

**Hypertension Management Using Mobile Technology and Home Blood Pressure Monitoring: Results of a Randomized Trial in Two Low/Middle-Income Countries**

John D. Piette, Hema Datwani, Sofia Gaudio, Stephanie M. Foster, Joslyn Westphal, William Perry, Joel Rodriguez-Saldana, Milton O. Mendoza-Avelares, and Nicolle Marinec. *Telemedicine and e-Health*. October 2012, 18 (8): 613-620.  
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**PRESS RELEASE**



***Cloud Can (Already) Improve Patient Care***

We needn't read another market forecast or research report to know: Cloud computing is poised to help revolutionize nearly every aspect of modern healthcare. Likewise, we don't have to dip into our RSS feeds to realize significant challenges to broad adoption of cloud within the sector remain — not least of which are regulatory hurdles and security concerns.

For physicians treating those with chronic conditions like hypertension or diabetes, it can be tough enough getting patients into their offices for scheduled visits, let alone convincing them to keep up with plans to manage their health at home. Research has shown that inadequate reimbursement for self-management support further compounds the issue, and in low- to middle-income communities, the problem is often much worse.

Cognizant of this, and building upon growing evidence that mobile interventions can help improve patient care, the University of Michigan's John Piette and his colleagues sought to evaluate how they might most effectively reach out to chronic disease patients in resource-poor settings using a cloud computing approach to facilitating mobile health service delivery. For one recent study, the team enrolled hypertensive patients from clinics in Honduras and Mexico to evaluate the effect of automated self-management calls and home blood pressure monitoring on patient care.

"Because we wanted to show that these services could be delivered at a distance — even internationally, to resource-poor communities — we sought to test out the feasibility and potential benefits of using a model where all of the mobile health infrastructure was maintained here at the University of Michigan, on our servers, connected with cell phones in Honduras and Mexico with voice over IP," says Piette, professor of internal medicine and director of the University of Michigan Health System's Quality Improvements for Complex Chronic Conditions group. "We wanted to see if we could really push the limit and stimulate further work in this area developing platforms for regional — even global — service delivery."

In a *Telemedicine and e-Health* paper, Piette and his colleagues show that, compared with controls, intervention patients reported decreased systolic blood pressures, fewer depressive symptoms, fewer issues with their medication, better general health, and greater satisfaction with their overall care.

The full **press release** can be found here: <http://www.wired.com/insights/2013/03/cloud-can-already-improve-patient-care/>

The **article** can be found here: <http://online.liebertpub.com/doi/abs/10.1089/tmj.2011.0271>

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