



# Infection Prevention and Public Health Update

## OKLAHOMA STATE DEPARTMENT OF HEALTH

### Oklahoma Hospitals Participate in the

### CUSP: STOP BSI Project Overview

#### 2010 3rd Quarter

The Agency for Healthcare Research and Quality (AHRQ) recently released its National Quality Report for 2009. The story is grim. One of the key findings: "Some areas merit urgent attention, including patient safety and health care-associated infections (HAIs)". Despite campaigns, hospital activities and rhetoric, the report indicates that there has been **no national improvement** in one type of HAI: central line associated bloodstream infections (CLABSI). Still, each year an estimated 250,000 of these infections occur in hospitals in the United States, and an estimated 30,000 to 62,000 patients who get the infections die as a result.

Yet these infections are measurable and largely preventable as has been demonstrated by hospitals that have participated in HAI reduction projects in the past. Researchers from the Johns Hopkins University Quality and Safety Research Group (JHU QSRG) in partnership with the Michigan Health & Hospital Association Keystone Center (MHA Keystone), and clinicians and administrators from over 70 Michigan based hospitals nearly eliminated CLABSI in over 103 intensive care units (ICUs) ; an improvement that has been sustained for nearly four years. This initiative is being expanded to include other states in a project called "Comprehensive Unit Safety Program: Stop Blood Stream Infections (CUSP: STOP BSI). The expansion is achieved by working with state level associations to implement the program.

#### The CUSP: Stop BSI Model

The model, which was created and will be led by the experts from Johns Hopkins Quality and Safety Research Group, has two components: a *technical* component which provides concise evidence based recommendations on how to address a specific clinical challenge, and an *adaptive* component, which provides a framework for patient safety improvement at the local unit level. According to the Hopkins group, both components are essential.

The program is implemented by the combined efforts of the JHU QSRG with the state hospital association (SHA) The state association is the main contact with local ICU teams; Johns Hopkins safety leaders interact with the teams through conference calls and workshops sponsored by the state association.

#### *What is the intervention?*

The project requires that ICU teams do the following:

- a. Implement the Comprehensive Unit-based Safety Program (CUSP) to improve teamwork between doctors and nurses and learn from mistakes. This program includes five steps and that are both qualitative and quantitative:
  - 1) Educate staff on the science of safety,
  - 2) Identify defects in care,
  - 3) Assign an executive as part of the ICU CLABSI team,
  - 4) Learn from one defect per month, and
  - 5) Work to improve teamwork and safety culture using tools we provide.
- b. Implement interventions to reduce CLABSI that include:
  - Educate staff on five evidence based practices to reduce CLABSI:
    - 1) Remove Unnecessary Lines,
    - 2) Wash Hands Prior to Procedure,
    - 3) Use Maximal Barrier Precautions,
    - 4) Clean Skin with Chlorhexidine, and
    - 5) Avoid Femoral Lines.



c. Implement a checklist to ensure compliance with these practices:

- 1) Empower nurses to ensure doctors comply with the checklist,
- 2) Collect unit level data each month using standardized definitions,
- 3) Provide feedback on infection rates to hospitals and at unit level, and
- 4) Implement a monthly team checklist to assess overall progress of project.

#### **Project Leadership:**

Peter Pronovost M.D. and Christine Goeschel R.N. developed and led the Michigan patient safety project and will provide overall strategic leadership for this effort. The work would not succeed, however, without the dedication, knowledge and skill of the extended team of QSRG faculty, which includes doctors, nurses, sociologists, psychologists, health policy and management specialists, health care economists, biostatisticians and other health care related disciplines.

#### ***What are the responsibilities of the JHU team?***

- Appoint a JHU project coordinator to work directly with each state-level coordinating agency.
- Provide technical support (content and tools needed to implement the program).
- Provide database to collect CLABSI data.
- Provide reports regarding trends in CLABSI to participating teams.
- Participate on team conference calls and serve as faculty at bi-annual conferences.
- Assist with development of the agenda for conference calls and bi-annual conferences.
- Share what we are learning from our related work.

