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Fall Prevention in the ED

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## Fall Prevention in the ED

### **Introduction**

In healthcare high, quality, efficient, and equitable patient-centered care is a constant ideal. However, without safety such positive outcomes remain a far stretch from reality. Unfortunately, the unexpected occurs and harm transpires while in the hospital. Often this harm is defined as an identifiable, preventable, and serious problem in the safety of the health care facility (CMS, 2006). One such “never event,” is a patient fall. In the emergency department (ED) the last thing you expect is a patient to fall under your watchful eye. A fall, for the purpose of this paper, is an unplanned descent to the floor with or without injury.

A patient fall results in devastating effects for both the patient and the healthcare system. The patient suffers additional diagnostic tests and further interventions leading to an overall delay in their plan of care, increasing length of stay and in turn contributing to ED overcrowding. Additionally, patients who are injured from falls often require additional tests, treatment, and a prolonged length of stay (average 6.3 additional). Falls may even result in life threatening injuries and death. Sadly, falls continue to occur while under our care. As one of the Assistant Nurse Managers of the Kaiser Santa Clara ED, I have seen first hand the devastating ramifications of patient falls. For the calendar year of 2016 the ED had 32 total reported falls, one of which I recall vividly due to the outcome. A patient suffered a subarachnoid hemorrhage while attempting to use a urinal. The primary nurse had been in the room several minutes prior to the event. According to the Joint Commission approximately 30-50% of patients that fall in the hospital result in injury (TJC, 2015). Additionally, patients who are injured from falls often require additional tests, treatment, and a prolonged length of stay (average 6.3 additional). As a consequence, costs average \$14,000 due to falls with injuries (TJC, 2015). According to France,

Slayton, Moore, Domenico, Matthews, Steaban & Choma (2017) injuries from falls will go over \$54 billion dollars by 2020. Yet, there are proven strategies to help mitigate the alarming growth of patient fall rates. According to the Agency of Healthcare Research and Quality (2013) 33% of falls are preventable. What is needed is a multifactorial approach including timely identification of fall risks and targeted interventions, especially rounding. Rounding shows promising results on patient falls, according to a quasi-experimental study on 506-bed teaching hospital (Orlich, Kalman, Nigolian, 2012). The study revealed a 23% reduction in falls attributed to nurse rounding (Orlich et al., 2012).

This paper will address the application of an ED specific fall prevention process and supporting evidence. It will provide key strategies that have proven effective in a busy teaching environment. Including proven interventions such as intentional nurse leader rounds on identified fall risks.

### **Clinical Leadership Theme**

The Clinical leadership theme of the project revolves around safety and quality outcomes. The global aim is focused on risk anticipation through key CNL competencies such as stewardship and patient advocacy. Through stewardship, resources and personnel are utilized strategically. As an advocate the patient safety is kept on the forefront of all interventions. The global aim will be to reduce Kaiser Santa Clara emergency department (ED) patient falls by 35% by the end of 2017. The short-term goal of the project the goal will be to have less than five falls occur from September 1st to December 15, 2017.

### **Statement of the Problem**

An unplanned descent to the floor, better known as a fall, is devastating. The injuries that result from such an event can range between minor to even deadly. Additionally, the monetary

costs are not cheap. What's more is Medicare and Medicaid agencies do not reimburse hospitals for costs due to injuries from a fall (Murphy, Murphy, S., Hastings & Olberding, 2015).

Unfortunately Kaiser Santa Clara ED had 32 reported patient falls for 2016. Some of which could have likely been prevented. An assessment of the issue using a Strengths, Weakness, Opportunities & Threats (SWOT) analysis revealed weak areas in staffing, a fragmented prevention method, and lack of intentional patient rounding (Appendix A). The safety of culture in the ED was lacking and provided ample room for improvement.

To mitigate the concern, I took on the lead and initiated the ED fall prevention initiative in July 2016. After several Plan Do Check Act (PDCA) cycles which included the addition of a fall risk sign, the inception of an ED committee, a complete fall prevention bundle kit, and educational brochure, we have experienced a significant reduction in our fall rate (Appendix B). To date, we have had only nine reported falls for the 2017 calendar year. A triumph feat thus far. Yet, continuous quality improvement is key in ensuring patient's receive the safest and best care every time.

