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An Exercise Program to Prevent Frailty in Community-Dwelling Older Adults: A Proposed Pilot Study

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Implementing an Exercise Program to Prevent Frailty of Community- Dwelling Adults: A Proposed Pilot Study for Westchester County, NY

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Boyer Category: Application/Practice

Background Statement: Frail individuals have greater vulnerability and are more susceptible to falls, fractures, institutionalization, hospitalization, disability and death compared to robust older adults. Exercise has been shown to improve physical function in frail individuals allowing frail individuals to become more robust and reduce their risk of falls.

Purpose: To create an evidence-based program to prevent frailty and design a pilot study to examine the efficacy of the program to prevent frailty.

Methods: This will be a pilot study in which we will have a sample of convenience. Subjects will be community dwelling men and women aged 65 and older who have a frailty score of 1-5 on the Fried Frailty Phenotype scale (Fried et al, 2001), (Appendix B) and no medical contraindications to participation. Individuals will be recruited from a senior living community in Westchester County, New York via flyers (Appendix C). The target sample size for this pilot study is 10-15 individuals. Those enrolled will take part in a twelve week exercise program consisting of three modules, each four weeks in length. Each week includes two sessions, lasting 45-60 minutes per session. Exercises will be chosen to specifically target impairments associated with physical frailty. Module one will be focused on flexibility and balance, module two will be strength training, and module three will consist of endurance training. Data collection will be gathered at baseline and following each module.

Results: The main outcome measure being collected is Fried's Frailty Phenotype (Appendix B). Secondary outcome measures being collected include Timed Up and Go scores and SF-12 results.

Conclusion/Significance of Study: Older adults are a growing demographic within the United States, with 15% of the population currently age 65 or older and that number is expected to

increase. Of these older adults who do not reside within a nursing home, 15% are considered frail and 45% qualify as prefrail. Therefore frailty is an issue affecting a large demographic within the US with considerable consequences given the sequelae of frailty such as increased falls. Improved screening and treatment of frailty utilizing exercise will positively impact morbidity and mortality within older adults while saving costs from hospitalization.