Patient Safety Reporting Program

2011 Nursing Home Annual Summary

Report. Learn. Improve Patient Safety.

Bethany Higgins
Executive Director

Valerie Van Buren
Patient Safety Consultant

Carrie Parrish
Project Manager

Sydney Edlund
Data Analyst

September 2012

OREGON
PATIENT SAFETY
COMMISSION

Page intentionally left blank

Table of Contents

Executive Summary

In 2011, Oregon nursing homes submitted fewer reports compared to previous years. This decrease is not an indication that fewer adverse events are occurring, but rather, the reporting of fewer events. While over 77% of the nursing homes in Oregon participate in the Patient Safety Reporting Program, only 7% are currently reporting adverse events. To facilitate and encourage reporting, the Commission has:

- Created a *Quick Guide to Nursing Home Reporting*
- Established targets to recognize leading participants
- Invested in improvements to the online tool (scheduled for release – Fall 2012)

As nursing homes are aware, the voluntary, confidential nature of the Patient Safety Reporting Program is unique. Each year, the Commission strives to provide robust information on statewide trends and meaningful feedback to help nursing homes to learn and improve. Adverse event reporting demonstrates a commitment to patient safety and helps to preserve the unique qualities of the program.

This annual summary provides an aggregate look at the adverse events reported by Oregon nursing homes in 2011. Based on an analysis of these reports, this summary provides information regarding the type and characteristics of adverse events reported, as well as a clear set of recommendations to improve the quality of investigations and prevent recurrence of similar problems. It is the goal of the Commission that nursing homes will use the information in this report as a tool, in conjunction with evidence-based best practices and quality improvement tools, to build and strengthen their organization's culture of patient safety.

The Commission is dedicated to providing value to our Patient Safety Reporting Program participants. In addition to our work this year to enhance the Patient Safety Reporting Program, the Commission is offering programs specifically designed to support nursing homes with their patient safety efforts. Information regarding Commission programs is available online (http://oregonpatientsafety.org). The Commission also offers a monthly newsletter that provides essential patient safety information to professionals across the healthcare continuum (subscribe at http://oregonpatientsafety.org/news-events/subscribe/).

The Commission appreciates the continued support of our partners and Patient Safety Reporting Program participants that are actively participating. We are pleased to provide this 2011 Nursing Home Annual Summary to inform efforts throughout Oregon to reduce the risk of serious adverse events and encourage a culture of patient safety.

Overview of Oregon's Nursing Home Patient Safety Reporting Program

One of the primary goals of the Patient Safety Reporting Program is to identify and learn from adverse events in order to improve the healthcare system. An adverse event is any event resulting in unintended harm or creating the potential for harm (e.g., near-miss or close call) related to any aspect of a patient's care, rather than to the underlying disease or condition of the patient. While the reporting program is a mechanism to learn from adverse events, participating organizations must take the first step by seeking to identify these events.

To better understand why adverse events occur, the Patient Safety Reporting Program is based on root cause analysis (RCA). RCA requires a systematic, in-depth review to learn the most basic reasons why an adverse event occurred. The goal is to understand the problem in sufficient depth to effectively eliminate the chance of future occurrence. The reporting program's adverse event reporting form is designed to walk adverse event investigators though the RCA process in order to:

1. Determine **what** happened
2. Determine **why** it happened
3. Develop an **action plan** to prevent similar events

Through reporting, participating nursing homes identify opportunities to learn from and correct system-level issues. To date, over 77% of Oregon's nursing homes are participants in the Patient Safety Reporting Program. Participants are required to report unanticipated and usually preventable events that result in patient death or serious physical injury. Appendix I provides a complete list of events that nursing home participants are required to report; however, the Commission encourages participants to report adverse events that highlight a valuable patient safety lesson.

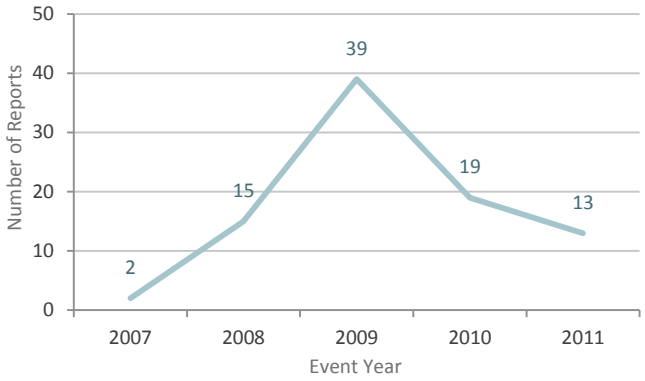
Participating nursing homes are demonstrating a commitment to learning and improvement; this is the cornerstone of creating a culture of patient safety. Reporting adverse events is not, in and of itself, enough to ensure patient safety. Rather, adverse event reporting is only the beginning. Through reporting, organizations identify and learn from opportunities to improve patient safety and develop action plans to prevent future recurrence. Sustaining successful change requires the implementation of action plans to redesign and continuously improve the system. Additionally, reported events and findings from the investigation can be aggregated with similar incidents to identify common underlying causes to facilitate learning and improvement.

