

# Madison Community Hospital Addresses Infection Prevention—Case for Chapters 7 and 13

Michael Moran

## *The Quality Issue*

Hospitals across the country have seen an increase in *Methicillin-resistant Staphylococcus Aureus* (MRSA), a bacterial infection that is highly resistant to some antibiotics. Patients who contract this infection can develop serious complications, sometimes leading to death. Area hospitals with MRSA outbreaks have been featured in recent media programs, resulting in a loss of public confidence and declining admissions. As the director of an inpatient unit at Madison Community Hospital (MCH), you understand the potential for an increase of MRSA at your hospital. Your infectious disease physicians are concerned about the potential for an outbreak at your hospital. Infection prevention studies have reported that only 40% of health care workers sanitize their hands before treating patients. Hand washing and other hand-sanitizing methods have been proven to reduce the transmission of dangerous infections from one patient to another.

## *Preliminary Actions at MCH*

The MCH products committee has evaluated several hand-sanitizing products and selected an alcohol-based product that effectively eliminates the majority of bacterial microorganisms that can be transmitted by contact. The hand hygiene policy at MCH requires staff members, physicians, and volunteers to apply the hand sanitizer before entering and after leaving a patient's room. The Infection Prevention staff estimates an average of 15–20 individuals enter a patient's room each day.

You have been appointed to serve on a task force charged with improving hand hygiene compliance. The Infection Prevention personnel have gathered preliminary data from various inpatient nursing units (see Table 18-1). Staff on these units were observed in order to assess whether they sanitized their hands prior to entering and upon leaving a

TABLE 18-1 Madison Community Hospital Hand Hygiene Compliance Observation Data

	Number of Staff Observed	Number Sanitizing Hands	Percentage Sanitizing Hands
2 North	15	8	53%
2 South	18	12	67%
2 East	16	6	38%
3 North	19	10	53%
3 South	13	7	54%
3 East	15	6	40%
4 North	18	9	50%
4 South	17	7	41%
4 East	14	6	43%
Total	145	71	49%

patient's room. The Infection Prevention staff observing the inpatient unit personnel are routinely seen on these units as part of their surveillance activities. Staff members were not aware their hand hygiene practices were being observed. At first glance, the data indicates hand hygiene is not practiced, as required by the policy, in more than half the observations.

MCH has adopted the FOCUS-PDCA improvement model and utilizes various tools for collecting data and analyzing processes. The hand hygiene task force will be applying these methods to address the hand hygiene concern.

## DISCUSSION QUESTIONS

1. How would your task force use the FOCUS model and the data collection, process mapping, and process analysis tools to plan for a process change?
2. What are some of the issues associated with caregivers sanitizing their hands? Why do you suppose only 40% of caregivers sanitize their hands? What other department personnel, besides nursing, may need to enter a patient's room during their stay?
3. Who should be on this task force to represent which hospital functions and why? To whom should the task force report their results and why?
4. What are the possible causes for noncompliance? Are there other factors contributing to the issue? (Hint: Develop a flowchart to lay out the sequence of events for staff members entering and leaving patient rooms, develop a workflow diagram to identify barriers, and use these to construct a fishbone diagram.)