting disease outcomes in the Arab region are strongly encouraged." (p. 382) <sup>7</sup>	Level of Evidence: 5; Strength of Recommendation: NR
<b>Cardiovascular conditions: LLKardReha-DACH (2021)<sup>8</sup></b>	
"Cardiac rehabilitation of phase II is recommended to be preferably offered under face-to-face supervision and responsibility of a multidisciplinary rehabilitation team (centre based CR)." (p.29 to 30) <sup>8</sup>	Quality of evidence: NR; Strong recommendation
"It is suggested to establish tele-rehabilitation facilities for low-risk patients with sufficient time interval since a non-complicated index-event to support cardiac rehabilitation participation in general." (p.29 to 30) <sup>8</sup>	Quality of evidence: NR; Medium recommendation
<b>Cardiovascular conditions: Canadian Stroke Recommendations (2022)<sup>9</sup></b>	
<p><b>"1.6 Virtual Care for Secondary Stroke Prevention (New 2020)</b></p> <p>i. Secondary stroke prevention services should establish processes and technology to increase and ensure access to services through virtual care delivery mechanisms for patients who do not require in-person visits, and especially patients living in rural and remote settings without local access to health care professionals with stroke expertise." (p.319)<sup>9</sup></p>	Evidence Level: C; Strength of Recommendation: NR
"a) Clinicians should follow established/validated criteria to determine the best modality for each patient at each encounter based on the purpose and goals for each visit." (p.319) <sup>9</sup>	Evidence Level: C; Strength of Recommendation: NR
"b) Shared decision-making should also take into account patient values, preferences, health goals, medical complexity, social determinants of health, and health needs." (p.319) <sup>9</sup>	Evidence Level: C; Strength of Recommendation: NR
<p><b>"2.8 Smoking Cessation</b></p> <p>A referral to virtual smoking cessation services, smoking cessation programs, supportive resources, and clinics should be considered depending on regional availability to optimize the success of smoking cessation" (p.321)<sup>9</sup></p>	Evidence Level: B; Strength of Recommendation: NR
<b>ENT: ENT guideline (2021)<sup>10</sup></b>	
<p><b>"Adopting ENT Teleconsultation Practice:</b></p> <ul style="list-style-type: none"> <li>• Teleconsultation and telemedicine should be promoted among the patients</li> <li>• It allows continuity of care of patients who cannot travel, thus limiting the preventable risks of spreading the coronavirus within ENT private practices and health care facilities</li> </ul>	NR

Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
<ul style="list-style-type: none"> <li>• Remote hearing tests for adult patients and more cautiously for older children in whom audiometry without conditioning is possible are also being developed</li> <li>• Periodical follow-up and evaluation is a vital part of telemedicine.” (p. 622)<sup>10</sup></li> </ul> <p><b>“Patients who can go for ENT teleconsultation:</b></p> <ul style="list-style-type: none"> <li>• Nosebleed that can be managed with anticoagulants</li> <li>• Decreased sense of smell/taste</li> <li>• Blocked nose</li> <li>• Swelling over face or neck</li> <li>• Change in voice</li> <li>• Earache, ear bleed, decreased hearing, assessment of ringing sensation in ear, dizziness</li> <li>• Assessment of snoring” (p. 625)<sup>10</sup></li> </ul>	
<b>Pain: COVID-19 pain guideline (2020)<sup>11</sup></b>	
<p>Recommendations pertaining to telemedicine practice during COVID-19 were as follows:</p> <p><b>“In-patient visits</b></p> <ul style="list-style-type: none"> <li>• Any elective in-person patient visits or meetings should be suspended.</li> <li>• No elective pain procedures should be performed, except specific semi-urgent procedures.</li> </ul> <p><b>Use of telemedicine</b></p> <ul style="list-style-type: none"> <li>• Use telemedicine as the first approach and exclusively in most cases.</li> <li>• Ensure adherence to the subscribed needs of telemedicine required by individual state or country of practice.</li> </ul> <p><b>Biopsychosocial management of pain</b></p> <ul style="list-style-type: none"> <li>• Telemedicine platforms are available to engage in multidisciplinary interactions.</li> <li>• Whenever possible, online self-management programmes that integrate components of exercise, sleep hygiene, pacing and healthy lifestyle should be considered.</li> <li>• Multidisciplinary therapies could be helpful in overcoming increased opioids needs and/or procedures during the pandemic.</li> </ul> <p><b>Prescribing opioids</b></p> <ul style="list-style-type: none"> <li>• Use telemedicine to evaluate, initiate and continue opioid prescriptions.</li> <li>• Ensure all patients receive their appropriate prescription of opioids to avoid withdrawal.</li> <li>• Naloxone education and prescription for high-risk patients.</li> <li>• Inform patients of the risks and impact of long-term opioid therapy on the immune system.</li> <li>• Communicate with other health care providers in the patients’ circle-of-care including family physicians, pharmacists and nurses” (p.938)<sup>11</sup></li> </ul> <p><b>“Neurostimulator issues</b></p> <ul style="list-style-type: none"> <li>• Avoid any new trials or implants.</li> <li>• Use telemedicine as much as possible to resolve patient concerns. An audiovisual</li> </ul>	NR

