Patient Fall Reduction

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Purpose and Rationale
This project focuses on reducing the rate of patient falls in your facility.

Patient falls are one of the most common sources of liability lawsuits against medical practitioners and hospitals. They account for significant morbidity and mortality in the hospital setting. Radiology departments have been singled out in past reports as being the site of

National Patient Safety Goal Number 9 is to “reduce the risk of patient harm resulting from falls,” with a Part B which is “to implement a fall reduction program, including an evaluation of the effectiveness of the program”. The Safe Practices of the National Quality Forum states, “Take actions to prevent patient falls and to reduce fall-related injuries by implementing evidence-based intervention practices.”

This project is designed to measure the number of falls within a given time frame, implement a fall reduction program (using the provided resources to identify an approach that best provides for your patient population), and then re-measure to determine the effectiveness of the intervention.

Project Resources


Project Measure
Metric 1
Number of falls within a specified period of time in the Department of Radiology.

Metric 2
Number of days in a specified period of time on which no falls occurred in the Department of Radiology.

Baseline data collection
First, define the area(s) that will be considered within the scope of this project. This may include, but not be limited to, the Interventional Suites, Fluoroscopy, CT, Ultrasound, MRI, and the patient waiting and holding areas.

Most hospitals and healthcare organizations monitor the number of falls through a system of incident reporting. These data should be consulted to determine an appropriate length of time to study that is sufficient to yield interpretable data. A good target would be to choose a sufficient interval for monitoring to include 10 or more falls. If the incidence of falls in your facility is such that this would require more than six months monitoring, consider whether 5 falls is more realistic. Be aware, however, that with such a small number of data points, conclusions are more tenuous because any one fall will result in a spike of 20%. If the incidence of falls in your department is particularly low, it may be best to choose a different PQI project.

Make a determination about whether the amount of data that are available through your institutional incident reporting system gives you the level of detail you need to design an appropriate intervention. If not, consider going back to the medical record to get more information to create a richer database for analysis.

Good examples of information to collect are sex and age of patient, location of fall, time of day of fall, whether or not staff were present when the fall occurred, and what was going on when the patient fell (e.g., getting on or off a scanner, waiting in a waiting room, etc.).

Data Analysis
Consider the data about the falls that occurred during the study period. Are there patterns in the data that suggest points of vulnerability? For example, are falls more likely on the evening shift? In the waiting area? Climbing off the MRI scanner? Draw your conclusions about where the “low hanging fruit” are, affording an opportunity for improvement.

Factors Potentially Influencing Performance
After analyzing the data, consider possible points of intervention. These might be educational or might involve a redesign of your facility or staff procedures. Consult with your colleagues to identify structural, procedural or training changes that, in your collective opinion, may have a positive impact.

Post Intervention Data Collection
After your intervention has been implemented, begin another period of data collection. Unless you see a significant upswing in falls, avoid reversing or altering elements of your intervention during the study period. Of course, if you do see an uptick in falls, discontinue your intervention and regroup.

Review the data with your project team after every data collection period. If you are meeting your goals, no further changes may be necessary. However, you should plan to take steps to institutionalize whatever changes contributed to successful performance. If additional improvement is possible, look at your processes again and design additional interventions. It is...
generally best to only make one intervention per study cycle so that conclusions can be drawn about what caused the observed effect.

Once performance has stabilized or you feel the project is well underway, consider selecting and launching another PQI project.