

# BUILDING PARTNERSHIPS TO IMPROVE CARE OF EARLY KNEE OSTEOARTHRITIS (KOA) PATIENTS: CO-DEVELOPING A MOBILE-HEALTH PREDICTION TOOL FOR KOA PROGRESSION

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## INTRODUCTION

Similar to any chronic disease or illness, meaningful and effective treatment of people living with osteoarthritis (OA) requires an understanding of what patients need and value. Conversely, delivery of such treatment also requires an understanding of how healthcare providers approach the management of patients living with the chronic disease or illness.

## AIM

We sought to understand whether family physicians would use a mobile-health prediction tool for knee osteoarthritis (KOA) progression to improve patient care – i.e., would a risk calculator for KOA progression assist in promoting healthier outcomes?

## CONCLUSION/NEXT STEPS

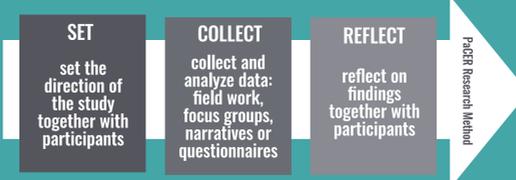
The moral of our research “expedition” (so far) is that if you don’t go and look, you won’t know. Engaging patients in and outside the “exam room” is crucial to building a system and supports that will meet their needs. Just as important, understanding the utility of a resource in real-world practice is key to ensuring patients and providers can work towards building better health outcomes together. Our new vision is to develop a self-management tool that will increase patient and physician communication and engagement in terms of shared decision-making and evidence-based self-management planning. Working in partnership with providers and patients is imperative for meaningful project implementation.

## METHODS & ANALYSIS

Two non-concurrent studies were used to inform the findings. The patient-to-patient study was completed prior to the physician study. The methodologies used to gather the patient and physician perspectives are outlined below.

### PATIENT PERSPECTIVE

Focus groups and interviews with 25 patients living with OA were conducted by Patient Engagement Researchers (also living with OA) using the iterative Patient and Community Engagement Research (PaCER) approach and methodology - Set, Collect and Reflect (see image below).



### PHYSICIAN PERSPECTIVE

A Cognitive Task Analysis (CTA) technique called Critical Decision Method was used to capture the physician perspective. This technique is ideal when focusing on one particular type of decision as it elicits the interviewee’s mental model of that situation and decision – i.e., their own beliefs, values and understanding. In this case, the focus was how physicians manage early KOA and whether they would use a risk calculator.

Interviewers trained in this technique conducted individual, audio recorded (with consent) interviews with 3 family physicians. The interviews were transcribed and analysed by the CTA trained team to gain an understanding of physicians’ mental models of their decision making process around KOA.

## RESULTS

### PATIENT STUDY (PaCER) FINDINGS:

The following 3 themes were identified:

The Right Knowledge - The Right Professional Support - The Right Professional Relationship



### PHYSICIAN (COGNITIVE TASK ANALYSIS) FINDINGS:

The CTA interviews revealed family physicians have:

- A solid knowledge of early KOA and managing with lifestyle interventions
- No use for a progression calculator in managing KOA, but suggested it be used as a self-management strategy for patients
- One global mental model of KOA that includes categorizing knee pain as osteoarthritis vs. other conditions; importance of clinical assessments of the knee; management and treatment; and addressing patient expectations

## DISCUSSION

While the PaCER method indicated patients want information, resources and a way to engage with supported self-management strategies, the exploration of family physicians’ mental models of early KOA treatment and the utility of a risk calculator revealed such a tool would not be used. This insight is highly valuable and has led to a re-examination of our approach and assumptions about developing a progression tool for early KOA.