

# Best Practices for Virtual Care in Rheumatology

## Consensus Statement from the Canadian Rheumatology Association

September 30, 2021

Virtual care is an emerging term adopted by the Canadian Medical Association (CMA) as “any interaction between patients and/or members of their circle of care, occurring remotely, using any forms of communication or information technologies with the aim of facilitating or maximizing the quality and effectiveness of patient care”(1).

Prior to the COVID-19 pandemic, virtual care in rheumatology was practiced infrequently (2) and used primarily to deliver care to more rural and remote regions across Canada often through Telehealth, with a physical exam presenter conducting a musculoskeletal exam at the patient’s site (3-6). During the COVID-19 pandemic, to limit virus spread and to address healthcare capacity concerns, many health systems around the world limited or stopped in person ambulatory care visits. This led to the rapid increase in virtual care, including in rheumatology.

To support rheumatology care teams in delivering high quality virtual care in rheumatology, the CRA embarked on a study and developed the following best practice statements. This document serves to highlight the statements and their rationale only, and the full manuscript of the study detailing the methods and references used has been submitted for publication and is currently under review. Once published, the full manuscript will be linked for further reference.

### Best practice statements:

- 1. Rheumatologists should adhere to national recommendations on best practices and provincial standards and regulations for virtual care including licensing considerations, patient privacy, confidentiality, documentation, and consent.**

**Rationale:** In Canada, physicians are licensed provincially and must adhere to provincial regulations of their licensing bodies. Organizations including the Canadian Medical Protective Agency (CMPA) and the CMA among others, have also developed specific recommendations to consider for the provision of virtual care. Recommendations include discussing the limitations of virtual care with patients, obtaining and documenting consent for virtual care, protecting the privacy and confidentiality of virtual care encounters, and ensuring appropriate documentation of virtual care encounters and appropriate communication of the encounter to other care providers.

- 2. The appropriateness of virtual care for a rheumatology encounter should be considered based on the following factors: access to local rheumatology care; reason for, urgency and complexity of the clinical encounter (including clinical, cultural and language considerations); patient preferences; and type of virtual care available.**

**Rationale:** Virtual care may be offered if medically appropriate. According to CMPA “virtual care is not a substitute for in-person assessments or clinical examinations” (7) and it is also not a substitute for attending the emergency department for urgent evaluation if required. Various patient, clinical and system-level factors need to be considered to determine the appropriateness of a virtual care encounter. Based on multiple systematic reviews of virtual care in rheumatology, there is limited evidence for the safety and efficacy of virtual care for many rheumatologic conditions (8-10). There is conflicting evidence from small, older studies that a videoconference for a new patient may offer a similar diagnostic accuracy to an in-person assessment (11-13), and additional high-quality studies are needed. Many (or all) of these challenges may be alleviated by having a skilled presenter such as an Advanced Clinician Practitioner in Arthritis Care (ACPAC)(14, 15) at the patient site to assist with examination. There is also limited evidence for the long-term efficacy of virtual care with most data available for rheumatoid arthritis (RA) (16). Only surveys (17) and opinion-based recommendations exist as to the types of rheumatic conditions that may be more or less appropriate for virtual care (18, 19). Furthermore, patient factors such as comorbidities, language, culture, and other factors should be considered when determining appropriateness of virtual care.

A major factor is access to local in-person rheumatology care, which is limited across many regions in Canada as rheumatologists are primarily located in larger urban centers. Virtual care allows for greater access to rheumatology specialist care in centers without a local rheumatologist and for greater continuity of care in centers where there may only be sporadic access to rheumatology care due to traveling rheumatology clinics.

At the present time, given the varied potential clinical scenarios encountered, we recommend an approach to determining the appropriateness of a virtual encounter that considers multiple system, clinical, and patient factors.

- 3. If virtual care is determined to be medically appropriate, ensure that the provision of virtual care is a shared decision with patients and that patient consent is documented.**

**Rationale:** Virtual care is not always medically appropriate (see Statement #2). If virtual care is appropriate, it should be a shared decision with the patient weighing the benefits and risks of missing subtle clinical findings, which could impact patient outcomes. Various organizations have developed tools and templates to help educate patients about virtual care and to document consent. The virtual care tools developed by the Doctors of BC in the Doctors Technology Office Virtual Care Toolkit (20)

are one example that have been referenced in national CMA documents (21) and adapted for use in other provinces.