Recommendations and supporting evidence	Quality of evidence and strength of recommendations <sup>a</sup>
interview makes it easier to evaluate or troubleshoot most issues. Principles for semi-urgent visits/procedures <ul style="list-style-type: none"> <li>• Comprehensive evaluation required and the need to help patients make informed decisions.</li> <li>• Use telemedicine to evaluate the patient, triage the urgency, and make suitable arrangements for treatment. This will minimise delay and prevent unnecessary visits” (p.938)<sup>11</sup></li> </ul>	
<b>Substance use: DoD substance use guideline (2022)<sup>12</sup></b>	
“We suggest using technology-based interventions (e.g., automated text/voice messaging, smartphone apps), in addition to usual care, for AUD.” (p.729) <sup>12</sup>	Quality of evidence: NR; Strength of recommendation: Weak for
“There is insufficient evidence to recommend for or against using technology-based interventions (e.g., automated text/voice messaging, smartphone apps), in addition to usual care, for SUDs other than AUD.” (p.729) <sup>12</sup>	Quality of evidence: NR; Strength of recommendation: Neither for nor against
“We suggest the use of structured, telephone-based care as an adjunct to usual care for SUDs.” (p.729) <sup>12</sup>	Quality of evidence: NR; Strength of recommendation: Weak for
“There is insufficient evidence to recommend for or against the use of telemedicine-delivered treatment of SUDs.” (p.729) <sup>12</sup>	Quality of evidence: NR; Strength of recommendation: Neither for nor against
“There is insufficient evidence to recommend for or against the use of computer-delivered behavioral treatments, either alone or in combination with usual care, for SUDs.” (p.729) <sup>12</sup>	Quality of evidence: NR; Strength of recommendation: Neither for nor against

ACOG = American College of Obstetricians and Gynecologists; APLAR = Asia Pacific League of Associations for Rheumatology; APP = advanced practice providers; ArLAR = Arab League of Associations for Rheumatology; ASCO = American Society of Clinical Oncology; AUB = abnormal uterine bleeding; AUD = alcohol use disorder; CCO = Cancer Care Ontario; COVID-19 = coronavirus disease 2019; CPP = chronic pelvic pain; CR = cardiac rehabilitation; DoD = Department of Defense; EC = expert consensus; ENT = ear, nose, and throat; FPMRS = female pelvic medicine and reconstructive surgery; GnRH = gonadotropin-releasing hormone; GP = general practitioner; HSV = herpes simplex virus; IC/BPS = interstitial cystitis/bladder pain syndrome; LLKardReha-DACH = Abbreviation for Cardiac Rehabilitation Guidelines of German Speaking Countries; MCC = multidisciplinary cancer conferences; MDT = multidisciplinary team; MiPATH = Michigan Plan for Appropriate Tailored Health care in pregnancy; N/A = not applicable; NR = not reported; STI = sexually transmitted infections; SUD = substance use disorder; TENS = transcutaneous electrical nerve stimulation.

