

Agency for Healthcare Research and Quality: The Pressure Ulcer Program

The Pressure Ulcer program an innovative program designed to improve day-to-day practice in nursing homes, improve and redesign workflow, improve productivity of direct-care workers, and reduce pressure ulcers.

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 health care for all Americans.

Principal Investigators:

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Partner Agencies:

New York State Department of Health
California and District of Columbia QIO (Centers for Medicare and Medicaid Services)
California Health Care Foundation

General Description:

The Pressure Ulcer Prevention and Healing Research Program is carried out under the leadership of AHRQ staff working with contractors and partner organizations. The major activity, "On-Time Quality Improvement (QI) for Long-Term Care" has been the development of a pressure ulcer and healing quality improvement program to help nursing home staff identify high risk residents and to integrate evidence-based tools and documentation tools into daily workflow and care planning structures. This project applies and extends knowledge that had been learn in "Real Time Optimal Care Plans for

Nursing Home QI", grant funded by AHRQ, to new nursing homes using Health Information Technology (HIT).

The "On-Time" model integrates clinical guidelines and clinical information into each nursing home's daily routine and processes for assessment, care planning, care delivery, communication and reassessment using HIT. The "On-Time" model streamlines Certified Nursing Aide (CNA) documentation and focuses their documentation on critical data. Using HIT, CNAs spend less time documenting (redundancies are eliminated), but they document more information in a standardized way and it is more accurate, meaningful, and useful to them in their daily assignments. New work is integrated into daily routines rather than added on to them. The model facilitates timely information flow that informs weekly monitoring of resident status and on-going care planning. The communication mechanisms used in the "On-Time" model are effective and efficient and provide staff with current and accurate information on the resident on a weekly or more frequent basis. Ultimately, the project aimed to redesign clinical workflow—instead of concentrating on improving existing processes only—to reduce the incidence of pressure ulcers among nursing homes residents.

"On-Time" has been implemented, tested and refined in 30+ nursing homes across the nation. Twenty-One nursing facilities across the country have completed the prevention program. Fifteen of the participating facilities are in California. Sixteen facilities have begun implementing in 2008 in New York State. All facilities in the District of Columbia plan are planning to participate beginning in 2008 and 2009. The "On-Time" has also expanded its scope by including pressure ulcer healing. Ten of the facilities in California are currently implementing pressure ulcer healing tools that supplement on-going work on pressure ulcer prevention.

Excellence: What makes this project exceptional?

Significance: How is this research relevant to older persons, populations and/or an aging society?

Effectiveness: What is the impact and/or application of this research to older persons?

Innovativeness: Why is this research exciting and newsworthy?

The elderly are at greatest risk of developing pressure ulcers because of age-related changes in soft tissues and decreases in skin perfusion and subcutaneous fat. Pressure ulcers in elderly can be extremely painful and can lead to other complications if left untreated. It has been estimated that over \$355 million are spent annually on pressure ulcer treatment in long-term care settings.

This project has developed a quality improvement model that can be applied to all aspects of care, not just care for pressure ulcers, through better documentation of all aspects of resident care and through on-time feedback reports to inform care planning. Of all nursing home staff, CNAs spend the most time with residents. It integrates and uses CNA clinical reports to enhance communication across disciplines, and promote teamwork. The "On-Time" reports, designed with input from multiple disciplines, identify residents at highest risk for pressure ulcer development, show trends in multiple outcomes for these

residents over time, and help staff monitor the effectiveness of care in a timely fashion. By documenting key observations on every shift, and using these data summarized in weekly reports focusing on high risk residents, critical information is made available for decision making by the entire care team.

The initial grant pilot facilities achieved an average 33% annual reduction in pressure ulcer prevalence among 11 participating nursing homes. Some facilities reduced prevalence by up to 73% and incidence by up to 65%. In this project (21 facilities completing the program), for facilities with a high level of implementation there was a 30.7% decline (from 13.1% to 9.1%) in the CMS pressure ulcer quality measure and a 42% decline in in-house pressure ulcer rates (from 4% to 2.3%). Seven HIT vendors have now programmed the “On-Time” specifications into their products making these tools available to their customers.