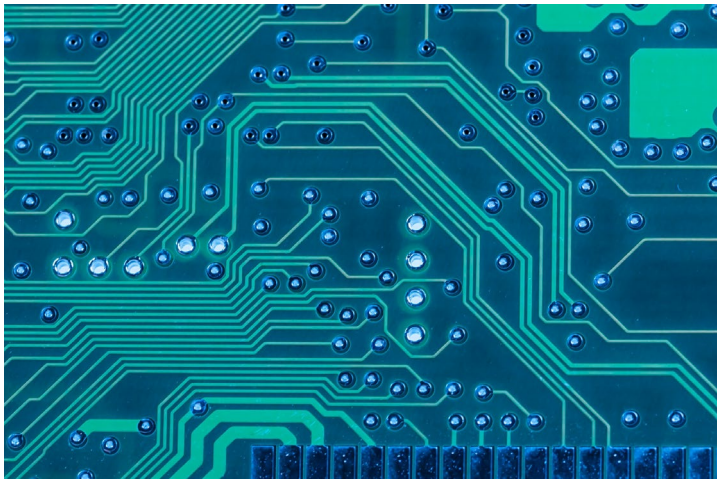
BONE and JOINT CANADA

# VIRTUAL CARE OF MUSCULOSKELETAL CONDITIONS

Policy requirements to build a sustainable system



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## Background

Musculoskeletal (MSK) assessments are completed across the health care system by trained health care providers (HCPs) who work in primary care (e.g. physicians, rehabilitation professionals and nurse practitioners), and in the hospital sector (e.g. orthopaedic surgeons). Patients can access care through an emergency departments or fracture clinics when presenting with trauma, and through offices and clinics for those with sports injuries and degenerative conditions. Many patients also attend appointments for treatments such as joint injections, rehabilitation or education.

Some patients struggle to attend appointments related to social, geographic, and clinical factors including:

- Residing a long distance from the service.
- Unable to travel (e.g. related to medical condition, frailty).
- Lack of transportation (e.g. access to a car, remote fly-in communities).
- Lack of access to someone to accompany the patient (e.g. family member).
- Unnecessary resources required to coordinate the visit (e.g. long-term care).
- A clinical condition/issue that causes an unnecessary increase in symptoms to travel (e.g. low back pain, recent fractures).
- Unacceptable financial and time burden for patients.

The technology for virtual assessments has been used for many years in Canada, especially in remote communities. With COVID restriction there has been significant increase in the use by HCPs, many of whom have little or no experience. They have had to learn as they go and investments have had to be made in space, technology and the time and training related to developing and implementing new processes. In many provinces across Canada funding has had to be adjusted to allow HCPs to get paid fee for services rates for the virtual assessment. HCPs have also had to adapt to the new paradigm, including the lack of ability to put their hands-on patients to complete specific manual tests. When used for appropriate patients, completing assessments through virtual care provides significant benefit to the patient, HCP and the system (Appendix A) and research shows that patients are satisfied with this form of assessment. There is overall agreement within the MSK clinical community in Canada that virtual care should be available on a permanent basis, and that its use should be optimized for the right patients by developing effective clinical pathways by sharing learnings at a clinical and policy level across the country.

## A Toolkit to Support Clinical Practice

In order to facilitate learning and uptake of virtual care, the HCPs who undertake MSK assessment (Appendix B) came together to develop a Toolkit. The Toolkit was developed through Bone and Joint Canada to make available the most up-to-date information on completing virtual assessments for MSK patients. It provides information on the logistics of completing the assessment including initial consultation, treatment, follow-up and final discharge and is supported by a clinical document which provides information on how to complete the clinical assessment for different patient populations. The Toolkit was developed following a set of principles (Appendix C). The Toolkit focuses on quality of care by facilitating a decision on next steps in care which may include diagnostic imaging, rehabilitation, the need for an in-person assessment, or referral to another HCP. It provides examples of how new models of care can be leveraged to optimize the system and reduce the potential for negative consequences such as deferred assessment to an emergency department, or inappropriate/unnecessary referral to a specialist.

**Supporting Virtual Care**

Now that the Toolkit has been developed, work is required to support the implementation of virtual care across the country. To be successful there are a number of factors that need to be considered including:

- Different processes and infrastructure, including space and technology.
- A coordinated approach to training clinicians so that they are skilled and confident in their abilities.
- Development of visual tools (e.g. videos) to support the patient through their interaction.
- Permanent funding for all HCPs.
- Developing pathways that enhance access to the right HCP and limit potential negative consequences e.g. inappropriate referrals
- A coordinated approach to learning to leverage system efficiencies.
- Research on clinical tests where their effectiveness in a virtual setting is unknown.
- Ability to assess patients across provincial boundaries which would help to support communities with no practitioners (e.g. rheumatologists).

## Future Opportunities Using Virtual Care

The development of the Toolkit has brought together a network of HCPs across the country who have identified that virtual care should be available on a permanent basis to improve patient access and care and to optimize available healthcare resources. The following opportunities have been identified:

1. **Assessment and re-assessment:** virtual assessment of patients with MSK conditions related to injury, degeneration or chronic disease in the public sector including hospitals, primary care and rehabilitation clinics.