### **Project Overview**

This PDCA cycle will seek to further decrease the amount of ED patient falls. The goal will be to have less than five reported falls from September 1, 2017 to December 15, 2017. To do this, three intentional nurse leader rounds (NLRs) have been added to the Assistant Nurse Manager's (ANM) daily checklist. Currently, eight total nurse leader rounds per shift are conducted with this PDCA it simply focuses three on identified fall risks. Alexander, Kinsley & Waszinski (2013) argued that rounding not only reduced falls but also increased patient satisfaction. A cost-effective plan to alleviate the alarming safety concern and increase service scores.

Nurse Leader Rounding on patients focuses on the following factors: positively cueing patients, helping patients understand the quality of care being rendered, soliciting direct feedback about staff, and setting expectations (Hotko, 2017). The expectations consist of informing the patient about purposeful hourly rounding and how their needs can be timely addressed. With intentional NLRs identified fall risk patients are rounded on to ensure all elements of the fall kits bundle are in place to ensure their safety.

To ameliorate the problem, the addition of intentional NLRs would cost a total of \$15,480 to cover the remainder of the year. The cost includes one two-hour long ANM meeting and the wages of the ANMs on duty conducting the rounds. An ANM's hourly pay rate without any differential compensation is approximately \$86. NLRs on average take about twenty minutes per patient, multiplied by three would equate to sixty minutes. There are about two ANMs on duty per day at a cost of \$172 daily for the PDCA addition. Total costs for the remainder of the year (12 weeks total) would be \$14,448. As a matter of fact the minimum cost of a patient fall is \$14,000 (TJC, 2015). The benefit-cost ratio for the project will be 1.28, meaning for every dollar spent, we estimate a savings of 0.28 cents in savings (Appendix C). Moreover, NLRs are already being conducted by the ANMs, the project simply focuses their random method of rounding on patients. When the goal is met by the end of December 2017, the ED would burden less harm and costs.

### **Methodology**

The specific aim of this project is to sustain no more than five falls for the remainder of the year, precisely September 1, 2017-December 15, 2017. Findings from the SWOT analysis and microsystem assessment revealed an opportunity for nurse leaders to be actively involved in the prevention of patient falls in the ED. ANM's will intentionally round on identified patients

at risk for falls and ensure they are adequately assessed and provided the fall prevention bundle kit.

Resistance to change is common, especially when the sense of urgency is lacking. Nevertheless, change is required to ensure the highest quality and safe care is provided. A Clinical Nurse Leader's (CNL) role in change is crucial, through communication, collaboration, and evaluation. CNLs are advocates, educators, and team leaders (AACN, 2013). Furthermore, their use of proven change theories can be beneficial in the process. Lewin's Change Theory will be used for this project because it targets unfreezing the norm and fueling the need for change, despite the current state. The ANM team, due to its simplicity and concise model, will best receive this theory. To add, it is a process that was described as a supportive approach that benefits sustaining changes in practice (Bowers, 2011).

During the unfreezing stage, the status quo must be changed by increasing the driving forces and removing the current restraining forces (Nursing Theory, 2016). The first step in this project was to hold an ANM meeting to discuss the need for change. Mid August 2017 I held a two-hour meeting with the ANM team and reviewed the importance of patient safety and our role in preventing falls from occurring. I reviewed the previous year's data, the current progress-zero falls since July 29, 2017, and the importance of rounding. The team was in favor, a promising step as studies have shown that leadership involvement have shown significant reductions in patient falls (Goldsack, Bergey, Mascioli & Cunningham, 2015). I reminded the ANM team of the current process, and reviewed the modification in their daily tasks to help support the project. As expected all ANMs (four total including myself) were in unanimous favor of the project. They all agreed to intentionally round on three identified falls risks patients

out of the eight they were currently doing. The only difference was ensuring at least three identified fall risk patients they rounded on had all elements of the fall kit bundle in place.