Reporting History

Oregon nursing homes have been submitting adverse event reports to the Oregon Patient Safety Commission since 2007. Nursing home reports submitted to the Commission steadily increased from 2007 through 2009 but have declined in 2010 and 2011, with only 7% of nursing home participants submitting a report in 2011 (see Figure 1). We interpret the initial rise not as an

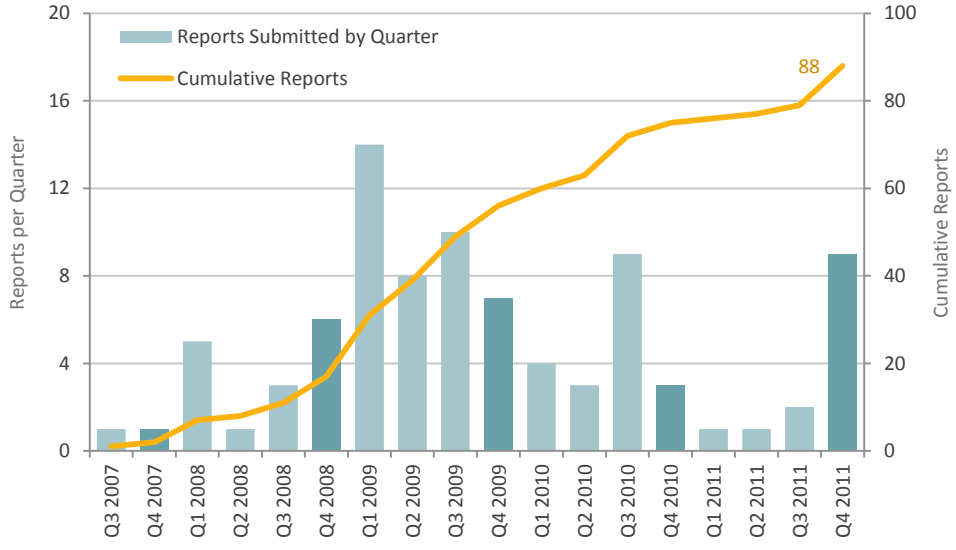
increase in the number of reportable events occurring, but rather as improvement on the part of Oregon nursing homes to recognize and report adverse events. Similarly, we interpret the decrease in 2010 and 2011, not as a decrease in the number of reportable events but as a decrease in the reporting of adverse events.

Figure 1. Reports by Event Year, 2007-2011



The Commission is encouraged by a significant upturn at the end of 2011 with over 90 percent of reporting for 2011 in the months of November and December. This increase may be due to increased visibility of the reporting program through a series of falls prevention trainings and the release of the reporting recognition targets in the fall (see Figure 2). To support the 108 participating Oregon nursing homes in their identification and reporting of adverse events, a *Quick Guide to Nursing Home Reporting* is now available on our website to help nursing homes better understand what to report to the Commission.

Figure 2. Reports Submitted by Event Quarter and Cumulatively, 2007-2011



To ensure that sufficient adverse event reports are received to build a strong database for learning, and to recognize healthcare organizations for their transparency efforts and commitment to patient safety, the Commission has established reporting recognition targets.

These targets focus on the quantity of reports submitted as well as the quality and timeliness of those reports. *Patient Safety Reporting Program Recognition Targets for 2012* are available for review.

2011 Reporting

This report provides an aggregate overview of adverse event reports submitted to the Oregon Patient Safety Commission by nursing homes in 2011, , as well as a comparison to previous years.

Types of Adverse Events

The nursing home adverse event reporting form contains 13 different reportable adverse events (including "Other"). A complete list of reportable events can be found in Appendix I. Table 1 offers an overview of the types of adverse events reported by Oregon nursing homes.

Table 1. Number and Percent of Events Reported by Type, Historically and in 2011

	2007-2010		2011	
Reported Event Types	**Number**	**Percent**	**Number**	**Percent**
Falls	57	68%	11	85%
Device or equipment related	10	12%	0	0%
Medication error	7	8%	0	0%
Other	6	7%	1	8%
Elopement	2	2%	0	0%
Suicide	1	1%	0	0%
Treatment related[1]	1	1%	0	0%
Burn	0	0%	1	8%
Total Events	**84**		**13**	
Total Reports	**75**		**13**	

The majority (85%) of the events reported by nursing homes are *falls*. In the long-term care setting, 29% to 55% of patients/residents are reported to fall during their stay with up to 20% of those falls resulting in an injury (twice that of community dwelling elderly (Hughes, 2008)). Because of the prevalence of falls in the nursing home environment, the Commission's new online reporting system will collect more detailed information on this event type, which will help guide facilities that are investigating falls.

Read about a patient safety strategy that one Oregon nursing home is using to prevent falls in cognitively impaired residents on page 12.

While only 13 reports were submitted by nursing homes in 2011, evidence strongly supports that other types of adverse events are occurring in nursing homes. For example, costs related to

[1] In the coming months, the new online reporting system will replace the event type treatment related with easier to understand event types: *Intravascular embolisms related to IV therapy*, *Fecal impaction*, *Dehydration*, *Pressure ulcers (stage 3 or 4)*, *Diabetic coma*, and *Contractures*.

adverse medication events in nursing homes are reported at $7.6 billion a year (Herndon, et al. (2007). These costs are comprised of payments for additional procedures, unnecessary rework, and claims resulting from harm to patients. Medication events and other unreported events, offer opportunities for learning and improvement.

