

Welcome to the Fall 2010 issue of IPRO's *Hospital Patient Safety News*

In this issue we present updates on the Centers for Medicare & Medicaid Services (CMS) 9th Scope of Work (SOW) Patient Safety Initiative Projects, upcoming events, articles of interest and educational resources. If you have a best practice, tools or resources that you would like for us to feature in a future issue, please forward the information to Gloria Stone at gstone@nyqio.sdps.org.

If you have colleagues that you believe should be receiving this newsletter, they can request their own subscription by sending an e-mail to Gloria Stone at gstone@nyqio.sdps.org.

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The Hospital Patient Safety Initiative Staff at IPRO

IPRO's Patient Safety Initiative Projects

MRSA Project:

Reducing rates of healthcare-associated Methicillin-resistant *Staphylococcus aureus* (MRSA) infections;

Surgical Care Improvement/Heart Failure (HF) Project (SCIP):

Improving inpatient surgical safety and heart failure treatment; and

Medication Safety:

Reducing the prevalence of prescribing potentially inappropriate drugs with anticholinergic properties to seniors and improving the quality of warfarin management.

MRSA Project

International Infection Prevention Week is October 17-23rd!

IPro has created several tools to assist your facility promote International Infection Prevention Week. To view or download, please visit <http://jeny.ipro.org/mrsa>.

The “Hand Hygiene Star” campaign, which includes posters, positive reinforcement giveaways and humorous videos, all deliver the message “protect yourself and your patients from MRSA and other infections through proper hand hygiene.” On the JENY site you will find:

- “Be a Hand Hygiene Star” A staff-oriented poster highlighting the importance of proper hand hygiene. We suggest hanging these posters in staff locker rooms, break rooms, and other places where staff can be exposed to the message on a regular basis.
- Hand Hygiene Videos starring real hospital staff members: these brief vignettes use humor to demonstrate that all staff members are required to comply with and reinforce proper hand hygiene techniques. Show before, during or at the end of planned meetings; or play on the TV in your staff lounge.

It Looks Clean . . .

There has been dramatic success in improving the quality of patient care by focusing on the implementation of an entire group or bundle of evidenced-based practices to achieve a better outcome than when implemented individually. This process is referred to as “bundling” of evidence-based practices.

The MRSA Advisory Committee developed the MRSA Bundle, which is a set of six evidence-based practices related to addressing MRSA that, when implemented together, have been shown to achieve significantly better outcomes than when implemented individually. One of the six practices of the MRSA bundle is correct surface hygiene which is defined as the “proper disinfection of patient care equipment, instrument/devices (including those items involved with transport) after each use and disinfection of the environment when a patient is discharged or transferred to another patient care environment.”

Along with other initiatives there is an increasing awareness of a clean patient environment. Therefore, as surface hygiene becomes a higher priority item for healthcare facilities, two main questions arise: Is requiring that a surface be “visibly clean” enough? If not, how do you measure clean? Currently, the healthcare industry is experimenting with ways to quantify cleanliness and the most cited method is the use of a portable luminometer.

After a wipe test and a 25-second waiting period the luminometer produces a readout which measures adenosine triphosphate (ATP) on the given surface. The measurement provides an estimate of the biological material on surfaces. The results are given in relative light units (RLU); the lower the number, the cleaner the surface. Some recent studies have trialed using the luminometer to monitor surface hygiene including:

- **Monitoring the effectiveness of hospital cleaning practices by use of an adenosine triphosphate bioluminescence assay.** Boyce JM, Havill NL, Dumigan DG, Golebiewski M, Balogun O, Rizvani R. *Infect Control Hosp Epidemiol*. 2009 Jul;30(7):678-84.
- **Monitoring the effectiveness of cleaning in four British hospitals** Cooper RA, Griffith CJ, Malik RE, Obee P, Looker N. *Am J Infect Control*. 2007 Jun;35(5):338-41.

SCIP TIPS

In reviewing many hospital charts throughout the state we often see the same mistakes over and over. We thought some **QUICK Tip Reminders** would be helpful.

- There needs to be a time written for when a beta-blocker was taken.
 - Just writing AM or PM is no longer acceptable.
- If you discover during your “Time Out” that the prophylactic antibiotic was not given or is going to be over the one-hour time frame STOP and re-dose.
- Remember the prophylactic combo antibiotic requirements.
 - Clindamycin alone is not always appropriate.
- Make sure there is written documentation as to why an antibiotic is going to be continued over the 24- hour time frame. We have seen a lot of cardiac cases with continuance but no documentation.

Hospital Surveys

Hospital Leadership and Quality Assessment Tool (HLQAT)

What is the HLQAT?

The HLQAT, an online survey of hospital boards, executives, and clinical leaders, is a self-assessment tool designed to help hospitals identify and improve leadership structures and processes that are associated with high performance in clinical quality measures.

