

Nursing Home Health IT Reduces Pressure Ulcers and Increases Staff's Job Satisfaction



Pressure ulcers are a painful, prevalent, and preventable condition that can reduce quality, affect mortality for nursing home residents (Takahashi, 2008), and add costs to the health care system (Reddy, 2006). Recognizing residents who are at high risk of developing pressure ulcers could prevent unnecessary suffering and spending. Clinical decision support (CDS) embedded in health

information technology (health IT) can provide a clinician with patient-specific information and State-of-the-science care guidance (i.e., evidence-based recommendations). Although this approach has been shown to be very helpful in aiding clinicians' decisionmaking and the subsequent quality of care patients receive, nursing homes have been slow to adopt it.

AHRQ (with \$1.5 million of funding) and 15 participating nursing homes representing seven long-term care (LTC) organizations (with \$4.5 million of funding) sponsored the initial integration of the On-Time Quality Prevention Program for Long-Term Care (On-Time) into health IT. On-Time, a quality improvement program that leverages health IT for clinical documentation and CDS, engages multiple care providers (certified nursing assistant (CNA), registered nurses, dieticians, rehabilitation staff, and so on) to work together as a team in communication and care planning as they use CDS to identify high-risk patients and to provide prompt, preventive care. On-Time reduced the percentage of residents with pressure

“On Time emphasizes communication; you know the residents are better cared for; families are happy.”

Staff member

ulcers and led to closer bedside monitoring of the skin, nutrition, and incontinence. Staff job satisfaction also improved. Although it took over a year to see results because facilities needed time to train users and to fully incorporate the system into daily activities, nursing home staffs report that they have

been able to maintain these improvements in quality beyond the conclusion of the grant.

The successful result of this grant laid the foundation for subsequent AHRQ funding and partnerships with the New York Department of Health, District of Columbia Office of Aging, quality improvement organizations, and others. The On-Time quality improvement process is currently embedded in health IT for 12 vendors, and an additional 50+ nursing homes across the country have adopted it.¹ Many nursing homes using On-Time are exploring ways to expand it to address other preventable conditions such as resident falls. The team is also developing a Train-the-Trainer Guide, and a comprehensive evaluation of On-Time in New York will be completed by 2011.

- The On-Time Manual (fall 2010) provides guidance on how to get started and what to expect when pursuing an On-Time QI approach, regardless of the vendor of the health IT (e.g., electronic health record) used.
- This manual and other On-Time reference materials are available at: <http://www.ahrq.gov/research/ontime.htm>, under Program Materials and Tools. An additional overview may be found at: <http://www.innovations.ahrq.gov/content.aspx?id=2153>
- Health IT vendors may request details on the process to incorporate On-Time into their software, including a standard set of On-Time requirements and overview of testing process by contacting On-Time@ahrq.hhs.gov.

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Principal Investigator: Susan D. Horn, Salt Lake City, Utah

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¹ Twelve vendors have knowingly incorporated requirements for the five standard On-time reports and associated data elements in their software including: CareTracker® (by Resource Systems); Optimus EMR™ (by Optimus EMR, Inc.); Digital Pen Systems, Lintech, Mylex, Reliable, SigmaCare® e-Health, American Data, Healthcare Systems Connection, Point-Click-Care®, and HealthMedX™.

