

# Examples of Excellence

## Technology Assists Maryland Agency in Finding the Hidden Causes of Falls

St. Agnes Homecare and Hospice is a hospital-based agency in heavily populated metropolitan Baltimore. The agency, which averages about 145 home care episodes per month, assessed its fall records and discovered that falls weren't being reported in the incident reports.



Kathy Chrystal, Performance Improvement Coordinator for St. Agnes, reviewed the agency's Outcomes Based Quality Improvement (OBQI) reports for patients who had fallen. After reviewing the data, a plan was developed for assessing risk for falls and interventions to lower the incidence of falls, which can often lead to acute care hospitalizations. Chrystal says the agency was prompted to look at the incidence of falls after reviewing the Joint Commission fall risk prevention guidelines.

### Finding the Hidden Causes

The agency assembled an interdisciplinary team to audit charts and identify key factors contributing to an increased risk for falls, including:

- Patients who live alone or with an elderly caregiver
- Physical weakness and trouble standing
- Impaired vision or hearing
- Confusion
- Polypharmacy and medications that may increase fall risk
- Home environment – insufficient handrails, presence of stairs
- Inappropriate footwear
- Obtrusive medical devices such as oxygen tanks
- Disease process

“There are so many hidden causes for falls,” says Chrystal, “such as elderly women wearing very dainty, high heeled shoes or patients becoming light-headed with taking medications, such as diuretics. We conducted an in-service that focused on medications that increase the risk for falls such as diuretics and antidepressants.”

### **Involve Technology**

With the green light from the agency director, the St. Agnes team, led by Chrystal, involved clinicians from the start and earned wide support for the development of a fall prevention program. From the supervisors to the medical director to clinicians, all were on board. "We didn't want to saddle clinicians with another paper form, so we involved our IS [information systems] nurse early," Chrystal says. Creating an electronic assessment form for a staff that uses laptop computers during visits 80 percent of the time was a win-win, according to Chrystal.

Once the electronic risk assessment was created, the agency tested it with one clinician in each discipline and then educated the entire staff on fall risk assessment and prevention. Home caregivers were then educated by the clinical staff. Chrystal says education was provided to clinicians at monthly meetings.

The rate of completion of the risk assessment form is 100 percent at the start and resumption of care. St. Agnes completes an audit to make sure an assessment is done after a fall. In 2005, the agency reports there were 46 falls that were discovered through patient incident reports or adverse event reports, and 31 fall risk profiles were completed, so the rate of completion was 67 percent. In 2006 there were 23 falls and 17 risk profiles completed after the fall, making a 74 percent completion rate.

### **Ongoing Process**

"It's been a two-and-a-half year process," Chrystal says. "First we had to educate the staff about falls, then we had to teach how to use the risk assessment tool, and finally we provided intervention instruction. When we began, we had no intervention education tools, so we researched all types of fall prevention tools, developed one tool and included it in the home chart."

St. Agnes is randomly auditing to see if the interventions are being used correctly and are working. Some of the interventions the agency has implemented include:

- Teaching safe exercise programs
- Teaching ambulation techniques
- Teaching safe transferring techniques
- Teaching safe use of assistive devices
- Re-evaluating stair climbing ability
- Ensuring adequate pain management
- Completing a home safety evaluation for environmental hazards

Families tell Chrystal that they like the instruction sheets in the home charts, and that they are using them. Chrystal concludes that the agency's adverse events incidents have dropped dramatically, and that the program is bringing about results – fewer falls, fewer hospitalizations. Between January 2005 and July 2005, the incidence of emergent care for injury caused by fall was 1.01 percent. The following year, between January 2006 and December 2006, emergent care for injury caused by a fall dropped to 0.38 percent.

*Information for this article was provided by Kathy Chrystal, St. Agnes Homecare and Hospice.*

# Visiting Nurses Association of Boston Drastically Lowers Emergent Care Rate Due to Falls



Fall prevention is not new for the Visiting Nurses Association (VNA) of Boston. This agency, one of the largest home health agencies in New England, has been proactive with an ongoing fall prevention program for years. However, for the past two years, the agency has intensified its approach by taking a closer look at what patients are considered “high risk” for a fall.

