
DAVID GOESE

DAVE GUPTA

www.linkedin.com/in/david-goese-8031011b

<https://www.linkedin.com/in/dave-gupta/>

Required Skills:

Mobile App, Stand Alone App Development, Responsive Web Design, Human Centered Design, Project Management, Communications

Preferred Team Communications:

In person or Skype, Weekly or as needed

Data Sources:

Emory Clinical Data Warehouse (application for access in process)

Georgia Tech synthetic data will be sufficient for the project as a backup.

Other Items:

Project has timezone flexibility. Mentors and students will determine a good time for in person and virtual meetings.

FAIHR - FHIR APP FOR INFORMATION ACQUISITION ON HOSPITAL READMISSIONS

The Medicare Hospital Readmissions Reduction Program has focused national health care policy on improving quality and controlling cost by imposing financial penalties for hospitals with excessive readmission rates, creating a powerful incentive to reduce hospital readmissions. 89% of US hospitals have received such penalties since the program's inception. Conditions associated with elevated hospital 30-day readmission rates include congestive heart failure, sepsis, myocardial infarction, COPD, and acute renal failure. There are generally accepted risk factors for hospital readmissions, but improving mechanisms to gather detailed data to inform hospital-specific readmission initiatives or interventions remains a widely-applicable opportunity.

PROJECT OBJECTIVES

Create a FHIR app that can gather a wide variety of data relevant to hospital discharge and risk for readmission. The ultimate objective is 1) to generate real-time data rather than rely on retrospective data for preventing hospital readmissions and 2) build a more robust data set to inform hospital administration, patient care teams, and physicians about who is at risk for hospital readmission and why.

SUCCESSFUL PROJECT

A successful project would capture the right data from the right population at the right time. Data includes patient demographics, hospital diagnoses or problem list, prior admissions and ED visits, referral / scheduling and follow-up information, prescriptions and medication reconciliation information, communication with care teams, post-discharge symptoms or vital signs, environmental factors, barriers to care, and others. Data could be gathered directly from patients, from EMR's, and possible other sources (pharmacies, other organizations). Part of the project will be defining the target users of the app – health care providers who are face-to-face with patients, patients themselves, or mobile health teams that visit patients in the home – and designing an appropriate interface. The app would have an easy to use interface with capability for dynamic interaction with the user to gather targeted data based on user responses. Data collected from the FHIR app would be organized in a format which is easily accessible and useful to hospital IT staff, hospital administration, and researchers.

Intellectual Property: Students own any IP from the project.