THE TERRACES
▪ of Los Gatos ▪
OWNED AND MANAGED BY ABHOW

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LeadingAge **CAST**
center for aging services technologies

The LeadingAge Center for Aging Services Technologies (CAST) is focused on accelerating the development, evaluation and adoption of emerging technologies that will transform the aging experience. As an international coalition of more than 400 technology companies, aging-services organizations, businesses, research universities and government representatives, CAST works under the auspices of LeadingAge, an association of 6,000 not-for-profit organizations dedicated to expanding the world of possibilities for aging.

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BAM Labs

Improving Efficiency and Reducing Pressure Ulcers and Falls Through Functional Assessment Technology

Category:

Improving Staff Efficiencies, Fall Reduction, Pressure Ulcer Reduction, Improving Sleep Quality, Improving Quality of Care, Return on investment (ROI) to Providers

Organization Name

Terraces of Los Gatos (ABHOW)

Organization Types

CCRC, Skilled Nursing, Memory Care, Rehabilitation

Organization Description

The Terraces of Los Gatos (TLG), a non-profit continuing care retirement community in Northern California, promotes a rewarding lifestyle of activity, security, and convenience. Their mission is to create a quality environment of recognized value for their residents in a setting that is responsive to their desire for both independence and supplemental care. The Terraces has a 59 bed Skilled Nursing unit and a 16 bed Memory Care unit.

The Terraces is accredited by the Continuing Care Accreditation Commission (CARF-CACC), and is a part of the American Baptist Homes of the West (ABHOW), a provider of retirement housing and healthcare services since 1949.

Project Description

TLG implemented BAM Smart Bed Technology in their Skilled Nursing and Memory Care units. The community revised their clinical procedures and protocols to leverage the Smart Bed information to prevent pressure ulcers, falls and develop patient centered care plans. The project included removing local alarm-based systems and prioritized resident dignity.

Functional Assessment and Activity Monitoring System Type from the Resident and User's Perspective

For the Resident: The passive sensor is located underneath a resident's mattress and does not require any resident interaction. Once a resident enters the bed, the bed sensor will begin to record information until the resident exits the bed.

For the Provider User: Information is collected from the bed sensor and is viewable via an Internet web browser or Apple or Android mobile app which allows tracking position changes.

Functional Assessment and Activity Monitoring Single/Multi User Type

There is a sensor unit per bed, but the solution allows for multiple caregiver users to monitor multiple older adults, and is available through a browser or mobile app. The system has two different caregiver user security levels.

Business Model

ROI due to reduced pressure ulcers and falls.

Implementation Approach

TLG used a pilot of six beds to initially validate the Smart Bed Technology. After obtaining positive results, reduction in pressure ulcers and falls, from the solution and feedback from stakeholders, TLG decided to implement in all 59 beds across the two nursing stations in the Skilled Nursing Unit beginning with Nursing Station 2. Following a successful rollout in Station 2, TLG implemented the solution in Nursing Station 1. The Memory Care unit implemented the Smart Bed solution shortly after the Nursing Stations were fully implemented. The caregiving team regularly attended in-service training, as well as, shared best practices for the use of the Smart Bed Technology information.

Outcomes

- Reduction in facility-acquired pressure ulcers near 100%.
- Reduction in falls from bed by over 50%.
- CMS star rating increase from 3 stars to 5 stars following implementation.
- Caregiving team increased efficiency, saving over 473 hours per month spent on checking and turning residents.

- McKnight's Excellence in Technology award 2013: Dignity through Technology (Gold).

Challenges and Pitfalls to Avoid

While Smart Bed Technology is becoming widely adopted, it will likely be a new technology for your caregiving team. Changes to the clinical protocols, procedures and processes will be required. Leadership, in both business and clinical areas, will need to identify goals and objectives related to implementing Smart Bed Technology. A robust plan for change, including communications, education and training will be needed to optimize results and outcomes.

Lessons Learned/Advice to Share with Others

As one of the very first customers for this innovative solution, TLG has truly cleared the path for other communities planning to leverage technology to improve outcomes through resident monitoring. By being open to new solutions, and having a willingness to adapt clinical workflow for the benefit of improved resident safety and a more peaceful environment, the facility learned several valuable lessons:

- **Obtain staff buy-in.** Any new procedures or tools in a healthcare setting must be learned and accepted by the entire care team in order to succeed. Through effective training and oversight, TLG worked closely with their caregivers to overcome old habits and realize the benefits of the new Smart Bed Technology.

- **Start with the basics.** Although the BAM Labs Solution offers many capabilities, administrators recognized they had 2 specific challenges to address first. They focused on creating a quieter environment and reducing pressure ulcers. This focus allowed the facility to keep its "eye on the ball" and overcome those challenges.

- **More can be done.** TLG is now monitoring how certain residents are sleeping at night so they can provide proactive assistance, as with middle-of-the-night toileting. Additionally, they are in the early stages of beginning to assess how certain medications are impacting resident sleep quality and subsequent behavior.

Not only has TLG learned these important lessons and achieved quantifiable gains through reduced pressure ulcers and reduced audible alarms, but administrators have noticed many positive reactions from key stakeholders:

- The IT department found the solution to be easy to implement and to maintain.

- Family members enjoy the improved monitoring capabilities, and have used the objective data to understand how their loved-one is doing.

- Prospective residents and families are impressed with the unobtrusive nature of the Smart Bed Technology and are appreciative that alarm noise has been eliminated.

- Certified Nurse Assistants (CNA) are now comfortable with the technology and find it helpful in their daily routines.

- BAM Labs Smart Bed Technology is a contributing factor to achieving deficiency-free surveys by the California Department of Public Health in the past 3 years.