



## **GW Researchers Receive Grants to Study How Mobile Technology Can Help Patients Manage Diabetes**

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GW researchers have been awarded two grants from the McKesson Foundation as part of its Mobilizing for Health initiative, an initiative to improve the health of underserved populations with chronic diseases through the use of mobile-phone technology. The Mobilizing for Health grants, of up to \$250,000 each, will support studies on diabetes care and management. GW researchers received two of the six grants awarded in a national competition.

“We are honored to be the recipient of these grants. We know that finding the most effective ways to work with modernized technology to provide education, disease information, and disease management for patients, is important for better health outcomes,” said Jeffrey S. Akman, M.D., Interim Vice Provost for Health Affairs and Dean of the School of Medicine and Health Sciences at The George Washington University.

One of the grants will provide support for a study that will examine the use of SMS messaging to reduce emergency department visits for people with diabetes. Researchers, led by Joshua Cohen, M.D., Professor of Medicine, in the Division of Endocrinology, and Neal Sikka, M.D., Assistant Professor of Emergency Medicine, in the Department of Emergency Medicine, at The George Washington University School of Medicine and Health Sciences, will evaluate the impact of a mobile phone based text messaging system, compared with usual emergency department (ED) practice, on recurrent ED utilization by individuals with diabetes, and in increasing their diabetes self-care practices. Through this study, information on diabetes will be pushed directly to study subjects’ mobile phones through SMS text messaging. Additionally, study subjects will be able to transmit information about their diabetes management to study personnel, to obtain information about their follow-up at their primary care medical practice, and to request additional information. It is anticipated that the information provided to the study subjects through their cell phones will result in increased knowledge about diabetes and improved self-care behaviors.

The other study will be a randomized, controlled trial of a cell phone based software application for patients with diabetes and hypertension, led by Samir Patel, M.D., Associate Professor of Medicine, in the Division of Renal Diseases and Hypertension, who is the principal investigator on the grant, and Richard Katz, M.D., Bloedorn Professor of Medicine and Director in the Division of Cardiology, at The George Washington University School of Medicine and Health Sciences, who serves as the co-investigator on the grant. The software application allows patients to monitor their blood glucose and blood pressure, aggregate and share the patient derived information with case managers and primary care providers through existing electronic medical records. The intervention is designed to integrate into the current Chronic Care Model in community clinics to enhance patient self-monitoring, patient education, and information flow between patients, case managers and health care providers. The researchers aim to create a scalable and sustainable care model centered on the cell phone based application. The study will also explore the potential for medication error reduction and perform a cost analysis of the intervention.

The McKesson Foundation pledged to put diabetes management at the forefront of its Mobilizing for Health grant program when it launched the initiative in April 2010, and will continue to focus its funding priorities on diabetes management and research through March 2012.

“These studies are a part of an ongoing Foundation effort to tie innovative technologies to low-cost scalable health solution in order to better help patients manage their chronic conditions,” noted Carrie Varoquiers, president of the McKesson Foundation. “Through initiatives like Mobilizing for Health, the McKesson Foundation is committed to increasing access to affordable, high-quality healthcare for all.”

These grants add to the research that is underway at GW focusing on mobile health and positions GW as a leader in this field of research. GW School of Medicine and Health Sciences faculty have spearheaded several projects including the DC Chronic Care Initiative Cell Phone Projects, led by Dr. Richard Katz, and the GW/WellDoc Air Force Diabetes Project, led by Dr. Cohen, as well as other mobile health projects on our campus.

#### About The George Washington University Medical Center

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