- 4. The standard of care for physical exam by virtual care should allow for appropriate clinical decision-making. If this is not possible, then an in-person physical exam is required and should be completed (either at an in-person rheumatologist visit or completed by a skilled presenter at a remote site).**

**Rationale:** A variety of tools for physical exams in virtual care have been developed (22-24), although additional validation work is required as they are largely consensus-based. A physical exam may not always be required and depends on the nature of the clinical encounter. In general, the exam required should be directed based on clinical need to inform appropriate decision-making.

- 5. Where appropriate, patient-reported outcomes that help direct approaches for care should be used during virtual encounters.**

**Rationale:** Treat-to-target refers to the frequent reassessment of disease activity to direct the adjustment of disease modifying therapy to target low or inactive disease activity. This paradigm is part of current guidelines for RA (25) and emerging for many other rheumatic diseases. The reporting of patient disease activity and/or functional status may be necessary to obtain coverage for advanced therapies for many rheumatic diseases. In addition to measures of disease activity, best practices for RA care may include monitoring functional status (26, 27). The American College of Rheumatology has recently proposed modifications for the reporting of disease activity and functional status in RA to account for the provision of virtual care (28). While recommended patient-reported outcomes do not require modification, some composite disease activity measures do require patient completed joint counts in lieu of provider joint counts and further validation of this approach is required.

For other rheumatic conditions patient-reported outcome measures may also be readily obtained using electronic collection, through telephone or e-mailed surveys. For example, in juvenile idiopathic arthritis, measures of functional status like the childhood Health Assessment Questionnaire (CHAQ) may be collected routinely. In ankylosing spondylitis, disease activity indices may be recorded including the BATH AS disease activity and functional status indices (BASDAI and BASFI). A variety of patient-reported measures have been proposed in lupus (29) but there remains limited guidance from professional societies as to which measures should be routinely collected.

Other patient reported outcomes may be appropriate to capture including fatigue (30), pain (31) and measures of mental health (32, 33). Additionally, there may be specific considerations for the collection of patient-reported outcomes in individuals with limited English proficiency or who have limited health literacy (34, 35).

## **6. Virtual care may be used in addition to in-person follow-ups to enhance care.**

**Rationale:** In between rheumatology appointments, virtual care has been used to support patients in a variety of ways. Some examples include: self-monitoring using mobile applications (36, 37); nurse-led telephone lines (38); patient self-management courses/education/resources (36); methotrexate or biologic injection classes; rapid access rheumatology “hotlines” for practitioners to get timely specialist advice. Ongoing evaluation and reporting on these care strategies is suggested.

## **7. In complex co-management of disease, virtual care may be used to enhance communication between providers.**

**Rationale:** Patients with rheumatic disease may have multiple comorbidities that require consultation with different specialists. Across the country there are several examples of combined clinics where a patient may be seen by two or more specialists in a single clinical encounter to enhance communication, clinical decision-making and reduce the need for multiple visits. These clinics may be amenable to virtual encounters if appropriate. Scenarios where this may occur include co-management of rheumatology care with primary care providers or internists; virtual transition clinics where adult and pediatric rheumatologists assist young adults with transition to adult care; or inter-disciplinary visits (e.g., with a social worker, physiotherapist, or nurse present for part of a visit or the entire visit). Further research is needed in these advanced models of rheumatology virtual care.

### **In Summary:**

The COVID-19 pandemic has removed many logistical barriers to virtual care that previously existed and consequently it is anticipated that virtual care use will continue following the pandemic. The present work contributes a starter set of best practice statements that can be expanded upon as we learn more about the optimal delivery of virtual care in rheumatologic diseases. The set is not meant to replace good clinical judgement in the provision of care or to supplant regional regulatory requirements.

This work represents a starting point for future research and practice advances in rheumatology in virtual care. We anticipate increased research in this area over time and will look to updating these statements in accordance with advances in the field.

