

Welcome to the Summer 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

MRSA Learning Sessions

The IPRO MRSA Project Team thanks our speakers and attendees for contributing to the success of our four MRSA Learning Sessions, “**Reaching the Theoretical Limit: Preventing the Transmission of MRSA.**” For those unable to attend you may access the information on the MRSA Project JENY site <http://jeny.ipro.org/mrsa>. Please look for the conversation **MRSA Learning Slides & Documents**; there you will find the presentation materials and other tools presented by the speakers.

Hand Hygiene

For many hospitals summer brings a new group of clinicians: medical residents and students, nurses, respiratory therapists and pharmacists. Many Infection Preventionists might find it difficult to think of new ways to get important hygiene messages across to this new group of clinicians. Below are a few ideas

- As Dr. Will Sawyer of the **Henry the Hand** Foundation points out, using humor as a way to spread the message of improved hand hygiene and patient safety. Learn more and access these tools by visiting: http://www.henrythehand.com/pages/content/infection_control.html
- This unique hand washing video, developed by the French Ministry of Health uses only dance and music to demonstrate proper hand hygiene. To view it click here: <http://vigigerme.hug-ge.ch/> and then on the link “*Ô les mains.*”
- In his blog, **Running a Hospital**, Paul Levy shares the Tag You're It - Hand Hygiene Game. Based on the classic children's game of tag, you're deemed “it” on a website dashboard banner if you are caught violating a patient safety mandate. You continue to be “it” until you catch someone else breaking the rules, at which such time they become “it.” For more information on this tool, visit: <http://runningahospital.blogspot.com/2009/05/tag-youre-it.html>

National Healthcare Safety Network (NHSN) MDRO Module: Definition Reminders

Metric 1- Infection Rate as Defined by NHSN: Infection Events

For the purposes of NHSN surveillance in the acute care setting, the Centers for Disease Control and Prevention (CDC) defines a healthcare-associated infection (HAI) as “a localized or systemic condition resulting from an adverse reaction to the presence of an infectious agent(s) or its toxin(s). There must be no evidence that the infection was present or incubating at the time of admission to the acute care setting.” The infection must meet the particular criteria for a specific infection site as defined by the CDC.

Only infections that are associated with the reporting unit are entered into NHSN. These infections must:

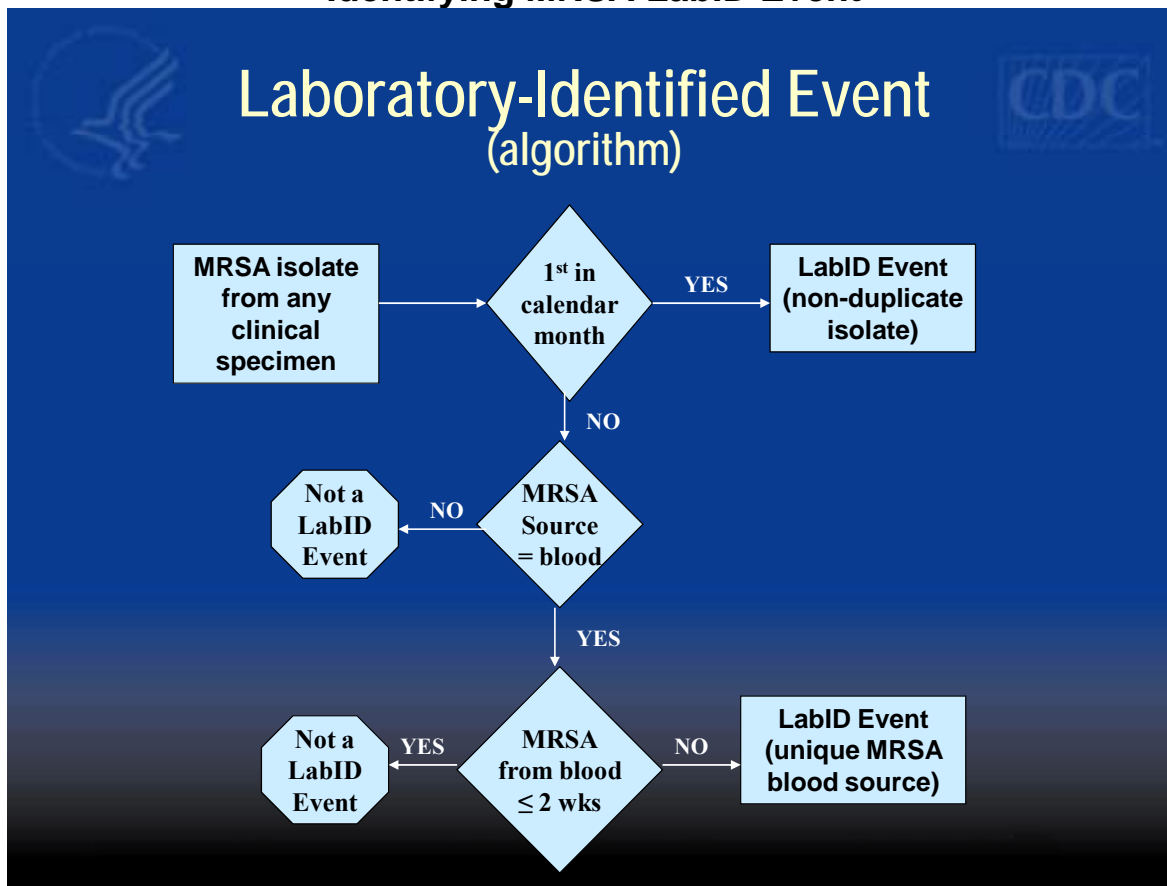
- Occur 48 hours after admission into the reporting unit;
- Not be incubating upon admission; and
- Meet the criteria for the specific infection site. (See chapter 17 http://www.cdc.gov/nhsn/TOC_PSCManual.html.)