The second stage of Lewin's Change Theory describes the process in which movement to the next stage transpires (Nursing Theory, 2016). At this stage, the ANM team rationalizes the change for patient safety, and begins to embed the process in their daily tasks. Their thoughts, feelings, and behaviors towards the change proceed and eventually settle. To ensure the intentional nurse leader rounds are conducted, I will review their end of shift reports and review their nurse leader rounds. On top of that, we will debrief about the process during our bi-monthly ANM meetings. What's more the reduction of patient falls will be an overall indicator of compliance.

The last stage of Lewin's Change Theory entails the freezing stage in which the process now becomes the norm or the standard operating procedure (Nursing Theory, 2016). At this point the ANMs have now incorporated the process into their daily tasks, as evidenced by their end of shift reports, thereby intentionally rounding on three identified fall risks during their shift. Throughout the process, I have made myself readily available to answer questions and provide support as needed. The goal is to sustain the change, maintain a culture of safety, and spread the pride we take in preventing patients from falling in the ED. I predict that intentional nurse leader rounds will be standard practice and positively contribute to having no more than five falls, between September 1, 2017 to December 15, 2017.

### **Data Source/ Literature Review**

A search of the CINAHL database was performed yielding successful results. The PICO method for the literature search was used with a focus on patients in the emergency department (ED). The intervention of emphasis was intentional nurse leader rounds or rounding on patients

at risk for falls. The comparison was the standard nurse leader rounds. The ultimate desired outcome would be to reduce the number of falls in the ED.

The literature search provided me substantial information including a pre-post intervention evaluation study by Morgan, Flynn, Robertson, New, Forde-Johnston & McCulloch (2017) that discussed how nursing staff led intentional rounds to reduce patient falls. The study revealed that intentional rounding can be successful with reducing patient fall rates. The success was attributed to staff and leadership engagement. Another factor the study revealed is that through coaching and support of the process effective change, and impactful improvement in patient care was achieved (Morgan et al., 2017). Evidence from the study professed that intentional rounding can aide in preventing patient falls.

In another article by Goldsack, Bergey, Mascioli & Cunningham (2015), hourly rounding and patient falls were studied, further supporting its usage in fall reduction. The 30-day prospective pilot study with pre-and-post implementation findings indicated reduced fall rates and call bell usage from hourly rounding (Goldsack et al., 2015). Even though the study focused on hourly rounding, it still revealed the significance rounds can have on patient safety. Again, this study concluded that active involvement from leadership was critical during the entire process.

Can rounding reduce falls? They certainly can! In an integrative literature review conducted by Hicks (2015), twelve out of fourteen studies showed fall rates were reduced due to rounding. Additionally, findings revealed that rounding potentially had secondary effects further leading to decreased falls. Intentional rounds reduced nurse interruptions, call bell usage, and patient anxiety.

However, rounding alone cannot prevent falls. Chu (2017) argued that fall prevention takes a multidisciplinary approach to ensure a culture of safety and reduces falls. But rounding is in fact a key intervention that should be supported. Other imperative interventions include a risk alert sign at the patient door, use of bed alarms, low bed, fall alert colored bracelets, and pt encouragement of using the call bell (Chu, 2017). The multifactorial approach is what our ED currently practices.

Intentional rounds can be beneficial. In a literature review conducted by Forde-Johnston (2014), intentional rounds were found to reduce falls, call bell use, patient complaints, and pressure ulcers. The effects of intentional rounds positively reduced 36% percent of the monthly average of falls in one UK hospital a month following the introduction of intentional rounding (Forde-Johnson, 2014). Intentional rounding and a target fall prevention process can vastly reduce falls, especially in the ED.

According to the Agency for Healthcare Research and Quality (AHRQ, 2013), one-third of falls can be prevented. The AHRQ provides insights on evidenced based interventions that have contributed greatly to reducing fall rates and tactics to overcome barriers to fall prevention. Additionally, the AHRQ site provided substantial methods of measuring fall rates and techniques in using such data to set goals for successful change. One of which recommends using both direct observation, which can be done through rounding and medical record reviews (AHRQ, 2013).

Another supporting article by McErlean & Hughes (2016) studied who actually falls in an adult ED. Findings from the retrospective observational study revealed that fall rates in the ED varied extensively due to patient presentation and age. The patient population in an ED can vary. Plus presenting factors and past medical history make this environment uniquely different from

inpatient units. Thus, further supporting the fact that intentional rounding can lessen the rate of falls in the unique environment of the ED.

