

Reach Out: Recruitment in a multicomponent, mobile health, behavioral intervention to reduce blood pressure in the Emergency Department patient population.

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Background:

Hypertension is the most important modifiable risk factor for cardiovascular disease and an important contributor to the racial disparities of stroke. The Emergency Department (ED) may represent an opportunity to identify difficult-to-reach hypertensive populations.

Methods:

Reach Out is a health system focused, multicomponent, health theory based, mobile health behavioral intervention to reduce Blood Pressure among ED patients. It is operational at a safety net hospital in the under-resourced, primarily minority community of Flint, Michigan. Patients are eligible for Reach Out if they are receiving care in the ED who have an elevated blood pressure and are expected to be discharged home. Following a three-week screening phase, participants who respond to text messages with persistently elevated blood pressures are randomized into the main trial. Reach Out consists of three components, each with two intensity levels: 1) healthy behavior text messaging (daily vs. none), 2) prompted home BP self-monitoring (daily vs. weekly), 3) facilitated primary care provider appointment scheduling and transportation (provided vs. not). Participants without outpatient providers are scheduled with a local Federally Qualified Health Center. Randomized participants are distributed across eight experimental arms and followed for twelve months. The primary outcome is change in systolic blood pressure at one-year.

Results

Recruitment began March 25, 2019. As of October 28, 2019, 872 ED patients have been approached, 508 participants have been enrolled, and 244 participants have been randomized. Among patients presenting to the ED who were found to have persistent hypertension, more than 50% were African American. Within our study, 60% of approached patients and 62% of randomized participants are African American. Approximately 95% of participants are under the age of 65. The most common reason for non-enrollment is absence of mobile phone.

Discussion:

The Emergency Department is a promising setting to reach working age African Americans for enrollment in behavioral interventions to reduce blood pressure. Reach Out may serve as a model for initiation of primary stroke prevention in safety net hospitals.