

Project title: Developing a Mobile Monitoring System for Drug Compliances in Outpatient Clinical Trial

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Project summary:

A major challenge in outpatient clinical trial is to make sure that the patients are compliant with the prescribed protocols. Our research is to study how to improve the patient compliance in outpatient care via new wireless technology solutions.

Since our project began, we have accomplished the following goals:

In the first stage, before we build the prototype system, we set to determine (1) the technical feasibility of such a system; (2) Explore the optimal user interface design; (3) determine the desired functionalities and quality-of-service requirements; and (4) analyze the potential barriers for field adoption.

In order to study the previous questions, we established a collaboration relationship with the College of Health Professions. Many of its faculty members have extensive experiences in the outpatient care in their studies and practices. We conducted focus groups and surveys on the faculty members and gained many valuable insights to the above four research questions.

Based on the first stage results, we are drafting an article on the mobile device's interface design in out-patient care settings. We plan to finish the paper by the end of summer and submit it to academic journals and conferences.

Based on the first stage results, we are also building the end-to-end prototype system that alerts the patient to take medicine on time, records the actual dosage and time in real time. We aim to finish this stage by the end of this year and submit our research report to academic journals and conferences as well.