ABSTRACT

THESIS: PAI Monitor Usability for Cardiac Patients

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DATE: May 2019

PAGES: 49

This study evaluated usability of the PAI Health application in 10 cardiac rehabilitation patients (attending rehabilitation ≥3 days/week). Following an initial maximal exercise test, participants wore a PAI 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 VO₂max values averaged 22.74±5.33 ml/kg/min and exercise volumes of 207.4±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 VO₂max values.