<sup>a</sup>Grading of evidence: For APLAR,<sup>5</sup> the quality of evidence was assessed using GRADE, ranging from A (high quality of evidence) to D (very low quality of evidence). For APLAR<sup>6</sup> and ArLAR,<sup>7</sup> the levels of evidence were assessed using the Oxford Centre for Evidence-Based Medicine scale from 1 (systematic review of randomized trials) to 5 (mechanism-based reasoning). For Canadian Stroke Recommendations,<sup>9</sup> authors assessed the level of evidence as A, B, or C where A = Evidence from a meta-analysis of randomized controlled trials or consistent findings from 2 or more randomized controlled trials; B = Evidence from a single randomized controlled trial or consistent findings from 2 or more well-designed non-randomized and/or noncontrolled trials and large observational studies; and C = Writing group consensus and/or supported by limited research evidence. For LLKardReha-DACH,<sup>8</sup> the “grades of recommendation” were strong recommendation = is recommended/is not recommended; medium recommendation = is suggested/is not suggested; neutral recommendation = may be considered. For the DoD substance use guideline,<sup>12</sup> the strength of recommendations was reported as ‘strong for’, ‘weak for’, or ‘neither for nor against’.

The ASCO guideline<sup>3</sup> recommended telehealth for treatment or long-term management of various conditions including new patient consultations (followed by in-patient), prescribing and management, pre-chemotherapy evaluations, and follow-up. The guideline also recommended telehealth when care access issues exist for family conferences, genetic counselling, and second opinions. An extensive list of services that are reasonable to offer via telehealth (versus in person) is in [Table 7](#).

**Other implementation recommendations:** The Ontario Health (CCO)<sup>1</sup> guideline recommended offering the virtual care option to all patients, ensuring equitable access, providing guidance on how to use virtual care, enabling access to technology, being persistent, incorporating care partners, and allocating adequate time and space for virtual care. The guideline included logistical recommendations, such as addressing technology requirements, having back-up systems in place, documentation standards, access to electronic medical records, training,

mode of virtual care, and use verified tools. Further, the guideline recommended considering non-clinical patient characteristics such as health literacy, patient preference, collaboration with other health care providers, and patient needs when providing diagnosis using virtual modes.

The ASCO guideline<sup>3</sup> recommended telehealth via telephone or videoconferencing when infrastructure and personnel are available. They recommended providing individualized orientation to both parties for the specific type of technology (e.g., mobile phone, web-based); using asynchronous transmission of images for diagnosis; involving patients and caregivers in user testing of new interventions (e.g., apps) whenever possible; developing policies and procedures that outline preferred frequency of telehealth versus in-person visits during the cancer care continuum and considering patient preferences. There were further recommendations on the availability of technical support during videoconferencing; establishment of the doctor-patient relationship; use of advanced practice providers and allied health professionals; virtual multidisciplinary cancer conferences (when technology and support are available); and teletrials and/or virtual participation in oncology clinical trials.

**Other recommendations on virtual care:** The Ontario Health (CCO)<sup>1</sup> guideline included recommendations on collaborative care with integrated information, including multidisciplinary case conferences and tumour boards in care plan, involving of local health care providers, linking to local laboratories, and accessing primary care. The ASCO guideline<sup>1,2</sup> also included standards on documentation, policies and standard operation procedures, and evaluations of key performance indicators.

### ***Recommendations for Obstetrics/Gynecology Practice***

Two guidelines<sup>4,5</sup> provided recommendations or standards for obstetrics/gynecology practice on different aspects of virtual care. Neither reported the strength of the recommendations or quality of evidence informing the recommendations. Guidance for gynecologists<sup>5</sup> indicated whether the recommendation was based on existing evidence (EE) or expert consensus (EC).

**Clinical practice recommendations:** The MiPATH guideline<sup>4</sup> recommended using individualized prenatal visit schedules and integrating telemedicine into routine prenatal care, including risk assessment.