As part of the current CMS 9th SOW, hospitals enrolled in the IPRO SCIP Project will be required to complete the HLQAT Survey during October and November. This is a survey for hospital leaders and board members. The link to the survey will be sent via e-mail to hospital Quality Improvement Directors and CEOs in October. For further information please contact Karline Roberts at kroberts@nyqio.sdps.org or visit the HLQAT website at www.hlqat.org.

The survey should be offered to board members, c-suite executives, and clinical leaders. It takes less than 30 minutes to complete.

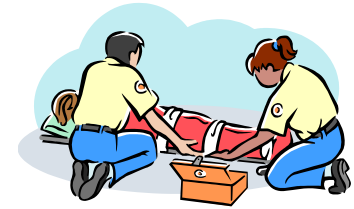
How can the HLQAT advance my hospital?

Hospitals face increasing pressure to improve quality while reducing costs. Your participation in this initiative will facilitate higher levels of quality in your hospital and ultimately help you to compete in a healthcare environment where payments are increasingly tied to clinical performance. Participating hospitals will be able to pinpoint areas for improvement in categories such as, “knowledge seeking, quality goals and priorities, communication processes and collaboration.”

Medication Safety

Medications and Falls: Risks and Reduction Strategies

Falling is an epidemic in the elderly population. Over one-third of persons aged 65 and older fall and half of these falls are recurrent.¹ Serious injury such as hip and other fractures, subdural hematoma, serious soft-tissue injury and head injury occurs in 10% of falls.² Even if serious injury does not occur, falls restrict mobility, decrease activities of daily living, and increase the risk of nursing home placement.



Recurrent falls have been associated with arthritis, depression, orthostasis, impaired cognition, poor vision, impaired balance and gait, muscle weakness and the use of four or more prescription medications. Drug-induced falls are one of the most common adverse events experienced by the elderly.³ The times of highest fall risk occur within one month after hospital discharge or when experiencing acute illness or exacerbations of chronic illness.⁴ Central nervous system depressants are associated with a 50% increased risk of falls; drug classes associated with falls resulting in hip fractures are barbiturates, benzodiazepines, tricyclic antidepressants and antipsychotics.⁵ Other drugs/drug classes associated with falls are anticonvulsants, selective serotonin reuptake inhibitors, sedative/hypnotics, opiate analgesics, digoxin, diuretics, and class 1A antiarrhythmics (procainamide, quinidine).^{6,7}

Reducing the number of medications routinely taken and decreasing the use of psychotropic medications significantly reduces fall risk. The process of discontinuing medications to decrease drug burden is complex, but studies have shown that it can be achieved effectively and without harm. A recent systematic review of medication withdrawal trials reveals that diuretics, when not used for heart failure, have been successfully withdrawn in 51-100% of patients⁸ and Campbell et al. showed a 39% reduction in the rate of falling after a 14-week gradual dose reduction of psychotropic drugs to discontinuation.⁹

A medication review should be performed for patients at risk for falls with emphasis on drug dose reduction and discontinuation or replacement of high risk drugs with safer alternatives. If a high fall risk medication is necessary it should be started at the lowest dose, titrated up slowly, and closely monitored to minimize risk.

¹ Tinetti ME, Speechley M, Ginter SF. Risk factors for falls among elderly persons living in the community. *N Engl J Med*. 1988;319:1701-7.

² Nevitt MC, Cummings SR, Kidd S, Black D. Risk factors for injurious falls: A prospective study. *J Gerontol*. 1991;46:M164-M170.

³ Hanlon JT, Schmader KE, Koronkowski MJ, et al. Adverse drug events in high risk older outpatients. *J Am Geriatr Soc*. 1997;45:945-8.

⁴ Tinetti, ME. Preventing falls in the elderly. *N Engl J Med*;2003;348(1):42-49

⁵ Hilmer SN, Mager DE, Simonsick EM, Cao Y, Ling SM, Windham G, et al. A drug burden index to define the functional burden of medications in older people. *Arch Intern Med*. 2007;167:781-787.

⁶ Darowski A, Chambers SCF, Chambers DJ. Antidepressants and falls in the elderly. *Drugs Aging*;26(5):381-394.

⁷ Tinetti, ME. Preventing falls in the elderly. *N Engl J Med*;2003;348(1):42-49.

⁸ Iyer S, Naganathan V, McLachlan AJ, LeCouteur DG. Medication withdrawal trials in people aged 65 years and older: A systematic review. *Drugs Aging*; 2008:1021-1031.

⁹ Campbell AJ, Robertson MC, Gardner MM, Norton RN, Buchner DM. Psychotropic medication withdrawal and a home-based exercise program to prevent falls: a randomized controlled trial. *J Am Geriatr Soc*.1999;47:850-3.

Reference Materials

Celebrate National Healthcare Quality Week!

National Healthcare Quality Week, which will be celebrated October 17–23, acknowledges the work of healthcare quality professionals and highlights their influence on improved patient care outcomes and healthcare delivery systems. Go to www.nahq.org for more information.