Metric 2 - Unit-Onset of MRSA from Lab Cultures*: Laboratory-Identified Events

Metric 2 relies exclusively on laboratory data. Laboratory-Identified (LabID) Event reporting requires entry of: all non-duplicate MRSA isolate, any specimen source; and unique blood source obtained for clinical decision making that test positive for MRSA in the reporting unit and excludes active surveillance testing specimens. Only one isolate per patient per month may be reported with the exception of blood specimens which are reported in two-week intervals.

NHSN calculates several rates based upon LabID event entry. The rate used by the MRSA Project, *MRSA MDRO Infection/Colonization Incidence Density Rate*, is defined as the “number of first LabID Events per patient per month among those with no documented prior evidence of previous infection or colonization with MRSA and identified three days after admission to the unit/number of patient days for the unit non-duplicate MRSA Isolate from any specimen source plus unique blood source MRSA Isolates.”

Identifying MRSA LabID Event



*Rate name change under discussion.

SCIP Project

Urinary Catheterization

Decrease Post-Op Infections by Reducing Duration of Urinary Catheterization

It is well-established that the risk of catheter-associated urinary tract infection (UTI) rises with increasing duration of indwelling urinary catheterization. A study conducted in 2000¹ reported that bacteriuria will develop in 26% of patients after two to 10 days of catheterization; 24% of those patients will develop symptomatic UTI; and bacteremia will develop in 3.6% of patients. Another study⁴ showed that surgical patients discharged with catheters to a skilled nursing facility were more likely to be readmitted to the hospital with a UTI. Furthermore, patients with catheters inserted for more than two days post op were 21% more likely to develop a UTI, and significantly less likely to be timely discharged. Other consequences include increased costs and lengths of stay, and patient discomfort and impaired mobility, which increase the risk of skin breakdown, deep-venous thrombosis, and pneumonia.

Multiple studies have shown that one of the most common reasons that urinary catheters are left in place is that clinicians are simply not aware they remain in place. When medically appropriate, reducing the length of time

urinary catheters are used for surgical patients in the inpatient setting, can help hospital staff improve patient safety and outcomes. The following are some ideas to facilitate hospitals in this effort:

- Develop an order set to discontinue catheter by post-op day 2 or incorporate into current post-op order sets.
- Check post-op orders to ensure there is an order to discontinue catheter by post-op day 2.
- Ensure order includes documentation of a reason to continue catheter beyond post-op day 2.
- Contact physician in the absence of an order to discontinue catheter by post-op day 2.
- Remove catheter as per order and document date and time of removal.
- Educate staff that the following are not reasons for prolonged catheterization:
 - Incontinence
 - Immobility
 - Obtaining urine specimens
 - Close monitoring of outputs (outside ICUs)
 - Patient request/convenience



Selected References:

1. Saint S. Clinical and economic consequences of nosocomial catheter-related bacteremia. *Am J Infect Control* 2000; 28: 68-75.
2. Stephan F, Sax H, Wachsmuth M, et al. Reduction of urinary tract infection and antibiotic use after surgery: a controlled, prospective before-after study. *Clin Infect Dis*. 2006; 42: 1544.
3. Wald HL, Ma A, Bratzler DW, Kramer AM. Indwelling Urinary Catheter Use in the Postoperative Period: Analysis of The National Surgical Infection Prevention Project Data. *Arch Surg*. In press.
4. Wald H, Epstein A, Kramer A. Extended Urinary Catheterization Among Hip Fracture Patients Discharged to Skilled Nursing Facilities. *Med Care* 2005; 43:1009-1017.
5. Wald HL, Epstein AM, Radcliff TA, Kramer AM. Extended Use of Urinary Catheters in Older Surgical Patients: A Patient Safety Problem? *Infect Cont Hosp Epidemiol* 2008; 29:116-124.

Hospital Surveys

AHRQ Patient Safety Survey

In 2004, the Agency for Healthcare Research and Quality (AHRQ) released the Hospital Survey on Patient Safety Culture, which was designed to help hospitals assess the culture of safety in their institutions from the staff's perspective. Since then, hundreds of hospitals across the US, and internationally, have implemented the survey.

In response to requests from hospitals interested in comparing their safety culture survey results to other hospitals, AHRQ funded the development of a comparative database on the survey in 2006. The database is comprised of voluntarily submitted data from US hospitals that administered the survey. Comparative database reports were produced in 2007–2010, and will be produced yearly through at least 2012.

As part of the current 9th Scope of Work, hospitals enrolled in the IPRO SCIP Project are required to complete the Survey. The *Hospital Survey on Patient Safety Culture* can be completed by both clinical and non-clinical hospital staff. The link to the survey was sent via e-mail to hospital Quality Improvement Directors and CEOs in July. For further information please contact Karline Roberts at kroberts@nyqio.sdps.org.

To assist you in using the survey, please visit <http://jeny.ipro.org/showthread.php?p=9049#post9049> on the JENY site to view slides and documents associated with the recent conference: *Using Survey Data to Create a Culture of Patient Safety*.

Reference Materials

August – National Immunization Awareness Month

August is recognized as National Immunization Awareness Month (NIAM). The goal of NIAM is to increase awareness about immunizations across the life span, from infants birth to advanced age.

With parents enrolling their children in school, students entering college, and healthcare workers preparing for the upcoming flu season, August is the perfect time to remind family, friends, co-workers and those in the community to catch up on their vaccinations.

Why are immunizations important?

Immunizations are among the most significant public health achievements of the 20th century. Vaccines have eradicated smallpox, eliminated wild poliovirus in the US and have significantly reduced the number of cases of measles, diphtheria, rubella, pertussis and other diseases. Despite these efforts, people in the US still die from these and other diseases, all of which can be prevented by vaccines .

Vaccines offer safe and effective protection from infectious diseases. By staying up-to-date on the recommended vaccines, individuals can protect themselves, their families and friends and their communities from serious, life-threatening infections.

Who should be immunized?

Getting immunized is a lifelong, life-protecting community effort regardless of age, sex, race, ethnic background or country of origin. Recommended vaccinations begin soon after birth and continue throughout life. Being aware of the vaccines that are recommended for infants, children, adolescents, adults and seniors, and making sure that we receive these immunizations, are critical to protecting ourselves and our communities from disease.

When are immunizations given?

Because children are particularly vulnerable to infection, most vaccines are given during the first five to six years of life. Other immunizations are recommended during adolescent or adult years and, for certain vaccines, booster immunization are recommended throughout life. Vaccines against certain diseases that may be encountered when traveling outside of the US are recommended for travelers to specific regions of the world.

Back to Basics Corner

Cause and Effect Diagram

Cause and Effect Diagrams (also known as Fishbone Diagrams) show the causes of a certain event and are used to identify potential factors causing an overall effect. Each cause or reason for imperfection is a source of variation. Causes are usually grouped into major categories to identify these sources of variation. The categories typically include:

People Anyone involved with the process.

Methods How the process is performed and the specific requirements for doing it, such as policies, procedures, rules, regulations and laws.

Equipment Any equipment, computers, tools, etc. required to accomplish the job.

Measurements Data generated from the process that are used to evaluate its quality.

Environment The conditions, such as location, time, temperature, and culture in which the process operates.

As we move through the improvement cycle (Figure 1) the Cause and Effect Diagram is one of the planning tools teams can use to help determine potential root causes of a particular problem.

