



Toolkit Executive Summary

BACKGROUND

Methicillin-resistant *Staphylococcus aureus* (MRSA) is a type of bacteria that is resistant to certain antibiotics including methicillin and other more common antibiotics. Staph infections, including MRSA, occur most frequently among persons in hospitals and healthcare facilities such as nursing homes and dialysis centers. However recently, such infections have been identified in otherwise healthy people who have not been recently hospitalized or had a medical procedure and are known as community-associated (CA)-MRSA infections.

MRSA is becoming more prevalent in community and health care settings. According to CDC data, the proportion of infections that are antimicrobial resistant has been growing. In 1974, MRSA infections accounted for two percent of the total number of staph infections; in 1995 it was 22%; in 2004 it was 63%.

The Kentucky Hospital Association (KHA), in partnership with the University of Louisville School of Public Health and Information Sciences, the University of Kentucky, the Kentucky Department for Public Health and Health Care Excel of Kentucky are launching a statewide MRSA Collaborative aimed at increasing knowledge regarding identification, treatment and containment of MRSA. The Collaborative will utilize current best practices, national experts, and easily accessible Web-based tools to educate health care providers as well as members of other disciplines.

MRSA COLLABORATIVE ACTIVITIES

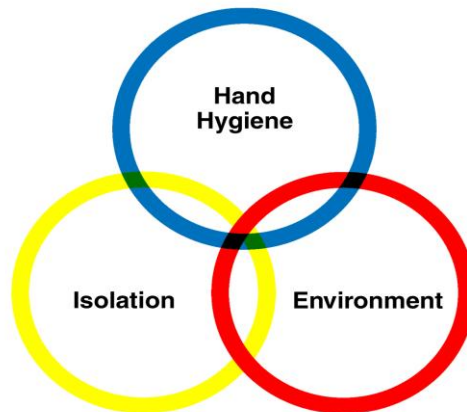
KHA is asking every Kentucky hospital to participate in the Kentucky MRSA Collaborative. As part of that commitment, hospitals are being asked to take a number of actions in an effort to improve identification, treatment and containment of MRSA in our communities. MRSA Collaborative participants will:

- Sign a commitment letter and identify a team leader designated to serve as the contact person for your facility and lead MRSA improvement efforts
- Participate in the Hospital Infection Control Practices Survey
- Implement key components of the Kentucky MRSA Toolkit including:
 - Hand Hygiene
 - Competency checklists
 - Adequate Room Cleaning
 - Utilization of standard signage
 - Update infection control policies
 - Antimicrobial stewardship
- Participate in data collection to support analysis of improvement.

MRSA COLLABORATIVE TOOLKIT

There currently exists a plethora of data and practice direction regarding how to prevent and minimize transmission of MRSA as well as other multidrug resistant organisms (MDROs). The three basic elements consistently identified in the best practices summaries compiled by organizations such as IHI, TJC, state hospital associations and professional organizations such as APIC and SHEA include 1) early initiation of isolation; 2) meticulous hand hygiene and; 3) consistent attention to the patient care environment. These three elements comprise the essence of this collaborative and are displayed in Figure 1.

Figure 1.



The Toolkit is a collection of information and resources including evidence basis, sample policies, tools, and measures organized into one effective and useful “bundle”. A “bundle” is a grouping of several scientifically grounded elements essential to improving clinical outcomes.¹ Several interventions are bundled together and, when combined, significantly improve patient care outcomes. According to the Institute for Healthcare Improvement (IHI), the creator of the bundle, a bundle should be small and straightforward. Individual elements of the bundle must each be proven to be necessary for the best care, and together they result in significant improvement.

The MRSA Collaborative recognizes that a barrier to implementing guidelines and best practices is opposing or differing recommendations made by national and international organizations. The toolkit is a collection resources and tools to help navigate you through the opposing recommendations in order to put in place the best program for your facility.

As with all improvement projects, it is important to determine specific and measurable process measures and outcomes. To that end, the toolkit identifies two process measures and two outcome measures associated with successful implementation of the improvement elements.

1. Institute for Healthcare Improvement: *Bundle Up for Safety*. <http://www.ihl.org/IHI/Topics/CriticalCare/IntensiveCare/ImprovementStories/BundleUpforSafety.htm>



The process measures involve evaluation of hand hygiene and environmental cleaning. An optional process measure involves isolation practice. The outcome measures capture incidence of new MRSA infection and rates can be based upon patient days or patient admissions, depending upon the information most readily available by the participating hospitals.