Flu Season is around the corner. The CDC offers a wealth of information about seasonal flu. The following links are provided for your use and please note that all print materials are free of charge.

- **Print Materials**
Free downloadable materials. View by audience or topic.
- **"Take 3" Actions To Fight The Flu**
Poster and brochure available free for download
- **Preventing and Treating Influenza (Flu)**
Information for people with asthma, diabetes and chronic cardiovascular disease
- **Questions & Answers on Estimating Seasonal Influenza-Associated Deaths in the United States: CDC Study Confirms Variability of Flu**
Update on CDC's estimates of deaths associated with seasonal influenza.
- **What You Should Know About Flu Antiviral Drugs**
Antiviral drugs are prescription medicines (pills, liquid or an inhaled powder) that fight against the flu in your body.
- **American Sign Language Videos: Flu Guidance for Adults**
Video from the Deaf Wellness Center, University of Rochester
- **Seasonal Flu Information for Workplaces & Employees**
The first and most important step in protecting against the flu is to get a flu vaccine each season.
- **Flu Prevention Toolkit**
This toolkit provides tips on other ways besides vaccination to prevent flu.
- **Seasonal Flu: International Situation Update**
This report provides an update to the international flu situation using data reported by the World Health Organization (WHO) on August 27
- **Spanish Vaccine Information Statement: Nasal Spray**

Back to Basics Corner

Pareto Charts

A Pareto Chart is problem-solving tool in the form of a vertical bar graph showing the bars in descending order of significance from left to right. This type of chart focuses improvement activity on the "vital few" and not the trivial many. The Pareto chart, which is a graphic representation of the frequency with which certain events occur, displays the relative importance of variables in a data set which may be used to set priorities for improvement opportunities. A sample Pareto chart is provided at the end of this article.

When to use a Pareto Chart:

- When analyzing data to help identify the frequency of problems or causes in a process
- When trying to identify the most significant problems/causes
- When you need a visual so that the significant few problems emerge from the general background
- To help ensure resources are allocated to the most significant areas

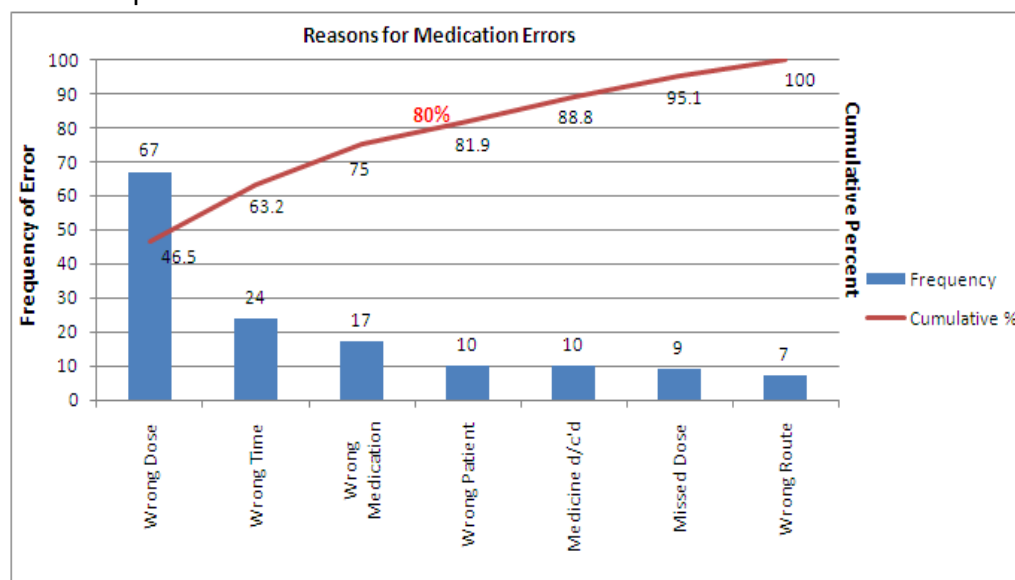
How to construct a Pareto Chart:

1. Determine the categories and units for comparison (frequency, cost, time)
2. Tally the occurrences in each category
3. Add all of the occurrences to produce a grand total
4. Re-sort the categories from largest to smallest
5. Divide each category total by the grand total to determine the percentage that each individual problem classification represents of all of the problems
6. Draw and label the left-hand vertical axis with the unit of comparison (frequency, cost, time)
7. Draw and label the horizontal axis with the categories, listed from left to right in rank order
8. Draw and label the right-hand vertical axis in increments from zero to 100%.
9. Beginning with the largest category, draw in bars for each category representing the total for that category.
10. Draw a line graph beginning at the first bar to represent the cumulative percent for each category as measured on the right-hand axis
11. Review and analyze the results. A brief summary explaining how and when the data was collected may be helpful for presentation purposes.

Analysis:

- Wrong dose, wrong time, and wrong medication are the three largest categories which contribute to ~80% of the errors.

A sample Pareto chart is provided below:



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