

## **ABSTRACT**

**THESIS:** PAI Monitor Usability for Cardiac Patients

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**DATE:** May 2019

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This study evaluated usability of the PAI Health application in 10 cardiac rehabilitation patients (attending rehabilitation  $\geq 3$  days/week). Following an initial maximal exercise test, participants wore a PA monitor for 14 days continuously and completed a 19-item usability questionnaire to describe satisfaction with the application. Participants attended a focus group visit to discuss their experiences, allowing participants to give open-ended feedback. Participant  $VO_2$ max values averaged  $22.74 \pm 5.33$  ml/kg/min and exercise volumes of  $207.4 \pm 59.2$  minutes/week. Overarching themes emerged describing usability of the PAI Health application for cardiac patients. Theme 1: Participants were comfortable wearing the monitor but had issues interpreting the application. Theme 2: Participants were encouraged to perform more PA. Theme 3: The HR monitor was inaccurate. Theme 4: Participants wanted more focus on other aspects of the application/more compatibility with other applications. Generally, the PAI Health application was received favorably. However, exercise volume did not relate to increased  $VO_2$ max values.