Unlike many home health agencies, VNA of Boston considers every patient at risk for a fall. While the agency does use a risk assessment tool to identify how high the patient’s risk might be, all patients receive education and monitoring to help protect them from a possible fall at home.

VNA of Boston’s fall risk assessment tool is also different than many other agencies. While many assessment tools include ten or fewer common fall risk factors, VNA of Boston’s includes twelve. The agency felt it was important to include postural hypotension and fear of falling on its tool. Fall intervention is then provided on a “sliding scale” – the more risk factors a patient has, the more interventions the agency provides.

“Because all of our patients are home bound, have some type of health concern and most are elderly, all of them receive basic fall prevention education upon admission to our agency,” shared Carson Reinart, PT, DPT and Rehabilitation Program Developer and Clinical Educator at VNA of Boston.

## **Interventions Admission**

Upon admission, the admitting clinician completes the fall assessment and determines the patient’s fall risk rate. The clinician also provides each patient with a booklet, Preventing Slips and Trips in the Home, and reviews five core fall prevention areas that research has found to be most critical in preventing falls in the home. The admitting clinician distributes the booklet to the patient and any caregivers. Then, depending on the patient’s identified fall risks, interventions may be recommended. For example, if the patient only has one risk factor he/she would receive the education booklet and a follow-up discussion upon the next visit. If the patient has two or more risk factors, he/she would receive an

intervention that coincides with that risk factor – such as making a referral to physical therapy if the patient has impaired functional mobility.

### **Core Areas for Preventing Falls in the Home**

1. Physical Activity
2. Stay hydrated and eat properly
3. Get an annual vision check
4. Annually review medications and doses
5. Keep the home environment safe and free of hazards

### **Outcomes**

Prior to the agency enhancing its program and considering each patient at risk, VNA of Boston's 2005 emergent care, due to falls, peaked at 2.9 percent. After the agency implemented the program in 2006 with two pilot teams, which had the highest rates, there was a decrease in the rate to 1.42 percent in just the first half of the year. By the end of 2006, the rate dropped even lower to 1.20 percent in one of the pilot teams.

### **Success Attributions**

The agency attributes its success to partnerships and extensive research. VNA of Boston participates in the Missouri Alliance of Home Care project, which provides benchmarking reports and peer comparisons. See the leadership section of the Best Practice Intervention Package for more information.

As for advice to other agencies seeking to make this same effort, the team at VNA of Boston says it is a matter of awareness – falls can be prevented. The elderly are capable of improving balance and increasing the safety of their environments, in addition to managing vision or medications properly. “There are so many areas that you can assess and address – not just one,” says Reinart. “Deal with as many as possible to reduce the risk of falling.”

*Data in this article was provided by Carson Reinart at VNA of Boston.*



# Examples of Excellence

## Fall Reduction at Avera St. Luke's Home Health: The Collaboration Dance



Avera St. Luke's Home Health is a hospital-based home health agency located in rural Aberdeen, South Dakota with approximately 500 episodes of care annually. The agency successfully reduced patients' risk for falls in the home by implementing a fall reduction program that included:

- Multidisciplinary collaboration
- New forms
- Assessment
- Screening tools
- Patient education
- Performance improvement monitoring

### Problem Identification

In the autumn of 2005, Cindy Senger, Director of Home Health, Hospice, Palliative Care and Respiratory Home Care, reported that Avera noticed a 23 percent increase in the fall rate for skilled home health patients as part of an annual summative evaluation. Reviewing these data in conjunction with the JCAHO 2006 Home Care National Patient Safety Goal to "reduce the risk of patient harm from falls," agency staff began the multidisciplinary collaborative dance to reduce home health patients' fall risk.