Harm in Adverse Event Reports

Historically, nursing homes assigned each adverse event a harm level using nine numerical categories ranging from no harm to death. The Commission summarized the reported harms in two ways: serious harm (levels 7-9) and less serious harm (levels 2-6).[2] While nursing homes are only required to report serious adverse events, the identification of less serious harm, no harm, and "near-miss" events provides important opportunities to improve patient safety and prevent the likelihood for serious adverse events to occur in the future. The goal of the Patient Safety Reporting Program is to learn and improve from adverse events, regardless of the level of harm.

In 2011, the Commission adopted formally validated national harm categories established by the National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP) (see Table 2).[3] Adoption of the NCC MERP harm categories increases the Commission's ability to interpret the impact of adverse events on patients and provides the Commission with a richer understanding of reported harms. While the original harm levels were a scale from lower harm to greater harm, the new NCC MERP system consists of mutually exclusive categories assigned by following a standardized NCC MERP Harm Category Algorithm. Although there will always be some level of subjectivity in assessing the harm associated with a specific adverse event, the algorithm standardizes the assessment of harm across facilities. Use of the NCC MERP categories will strengthen data analysis and provide a clearer picture of what may have happened to the patient.

[2] Participants in the Patient Safety Reporting Program are only required to submit adverse event reports for serious harm events (Oregon Patient Safety Commission, 325 Oregon Administrative Rules § 020-0055. 2007) which are defined in Appendix I. Serious harm is defined as NCC MERP harm categories F through I (see table 2).

[3] In 1999, NCC MERP developed a classification for standardizing harm from adverse drug events. The classification's use has been extended to other types of adverse events, most notably by the Institute for Healthcare Improvement, which uses the Medication Error Reporting and Prevention categories with its trigger tools.

Table 2. NCC MERP Harm Categories

Category A	Circumstances that have the capacity to cause an adverse event	**No adverse event**
Category B	An event occurred that did not reach the patient (an "error of omission" does reach the patient)	**Adverse event, no harm**
Category C	An event occurred that reached the patient but did not cause patient harm *Harm is defined as "any physical injury or damage to the health of a person requiring additional medical care, including both temporary and permanent injury"*	
Category D	An event occurred that reached the patient and required monitoring to confirm that it resulted in no harm to the patient and/or required intervention to preclude harm *Monitoring is defined as "to observe or record physiological or psychological signs"*	
Category E	An event occurred that may have contributed to or resulted in temporary harm to the patient but did not require a significant intervention *A significant intervention is defined as "an intervention intended to relieve symptoms that have the potential to be life-threatening if not addressed"*	**Adverse event, harm**
Category F	An event occurred that may have contributed to or resulted in temporary harm to the patient and required a significant intervention *A significant intervention is defined as "an intervention intended to relieve symptoms that have the potential to be life-threatening if not addressed"*	
Category G	An event occurred that may have contributed to or resulted in permanent patient harm *Permanent harm is defined as "harm lasting more than 6 months, or where end harm is not known ('watchful waiting')"*	
Category H	An event occurred that required intervention necessary to sustain life *An intervention necessary to sustain life is defined as including "cardiovascular and/or respiratory support (e.g., CPR, defibrillation, intubation)"*	
Category I	An event occurred that may have contributed to or resulted in patient's death	**Adverse event, death**

The Commission is in the process of enhancing the nursing home reporting form and is designing a new online reporting system. The new online system walks participants though a series of questions to determine the harm category based NCC MERP index for harm categorization (see above in Table 2). Nursing homes can expect more communication about this from the Commission with the release of the new system.

Adverse Events by Harm Category

A majority of reported events fell into the serious harm categories (see Table 3). Given the opportunity for learning from all events, including those resulting in less serious harm or those

that did not reach the patient, nursing homes are encouraged to report adverse events with the potential for shared learning.

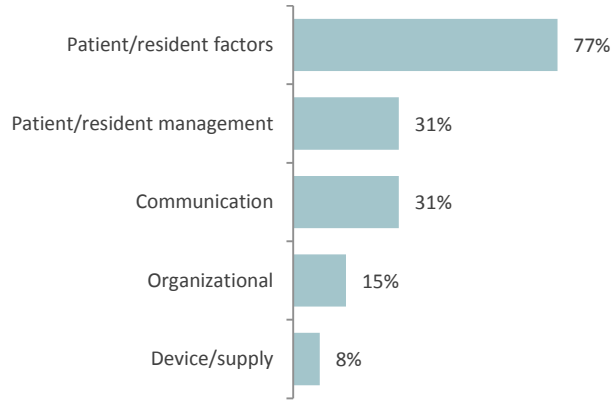
Table 3. Number and Percent Events by Harm Category and Event Type, 2011

Event Type	Number of Events with Harm A-E	Percent of Total Events	Number of Events with Harm F-I	Percent of Total Events
Fall	3	23%	8	62%
Burn	0	0%	1	8%
Other Event Type	0	0%	1	8%
Total Events	3	23%	10	77%

Contributing Factors

Factors that may have contributed to an event and those that ultimately caused the event— the root cause(s)—help organizations understand why the event occurred. Typically, one adverse event involves multiple contributing factors. The adverse event reporting form offers 62 potential contributing factors organized into eight larger categories for ease of analysis. In 2011, 39 contributing factors, represented by five categories, were identified in the 13 submitted reports. Figure 3 displays the categories reported in 2011.