Guidance for gynecologists<sup>5</sup> indicated that telemedicine may provide a safe and cost-effective option for assessing pain, analgesia need, returning to normal function, and identifying complications needing an in-person visit (EC). They reported that based on limited evidence, telemedicine may lead to similar or improved patient outcomes compared to in-person postoperative care (EE). The guidance indicated that telemedicine is useful for supplementing normal postoperative care, and limited evidence suggests that postoperative virtual visits are not associated with increased or delayed postoperative complications. The guidance encouraged use of telephone or video counseling with patients to help manage their care (EC), as these methods have demonstrated increased patient satisfaction and lower anxiety scores and did not alter treatment complication or outcomes. Further, the guidance indicated that telemedicine management is useful for anovulatory bleeding (as first-line management is hormonal treatment); chronic pelvic pain (except for examination); interstitial cystitis/bladder pain syndrome (most first- and second-line treatments); dysmenorrhea and premenstrual syndrome; endometriosis-related pain, initial treatment of vulvovaginal complaints; patients with a history of genital herpes simplex virus that are consistent with a secondary outbreak; and for reviewing surgical pathology results. The guidance also indicated that bleeding

timing and quantity collection through text message or mobile applications can facilitate telemedicine evaluation (EE).

**Other implementation recommendations:** The MiPATH guideline<sup>4</sup> recommended that clinicians interested in adding telemedicine services to their practice should reference “ACOG Committee Opinion” for details on telemedicine considerations, including legal and regulatory issues, billing and payment, and licensing and equipment requirements. The guideline also suggested that all scheduled prenatal visits (except required in-person visits for physical exams and scans) may be delivered through telemedicine if the patient prefers this mode, both parties have the necessary technology to complete the visit through telemedicine, and the patient has access to home devices to check relevant pregnancy parameters and has been appropriately trained to use them.

Guidance for gynecologists<sup>5</sup> indicated that internet-based programs to assist in postoperative recovery surgery are cost-effective and may shorten recovery time (EE); and providers could use video or photographs for wound examination (EC).

**Other recommendations on virtual care:** None were reported.

#### *Recommendations for Rheumatology Practice*

Two guidelines<sup>6,7</sup> provided recommendations or standards for rheumatologists on different aspects of virtual care. The 2022 APLAR guideline<sup>6</sup> included 13 recommendations, and the 2022 ArLAR guideline<sup>7</sup> included 3 general principles and 12 best practice standards. Quality of evidence was rated using GRADE (for APLAR) or an LOE system (for APLAR and ArLAR). The strength of the recommendations was not reported.

**Clinical practice recommendations:** The APLAR guideline<sup>6</sup> recommended that in new patients without a diagnosis, telemedicine should be limited to early guidance (GRADE C); that all patients can be assessed for eligibility for telemedicine follow-up for up to 12 months (GRADE B); that having a pre-teleconsultation triage system may help to identify patients that would not benefit from telemedicine (GRADE C); and that teleconsultations with a health care professional, co-located with the patient, is preferred (GRADE C). The ArLAR guideline<sup>7</sup> reported that teleconsultation can be used for patients who are home-bound, live in remote areas, or under-served communities, or who need to adhere to social distancing restrictions (LOE-3). Both guidelines provided recommendations or standards for access and continuity of care for patients with rheumatic diseases. The ArLAR guideline<sup>7</sup> reported that telehealth can help some patients adhere to the management plan, and this is likely to improve disease outcomes in some selected disease states (LOE 2).

The APLAR guideline<sup>6</sup> conditionally recommended the adoption of video consultation over other forms such as telephone or asynchronous messaging via email, short message services, and other internet-based services (GRADE C). The APLAR guideline<sup>6</sup> recommended telemedicine consultations over unsupervised medication changes when normal health services are disrupted (GRADE B). The APLAR guideline<sup>6</sup> conditionally recommended scheduling an in-person consultation when a rheumatologist encounters unexplained symptoms or has difficulty in assessing the patient or if the rheumatologist or patient perceives a gap in communication during the telemedicine consultation (GRADE C).

**Other implementation recommendations:** Both guidelines provided recommendations on protection of data privacy/confidentiality (APLAR GRADE B, ArLAR LOE 5); on the importance of using patient reported outcomes (APLAR GRADE B, ArLAR LOE 3); and on staff training

(APLAR no evidence, ArLAR LOE 5). Further, the APLAR guideline<sup>6</sup> recommended that if for in-person care a treat-to-target approach is practiced, a similar approach should be practiced for telemedicine (GRADE C). The ArLAR guideline<sup>7</sup> provided standards on informed consent (LOE 5), shared decision/choice between care provider and patient (LOE 5), documentation (LOE 5), safe prescription (LOE 5), teleconsultation fees and reimbursement being similar to in-person visits (LOE 5), ethical considerations similar to in-person care (LOE 5), and the improvement of infrastructure (LOE 5).