### **Timeline**

The start of the Fall Prevention initiative began back in July 2016, shortly after the department was flagged for having an alarming amount of patient falls. From there data was ascertained from our Quality and Risk Department to perform a root cause analysis. After that, several PDCA cycles were performed producing positive outcomes (Appendix D). At the end of July 2016, I created a simple fall risk signage to be placed outside of a patient's room.

Heightened awareness of identified falls risk proved advantageous, as evidenced by two total months of zero falls in August and September of 2016. Next in October, I was granted approval to purchase and incorporate yellow gowns into the department (the only ED in Kaiser Norcal to do so). I then created a fall kit bundle, which includes a yellow gown, fall-risk armband, yellow non-skid socks, the fall risk signage and bed alarm (Appendix B). After that, in January 2017 I was granted approval to start a fall committee that now currently holds monthly meetings and conducts RCAs on the most recent patient falls. In February 2017 educational fall prevention handouts were included in the fall kit bundle and posted in all forty-six rooms of the ED (Appendix B & F).

For this distinct project, the first step occurred in mid August 2017, when I met with the ANM Team for two hours to discuss the goal of the project and the required change to support our aim. On September 1, 2017 the ANM's started their new process and incorporated three intentional NLRs on identified fall risks (Appendix E). Then October 1, 2017 I ensured compliance through evaluation of the ANM's daily end of shift report, with a focus on their NLRs on identified fall risks. Next, debriefs on intentional NLRs are scheduled to be conducted

at the end of October during the monthly ANM meeting. Continuous review of NLRs and monthly debriefs will proceed throughout the end of December to ensure the project's momentum continues. Finally, by December 15, 2017 the total of reported falls will be calculated to review how we met our goal range of 5 or below.

### **Expected Results**

I expect promising results with the addition of intentional nurse leader rounds. The culture of safety in the department will continue its course and propel as we see a consistent decline in patient falls. I foresee us achieving our goal by having less than five falls by December 15, 2017 and sharing our best practices to other microsystems in need.

### **Nursing Relevance**

The project is a prime example of the beneficial effects of leadership involvement in quality improvement. In an article by Sonnad, Mascioli, Cunningham & Goldsack (2014) the safety of culture related to key organizational stakeholders and their significance in fall prevention. Additionally, the paper argued factors such as high reliable organizations, evidence-based practice, leadership, and teamwork reduced fall rates (Sonnad et al., 2014). Moreover, it provides the team active support by having leadership on the floor.

### **Summary Report**

The objective of this project was to have less than five falls occur from September 1st to December 15, 2017. To achieve the goal the ANMs changed their practice and intentionally rounded on three identified fall risk patients. During the rounds the ANMs ensured all elements of the fall prevention bundle kit were in place. So far the results have been promising. As of November 17, 2017 there has been two reported falls. What's more is the total number of falls for the calendar year is 11 for 2017 compared to 32 for the 2016 calendar year. A remarkable

65% decrease to date. Far exceeding the global aim of reducing the fall rate by 35% for the 2017 calendar year.

Using small tests of change and involving key personnel from the front lines was instrumental. The unit champion and simplicity of interventions was key. Buy-in was propelled by the unit champion and ultimately changed the safety of culture in the department. Fall prevention awareness was placed on the forefront contributing to the overall change of culture in our busy academic ED. Fall prevention, a notion typically not a high priority for the ED, has become one.

The ED fall prevention process will be sustained and be a standard process in our department. The results have proven its worth and the beneficial outcomes. The department now holds the record in the hospital with the longest time frame without a patient fall, ninety-three days. Our ED has taken extreme ownership of preventing falls and keeping patients safe while under our care.

The prevention of patient falls is important even in a busy academic ED. As a CNL being a team leader, data analyst, and advocate has helped improved the quality and safety of our varied patient population. Fall prevention in the ED is paramount.