Figure 3. Contributing Factor Categories, 2011



The categories with the most frequently reported factors were *Patient/resident factors* (77% of reports identified at least one factor), *Patient/resident management* (31%), and *Communication* (31%). These top three categories are consistent with 2010 reports. Table 4 takes a more detailed look at the most frequently reported contributing factors by nursing homes in 2011.

Table 4. Most Frequently Reported Contributing Factors, 2011

Contributing Factor (n=13 reports)	**Total**	**% of Reports**
Other patient/resident factor	8	62%
Mental status (patient/resident)	7	54%
Behavioral status (patient/resident)	4	31%
Accuracy of care plan	2	15%
Implementation of care plan	2	15%
Other communication factor	2	15%
Response to changing condition/delay in care	2	15%

The most commonly identified contributing factors were *Other patient/resident factors* (62%) and *Mental status (patient/resident)* (54%). Of those reports that selected *Other patient/resident factor,* 75% specifically indicated that the "resident's assumption of risk" played a role.

Adverse events may be precipitated by many different factors. For example, *Falls* (accounting for 85% of reported events in Oregon nursing homes) may be precipitated by many different factors including factors that are physiological in origin (e.g., sensory impairment or mental status) or those caused by environmental hazards, communication, or patient/resident management.

Understanding the complexities of why a fall occurred, starting with identification of contributing factors, can facilitate the development of more successful action plans.

Example Event & Contributing Factors

A patient/resident's fall risk assessment was not communicated to care staff through care plan development, preventing appropriate interventions from being applied. The patient/resident then falls.

Contributing factor categories would include:

- *Communication* (specific contributing factors: among healthcare personnel and availability of information)
- *Patient/resident management* (specific contributing factor: developing a care plan)

Recommendations & Improvement Strategies

Identifying adverse events is only the first step in improving patient safety. Understanding why adverse events occur through identification of root causes and the development of effective action plans is critical. Nursing homes can use the process of reporting to guide their organization's investigation process to identify root causes, which in turn support the development of more effective action plans – both essential components of the adverse event report. Ultimately, a successful investigative process can provide meaningful information that can be translated into ongoing system-level improvements.

Recommended Focus Areas

The information in adverse event reports submitted to the Commission in 2011 indicates that nursing homes are conducting investigations of adverse events, yet the investigations are not thorough. Most of the reports uncover only surface-level contributing factors and not root causes. Additionally, nursing homes developed action plans that did not reflect an in-depth level of analysis or create a successful long-term change. With this in mind, the following focus areas are recommended

- *Root cause identification*
- *Effective Action Plan Development*

The following sections offer improvement strategies using components of root cause analysis and other quality improvement principles. With an emphasis on learning, prevention, and continuous improvement, incorporating these concepts into organizational culture is a natural fit for a nursing home's Quality Assessment and Performance Improvement Program (QAPI); more specifically *Element 5: Systematic Analysis and Systemic Action*.[4]

> **Element 5: Systematic Analysis and Systemic Action**
>
> The facility uses a systematic approach to determine when in-depth analysis is needed to fully understand the problem, its causes, and implications of a change. The facility uses a thorough and highly organized/ structured approach to determine whether and how identified problems may be caused or exacerbated by the way care and services are organized or delivered. Additionally, facilities will be expected to develop policies and procedures and demonstrate proficiency in the use of Root Cause Analysis. Systemic Actions look comprehensively across all involved systems to prevent future events and promote sustained improvement. This element includes a focus on continual learning and continuous improvement.

[4] As a part of the 2010 Affordable Care Act (ACA), each nursing home will be required to have a quality assurance and performance improvement (QAPI). An implementation date has not yet been established by the Centers for Medicare and Medicaid Services (CMS).

Root Cause Identification

Root causes are the most basic reason(s) for why an adverse event occurred. Correcting root causes on a system-level can prevent (or significantly reduce the likelihood of) similar events. Nursing homes often move toward identifying root causes but may prematurely end their investigation by not examining specific contributing factors more thoroughly. Once contributing factors have been identified, an organization must continue the investigation until the root cause(s) have clearly been identified. In 2011 adverse event reports, the causes (i.e., the findings) identified for reported events did not consistently reflect an in-depth investigation to identify root cause(s). Health care team members can use the following tips to guide their investigation process for getting to the root cause of an event.

Identifying Root Causes

Use the 5 Whys

A method for uncovering the underlying causes of an event by continuing to ask "why" until the team agrees that they have identified the event's root cause(s)

Clearly show a cause and effect relationship

Ask, if you eliminate this cause/contributing factor, will you minimize/prevent future events?