**Other recommendations on virtual care:** The ArLAR guideline<sup>7</sup> encouraged research projects to assess the implementation of telehealth and the resulting disease outcomes in the Arab region (LOE 5).

### *Recommendations for Cardiovascular Conditions*

The LLKardReha-DACH guideline provided recommendations for cardiology practice.<sup>8</sup> Recommendations were categorized as strong, medium, or neutral, based on scientific evidence and a consensus process, in accordance with the GRADE Evidence-to-Decision framework. The Canadian Stroke Best Practice Recommendations provided guidance for stroke practice.<sup>9</sup> A working group developed a table of criteria to assess the quality of evidence supporting each recommendation, ranging from A (highest) to C (lowest). The strength of evidence was not reported.

**Clinical practice recommendations:** The LLKardReha-DACH guideline<sup>8</sup> recommended face-to-face supervision for cardiac rehabilitation of phase II, where the training objectives are to increase muscle building and improve coordination (strong recommendation). The guideline further suggested establishing tele-rehabilitation facilities for low-risk patients to support cardiac rehabilitation participation (medium recommendation). The guideline for stroke practice<sup>9</sup> recommended that providers should follow established/validated standards to determine virtual versus in-person care at each encounter, based on the purpose and goals for each visit (evidence level C).

**Other implementation recommendations:** The guideline for stroke practice<sup>9</sup> recommended that the “secondary stroke prevention services should establish processes and technology to increase and ensure access to services through virtual care delivery mechanisms for patients who do not require in-person visits, and especially patients living in rural and remote settings without local access to health care professionals with stroke expertise” (p.319)<sup>9</sup> (evidence level C). Other recommendations were shared decision-making considering patient values, preferences, health goals, medical complexity, social determinants of health, and health needs (evidence level C).

**Other recommendations on virtual care:** The guideline for stroke practice<sup>9</sup> further recommended referral to virtual smoking cessation services and other smoking cessation programs, if available, to optimize the success of smoking cessation (evidence level B).

### *Recommendations for ENT Practice*

The guideline for ENT practice<sup>10</sup> did not report the strength of the recommendation or the quality of evidence informing the recommendations.

**Clinical practice recommendations:** The ENT practice guideline<sup>10</sup> recommended ENT teleconsultation for patients with nosebleed (that can be managed with anticoagulants), decreased sense of smell/taste, blocked nose, swelling over face or neck, change in voice, earache, ear bleed, decreased hearing, assessment of ringing sensation in ear, dizziness, and



assessment of snoring. The guideline recommended that teleconsultation and telemedicine should be promoted among patients, as it allows continuity of care of patients who cannot travel and limits the preventable risks of spreading the coronavirus within ENT private practices and health care facilities.

**Other implementation recommendations:** None were reported.

**Other recommendations on virtual care:** None were reported.

### *Recommendations for Pain Practice During COVID-19*

The COVID-19 pain guideline<sup>11</sup> provided potential practice implications for chronic pain management during the COVID-19 pandemic. The guideline did not report the strength of the recommendation or the quality of evidence informing the recommendations.

**Clinical practice recommendations:** The pain guideline<sup>11</sup> recommended using telemedicine for the first visit to resolve patient concerns, to evaluate the patient, to triage the urgency, and to decide treatment plans, as this will minimize delay and prevent unnecessary visits. The guideline also recommended suspending any elective in-person patient visits and elective pain procedures (except specific semi-urgent procedures). The guideline further specified that telemedicine platforms should help engage in multidisciplinary interactions (e.g., exercise, sleep) and that these multidisciplinary therapies may help overcome increased opioids needs and/or procedures during the pandemic. The guideline also recommended considering online self-management programs that integrate components of exercise, sleep hygiene, pacing, and healthy lifestyle.

**Other implementation recommendations:** None were reported.

**Other recommendations on virtual care:** None were reported.

### *Recommendations for Substance Use Practice*

The DoD substance use guideline<sup>12</sup> reported the quality of evidence using GRADE criteria. The strength of recommendations was reported as “strong for”, “weak for”, or “neither for nor against”.