## References:

1. Canadian Medical Association (CMA), The College of Family Physicians of Canada, Royal College of Physicians and Surgeons of Canada. Virtual Care: Recommendations for Scaling Up Virtual Medical Services: Report of the Virtual Care Task Force. 2020 [updated 2020; cited 2020 October 30]; Available from: <https://www.cma.ca/sites/default/files/pdf/virtual-care/ReportoftheVirtualCareTaskForce.pdf>.
2. Barber CE, Jewett L, Badley EM, Lacaille D, Cividino A, Ahluwalia V, et al. Stand Up and Be Counted: Measuring and Mapping the Rheumatology Workforce in Canada. *J Rheumatol* 2017;44:248-57.
3. Davis P, Howard R, Brockway P. Telehealth consultations in rheumatology: cost-effectiveness and user satisfaction. *J Telemed Telecare* 2001;7 Suppl 1:10-1.
4. Davis P. The application of telehealth to rheumatology. *Clin Rheumatol* 2003;22:168-72.
5. Davis P, Howard R, Brockway P. An evaluation of telehealth in the provision of rheumatologic consults to a remote area. *J Rheumatol* 2001;28:1910-3.
6. Taylor-Gjevre R, Nair B, Bath B, Okpalauwaekwe U, Sharma M, Penz E, et al. Addressing rural and remote access disparities for patients with inflammatory arthritis through video-conferencing and innovative inter-professional care models. *Musculoskeletal care* 2018;16:90-5.
7. Canadian Medical Protective Association (CMPA). Providing virtual care during the COVID-19 pandemic. 2021 [updated 2021; cited 2021 April 20]; Available from: <https://www.cmpa-acpm.ca/en/advice-publications/browse-articles/2020/providing-virtual-care-during-the-covid-19-pandemic>.
8. McDougall JA, Ferucci ED, Glover J, Fraenkel L. Telerheumatology: A Systematic Review. *Arthritis Care Res (Hoboken)* 2017;69:1546-57.
9. Nelson A, Anderson M. A Systematic Review Exploring Pre-COVID-19 Telehealthcare Models Used in the Management of Patients with Rheumatological Disease. *Arthritis Rheumatol* 2020;72.
10. Piga M, Cangemi I, Mathieu A, Cauli A. Telemedicine for patients with rheumatic diseases: Systematic review and proposal for research agenda. *Semin Arthritis Rheum* 2017;47:121-8.
11. Leggett P, Graham L, Steele K, Gilliland A, Stevenson M, O'Reilly D, et al. Telerheumatology--diagnostic accuracy and acceptability to patient, specialist, and general practitioner. *Br J Gen Pract* 2001;51:746-8.
12. Nguyen-Oghalai TU, Hunter K, Lyon M. Telerheumatology: The VA Experience. *South Med J* 2018;111:359-62.
13. Graham LE, McGimpsey S, Wright S, McClean G, Carser J, Stevenson M, et al. Could a low-cost audio-visual link be useful in rheumatology? *J Telemed Telecare* 2000;6 Suppl 1:S35-7.
14. Advanced Clinician Practitioner in Arthritis Care (ACPAC). Advanced Clinician Practitioner in Arthritis Care (ACPAC). 2016 [updated 2016; cited 2016 January 29]; Available from: <http://acpacprogram.ca/>.
15. Ahluwalia V, Larsen TLH, Kennedy CA, Inrig T, Lundon K. An advanced clinician practitioner in arthritis care can improve access to rheumatology care in community-based practice. *J Multidiscip Healthc* 2019;12:63-71.