Use the Substitution Test

A method to identify proceeding causes, NOT the "human error," by asking, "Could a peer with comparable qualifications and experience, behave in a similar way in similar circumstances?" If the answer is "yes," then the event is likely caused by system level factors.

After an in-depth analysis of an event to identify root cause(s), continue with the root cause analysis (RCA) process to identify preventive measures to develop an action plan. Additional information and resources for root cause analysis (RCA) can be found both in the remainder of this annual summary as well as in the *Resources* section.

Root Cause Identification – A Practical Application

The consequences of adverse medication events in nursing homes, also referred to as adverse drug events, can be significant. According to Jacqueline Vance, American Medical Directors Association's (ADMA's) Director of Clinical Affairs, "although only a small number of medication errors actually cause adverse drug events (ADEs), as many as 50% of ADEs are caused by errors. Their consequences– falls and fractures as well as greatly increased costs– can't be ignored" (Vance, 2003).

Consequences of Adverse Medication Events in Nursing Homes

- Falls and fractures
- Malnutrition
- Incontinence
- Delirium
- Behavior problems

(Vance, 2003)

Patient Safety Strategy

Using RCA to Tackle Medication Errors

Cascade Manor, in Eugene Oregon, has adopted a root cause analysis (RCA) process, to investigate what they call medication "variances," as opposed to medication "errors." Working with forms provided by its corporation (Pacific Retirement Services), Cascade Manor has successfully integrated the in-depth investigative process into practice. The process has facilitated a shift in how the facility reacts when something doesn't go as planned. Focusing on the reasons why a medication variance occurred – even those that don't reach the patient/resident (i.e., near-miss) – and not on the individual involved or the ultimate outcome, has proactively strengthened the medication system, minimizing the chance of similar events in the future. Some of the essential components in Cascade Manor's RCA process for medication variances include to:

- Involve staff in the process
- Focus on processes and systems, not individuals (non-punitive)
- Identify possible reasons for variation – the contributing factors and root causes (e.g., transcribed incorrectly, labeling problem, unclear physician order, misidentification of a patient/resident)
- Identify the stage in the medication process when the event occurred (e.g., prescribing, transcribing, dispensing, administering, monitoring)
- Develop action plans designed to prevent recurrence of similar events
- Track and trend medication variances and/or near misses on an ongoing basis
- Be transparent and routinely share results with staff

At Cascade Manor, a high level of staff engagement in the investigation and preventive action plan development has resulted in buy-in for the new process. Through monthly tracking and trending of medication variances over time, a shift from punitive reactions to learning has led to successful medication system improvements.

Recommendation: Investigate with a focus on processes and systems – not individuals. Involve staff in the investigation to fully understand the circumstances that contributed to, and ultimately caused, the event.

Effective Action Plan Development

Action plans are a critical component of the root cause analysis. The action plan outlines the steps an organization will take to prevent future adverse events. Strong and complete actions plans have a clear link to the root causes and contributing factors, are easily understood, and are more likely to be successful in achieving system-level changes. Through improved root cause identification, nursing homes will be better prepared to develop effective action plans.

Appendix II provides additional information on developing an action plan that meets the quality criteria outlined in the *Patient Safety Reporting Targets for 2012*. You will also find information on writing an acceptable quality *complete account,* identifying causes (i.e., *findings*), and developing *action plans*.

Effective Action Plans

- Address the root cause(s)/contributing factors
- Focus on systems, not on individuals
- Are specific and concrete
- Can be understood and implemented by a "cold reader"
- Consult process owners (those responsible for carrying out plan) and resident and/or representative
- Are tested prior to full implementation (Plan-Do-Study-Act*)

** For more information on Plan-Do-Study-Act, see Testing an Action Plan.*

Testing an Action Plan

Once the decision has been made to implement an action plan, purposeful planning will help guide effective implementation. One way to structure this process is by using the Model for Improvement, a simple tool that serves as a roadmap for improvement. The Model for Improvement is not meant to replace change models that organizations may already be using, but rather to accelerate improvement. This model has been used very successfully by hundreds of health care organizations to improve many different health care processes and outcomes (Langley, et al. (2009)).

As shown in Figure 4, The Model for Improvement has two parts: (1) three fundamental questions and (2) the Plan-Do-Study-Act (PDSA) cycle for testing and implementing change. The PDSA cycle helps guide the test to determine if the change is an improvement.

Figure 4: The Model for Improvement

Model for Improvement

What are we trying to accomplish?

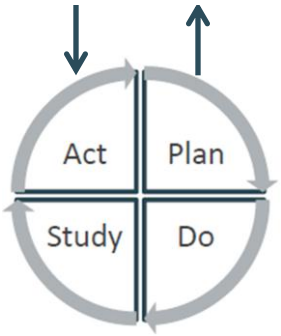
Setting Aims: The aim should be time-specific and measurable (use SMART to help set your aim).

How will we know that a change is an improvement?

Establish Measures: Quantitative measures will enable you to determine if a specific change actually leads to an improvement.

What change can we make that will result in improvement?

Selecting Changes: Organizations must identify the changes that are most likely to result in improvement.



