

Personal Activity Intelligence (PAI) Monitoring: A Potentially Viable Strategy for Cardiac Rehabilitation to Assist in the Maintenance of Physical Activity Adherence

VANCOUVER, November 17, 2021 – A [recent study](#) published in BMC Sports Science, Medicine and Rehabilitation revealed that using [Personal Activity Intelligence \(PAI\)](#) monitoring to guide people on physical activity levels may be a viable strategy for individuals within the cardiac population. Once participants learned about PAI concept and could track their PAI Scores, 89% of participants increased their physical activity levels and found the score to be motivating.

PAI is a science-backed metric developed by NTNU's Cardiac Exercise Research Group that uses heart rate data from wearable devices to assess and prescribe personalized levels of physical activity for optimal health benefits. Previous research has shown that the maintenance of 100 PAI or more on a rolling 7-day basis has been associated with an average 25% risk reduction in cardiovascular disease mortality, while achieving 50 PAI also provides significant health protection, with approximately 60% of the benefits.

89% Increased the Amount and/or Intensity of Their Physical Activity

During the six-week study, each participant's heart rate was converted to a PAI Score and monitored daily. Out of 20 eligible participants between the ages of 18-80 in the maintenance phase of cardiac rehab, 18 were included in the quantitative data, whilst 20 were included in the qualitative.

For the first three weeks of the study, participants were blinded to their PAI data. During the final three weeks, participants were "unblinded" by being educated about PAI and then given access to their individual data. This awareness and visibility of the metric was associated with a notable change in behavior based on the quantitative data analysis that showed 89% of the participants increased their PAI Scores, and on average there was a 42% increase in PAI Scores. Additionally, the percentage of participants who achieved 50 PAI or more increased from 39% at three weeks, to 61% at six weeks.

A Motivating and Beneficial Tool for Cardiac Patients

80% of participants believed they would continue to use PAI to monitor their training, while all participants indicated that they would recommend PAI monitoring to others. Described as being a "great tool" that was "interesting", "beneficial" and "motivating", the majority of participants revealed that the ease of PAI monitoring's individualized approach, fueled their motivation to exercise. PAI may be a viable strategy to help people with cardiac disease maintain physical activity adherence.

Reference: Hannan et al.: [Effect of personal activity intelligence \(PAI\) monitoring in the maintenance phase of cardiac rehabilitation: a mixed methods evaluation](#)

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About PAI Health

PAI Health allows organizations to assess, monitor and guide their people to better health, providing individuals with motivational guidance on personalized recommended physical activity

levels. Our mission is to optimize anyone's path to better health by making the science-backed Personal Activity Intelligence (PAI) metric a global health standard through partnerships with insurers, employee wellness programs, technology platforms, health care providers and other industry partners. PAI Health is a wholly owned independent subsidiary of Zepp Health. For more information, visit www.paihealth.com.

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