



# Integrating Wearable Physical Activity Monitoring Tools into Rehabilitation Practice for Patients with Arthritis: the Healthcare Professional Perspective

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## Background

- Wearable physical activity monitoring tools can be used for goal-setting and progress-monitoring in rehabilitation programs for patients with arthritis.
- Little is known about the views of health professionals regarding potential clinical application of these tools.

## Objective

To identify the barriers and facilitators perceived by healthcare professionals to the prospect of using commercially available wearable physical activity trackers in their practice.

## Methods

- Focus groups and one-on-one interviews exploring views of health professionals towards physical activity trackers.
- Eligibility:**
  - English-speaking
  - Physiotherapists or occupational therapists
  - Minimum 40% caseload dedicated to arthritis.
- Transcripts were coded and analyzed using Constant Comparative Method (qualitative, iterative, theme-based method coding content into thematic categories, refining codes as trends emerge, and analyzing categories to maintain logical consistency as new insights become apparent).



5 focus groups and 3 interviews were conducted in Canada, in British Columbia, Alberta, and Ontario in 2014-15

Sample Characteristics (n = 25)	
Age Range	28-61
Median Age	47
Gender, female	92%
Physiotherapists	94%
Occupational Therapists	6%
Working full time	60%
Range: years in practice	5-39
Median years in practice	22
Urban or suburban	94%

A) Not enough people will want to use them in the first place, and uptake would be skewed toward the already physically active parts of the patient population

"If you're talking to someone like that for whom it's a big deal to get to one location for one appointment, these aren't the people that we're going to talk to about that kind of, these tracking tools, we're not going to talk to them about that, right. So you're right... there's a very small population I think that would be helpful for." -P4FG3

B) Patients would not sustain their use of the PATs even if they are at first enthusiastic users

"It's trendy, it's something that's new, and right now we're seeing this, this potential as tipping point where people are early adopters and then we're going to see a lot more people starting to use it but what will be, what will be the long term sustainability of these types of programs?" -P3FG1

## Findings

The majority of healthcare professionals participating in the study regarded these devices as potentially useful tools because of the objective data they provide and their ability to facilitate the setting of and adherence to goals throughout rehabilitation. Some of the participants, however, thought that they would be of limited use due to:

1) The inaccessibility for people with health-related challenges such as hand pain and deformity due to arthritis, or vision problems

3) Their potential to be "just another novelty" in the following ways:

C) Patients will find the technology excessive, which may end up demotivating the patient and putting strain on the therapist-patient relationship

"It gave a lot of negative feedback actually to people kinda I felt the feedback was really negative that it kept giving so I think you have to kind of be wary is this A: A fad? And B: Is it giving appropriate information to a patient who has a certain health problem?" -P1FG4

## Conclusion

- Our results reveal that activity trackers show promise for improving physical activity habits, however, some therapists are skeptical regarding the benefit for and accessibility to specific patients, particularly older adults.
- Participants agreed that the patient-therapist relationship must take precedence over PATs: "you could never replace therapy with an app."