#### ***What are the responsibilities of the state level coordinating agency?***

- Coordinate efforts to eliminate CLABSI. This includes working with the Hopkins team for technical support and working directly with participating hospitals.
- Provide a project manager to coordinate the project with support from Hopkins project manager.
- Recruit hospitals to participate.
- Coordinate and host monthly communication (conference calls) with teams.
- Help to ensure teams provide accurate and timely data submission for this project.
- Monthly CLABSI data using standard CDC definitions.
- Monthly team checkup data that generally take less than 5 minutes to complete.  
(We also recommend annual safety culture assessment using a validated survey instrument).
- Share team experiences within their hospital and with other participating project teams.

#### ***How to participate What are the responsibilities of participating hospitals?***

- Create and support a project team that includes at a minimum:
  - 1) MD leader,
  - 2) Nurse leader,
  - 3) Data collector, and
  - 4) Executive to participate with the project team (monthly meetings).
- Submit required infection data that is complete and on time (this is already being done in your ICU with the submission of CLABSI data to the Oklahoma State Department of Health).
- Submit a monthly team checklist to provide insight on local project management .
- Participate in project conference calls.
- Participate in face to face meetings that may be scheduled in the future.
- Implement improvement tools that are part of project.

If you have not had a “zero” CLABSI for one year, you need to participate. If you have already implemented improvement interventions in this area, and have a zero CLABSI rate, still consider enrolling so that we can learn from what you have found to be successful and share your success with others nationwide.

The deadline for enrollment is **July 15th, 2010**. Contact **LaWanna Halstead** at lhalstead@okoha.com or (405) 427-9537 to discuss your participation.



## NEEDS ASSESSMENT SUMMARY

The Healthcare Associated Infection (HAI) Prevention Work Group asked for your input via the Oklahoma Healthcare Associated Infection (HAI) Prevention Project Assessment and you responded. A total of 88 survey requests were sent out to the IP staff at Oklahoma hospitals, and 69 responded by completing the survey within the given timeframe. On behalf of the HAI Prevention Work Group and OSDH, we want to share the answers received on the project assessment in the following summary.

### Facility & IP Identifiers:

- 58% of the hospitals responding represented hospital facilities with less than 100 beds.
- 70% of the infection prevention staff are not certified in infection control.
- 94% report having an Infection Control Committee at their facility.
- 97% responding report they participate in the Infection Control Committee at their facility . 55.2% said they either chair or act as co-chair on the committee.
- 75% do not have access to additional staffing to assist with data management, secretarial duties, or other assistance.
- 74% do not have an independent budget for their infection control prevention activities.
- 38% are not given opportunities and resources needed for their continuing education in infection prevention and control.

### NHSN :

- 84% report being familiar with the National Healthcare Safety Network (NHSN).
- 74% currently report data into the NHSN.
- 73% are not using any electronic surveillance reporting system outside of the NHSN.
- 47% want additional individual or small group trainings on applying the NHSN surveillance definitions.
- 48% want training on generating meaningful reports through NHSN.

### Training & Education:

- 48% want training on regulatory requirements and standards of an infection prevention program.
- 44% would attend training on establishing and evaluating an Infection Control Program.
- 64% would like easy access to information on best practice and resources.
- 45% would attend a free training on basic infection prevention and control.
- 51% would attend a free training on an infection prevention certification course, to help prepare them for taking the certification in Infection Control (CIC) test.
- 54% thought having the leadership, middle managers, and physicians trained on the impact of HAIs would benefit the IPs infection control and prevention efforts at their facility.

### Resources:

- 51% think they need a written manual that outlines the role and responsibility of an IP.
- 42% could use assistance in purchasing reference books related to their role such as the "Control of Communicable Disease Manual".

### Mandatory HAI Reporting:

- 19% feel mandatory reporting takes away from other infection prevention activities.
- 10% report having additional resources to do their job because of the mandatory reporting requirements.
- 32% think the mandatory reporting influences the decisions made by the Infection Prevention Program.
- 30% think the mandatory reporting influences the decisions made by the hospital administration and leadership.
- 29% felt MRSA reporting would need to be mandated before they would be able to report the data.