Testing the Changes: The Plan-Do-Study-Act (PDSA) cycle is shorthand for testing a change in the real work setting — by planning it (Plan), trying it (Do), observing the results (Study), and acting on what is learned (Act). Use the PDSA to test change on a small scale multiple times, in order to learn and make modification before implementing changes on a large scale (i.e., facility-wide).

Use the Model for Improvement, test a change on a small scale, learn from each test, and modify the change through several PDSA cycles.

Testing Action Plans – A Practical Application

In Oregon, 63% of nursing home patient/residents are cognitively impaired, which may increase their risk for falls (Alzheimer's Association (2012)). In general, people who have Alzheimer's or dementia are more likely to fall than people who don't and they are more likely to be injured in a fall. Additionally, when individuals with cognitive impairments become agitated, they are more likely to fall (Taylor, et al. (2012)). Nursing homes spend a tremendous amount of energy trying to keep their patients/residents safe from falls; evidenced by the majority of reported adverse events in 2011 being falls involving cognitive impairment.

Patient Safety Strategy

Testing Fall Prevention Strategies in Cognitively Impaired Patients

Marquis Mt. Tabor, a post-acute rehabilitation facility in Portland, Oregon, has been using Plan-Do-Study-Act (PDSA) cycles to rapidly test fall interventions for cognitively impaired patients/residents. Preventing falls among populations with cognitive impairments is difficult, as there is no 'one size fits all' solution.

Led by the resident care managers, a multidisciplinary team in the long-term care unit identified a list of priority patients/residents who were at risk of falling. Priority patients/residents were selected based on their fall risk and the number of falls they had experienced while at the facility. Focusing on one patient/resident at a time, the multidisciplinary team investigated potential reasons why falls were occurring, using the Five Whys to identify the event's root cause(s). With root causes identified, the team planned a test of change using the PDSA cycle.

Team members brainstormed potential ideas to address the identified cause(s) of each patient's/resident's falls. Once the team identified an intervention that they thought might work, they tested it using the PDSA cycle. Each intervention was tested for two weeks and reevaluated to determine its effectiveness. Oftentimes, the team found that successfully reducing falls came down to finding the right combination of interventions for each specific patient/resident. So far, Marquis Mt. Tabor has been successful in significantly reducing falls for targeted patients/residents; the staff are optimistic about the long-term viability of the approach.

Recommendation: Be willing to try something creative and don't worry about guaranteed success. If you're paying attention, you can learn as much from interventions with limited success as those that have the intended impact.

Looking Forward

Over the next year, the Patient Safety Commission will be offering education and resources for infection prevention programs in nursing homes. This will include several infection prevention seminars as well as a multi-day workshop to train the individual responsible for the infection prevention program at your facility. Additionally, a tool kit containing infection prevention resources developed specifically for the nursing home environment will available on the Commission's website. Watch the Commission's newsletter and website throughout the coming year for more information about this work to support nursing homes.

References

Herndon, Laurie MSN, APRN, BC A; Niemi, Jane MSN, RN, LNHA. (2007). A Systems Approach to Quality Improvement in Long-Term Care: Safe Medication Practices Workbook. Commonwealth of Massachusetts. Retrieved from: http://www.macoalition.org/Initiatives/docs/safe_medication_practices_wkbk-2008.pdf

Hughes RG (ed.). Patient safety and quality: An evidence-based handbook for nurses. (Prepared with support from the Robert Wood Johnson Foundation). AHRQ Publication No. 08-0043. Rockville, MD: Agency for Healthcare Research and Quality; March 2008. Retrieved from www.ahrq.gov/qual/nurseshdbk/nurseshdbk.pdf

Taylor, SL, Saliba, D. (2012). Improving Patient Safety in Long-Term Care Facilities. Module 3: Falls Prevention and Management. Student Workbook. (Prepared by RAND Corporation under contract 290-06-00017-7). AHRQ Publication No. 12-0001-4, June 2012. Agency for Healthcare Research and Quality, Rockville, MD. Retrieved from http://www.ahrq.gov/qual/ptsafetyltc/ltcmodule3.htm

Langley, GL; Nolan, KM; Nolan, TW; Norman, CL;, Provos, LP. The Improvement Guide: A Practical Approach to Enhancing Organizational Performance (2nd edition). San Francisco: Jossey-Bass Publishers; 2009.

Oregon Alzheimer's Statistics. (2012). Alzheimer's Association. Retrieved from http://www.alz.org/oregon/documents/oregon_facts_and_figures_2012.pdf

Vance, J. (2003). Reducing medication errors in Nursing Homes: Caring for the ages. American Medical Directors Association, 4.

