

Activity trackers can be useful tools in managing diabetes

October 14 2019



Credit: CC0 Public Domain

Researchers at The University of Manchester have conducted the largest ever review of the effect of movement-monitoring devices, such as pedometers, on the activity of individuals with diabetes and

cardiovascular disease.

Using data from 36 studies, with a total of 5,208 participants, researchers investigated the short-term effects of using wearable step-counting devices on the [physical activity](#) in adults with cardiometabolic conditions, such as type 2 diabetes, and [cardiovascular disease](#) (CVD). They found the devices were associated with small-to-medium improvements in physical activity. The [paper](#) was published in the open-access journal *JAMA Network Open* on October 9.

Results from previous studies have shown that the use of pedometers helps patients with [chronic conditions](#) to increase their physical activity levels. However, the authors of this paper note that a major limitation from previous studies is that interventions involving step-counting devices vary a lot, so it is unclear which interventions are most effective.

Dr. Alex Hodkinson, one of the researchers who carried out the study, said; "This study differs to earlier ones because it has looked at which types of interventions using the two most common monitoring devices (accelerometers and pedometers) are most effective in improving physical activity among people with diabetes and cardiometabolic conditions."

He added; "We have also determined some of the key factors that moderate their performance, such as the 'personnel' involved delivering the intervention and participant level factors like 'age and gender.'"

More information: Alexander Hodkinson et al. Accelerometer- and Pedometer-Based Physical Activity Interventions Among Adults With Cardiometabolic Conditions, *JAMA Network Open* (2019). [DOI: 10.1001/jamanetworkopen.2019.12895](https://doi.org/10.1001/jamanetworkopen.2019.12895)

Provided by University of Manchester

Citation: Activity trackers can be useful tools in managing diabetes (2019, October 14) retrieved 10 January 2023 from <https://medicalxpress.com/news/2019-10-trackers-tools-diabetes.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.