

How well did an instant blood pressure app work?

March 2 2016

A blood pressure (BP) smartphone app delivered inaccurate results in a small study, which suggests more than three-quarters of individuals with hypertensive BP levels may be falsely reassured that their BP is in the nonhypertensive range, according to an article published online by *JAMA Internal Medicine*.

The Instant Blood Pressure (IBP) app estimates BP by placing the top edge of the smartphone on the left side of the chest and the right index finger over the smartphone's camera. Between its release in June 2014 and its removal in July 2015, the app spent 156 days as one of the top 50 best-selling iPhone apps and at least 950 copies of the \$4.99 app were sold on each of these days.

Timothy B. Plante, M.D., of the Johns Hopkins University School of Medicine, Baltimore, and coauthors looked at the accuracy and precision of IBP.

Research staff were trained to measure BP according to the manufacturer guidelines using the IBP app and they were trained to follow a standard protocol when using automated sphygmomanometers for standard BP measurements. The study included 85 participants, with more than half self-reporting hypertension and 91 percent of these participants reported taking antihypertensive medications.

The authors report the IBP underestimated higher BPs and overestimated lower BPs.



"Our study has both clinical and public health relevance. While IBP recently became unavailable for unclear reasons, it is installed on a vast number of iPhones; furthermore, several 'me-too' apps are still available. Hence, we remain concerned that individuals may use these apps to assess their BP and titrate therapy. From a public health perspective, our study supports partnership of app developers, distributors and regulatory bodies to set and follow standards for safe, validated mHealth [mobile health] technologies," the research letter concludes.

More information: *JAMA Intern Med.* Published online March 2, 2016. DOI: 10.1001/jamainternmed.2016.0157

Provided by The JAMA Network Journals

Citation: How well did an instant blood pressure app work? (2016, March 2) retrieved 12 May 2024 from https://medicalxpress.com/news/2016-03-instant-blood-pressure-app.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.