Resources

Falls

Research: Dose-response relationship between Selective Serotonin Reuptake Inhibitors and Injurious Falls: A study in Nursing Home Residents with Dementia

Carolyn S. Sterke MSc, Gijsbertus Ziere MD, PhD, Ed F. van Beeck MD, PhD, Caspar W. N. Looman MSc, Tischa J. M. van der Cammen MD, PhD. Dose-response relationship between Selective Serotonin Reuptake Inhibitors and Injurious Falls: A study in Nursing Home Residents with Dementia. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1365-2125.2012.04124.x/abstract

Research: Fall prevention with supplemental and active forms of vitamin D: a meta-analysis of randomized controlled trials

Bischoff-Ferrari H.A. , Dawson-Hughes B., Staehelin H.B., Orav J.E., Stuck A.E., Theiler R., Wong J.B., Egli A., Kiel D.P., Henschkowski J. Fall prevention with supplemental and active forms of vitamin D: a meta-analysis of randomized controlled trials. Retrieved from http://www.bmj.com/content/339/bmj.b3692.pdf%2Bhtml

Tool: Falls Investigation Guide Toolkit

Falls Investigation Guide Toolkit. (2011). Oregon Patient Safety Commission. Retrieved from http://oregonpatientsafety.org/healthcare-professionals/nursing-homes/long-term-care-falls-investigation-toolkit/284/

Research: Incidence and Prediction of Falls in Dementia: A Prospective Study in Older People

Allan Louise M., Ballard Clive G., Rowan Elise N., Kenny Rose Ann. Incidence and Prediction of Falls in Dementia: A Prospective Study in Older People. Retrieved from http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0005521

Tool: Improving Patient Safety in Long-Term Care Facilities. Module 3: Falls Prevention and Management

Taylor SL, Saliba, D. (2012). Improving Patient Safety in Long-Term Care Facilities. Module 3: Falls Prevention and Management. Student Workbook. (Prepared by RAND Corporation under contract 290-06-00017-7). AHRQ Publication No. 12-0001-4, June 2012. Agency for Healthcare Research and Quality, Rockville, MD. Retrieved from http://www.ahrq.gov/qual/ptsafetyltc/ltcmodule3.htm

Root Cause Analysis

Tool: Oregon's Guide to Root Cause Analysis in Long Term Care

Oregon's Guide to Root Cause Analysis in Long Term Care. Oregon Patient Safety Commission. Retrieved from http://oregonpatientsafety.org/healthcare-professionals/nursing-homes/root-cause-analysis-materials-for-long-term-care-facilities/283/

Other Patient Safety & Quality Improvement Resources

Tool: Improving Patient Safety in Long-Term Care Facilities. Module 1: Detecting Change in a Resident's Condition.

Taylor SL, Saliba, D. (2012) Improving Patient Safety in Long-Term Care Facilities. Module 1: Detecting Change in a Resident's Condition. Student Workbook. (Prepared by RAND Corporation under contract 290-06-00017-7). AHRQ Publication No. 12-0001-2, June 2012. Agency for Healthcare Research and Quality, Rockville, MD. Retrieved from http://www.ahrq.gov/qual/ptsafetyltc/ltcmodule1.htm

Tool: Improving Patient Safety in Long-Term Care Facilities. Module 2: Communicating Change in a Resident's Condition.

Taylor SL, Saliba, D. Improving Patient Safety in Long-Term Care Facilities. Module 2: Communicating Change in a Resident's Condition. Student Workbook. (Prepared by RAND Corporation under contract 290-06-00017-7). AHRQ Publication No. 12-0001-3, June 2012. Agency for Healthcare Research and Quality, Rockville, MD. Retrieved from http://www.ahrq.gov/qual/ptsafetyltc/ltcmodule2.htm

Resource: Quality Assurance and Performance Improvement (QAPI) in Nursing Homes - Activities Related to QAPI Implementation

Quality Assurance and Performance Improvement (QAPI) in Nursing Homes - Activities Related to QAPI Implementation. (2012). Office of Clinical Standards and Quality/Survey Certification Group, Ref: S&C: 12-38-NH. Centers for Medicare and Medicaid Services (CMS). Retrieved from http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-12-38.pdf

Resource: Five Elements of QAPI

Five Elements of QAPI. (2012). Centers for Medicare and Medicaid Services (CMS). Retrieved from http://go.cms.gov/Nhqapi

Patient Safety Reporting Program

Resource: Patient Safety Reporting Program: Recognition Targets for 2012

Patient Safety Reporting Program: Recognition Targets for 2012. (2012). Oregon Patient Safety Commission. Retrieved from http://oregonpatientsafety.org/reporting-programs/nursing-homes/

Resource: Quick Guide to Nursing Home Reporting

Quick Guide to Nursing Home Reporting. (2011). Oregon Patient Safety Commission. Retrieved from http://oregonpatientsafety.org/reporting-programs/nursing-homes-submit-reports/

Appendix I: Reportable Adverse Events for Nursing Homes

Nursing home participants are required to report any unanticipated, usually preventable event that results in patient death or serious physical injury.[5]

Aspiration/choking
Burn (second or third degree)
Device or equipment related
Elopement (requiring notification of emergency personnel)
Facility-acquired infection
Fall
Food allergy
Medication allergy
Medication event
Poisoning
Related to use of restraints
Strangulation (not restraint-related)
Suicide/attempted suicide
Treatment-related event (including omission and incorrect treatment):
- Intravascular embolisms related to IV therapy
- Fecal impaction
- Dehydration
- Pressure ulcers
- Diabetic coma
- Contractures

Other adverse events →

The Commission encourages participants to report all adverse events (including non-serious events) that may not be included in the "Reportable Adverse Events" list but that highlight a valuable patient safety lesson. If your nursing home has an event that does not fit into one of the pre-defined categories, please select "Other" and provide a brief description.

