Agency for Healthcare Research and Quality (AHRQ)

Three falls prevention projects are funded to study the feasibility of long term care facilities incorporating these evidence based programs into their day to day practice. The goal is to foster improved quality of care and quality of life and safety in residential settings by demonstrating feasibility of evidence-based models to ultimately foster the dissemination of these model programs on a broader scale.

Lead Agency:

Agency for Healthcare Research and Quality (AHRQ)

Agency Mission:

The mission of the Agency for Healthcare Research and Quality is to improve the safety, quality, effectiveness, and efficiency of healthcare for all Americans.

Principal Investigators:

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Preventing Disability Among Residents Of Continuing Care Residential Communities (Contract PI) Helaine E. Resnick, PhD Director of Research Institute for the Future of Aging Services American Association of Homes and Services for the Aging 2519 Connecticut Avenue, NW Washington, DC 20008-1520

Development of Injurious Falls Measures for Nursing Homes (Contract PI) Terry Moore, MPH Principal Associate Abt Associates Inc. 55 Wheeler St. Cambridge, MA 02138

Partner Agencies:

National Institute for Aging (Preventing disability among residents of CCRC)

General Description:

The Falls Prevention in Long Term Care Program at AHRQ focuses on the prevention of injurious falls and related injuries and disabilities in nursing home and residential care settings. Three contracts have been funded (1)implementation of an evidence-based falls prevention program in nursing homes;(2)implementation of a falls prevention program in assisted living facilities; and (3)preventing disability among residents of Continuing Care Residential Community (CCRC). In addition, one contract develops a method for comparing case-mix adjusted rates of injurious falls across nursing homes. AHRQ staff research on fractures in nursing homes has contributed to the evidence base.

The first project involved the implementation of the Falls Management Program (FMP) in 19 nursing homes owned and operated by a single nonprofit nursing home chain in Georgia. The FMP is based on work at the Vanderbilt University School of Medicine that has been developed, tested and refined over several years involving >250 facilities. FMP is an interdisciplinary, multifaceted approach to reducing fall risk that includes systematic screening, assessment, individualized care planning, resident monitoring, and the elimination of environmental safety hazards. The FMP is initiated by a self-assessment process that assists nursing homes in identifying areas that need improvement so that staff can tailor implementation to their own facility's needs. The FMP incorporates education on best practices and uses several quality improvement (QI) tools designed to assist nursing homes with program implementation. Core components of the program include administrative and clinical leadership, interdisciplinary teamwork using QI methodology, support by advance practice nurses, and an 8-step fall response system to facilitate the comprehensive investigation and documentation of falls, primary care provider involvement, and development of individualized fall risk reduction strategies.

The second project is a multi-component falls intervention program that assesses the feasibility of carrying out this program in assisted living facilities. The falls intervention includes medication review, assessment, environmental modification, and exercise, to reduce risk factors for falls and fall and fracture rates among residents of assisted living facilities. The project involves the following activities: adapting a multi-faceted,

evidence-based falls prevention program to a protocol tailored to the assisted living environment; implementing the pilot protocol and collecting clinical and process data pre-post intervention; and evaluating the results of interventions. This project is currently on-going and being implemented in two assisted living facilities in North Carolina (with 2 control facilities).

The third project focuses on preventing disability among residents of CCRCs. This project will test the feasibility of screening, providing an evidence-based exercise program, and counseling to encourage exercise program adherence. The screening tool is the Short Physical Performance Battery (SPPB), a tool developed by the National Institute of Aging, to detect sub-clinical disability in older adults who the study involves 300 residents in 6 CCRCs. The goals are to show that CCRCs can feasibly incorporate this program into their daily practice and reduce the disability risk of their residents. Falls rates, mortality and hospitalizations will also be monitored. Implementation challenges and lessons learned will be summarized. This project is scheduled to commence July 2008.

The aim of developing an injurious falls measure in nursing homes is to help nursing homes and older consumers to compare nursing home on a measure of safety. With this measure, consumers can make better choices and facilities can monitor and improve the safety of the environment they provide to their residents. This project is being accomplished in collaboration with CMS and uses CMS data.

Innovativeness: Why is this research exciting and newsworthy?

This research program is ultimately designed to make long-term care facilities safer for an aging population and to provide programs that reduce the risk of older persons falling. Falls are significant problems for elderly persons who reside in long-term care facilities because they are the primary cause of fractures and other physical injuries which in turn, result in reduced physical function and quality of life, increased morbidity and mortality, and related health care utilization and costs. In addition by preventing disability and serious falls this research will contribute to the reduction of avoidable health care costs. An injurious fall increases nursing home cost by \$5,325 per year. In the year 2000, the direct medical costs for fatal and non-fatal fall injuries of elderly in the U.S. totaled 19.2 billion dollars.

The three implementation projects are exceptional in that they test evidence-based models of care in long term care settings to demonstrate that long term care facilities can incorporate best practices into their daily work flow. By testing models in the three main residential care settings that elderly live, this program provides evidence to help improve the safety of a wide range of housing options for older persons who need long term care services.

These studies will facilitate the dissemination of these models to other comparable long term care facilities, providing them with information to help them decide if they want to adopt a model that has been tried by their peers.

In nursing homes, where multiple interventions are often occurring at the same time, we have shown that when a restraint reduction program is being implemented, if the FMP was also implemented, the falls rate remained stable. Without the FMP the rate of falls increased.

Spector et al. (2007) demonstrates the importance of monitoring prescription drug ordering practices in nursing home when trying to prevent avoidable falls and fractures, although the FMP implementation study indicated that it is difficult for nursing homes to influence physician prescription drug orders. FMP tools have been made available at the MedQIC web site that supports Medicare Quality Improvement Organizations (QIOs) and providers in finding, using, and sharing quality improvement resources.

Successful translation of research into clinical practice that improves care is complex. These projects are identifying how to make evidence based practices available to aging consumers who need long term care services in residential settings. As the population ages there will be increased demand for these types of services and it is important to assure that these environments can be made as safe as possible and can encourage persons to age as disability-free as possible.