2. **Fracture clinics:** virtual assessment could revolutionize the flow of patients through a fracture clinic by having straight forward fractures (e.g., 5$^{th}$ metatarsal, radial head, clavicle) streamlined through a virtual follow-up clinic with the surgeon.

3. **Management of chronic disease:** virtual clinics for fragility fracture patients can be used to identify patients who are high risk for chronic disease e.g. osteoporosis.

4. **Pre-operative education:** elective surgery patients can be provided with their pre-operative education virtually in groups with no restrictions to group sizes.

5. **Rehabilitation:** treatment can be provided on a one-on-one basis or in a group-based session. A virtual treatment session(s) can also be considered for patients who are attending in-person to establish a home program and engage them in continuing with their exercises and physical activity independently.

6. **Patient education:** patient education can be provided in a group-based format with no restrictions on group size.

7. **Monitoring of high-risk patients:** monitoring of clinical care plans for patients who are at high risk such as hip fracture patients in long-term care.

8. **Equipment prescription**: increased access to authorized assessors for specific equipment e.g. seating, wheelchairs etc.

9. **Provider education:** virtual care provides an opportunity for students and HCPs to attend different assessments to gain additional clinical experience.

10. **Primary care physician assessment and referral in the EMR**: a standard virtual assessment for primary care can be used to facilitate clinical assessments and develop appropriate referrals pathways.

## Recommendations

The HCPs involved with MSK care recommend that the health care systems in each province adapt to allow for the permanent use of virtual care with the provincial governments responsible for:

1. Removing funding barriers.

2. Supporting sites with their implementation through coordinated local, regional and provincial planning.

3. Supporting their clinical networks in identifying and piloting new opportunities to improve patient care.

It is also identified that there is a potential role for the federal government that includes leveraging the different programs across the country by supporting a national network to share information and experiences.

# Appendix A: Benefits

## Overall

- Decreased exposure to infections for patients and staff.
- Improved access, specifically for patients in remote areas.
- Decreased time and money required for travel for patient and the health care system.
- Provide treatments recommendations that are appropriate to the patients living environment e.g., exercises taught in the patients home ensures they have the right equipment.
- Identify issues in care including social issues that need to be addressed for successful treatment.

## Patient

- Time sensitive reducing the need for travel.
- Reduced need for caregiver/family support to accompany patient.
- Reduced exposure to infection.
- Help develop realistic goals.
- Help set up home treatments.

## Healthcare provider

- Multidisciplinary assessments by aligning with local practitioners.
- Recommendations reflect the reality of patients living environment.
- Information received prior to assessment.
- Opportunities to move to electronic data capture.
- Minimizes no-shows.
- Time management.
- Flexibility in working location.

## System

- Increased patient access.
- Decreased space requirement.
- Improved utilization of specialists.
- Cost effective.

## Appendix B: Multidisciplinary

The Toolkit was developed with input from representatives of the HCP who complete assessments of MSK populations including:

- Orthopaedic Surgery
- Neurosurgery (involved with spine)
- Physiotherapy
- Occupational Therapy
- Rheumatology
- Sports Medicine
- Physiatry
- Chiropractic

## Appendix C: Guiding Principles

The guiding principles for the development of this Toolkit were:

1. ***Patient safety*** **–** Completing a virtual interaction (assessment or treatment) with a patient means that additional work is required to ensure the safety of the patient. This Toolkit has been developed with the understanding that each health profession will meet the requirements of their provincial legislation/regulations and is working within their scope of practice and their confidence and competence to provide virtual care.

2. ***Patient choice*** **–** the patient has made the choice to participate in the virtual interaction. For some patients, the need to meet the HCP in person is critical; therefore, the option of providing a virtual assessment, or treatment, does not replace an in-person visit, if it is preferred by the patient and available with the HCP.

3. ***Confidentiality*** – all interactions consider patient confidentiality and utilize the appropriate privacy and security measures required under legislation.

4. ***Best evidence or experience*** – the documents reflect evidence where it is available and clinical experience from HCPs who have been providing virtual assessment. However as additional research becomes available, the document will need to be updated.

5. ***Systems approach*** **–** new models should be developed that include virtual care to enhance the assessment capabilities of all providers and align with in-person assessment so they can meet the needs of patients, including primary care. Where a referral to another HCP is required the models should consider a multidisciplinary approach to streamline access to the most appropriate HCP so that patients are able to access the care they need.

6. ***Enhanced patient experience*** **–** the move to virtual care has resulted in new models being developed which may have an effect on the patients' clinical care, outcomes and overall experience. These models should optimize patient access to care and enhance their experience by facilitating knowledge e.g. providing information up front and preventing duplication and unnecessary interventions.

7. ***Respecting community need*** - Assessments for MSK conditions need to be completed in the context of the patients' community to ensure knowledge of local resources for appropriate follow-up and community reintegration as well as developing a trusting relationship with a provider who understands the diversity and special needs of the community. The new virtual models have the potential to limit local access to in person care due to economies of scale which should be recognized and mitigated.

8. ***Sharing to facilitate discussion and planning*** – the documents have been developed to facilitate the sharing of information, experiences, and tools to enhance discussion and planning.

9. ***Identifying future research opportunities*** – areas of clinical practice where there is little, or no evidence will be identified as opportunities for future research.