**Clinical practice recommendations:** The DoD substance use guideline<sup>12</sup> suggested using technology-based interventions (e.g., automated text/voice messaging, smartphone apps), apart from normal care, for alcohol use disorders (weak for). There was insufficient evidence for using/not using technology-based interventions for substance use disorders other than alcohol use disorders (neither for nor against). The guideline suggest the use of structured, telephone-based care as an addition to usual care for substance use disorders (weak for). There is insufficient evidence for using/not using telemedicine-delivered treatment and computer-delivered behavioural treatment for substance use disorders (neither for nor against).

**Other implementation recommendations:** None were reported.

**Other recommendations on virtual care:** None were reported.

## References

1. Cheung MC, Franco BB, Meti N, et al. Delivery of virtual care in oncology: province-wide interprofessional consensus statements using a modified Delphi process. *Curr Oncol*. 2021;28(6):5332-5345. [PubMed](#)
2. Ontario Health (Cancer Care Ontario). Person-centred virtual cancer care clinical guidance. Toronto: Ontario Health (Cancer Care Ontario); 2022: <https://www.cancercareontario.ca/en/guidelines-advice/types-of-cancer/69581>. Accessed 2022 Sep 1.
3. Zon RT, Kennedy EB, Adelson K, et al. Telehealth in oncology: ASCO standards and practice recommendations. *JCO Oncol Pract*. 2021;17(9):546-564. [PubMed](#)
4. Peahl AF, Turrentine M, Barfield W, Blackwell SC, Zahn CM. Michigan plan for appropriate tailored healthcare in pregnancy prenatal care recommendations: a practical guide for maternity care clinicians. *J Womens Health*. 2022;12:12. [PubMed](#)
5. Grimes CL, Balk EM, Dieter AA, et al. Guidance for gynecologists utilizing telemedicine during COVID-19 pandemic based on expert consensus and rapid literature reviews. *Int J Gynaecol Obstet*. 2020;150(3):288-298. [PubMed](#)
6. Ahmed S, Grainger R, Santosa A, et al. APLAR recommendations on the practice of telemedicine in rheumatology. *Int J Rheum Dis*. 2022;25(3):247-258. [PubMed](#)
7. Ziade N, Hmamouchi I, El Kibbi L, et al. Telehealth in rheumatology: the 2021 Arab League of Rheumatology best practice guidelines. *Rheumatol Int*. 2022;42(3):379-390. [PubMed](#)
8. Schwaab B, Bjarnason-Wehrens B, Meng K, et al. Cardiac rehabilitation in German speaking countries of Europe-evidence-based guidelines from Germany, Austria and Switzerland LLKardReha-DACH-Part 2. *J Clin Med*. 2021;10(14):12. [PubMed](#)
9. Gladstone DJ, Lindsay MP, Douketis J, et al. Canadian stroke best practice recommendations: secondary prevention of stroke update 2020. *Can J Neurol Sci*. 2022;49(3):315-337. [PubMed](#)
10. Kapoor S, Gupta A, Saidha PK. Ear, nose, and throat practice guidelines: an update for COVID-19. *Int Arch Otorhinolaryngol*. 2021;25(4):e621-e627. [PubMed](#)
11. Shanthanna H, Strand NH, Provenzano DA, et al. Caring for patients with pain during the COVID-19 pandemic: consensus recommendations from an international expert panel. *Anaesthesia*. 2020;75(7):935-944. [PubMed](#)
12. Perry C, Liberto J, Milliken C, et al. The management of substance use disorders: synopsis of the 2021 U.S. Department of Veterans Affairs and U.S. Department of Defense clinical practice guideline. *Ann Intern Med*. 2022;175(5):720-731. [PubMed](#)
13. Fitch K, Bernstein SJ, Aguilar MD, et al. The RAND/UCLA Appropriateness Method User's Manual. Santa Monica (CA): RAND Corporation; 2001: [https://www.rand.org/pubs/monograph\\_reports/MR1269.html](https://www.rand.org/pubs/monograph_reports/MR1269.html). Accessed 2022 Sep 1.