

Evaluation of AHRQ's On-Time Pressure Ulcer Program

Principal Investigator:	Hurd, Donna, M.S.N.
Organization:	Abt Associates, Inc.
Contract Number:	290-06-0011-8
Project Period:	June 2009 – January 2012
AHRQ Funding Amount:	\$1,699,797

Summary: Pressure ulcers and injurious falls have serious health and economic consequences for elderly residents in nursing homes. Although substantial research has documented that preventing pressure ulcers and falls is possible, these problems persist across health care settings. In the last decade, many initiatives—including an earlier Agency for Healthcare Research and Quality (AHRQ)-funded On-Time Pressure Ulcer (PrU) Healing program, which helps nursing homes implement best practice guidelines in PrU care through workflow redesign and process improvements—have been undertaken to improve quality of pressure ulcer care in nursing homes. While the On-Time program has unique characteristics, it had not previously been formally evaluated and thus was not ready for wide dissemination.

This project evaluated AHRQ's On-Time PrU program. The findings will help make guidelines available to other practices. Lessons from the PrU program will also inform the development of an On-Time Fall Prevention Module, which will use documentation data elements, actionable reports, and tracking tools on risk factors from the On-Time PrU program. These resources will allow nursing home staff to intervene in a timely manner with at-risk residents to reduce the incidence of injurious falls. The project team worked with facilities to develop a feasible implementation plan to integrate these tools into daily practice.

A yearlong process of workgroup meetings has already informed the standardization of fall documentation and the development of tools to guide clinical decisionmaking for fall prevention. In addition, several facilities participated in a series of teleconference calls to develop health information technology specifications based on the final set of fall prevention tools. Early in the project, the original scope of work was expanded to include two additional tasks: 1) a review of literature and analysis of national data to identify residents in nursing homes who should be targeted for prevention protocols to reduce hospital and emergency department (ED) visits; and 2) development and testing of a training curriculum for the On-Time PrU Prevention program and modification of the Team Strategies and Tools to Enhance Performance & Patient Safety (TeamSTEPPS) program for nursing homes. TeamSTEPPS is a training system designed to help health care professionals provide higher-quality, safer patient care and create a culture of safety within their health care teams.

Project Objectives:

- Evaluate the effect of the On-Time PrU by comparing 15 New York nursing homes that have implemented the program with 12 to 15 control nursing homes. Information on pressure ulcer incidence provided by the facilities for a 12-month period and adjusted for resident risk factors using minimum data set (MDS) data will provide the data needed to assess the effectiveness of the On-Time program for reducing pressure ulcers. **(Achieved)**
- Design the tools and establish the foundation for a fall prevention implementation effort using an approach similar to the On-Time PrU prevention, including standardized documentation data elements that can be integrated into everyday practice, actionable reports of resident fall risk factors, and tracking tools. **(Achieved)**

- Develop an evidence-based systems approach for identifying, managing, and monitoring multiple risk factors for hospitalizations and ED visits. **(Achieved)**
- Develop the On-Time Train-the-Trainer and TeamSTEPPS for long-term care curricula. **(Achieved)**

2011 Activities: Thirteen control and 13 intervention facilities were recruited and worked with the project team to submit census and pressure ulcer data for this study. The study team made site visits to four facilities. The project team found that each facility, including control and intervention sites, has required an individualized strategy to facilitate submission of the data needed for the study instead of the standardized approach initially envisioned. Therefore, the team conducted many rounds of followup telephone calls and emails to determine the agreed-upon data submission strategies. All facilities were eventually able to submit electronic census data and some form of pressure ulcer data. Data received from facilities were then checked and cleaned, which necessitated further rounds of followup telephone calls and emails with control and intervention facilities to check missing and inconsistent data. The most common problem was residents listed in the pressure ulcer records with no corresponding information in the census data for the same dates.

The study team has linked census data to the MDS using facility-provided resident identifiers. Preliminary testing of the data linking process showed that in some cases the linking could be accomplished quite readily using the medical record number supplied by the facility, while in other cases the linking yielded numerous problems. At the end of 2011, construction of the analytic file was completed, with an overall MDS match rate of 75 percent.

Meanwhile, various modules in the TeamSTEPPS manual have been revised, including those focused on leadership, team structure, situation monitoring, mutual support, and communication. Filming for a TeamSTEPPS video was completed in September 2011 and revisions are ongoing.

Sections of the draft final report were submitted to AHRQ in November. The draft report included sections on background, data collection, and analysis methods (nursing home recruitment, data sources and data collection, analytic file construction), and baseline description of intervention and control facilities. Analysis of the data continues and final details of the analytic model are under discussion.

Prior to 2011, there were substantial delays (out of the team's control) in obtaining the data files needed for the avoidable hospitalization analysis. In 2011, the project team proposed a revised timeline that would not affect the estimated cost or performance of the contract. The project was extended 12 months and completed in January 2012.

Preliminary impact and Findings: The project has no findings to date.

Target Population: Adults, Elderly*

Strategic Goal: Develop and disseminate health IT evidence and evidence-based tools to improve health care decisionmaking through the use of integrated data and knowledge management.

Business Goal: Knowledge Creation

** This target population is one of AHRQ's priority populations.*