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HIGH ADOPTION RATES OF MOBILE TECHNOLOGY BY CARDIOLOGY CLINIC PATIENTS BUT LIMITED USE OF HEALTH APPLICATIONS

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Background: With the proliferation of smartphones and mobile technology, the use of health related applications ("apps") is expected to increase. Mobile health could improve outcomes and patient satisfaction by providing access to quality health information, monitoring tools and improved communication with health care providers.

Methods: Patients from three outpatient cardiology clinics were surveyed regarding their use and attitudes towards mobile technology for monitoring their conditions. Only patients with at least one cardiac diagnosis were included.

Results: One hundred eighteen patients were surveyed (47.46% women). Age distribution was 18-44: 14%; 45-64: 38% and 65 or older: 47%. Diagnoses were atrial fibrillation (75%), hypertension (52%), coronary artery disease (35%) and heart failure (14%). Most patients (75%) had been diagnosed more than a year prior to the visit and had at least one prior hospital admission (65%). The majority (83%) own a cell phone with 49% of those being smartphones. A personal computer, laptop, tablet or iPod is owned by 85%. Seventy-five percent use email and 55% text messaging. Nearly half of all patients (46%) have used apps, which primarily were accessed on smartphones. Among apps users, 32% use health related apps, including those related to exercise and fitness (29%), diet and calorie counting (27%), medication management (6%) and heart rate monitoring (4%). Of participants who do not own a smartphone or tablet, 60% would be willing to pay for one if it could potentially prevent an emergency room visit. A minority of patients (18%) reported they would not be willing to use a smartphone or tablet, even if they received it free or it was covered by insurance.

Conclusions: Although the vast majority of patients receiving outpatient cardiac care surveyed have access to mobile technology, and nearly half have used apps on smartphones or tablets, patients' use of mobile technology for health-related purposes is more limited. Lack of outcomes based research, cost, and in some cases lack of familiarity with technology may be limiting factors. An strategy to demonstrate clinical benefits with the use of this technology is urgently needed.