
JULIET HAARBAUER- KRUPA & KELLY SARMIENTO

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[WWW.CDC.GOV/INJURY/PRESSRO
OM/FULLBIOS_SUBJECTMATTEREXP
ERTS/BIO_KELLYSARMIENTO.HTML](https://www.cdc.gov/injury/pressroom/fullbios_subjectmatterexperts/bio_kellysarmiento.html)

Required Skills:

Mobile App, Web Development,
Stand Alone App Development,
Responsive Web Design, Human
Centered Design,
Workflow/Process Optimization,
Project Management,
Communications

Preferred Team Communications:

WEBEX, Skype or Conference call

Data Sources:

Georgia Tech synthetic data will be
sufficient for the project.

Other Items:

Project has timezone flexibility.
Mentors and students will
determine a good time for virtual
meeting

CONCUSSION AND TRAUMATIC BRAIN INJURY IN PEDIATRIC PATIENTS

As attention to concussion and traumatic brain injury (TBI) has grown in recent years, there has been an increase in the number of pediatric patients with concussion (also known as mild TBI, or mTBI). Many providers have insufficient time and training to systematically assess and manage patients with suspected mTBI,

This project aims to assess the feasibility of using Fast Healthcare Interoperability Resources (FHIR) to promote evidence-based diagnosis and management of TBI in children. The aim is to improve medical diagnosis at the time of injury by using evidence based guidelines made more available to clinicians and improve communication between clinicians, families, and schools in order to improve post injury management. We are particularly interested in the applicability of this technology in rural health systems and primary care providers' practices.

PROJECT OBJECTIVES

Project Objective(s):1) to develop a provider interface that provides clinical decision support that are informed by evidence-based guidelines for the diagnosis and management of Mild Traumatic Brain Injury in Children and 2) devise a parent/patient app that alerts parents about symptom monitoring and follow-up, and aids in communication between parents and the healthcare and school settings.

SUCCESSFUL PROJECT

1) Provider Facing App-Create an interface using evidence based guidelines that can be inserted into any system of electronic health records (in hospital, urgent care or provider practices) for physician diagnosis and management of mild TBI.

2) Patient-Parent Facing App-This app can be given to parents at the time of the injury care visit to provide symptom monitoring information and provide alerts for follow-up. A goal is to create a platform for multiple phone types to ensure application for a diverse range of demographics.

Intellectual Property: Project involves a government agency so the resulting project is made available to the public. Students do not own IP. Students will be recognized as contributors