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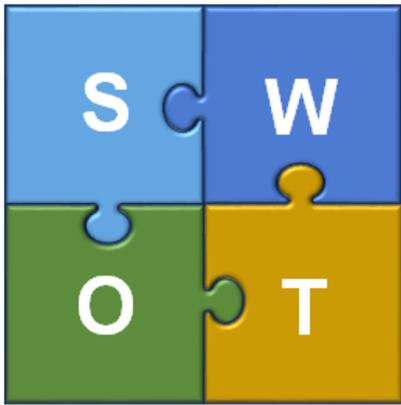
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### Appendix A

#### SWOT Analysis



**STRENGTHS (+)**

- Timely Schmid Fall Risk done
- Fall Risk Committee
- Involved leadership team
- Fall Risk Bundle Kit

**WEAKNESSES (-)**

- Inconsistent staff rounds
- Fragmented fall kit
- Staffing

**OPPORTUNITIES (+)**

- Intentional Nurse Leader Rounds
- Staff education on use of entire fall kit
- Mounted Bed alarms in all rooms

**THREATS (-)**

- Injury or death
- Increased length of stay
- Financial reimbursement



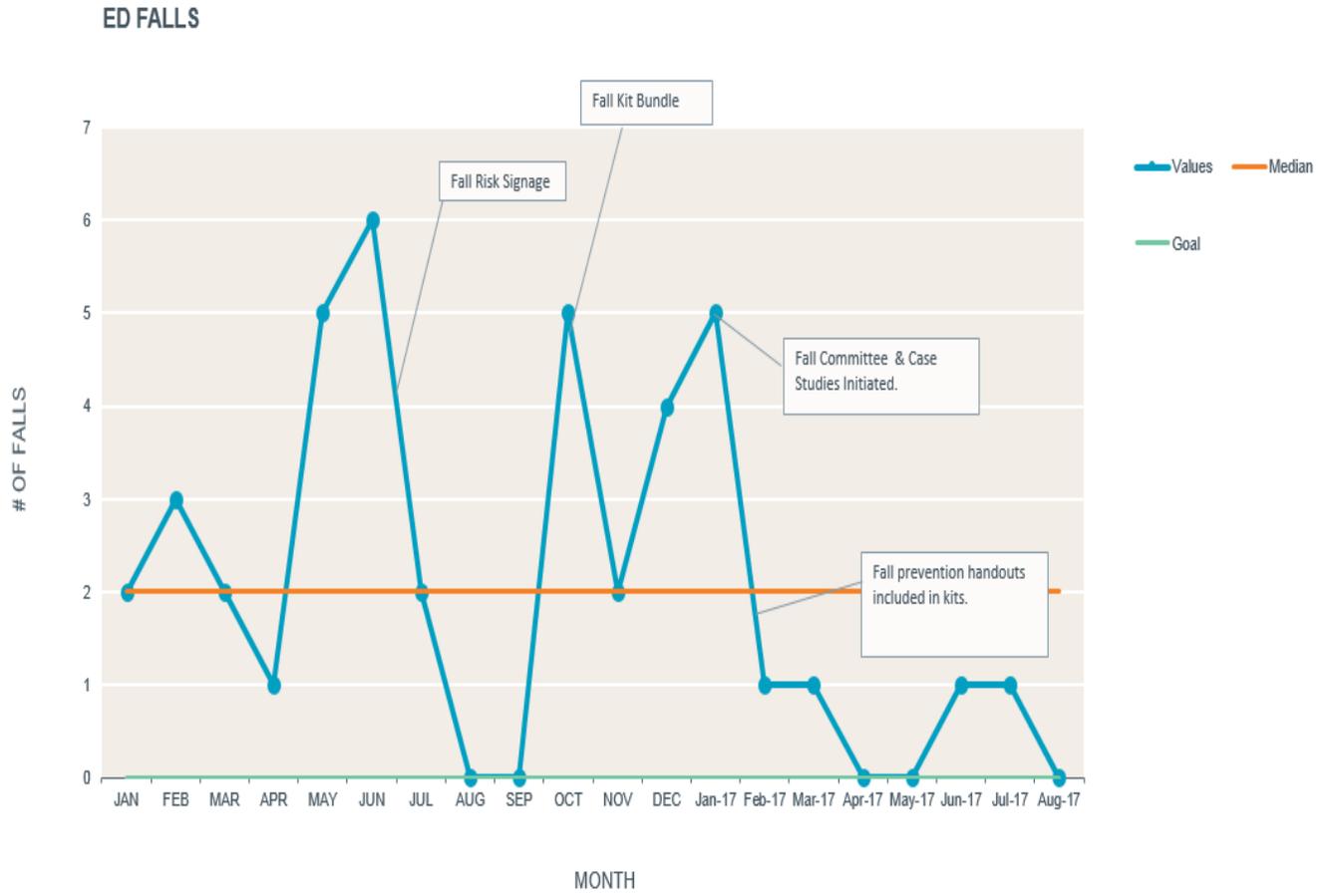
**Appendix C**

## Cost Benefit Analysis

	<b>First Year</b>	<b>Second Year</b>
<b>Costs</b>	\$15,480.00	\$30,940.00
<b>Benefits</b>	\$70,000.00	\$140,000.00
<b>CBA</b>		
<b>Net benefit</b>	\$54,520.00	\$109,060.00

### Appendix D

#### ED Falls Run Chart



**Appendix E**

GANTT Chart

<b>Action/ Step</b>	<b>Responsible Individual</b>	<b>August 2017</b>	<b>September 2017</b>	<b>October 2017</b>	<b>November 2017</b>	<b>December 2017</b>
Meet with the ANM Team and discuss the aim of the project and modifications in workflow. Introduce intentional nurse leader rounds on identified falls risks.	CNL Student					
Start the new process of 3 NLRs on identified fall risks per shift.	CNL Student & ANM Team					
Review ANM's end of shift report to focus on their NLRs on identified fall risks.	CNL Student					
Debrief on NLRs conducted on identified fall risks	CNL Student & ANM Team.					

during monthly ANM meetings.						
Review fall data report for the end of the year.	ANM Team.					

## Appendix F

### Fall Prevention Educational Handout Front



### Who's at Risk?

You are at risk of falling during hospital stays, regardless of your age or health. If you have fallen in the past 3 months, this increases your risk of falling again. Certain medical conditions, blood thinners, and age can also increase your risk of a serious injury from a fall.

Illness, surgery, and medications can make you:

- Weak
- Dizzy
- Disoriented
- Unable to move freely



### Using the Bathroom

*We need to know if you need to go!*

Most falls in the hospital happen on the way to and from and inside the bathroom.

