

## **Innovation Area Name: Health Transformation**

### **healthAction Patient Toolkit**

### **Problem**

Roughly four out of five healthcare dollars are spent on people with chronic conditions. Even more than the daily management of their illnesses, chronically ill patients and their caregivers struggle to evaluate and communicate their symptoms, comply with treatment plans, and coordinate between multiple providers. Too often, providers must then make critical decisions based on limited, incomplete patient-provided data.

### **Idea/Goals**

This project makes each patient a contributor to his or her care team. The healthAction Patient Toolkit leverages mobile IT so that chronically ill patients can track longitudinal data (e.g., symptoms), communicate effectively with their providers, improve their situational awareness, and increase treatment compliance. This research will identify ways to maximize patient engagement, assess the value of patient-supplied data, and develop habits which improve health outcomes without adding burden to the patient.

### **Planned FY13 Activities**

During FY13, the team will complete development of the healthAction Patient Toolkit iPad application, incorporating other MITRE research projects to ensure security and connectivity. The project will objectify and quantify the reliability of patient-generated symptom data and measure the value of this data to providers through a collaboration with the University of Virginia. A longitudinal trial will evaluate the impact of this tool on the personal and financial burdens of chronically ill patients. Transition of the system and our lessons learned will be done via open-source as well as publication where appropriate.

### **Result/Impact**

An initial prototype of the healthAction Patient Toolkit is being readied for evaluation. This tool increases the ability to track changes in a patient's health, ensures patients effectively communicate with their providers, increases treatment compliance rates, and enables providers to make decisions based on complete sets of information. Chronically ill patients can then partner with their providers to improve health outcomes and reduce costs.