### Creating a Fall Prevention Committee

To address the issue, the agency formed a falls committee consisting of Jackie Jund, RN, Kim Kram, Physical Therapist and Carla Van Dyke, Nurse Manager, who also serves as the intake manager for all new cases, sitting in on discharge meetings with hospital staff. The goals of the committee were to: (1) reduce fall rate of skilled home health patients by 10 percent in the first year by June 2006 and (2) decrease the fall risk severity grade, calculated by the updated clinical risk fall screening tool completed collaboratively by nursing and therapy by 0.5 percent at the time of discharge in 75 percent of the skilled home health patients.

### Change Determination

The Avera St. Luke's fall prevention committee collaborated with the South Dakota QIO to identify fall prevention best practices. Once best practices were determined, the fall prevention committee and agency staff:

- Expanded and updated the fall risk screening tool and increased its use by requiring it be completed at: admission, recertification, resumption of care and discharge of all skilled patients
- Developed a post-fall audit tool to be completed following each fall for a skilled home health patient – both witnessed and un-witnessed falls
- Developed PT consultation criteria, and/or if the fall was related to incontinence, the PT consult included an incontinence treatment evaluation. Performance improvement activity included the development of an incontinence pathway and therapy treatment interventions
- Developed pharmacy consultation criteria (The pharmacist determines if medication may

- have contributed to the fall. Pharmacy consultation occurs by phone or face-to-face during weekly patient team conference.)
- Developed criteria that requires documentation in the record to reflect additional post-fall patient/caregiver education concerning safety and fall risk
  - Developed a performance improvement study related to fall risk for 2006-2007

#### **Improvement Strategies**

- Utilized research done by Avera St. Luke's falls committee to select best practice interventions for fall risk program development
- Revised the fall risk screening tool multiple times to validate the tool
- Conducted multiple educational sessions to ensure staff understood dance steps for: using the screening tool, achieving desired outcomes, completing patient record documentation and using additional patient education tools
- Modified outcomes to ensure reliability of the screening tool indicators
- Adapted Avera St. Luke's hospital fall risk patient education for home care

#### **Improvement Challenges**

The primary challenge was achieving full engagement of the therapy and nursing staff in the dance. This achievement is an example of pure musical multidisciplinary collaboration to benefit patient care. The second challenge has been maintaining continuous staff buy-in and educating all staff on the steps, process and progress made in attaining the desired outcomes.

#### **Measurable Results**

Baseline data obtained prior to implementation of the fall risk program showed: the fall risk screening tool was inconsistently used at the desired time points, used correctly on admission only 50 percent of the time and 1 percent of the time at discharge with no documentation of the level of fall risk at the time patient was discharged. The tool was not valid in measuring patients' risk for falls (it was evident staff were not dancing to the music).

Audits were completed for four quarters from 4/06 – 3/07 to measure the fall risk severity weight calculated by the clinical risk profile to result in a .5 decrease at the time of discharge in 75 percent of all skilled home health patients:

- 1st Quarter: clinical risk profile weight decreased by .4 in 44 percent of all skilled patients
- 2nd Quarter: clinical risk profile weight decreased by .61 in 50 percent of the skilled patients
- 3rd Quarter: clinical risk profile weight decreased by .68 in 100 percent of the skilled patients
- 4th Quarter: clinical risk profile weight decreased by .73 in 60 percent of the skilled patients

Review of all falls data for FY 2005/2006 indicated a 32 percent decrease in the number of falls experienced by skilled home health patients.

#### **Collaboration: Strength of the Agency**

"Collaboration is a real strength of our agency," says Senger. "Nurses and PTs work together to provide the best care for the patients, and the disciplines are right in step with one another to reduce falls." A lot of informal discussion occurs about each patient among the PT, OT and RN staff whose offices are all very close together at the agency. "There's a real team spirit and participatory style. Our clinicians feel very good about the care they're giving our patients, and they take a stake in the performance improvement projects," reflects Senger. "These people are always looking to do something better. We all work together to make things better, and they are an integral part of our improvement process."

*\* Information and data provided by Cindy Senger, Avera St. Luke's Home Health*