Distinguished Lecture Series
Participatory mHealth: Opportunities and Challenges

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Auditorium 106 at New IIS Building

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Abstract

The most significant health and wellness challenges globally increasingly involve chronic illnesses, from diabetes, hypertension, and asthma to depression, insomnia, and gastrointestinal disorders. And three lifestyle behaviors – poor diet, lack of exercise and smoking – contribute to many of these conditions. Participatory mHealth leverages the power and ubiquity of mobile technologies to assist individuals and clinicians in monitoring and managing symptoms, side effects and treatment for chronic illnesses outside the clinical setting, and to address the lifestyle factors that can bring on or exacerbate these conditions. By empowering individuals to track and manage their key health-related behaviors and outcomes, this approach has the potential to greatly improve people's health and quality of life, while simultaneously reducing societies' overall healthcare costs.

Participatory mHealth can incorporate a variety of techniques, including automated activity traces, reminders and prompted inputs. Intended to be used episodically rather than continuously, it can assist patients with adherence to their treatment regimen and provide useful information for clinicians. Employed by individuals, it can glean insights into what might be contributing to the recurrence of a chronic problem, or help them track and sustain a plan to become healthier through better diet, exercise, sleep, and stress management.

This talk will present our experience to date with mHealth pilots and prototypes and will highlight areas in need of significant R&D: Data analysis and visualization for diverse audiences, Engagement such as adaptive goal setting and game mechanics, and Privacy mechanisms such as Personal Data Vaults and Selective Sharing.