
JULIET HAARBAUER- KRUPA

jhkrupa@me.com

Required Skills:

Web (HTML / JS / CSS)

Preferred Team Communications:

Conference Call, to be discussed

Data Sources:

Publications on fall-related TBI in children.

Other Items:

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

Team Info:

Needs a Developer, Project Manager and QA. Allows one team of 4-6 members.

PEDIATRIC TBI-FALLS IN YOUNG CHILDREN

Falls are the leading cause of non-fatal emergency department (ED) visits among children aged birth to 14 years, accounting for 2.4 million visits annually, and the leading cause of traumatic brain injury (TBI) ED visits for children in the 0 to 4 year age group. Infants are more likely to suffer more severe injuries.

Further, compared to older children, children 4 years old and younger are more likely to sustain head injuries, be hospitalized, or die from falls. Studies examining injury circumstances and location of the injury in younger children, report almost twice as many children are hospitalized due to falls from furniture than from stairs, but those children who fell from stairs are more likely to sustain head injuries.

Previous reports on injuries in the youngest children indicate many injuries are related to nursery and infant products (e.g. cribs), furniture; stairs; and surfaces (e.g., carpet, tile floor). The few studies that examine fall-related TBI by age report a higher incidence in children younger than 2 years compared to older children and injury mechanisms related to the developmental stage of motor skill acquisition especially around the time children become ambulatory. Children younger than 1 year compared to older children were more likely to sustain a fall-related TBI as a result of falling from caregiver's arms or a fall from infant products. These children were also more likely to have more severe injuries, sustain a skull fracture, and require hospitalization.

Injury prevention information for parents of children in this age group is needed to provide information on environmental structuring and parent supervision. Most parents have access to and utilize Smartphones which creates an opportunity to develop an app that can be used by parents and early intervention specialists to convey information about these efforts.

PROJECT OBJECTIVES

To develop an interface that provides information on fall prevention for young children, based on existing literature on injury mechanisms, environmental circumstances and parenting supervision practices for parents of young children.

SUCCESSFUL PROJECT

This project was first addressed on Fall 2018. I am submitting again hoping to take it a step forward..

Intellectual Property: None