This collaborative recognizes that Kentucky hospitals already do a great deal to minimize transmission of resistant organisms such as MRSA, but the goal shared by these hospitals is to target zero. Targeting zero embraces the concept that infections are preventable and efforts must be undertaken to continuously improve both the systems and processes of care. The MRSA Toolkit is designed to compliment policies and activities already in place in the hospitals and provide additional resources and tools to assist in those efforts. In addition, the collaborative provides a means of promoting synergy among hospital leadership and front line healthcare workers that supports and facilitates the sharing of ideas and improvement initiatives.

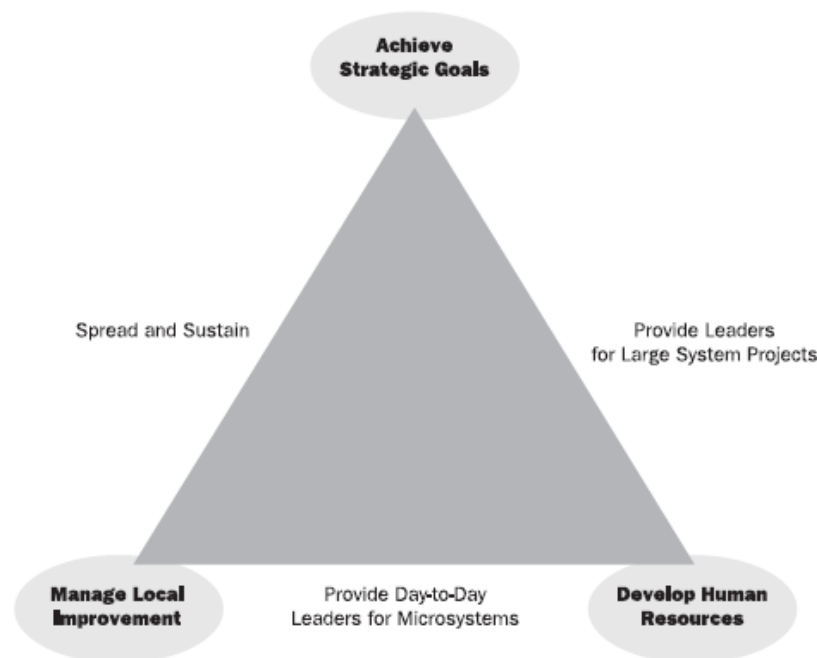
SUGGESTED IMPLEMENTATION STEPS

In order to execute change successfully in an organization, it is necessary to gain support at all levels of the organization and top level management is key. The new system will require new ideas about how work gets done, how relationships are built, and how patients participate in their care. No single initiative or set of unaligned projects will likely be enough to produce system-level results.²

Figure 2: Framework for Execution (IH)³

² Execution of Strategic Improvement Initiatives. Institute for Healthcare Improvement. Innovation Series 2007

³ Execution of Strategic Improvement Initiatives. Institute for Healthcare Improvement. Innovation Series 2007



The Collaborative encourages a team approach to implementation of the Toolkit. Participating facilities have been asked to identify a team of staff including a team leader and clinical champion who will lead the organization in activities to implement toolkit strategies. Every organization is different and will need to modify implementation plans to best fit the needs of the facility, staff and community. The following implementation plan is a guide that can be used by the implementation team when getting started.

Steps to Implementing Toolkit

1. Team Leader distributes toolkit components to team members and team meets to develop implementation timeline.
2. Team holds department head meetings to discuss policy updates, signage, and observations. Toolkit information is made available to staff.
3. Committees may be developed to focus on implementation of sections of the toolkit.
4. Use in-house marketing tools such as news letters and emails to get the word out about the toolkit.
5. Policies are updated throughout organization to support the intent of the collaborative.
6. Training on observations of hand hygiene and cleaning takes place but observations for hand hygiene and cleaning should begin immediately in order to establish baseline information for future comparison.
7. Team leader or designee develops monthly reports to department heads on benchmarking information.
8. A committee addressing antimicrobial stewardship should be established.



EVALUATION

Evaluation is key to measuring the successes of this initiative and it will give us information on how our efforts may need to improve to have a greater impact. The summative evaluation, which will show us how the collaborative works, is ongoing. Hospitals, through a password protected Web site, will be able to monitor their organization improvements and compare/benchmark with other hospitals in the state and with peer groups. In addition, this ongoing evaluation will enable us to identify high performing hospitals and learn from activities so their successes and experiences can be shared with others. This may serve as model for future patient safety and quality improvement initiatives.