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## Background

## Purpose

- Physical activity participation can reduce pain, improve mobility and enhance quality of life of arthritis patients.<sup>1</sup> Despite these benefits, less than half of Canadians with arthritis are physically active.<sup>2</sup>
- With advances in technology, a number of physical activity monitoring tools are being developed. Although current evidence indicates some tools can improve physical activity participation in people with chronic disease, little is known about how to integrate them in arthritis care.<sup>3</sup>

- Examine barriers and facilitators to using physical activity monitoring tools to support physical activity participation from the perspectives of patients across Canada with osteoarthritis and/or inflammatory arthritis.

## Methods

- Qualitative study
- Eligible participants 1) had a diagnosis of osteoarthritis (OA) and/or any type of inflammatory arthritis (IA); 2) had any level of experience with physical activity monitoring tools; 3) were English-speaking
- Participants were recruited via notices in hospitals and clinics of rheumatologists and rehabilitation professionals, and via online ads
- 9 focus groups with a total of 40 arthritis patients (9 men; 31 women) have been held in Ontario, Alberta & British Columbia (BC); age range 23-78 years (median 59 years)



- An iterative, thematic analysis approach using constant comparative methods is being applied to the data.

## Findings



Participant Self-Reported Physician Diagnosis	No. of Participants
Osteoarthritis (OA)	17 (46%)
Inflammatory Arthritis (IA)	13 (35%)
OA & IA	7 (19%)



Here we focus on preliminary themes arising from the data

### Unfamiliarity

Being new to the tools meant participants were in a process of 'figuring out' how the tools worked while assessing their potential.

### Cost

Some participants found the price of the tools to be high, and those who questioned the tool's value doubted whether the tools would be a good financial investment.

### Doubting sustainability

Some participants described how they had got out of the habit of using the tools. Others were hesitant to put in 'the amount of time and effort' involved in long-term use of the tools.

*...none of us have used those or similar things. We are giving our impressions before we've used them [Speaker 2, BC FG2]*

*...the thing I don't like about these is the cost... when the novelty wears off... then that's \$100 wasted. [Speaker 3, Ontario FG3]*

*Mostly when I stopped using it was because I would forget and then it would be like a week later, I'm like oh, I should start that again but now I've lost all that progress and I don't really want to go back to zero. [Speaker 2, Alberta FG2]*

*...it just didn't work, I can't find an app that just lets you put yoga in, you can't put more gentle exercise that sometimes with arthritis you need to be doing. [Speaker 2, Alberta FG1]*

*I usually do 5 kilometers so I can see that... I look and I see well it's that fourth kilometer that I slow down the most so it motivates me to do a little bit more [Speaker 2, Ontario FG3]*

*I like the idea that if it went to my doctor, 'cause then I'm more accountable, right? Because they get the information and then I get the phone call or the email saying we need to discuss some stuff you know. I think that would keep you more on track [Speaker 2, BC FG1]*

### Ease of Use

Participants expressed the importance of a tool being simple to use, and felt the tools had not been designed with their needs in mind.

### Motivation

The tools provided some participants with 'another marker' to push themselves to do a little bit more. It was felt that the tools were no replacement for internal motivation.

### Sharing information with health professionals (HCPs)

Sharing information collected by the tools with HCPs was considered favourably as a means to feel accountable to staying on track with being physically active. Participants questioned how realistic it would be, given HCPs' time constraints.

## Conclusion

Participants identified accessibility, information-sharing with health professional and existing levels of motivation to be physically active as important factors for their use of physical activity monitoring tools. Findings can inform future design, implementation and evaluation of physical activity monitoring devices.

### References:

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