16. Han L, Hazlewood GS, Barnabe C, Barber CEH. Systematic Review of Outcomes and Patient Experience with Virtual Care in Rheumatoid Arthritis. *Arthritis Care Res (Hoboken)* 2021.
17. Singh JA, Richards JS, Chang E, Joseph A, Ng B. Management of Rheumatic Diseases During the COVID-19 pandemic: A National Veterans Affairs Survey of Rheumatologists. *Arthritis Care Res (Hoboken)* 2020.
18. Roberts LJ, Lamont EG, Lim I, Sabesan S, Barrett C. Telerheumatology: an idea whose time has come. *Intern Med J* 2012;42:1072-8.
19. American College of Rheumatology. Guiding principles from the American College of Rheumatology for decision making around in-person urgent versus virtual non-urgent medical care.; 2020 [updated 2020; cited]; Available from: <https://www.rheumatology.org/Portals/0/Files/Guiding-Principles-Urgent-vs-Non-Urgent-Services.pdf>.
20. Doctors of BC. Doctors Technology Office Virtual Care Toolkit. Doctor's of British Columbia; 2021 [updated 2021; cited]; Available from: [https://www.doctorsofbc.ca/sites/default/files/dto\\_virtual\\_care\\_toolkit.pdf](https://www.doctorsofbc.ca/sites/default/files/dto_virtual_care_toolkit.pdf).
21. Canadian Medical Association (CMA), The College of Family Physicians of Canada, The Royal College of Physicians and Surgeons of Canada. Virtual Care Playbook. *Journal [serial on the Internet]*. 2020 Date [cited 2021 March 12]; Available from: <https://www.cma.ca/virtual-care-playbook-canadian-physicians>.
22. Bone and Joint Canada. Virtual Assessment of Musculoskeletal Conditions, Completing a Clinical Assessment. 2021 [updated 2021; cited 2021 April 20]; Available from: <http://boneandjointcanada.com/virtual-care/>.
23. Pediatric Musculoskeletal Matters (PMM) International. Virtual of Video-pGALS (V-pGALS). [cited 2021 April 20]; Available from: <http://www.pmmonline.org/doctor/approach-to-clinical-assessment/examination/v-pgals>.
24. Wahezi SE, Duarte RA, Yerra S, Thomas MA, Pujar B, Sehgal N, et al. Telemedicine During COVID-19 and Beyond: A Practical Guide and Best Practices Multidisciplinary Approach for the Orthopedic and Neurologic Pain Physical Examination. *Pain Physician* 2020;23:S205-S38.
25. Singh JA, Saag KG, Bridges SL, Jr., Akl EA, Bannuru RR, Sullivan MC, et al. 2015 American College of Rheumatology Guideline for the Treatment of Rheumatoid Arthritis. *Arthritis Rheumatol* 2016;68:1-26.
26. England BR, Tiong BK, Bergman MJ, Curtis JR, Kazi S, Mikuls TR, et al. 2019 Update of the American College of Rheumatology Recommended Rheumatoid Arthritis Disease Activity Measures. *Arthritis Care Res (Hoboken)* 2019;71:1540-55.
27. Barber CEH, Zell J, Yazdany J, Davis AM, Cappelli L, Ehrlich-Jones L, et al. 2019 American College of Rheumatology Recommended Patient-Reported Functional Status Assessment Measures in Rheumatoid Arthritis. *Arthritis Care Res (Hoboken)* 2019;71:1531-9.
28. England BR, Barber CEH, Bergman M, Ranganath VK, Suter LG, Michaud K. Brief Report: Adaptation of American College of Rheumatology Rheumatoid Arthritis Disease Activity and Functional Status Measures for Telehealth Visits. *Arthritis Care Res (Hoboken)* 2020.
29. Mahieu M, Yount S, Ramsey-Goldman R. Patient-Reported Outcomes in Systemic Lupus Erythematosus. *Rheum Dis Clin North Am* 2016;42:253-63.

30. Elera-Fitzcarrald C, Rocha J, Burgos PI, Ugarte-Gil MF, Petri M, Alarcon GS. Measures of Fatigue in Patients With Rheumatic Diseases: A Critical Review. *Arthritis Care Res (Hoboken)* 2020;72 Suppl 10:369-409.
31. Hassett AL, Whibley D, Kratz A, Williams DA. Measures for the Assessment of Pain in Adults. *Arthritis Care Res (Hoboken)* 2020;72 Suppl 10:342-57.
32. Kwan A, Bingham K, Touma Z. Measures of Anxiety in Rheumatic Diseases. *Arthritis Care Res (Hoboken)* 2020;72 Suppl 10:630-44.
33. Smarr KL, Keefer AL. Measures of Depression and Depressive Symptoms. *Arthritis Care Res (Hoboken)* 2020;72 Suppl 10:608-29.
34. Hirsh JM. The Challenge and Opportunity of Capturing Patient Reported Measures of Rheumatoid Arthritis Disease Activity in Vulnerable Populations with Limited Health Literacy and Limited English Proficiency. *Rheum Dis Clin North Am* 2016;42:347-62.
35. Carvajal Bedoya G, Davis LA, Hirsh JM. Patient-Reported Outcomes in Rheumatology Patients With Limited English Proficiency and Limited Health Literacy. *Arthritis Care Res (Hoboken)* 2020;72 Suppl 10:738-49.
36. Nguyen AD, Baysari MT, Kannagara DR, Tariq A, Lau AY, Westbrook JI, et al. Mobile applications to enhance self-management of gout. *Int J Med Inform* 2016;94:67-74.
37. Seppen BF, den Boer P, Wiegel J, Ter Wee MM, van der Leeden M, de Vries R, et al. Asynchronous mHealth Interventions in Rheumatoid Arthritis: Systematic Scoping Review. *JMIR Mhealth Uhealth* 2020;8:e19260.
38. Tomlinson P, Heaton H, Medcalf P, Campbell J, Whiteside D. A nurse-led rheumatology telephone advice line: service redesign to improve efficiency and patient experience. *Br J Nurs* 2019;28:619-27.