- Empty your bladder often. You will have many opportunities to use the bathroom.
- Always get help from the hospital staff to use the bathroom. Use your call button to alert them.
- If necessary, they may stay with you in the bathroom for your safety. They will do everything to maintain your privacy.



### What You Can Do

*Keep your hospital stay free of falls*

- Keep your call button within reach. Call a staff member if you need to get out of your bed or chair.
- Keep personal items such as eyeglasses within reach.
- Alert staff members when you need to get out of your bed or chair or use the bathroom, even when you're feeling strong.

## Appendix F

### Fall Prevention Educational Handout Back

**Your safety in the hospital is important to us.  
Working together, we can keep you safe from a fall.**



### Moving Around

*Our staff is here to help you*

- Take your time getting up. You may suddenly become dizzy or light-headed.
- Always have a staff member with you when you are sitting on the side of the bed.
- Use your cane, walker, or crutches as directed.
- Don't lean on IV poles or bedside tables. They won't support you and may roll away.
- Wear nonskid slippers or well-fitted shoes with nonslip soles when walking.



### How Family Members and Visitors Can Help

Family members and visitors are great sources of support. They can keep you company and clear your room of hazards.

They should not assist you with getting out of your bed or chairs, and should never help you to the bathroom.

Although they mean well, they are not trained to help you move safely. They may accidentally cause a fall that injures you or themselves!



### Staying Safe at Home

To learn more about preventing falls at home, please visit [kp.org/mydoctor](http://kp.org/mydoctor) and search for "Fall Prevention and Home Safety Emmi."

\*Developed in collaboration with the Vallejo Patient and Family Advisory Council.

This information is not intended to diagnose health problems or to take the place of medical advice or care you receive from your physician or other health care professional. If you have persistent health problems, or if you have additional questions, please consult your doctor. Some photos may include models and not actual patients.

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