

Characterization of Fall and Refall Risk Factors in the Elderly Presenting to the Emergency
Department: Retrospective Chart Review Protocol

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Background/Objective: Falls are a major contributor to morbidity and mortality of the elderly population. Aside from the direct burden of falls on the patients, the CDC estimates falls cost around \$50 billion annually, most of which is covered by Medicare/Medicaid. There are, however, fall prevention clinics that are focused on prevention and fall avoidance training in order to decrease the risk of falls. The goal of this work is to identify the population that is at a heightened risk of falls and analyze how this risk is mitigated with completion of a fall prevention program.

Methods: Men and women over the age of 65 who presented to the ED from January 2015-January 2019 were considered for the chart review. Approximately 480 charts are to be analyzed assuming 10% loss due to lack of data in chart or expiration of the patient. Medical history, fall history, and demographics will be input into a data collection tool designed by the researchers. Statistical significance will be identified by Fishers test, unpaired t-test, X² test appropriately. Fall risk factors that are identified as significant will be used in univariate and multivariate logistic regression to test for predictive value.

Results: This work produced an IRB submission draft, RedCap data collection tool and is pending approval by Parkview Health IRB for Fall 2020. The researchers anticipate beginning work on the study in Spring 2021.

Impact and Implications: Identification of risk factors associated with falls and reall events may be used to better distinguish the patient population that would benefit from a fall clinic referral. Increased knowledge of risk factors and protocolization of referrals may lead to decreased morbidity and mortality among the elderly as well as relieve some.