[5] "Unanticipated, usually preventable" refers to adverse events that are caused by an issue of medical or patient management, rather than the underlying disease. "Serious physical injury" includes, but is not limited to injuries that require a patient to be transferred to a higher level of care.

Appendix II: Acceptable Quality Reports – Meeting the 2012 Recognition Targets

Reports contain information about the event itself, the patient involved, the review process, any contributing factors, as well as a narrative account of what happened, what causes were discovered, and what action plans were put in place to prevent future occurrence. Reports are evaluated for quality by program consultants. When reviewing submitted adverse event reports, the Commission uses four criteria to determine if reports are of acceptable quality: reports are complete, thorough, and credible, and have a meaningful action plan. Reports exceeding the standard for acceptability are considered to be of high quality.[6]

Quality Criteria

A report is **complete** if it contains all of the information requested in the event report form, or explains to the Commission's satisfaction why that information is not available or not necessary to provide.

A report is **thorough** if the root cause analysis includes an analysis of all relevant systems issues and shows evidence of an inquiry into all appropriate areas.

A report is **credible** if it shows evidence that the investigation included leadership participation and was internally consistent.

A meaningful **action plan** clearly describes improvement strategies designed to minimize risk.

For more information about the complete set of Recognition Targets for 2012, visit http://oregonpatientsafety.org/reporting-programs/nursing-homes/.

Reporting Tips and Tools

The recognition targets serve to provide some structure to participants for submitting reports ensuring information is consistent and meaningful. There are several areas on the reporting form that require text entry allowing participants to describe information specific to the event they are reporting:, the *complete account*, the *findings* and the *action plans*. Each of these sections provides critical information and summarizes the root cause analysis – what happened, why it happened, and how similar events will be prevented in the future.

Complete Account – A complete, narrative account of the event

Findings – The causes or findings identified during the event review and analysis

Action Plan – The action plan that addresses each cause or finding and is designed to prevent occurrence of similar events

[6] The high quality measurement aligns with criteria used by the Oregon Public Health Officer who certifies the reporting program and provides an assessment of the quality and quantity of adverse event reports submitted by participants.

Acceptable Quality Complete Account

In order for a complete account to be considered of acceptable quality, the report must briefly summarize the sequence of activities and circumstances leading up to the event in a way that someone unfamiliar with the event could easily understand. It also includes any relevant environmental conditions or clinical information. The summary should not be solely a description of the patient's clinical progress, although that may be included as appropriate.

Example

Complete Account – A resident with a history of falls was found on the bathroom floor at about 4:40 p.m. A caregiver heard hollering coming from the room and went to investigate. The resident was lying face-down on the bathroom floor with his walker pushed up against the wall several feet away. The bathroom light was on and no trip/slip hazards were noted on the floor. He sustained a laceration to the forehead possibly from hitting the edge of the sink during the fall. The resident was last seen watching television in his room about ten minutes prior by a caregiver. When questioned, the resident said he was heading into the bathroom so he would be ready to go when dinner was ready. He indicated that he felt a little dizzy and lightheaded and the next thing he knew, he was on the floor. The resident and was transported to the emergency department for sutures and monitoring. The resident was assessed to be independent going short distances with his walker but required assistance for longer distances (e.g., to get to the dining room).

Acceptable Quality Findings

In order for causes or findings to be considered of acceptable quality, the report must show a clear link to the adverse event /near miss; including at least one root cause. Due to the complex nature of healthcare, there are typically multiple causes or findings for an event. The reporting form allows up to five findings.

Examples

Finding 1 – The day prior to the incident, the resident started a new beta blocker medication (which was in addition to the diuretic he was already taking) to better manage his hypertension. The director of nursing and the consultant pharmacist evaluated the resident's medications for possible side-effects or interactions. It was noted that with the addition of the beta blocker, some of the side-effects an individual can experience are dizziness, lightheadedness, drowsiness, and blurred vision as their body adjusts to the new medication; these side-effects were consistent with the resident's account of the event.

Finding 2 – Although the resident was placed on alert charting to monitor the resident as a result of starting the new medication, no specific side-effect information or interventions to address known side-effects were indicated. Additionally, this practice is consistent for any resident with a medication change (i.e., while they are placed on alert charting, little information about potential side-effects or possible changes in care needs are communicated to caregivers).

Acceptable Quality Action Plans

In order for an action plan to be considered of acceptable quality, the report must directly address the identified root causes and other relevant findings. Action plans should be strong, system-level actions that an organization will take to prevent or minimize the occurrence of similar events.

Examples

Action Plan 1 – The pharmacy consultant will work with the resident care managers, the director of nursing, and the medication aides to identify a list of common medications that have side-effects with the potential to increase risk for falls (e.g., cause dizziness, lightheadedness, or blurred vision). The high-risk medication list will be added to the alert form so that the list can be quickly scanned when new medications are started.

Action Plan 2 – Caregivers will be given an interim care plan that addresses the increased fall risk for any patients/residents who start one of the identified fall-risk medications (based on the expected side-effects and duration).