Cause and Effect Diagram

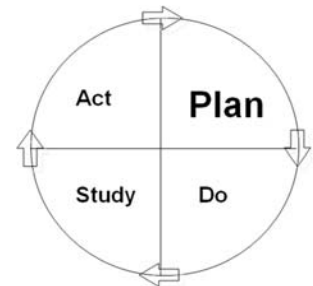
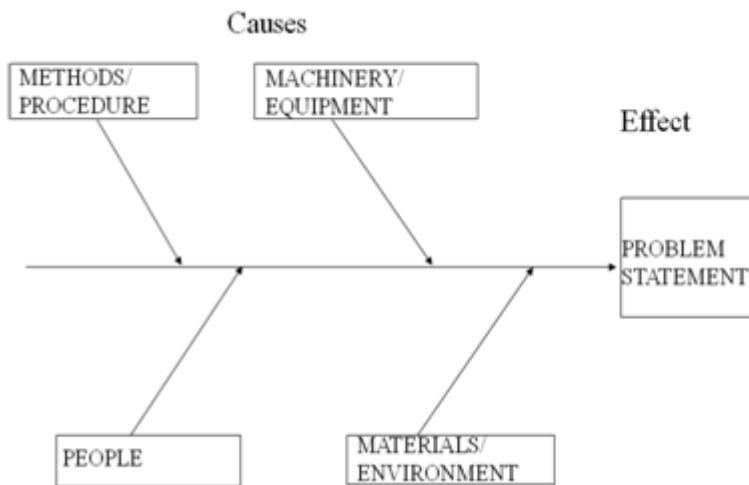


Figure 1 Improvement Cycle

1. Gather the necessary people at a meeting site; designate a team member as a facilitator.
2. Determine the effect (problem) to be addressed.
3. Draw the “fishbone” skeleton.
4. Write the problem in large lettering to the right of the fishbone.
5. Determine at least four to six major categories of causes for the effect, e.g., methods, people, equipment environment and measurements.
6. Brainstorm different causes for the effect and focus on causes, not symptoms.
 - a. Tip: Sticky notes a great way to way to help with brainstorming note taking.
7. Place causes in major categories branching out from the effect.
8. Analyze the causes to determine the root cause.

Flowcharts

Why they are useful:

“If you can’t describe what you are doing as a process, you don’t know what you’re doing.” W. Edwards Deming

What they can be used for:

- Define, clarify and analyze a new or existing process
- Build a step-by-step picture of the process for analysis, discussion and communication;
- Define, standardize, or find areas for improvement in a process (a shared mental model); and
- Training on a new process.

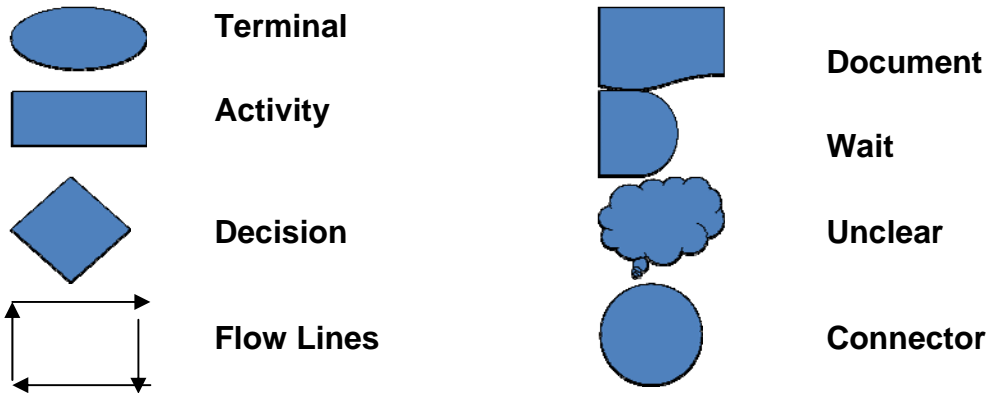
Constructing a flow chart:

- Gather the necessary people at a meeting site; designate a team member as a facilitator.
- Agree on the format of the flowchart.
- Determine the beginning and end points of the process.
- Document the steps of the process in sequence by asking the following questions:
- Who provides this input? Who uses it? What is done with the input? What decisions are made and by whom? What is done with the output?

- Revise the flowchart as needed based upon responses from team members.

Common Flow Chart Symbols

Although there are many symbols that can be used in a given flowchart, below are some of the more commonly flowchart symbols.



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