



# An ACPAC Program Trained Physiotherapy Practitioner and Orthopaedic Surgeon Share Care in an Interprofessional Orthopaedic Private Practice

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## Background

In 2014, two physiotherapists developed a shared business *and* clinical practice model with an orthopaedic surgeon to meet increasing musculoskeletal (MSK) care demands in the rapidly expanding Aurora-Newmarket region in Ontario. Due to demographic shifts of individuals residing within the Aurora-Newmarket area, there continues to be an increased demand for MSK care. The goal was to improve orthopaedic care by providing residents with comprehensive access to various services such as physiotherapy, massage therapy, chiropractic, occupational therapy, bracing, joint injections as well as various practitioners including a sports medicine physician and an orthopaedic surgeon, all within one well-equipped practice setting.

In 2017, one team member with 15 years of physiotherapy experience in acute, inpatient, and outpatient settings in neurological and musculoskeletal areas of practice, enrolled in the ACPAC program ([www.acpacprogram.ca](http://www.acpacprogram.ca))<sup>1</sup> as a measure to support the growing need for expert arthritis/MSK service provision within the practice. The orthopaedic surgeon, with over 11 years of independent practice experience including privileges at a local acute hospital, and academic appointments at McMaster University and the University of Toronto, agreed to supervise the physiotherapist through one subspecialty component (entailing 40+ hours of hip and knee surgical triage/management) of the ACPAC clinical training process.

## The Shared Orthopaedic Practice Setting: Meeting the Need

The Aurora-Newmarket community, which is located within the Central LHIN is experiencing a surge in population growth with a relatively limited number of orthopaedic surgeons. For individuals 65 years and older, the increase in population growth ranges from 9.8% to 20.5%<sup>2</sup> causing an inherent need to increase arthritis/MSK/orthopaedic care capacity by improving timely access to non-surgical and surgical care as well as by providing more efficient and effective models to deliver this care.

In order to meet these service demand issues in other MSK fields (rheumatology), one viable option under consideration has been the

adoption of models of care to increase arthritis/MSK capacity. At the core of these new models of arthritis care is the reliance upon strong interprofessional collaborative relationships between specialists and other highly trained healthcare professionals. In such service delivery models, the skill sets of formally educated (ACPAC program) advanced practice or extended role practitioners (ERPs) who are already experienced in arthritis care are leveraged and have shown significant potential to magnify the workforce capacity and improve access to care for patients living with arthritis.<sup>6</sup> Utilization of ACPAC ERPs in interprofessional shared care models of arthritis management has already optimized scarce human resources in rheumatology. These practitioners have achieved success as evaluated at the system level by demonstrating high concordance rates in their decision making processes with specialists, and in their ability to correctly triage patients and thus improve their access to appropriate care.<sup>3-6</sup>

## The Context: A Shared Care Model within a Private Practice Setting

As a direct result of the training processes, the ACPAC trained extended role physiotherapist was well prepared to triage individuals with hip and knee osteoarthritis in the shared orthopaedic private practice and streamline their care pathway into either a non-surgical or surgical management stream. Within this type of practice setting, an ACPAC ERP (also referred to as an Advanced Practice Physiotherapist (APP)) is expected to triage and accurately make binary decisions regarding non-surgical/conservative or surgical management for patients presenting with MSK/arthritis conditions. This model improves efficiencies. Studies have shown that up to 35-70% of referrals to orthopaedic surgeons do not require surgical intervention at all,<sup>7,8</sup> and that concordance rates between specialists and trained ERP/APPs are extremely high<sup>9</sup> in this population.

Within this shared care model, the ACPAC ERP is responsible for independently triaging all new patients referred to the orthopaedic surgeon by completing the initial assessment, which consists of imaging review and/or directives to order lab or diagnostic imaging and providing recommendations for management which could include **Continued on page 10 >>**

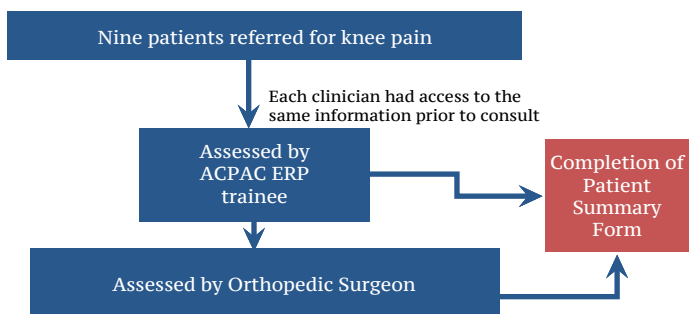
## An ACPAC Program Trained Physiotherapy Practitioner... continued >>

non-surgical treatment such as physiotherapy, injections, bracing, and weight loss. Patients identified as requiring further orthopaedic consultation would then be triaged and referred directly to the orthopaedic surgeon for intra-articular injections and/or surgical consideration. Patients initially deemed non-surgical are monitored over time by the physiotherapist and referred to the orthopaedic surgeon should they later become eligible surgical candidates.

## Quality Assurance Measures Taken to Ensure Accuracy in Making Binary Decisions About Surgical vs. Non-surgical Management of Incoming Patients with Hip and Knee Conditions

To ensure concordance in the decision-making process, the ACPAC ERP trainee and orthopaedic surgeon conducted a small quality assurance project to evaluate the level of agreement between the two clinicians. Nine new patients referred to the orthopaedic surgeon by a family physician for initial consultation for knee conditions were included in this initiative. The orthopaedic surgeon and ACPAC ERP trainee had access to the same information prior to the initial consultation, which included the initial referral letter from the family physician, and diagnostic imaging consisting of x-rays and/or MRI images and reports. Each practitioner independently reviewed these documents and no discussion occurred between the two practitioners. Figure 1 illustrates the approach taken for the initial consultation.

Figure 1: Quality Assurance Measure



There was 100% agreement between the orthopaedic surgeon and the ACPAC ERP trainee for the main categories of diagnosis, which included knee osteoarthritis (OA) (55.6% of patients), meniscal tears (33.3% of patients), and patellofemoral instability (11.1% of patients). Minor differences existed between practitioners for severity of OA (ie: advanced vs severe) and the underlying cause of meniscal pathology (ie: degenerative vs traumatic). With respect to the binary decision of whether a patient was deemed a non-surgical or a surgical candidate, the level of agreement between the ACPAC ERP trainee and orthopaedic surgeon was 88.9%. These results are consistent with those

identified in other studies<sup>7,9</sup> and it is further known that patients are equally satisfied with this decision-making process, whether conducted by an orthopaedic surgeon or a skilled advanced practice physiotherapist<sup>10</sup>. These results support the evidence that an ERP/APP role can be successfully implemented within a community-based shared physiotherapist and orthopaedic surgeon's clinical practice and that binary decision-making is high. It is recommended that validation studies are performed routinely as quality assurance measures in these types of settings to build trust in inter-professional relationships, particularly within the context of private practice settings.

## Lessons Learned and Strengths of Shared Private Practice Model of Care

The advantages to implementing an ERP/APP role within a shared private practice include prompt access to non-surgical management which can prevent functional decline, and a decrease in surgical wait times for surgical candidates. Surgical candidates can also receive prompt referrals to appropriate programming including physiotherapy to prepare them for surgery. Recommendations and referrals can be facilitated to other healthcare professionals and rehabilitation programs or other conservative management needs within one facility. This enhances the continuity of care, optimizes communication between relevant healthcare providers, and ultimately improves the individuals' outcomes. Co-location of providers allows for optimized communication regarding the individual's medical status and reduces the potential for disjointed care.

## Opportunities for Implementation and Advocacy

The demonstrated positive patient outcomes and evidence for the role of physiotherapists in advanced practice roles has led to a province wide Ministry funded strategy to address wait times for hip and knee arthroplasty and access to specialist care. However, there are many innovative models of interprofessional care that utilize health care professionals to their full scope of practice, including physiotherapists with additional skills, knowledge and competencies practicing in advanced roles, which exist in many forms across the health system. It will be important for all these examples of collaborative care models to be highlighted to decision makers so that the value physiotherapists bring to the system as innovators and collaborators can become more widely known.

Physiotherapists practicing in advanced practice roles continue to explore opportunities to partner and collaborate with community primary care providers to seek solutions. \*

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