


“DO WHAT you CAN, WITH WHAT you HAVE, WHERE you ARE.”

A QUEST *to* ELIMINATE MRSA *at the* VA PITTSBURGH HEALTHCARE SYSTEM

— by —
Arvind Singhal and Karen Greiner

Abridged version prepared by Prucia Buscell

 Heidi Walker stood by a gurney loaded with standard infection control supplies—gloves, gowns, nasal swabs, hand sanitizer—and an incongruous pile of 21 packages of uncooked macaroni. As a curious audience of patients, doctors, nurses, and other members of staff looked on, Ms. Walker cracked open a bag, scooped out a handful, and let the pieces fall slowly and resoundingly into a plastic bowl.

Each piece, she said, represented a human life lost to hospital acquired infection. As the clatter continued, she pointed to the pile of macaroni bags on the gurney and announced that they held 100,000 individual pieces—the same as the total number of lives lost each year to all infections

acquired in U.S. hospitals. That was in 2005. A report released in June 2007 by the Association for Professionals in Infection Control and Epidemiology shows that the incidence of MRSA infections alone is dramatically higher than any earlier estimates have suggested.

As MRSA coordinator at the Heinz long-term healthcare facility at the Department of Veterans Affairs Pittsburgh Healthcare System (VAPHS), Ms. Walker wanted visual and auditory impact to accentuate the emotional urgency of fighting (MRSA) Methicillin Resistant Staphylococcus Aureus, a virulent pathogen that cannot be killed with most commonly used antibiotics.

The facts, then and now, are sobering.

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The Institute of Medicine has estimated that two million hospital acquired infections afflict patients in U.S. hospitals every year, and 100,000 of those patients die. MRSA accounted for only a small fraction of those infections and deaths. But the APIC survey of more than 10,000 infection control practitioners at 1,200 healthcare facilities in 50 states found that of every 1,000 patients in the study, 34 had active MRSA infections, and 12 were colonized. This calculates to a total MRSA rate of 46 per 1,000. That rate is between eight and 11 times higher than earlier estimates.

- Most carriers are unaware they carry the bacteria. The bacteria lives harmlessly in the nose and folds of the skin, but if the bug enters the body through a break in the skin caused by surgery or a minor injury, it can cause debilitating illness, excruciating suffering or death. Further, asymptomatic carriers can easily spread the bacteria if they touch their noses and then deposit the germs on surfaces that others touch.
- Among hospital acquired infections, MRSA increased 32-fold between 1976 and 2004. Anecdotal and survey evidence show MRSA is rampant in healthcare facilities and medical experts consider MRSA and other resistant infections among the nation's most alarming public health threats.
- MRSA is a hardy microbe. Dr. Robert Muder, epidemiologist at VAPHS, explains by way of comparison that while the AIDS virus can't survive more than a few minutes outside the

"While the AIDS virus can't survive more than a few minutes outside the human body, MRSA can live up to six weeks on environmental surfaces and is easily transmitted by skin to skin contact."

human body, MRSA can live up to six weeks on environmental surfaces and is easily transmitted by skin to skin contact and shared items. A physician's tie, white coat, or stethoscope can serve as a potent transmission vector. So can equipment shared by patients in physical therapy, hospital library materials, furniture or even a dental chair.

- MRSA is preventable. Strict adherence to infection control protocol can drastically reduce the transmission rate.

We have known the importance of hand hygiene for 150 years. But hand hygiene studies in U.S. hospitals, conducted between 1994 and 2000, showed abysmal compliance rates

ranging from 29 percent to 48 percent. This means most encounters between health care providers and patients in U.S. hospitals carry a high risk of MRSA transmission.

Reversing an Ominous Trend

While MRSA infection rates are spiraling nationwide, they are declining sharply at the VA Pittsburgh Healthcare System. Why? Candace Cunningham, MRSA coordinator for the VAPHS acute care facility on University Drive, talks about a vital change in "institutional attitude." Infection control professionals used to be viewed as the ones responsible for holding infection rates down. Now, she says, it's everyone's job. Other staff members offer similar reflections. As Cheryl Squier, head infection control nurse at VAPHS puts it, "widespread ownership" of the struggle with MRSA gave birth to a real culture change. In the past, she says, the typical mindset was, "that's

your department, you take care of it. Today, MRSA is viewed as everyone's problem." Dr. Muder welcomes the change, observing that he is working harder but enjoying it more. "Now," he said, "instead of kicking down doors trying to get attention for infection control, front line staff are stepping up—at all levels, from housekeeping to the lab."

The technical, social and cultural campaign against the spread of infection is a continually evolving success story with influences from earlier times and other fields. In 2001, Dr. John Jernigan, an expert in the epidemiology of hospital-acquired infections at the federal Center for Disease Control and Prevention, began to collaborate with the Pittsburgh Regional Health Initiative (PRHI) on "zero goals," an effort to eliminate hospital-acquired infections and medical errors. PRHI and VAPHS crafted an agreement that allowed VAPHS to participate in a pilot MRSA prevention initiative on its surgical ward and intensive care unit. PRHI was founded in 1997 by Paul O'Neill, Alcoa CEO and former U.S. Treasury Secretary, and Karen Wolk Feinstein, president of the Jewish Healthcare Federation, to address healthcare regionally. Because of O'Neill's influence, PRHI used the principles of the Toyota Production System (TPS), which had been successful in automobile and other industries, to

reduce patient care errors and fight infections. Peter Perreiah, a former Alcoa manager familiar with TPS, and VAPHS staff nurse Ellesha McCray served as the TPS support and instruction team. They began by collecting data on staff-patient encounters on the surgical ward at the 146-bed acute care facility that carries out cardiac surgery and transplants.

TPS is about standardization, Ms. McCray explains, and it's also about *Kaizen*, the Japanese term for continuous improvement, which often emerges from small changes. One subtle shift was to encourage the staff to think of "hand hygiene" rather than hand washing. Among other things, that meant using alcohol rub, which was faster than soap and water and more effective fighting MRSA. Another more tangible change was to see that supplies were always in stock and meticulously organized. Staff members were more likely to use gowns, gloves and alcohol rubs when they were readily accessible. From 2001 to 2004, when Ms. McCray and Mr. Perreiah led the TPS effort, MRSA infections on the surgical unit dropped a whopping 70 percent.

VAPHS Chief of Staff Dr. Rajiv Jain says hospital management was so pleased with the results in the surgical unit that in late 2003 TPS was expanded to University Drive's Surgical Intensive Care Unit (SICU). In the next two years, the



*Dr. John Jernigan,
Infectious Disease Specialist, CDC*



*Dr. Rajiv Jain,
VAPHS Chief of Staff*

MRSA infection rate on that unit also plunged 70 percent.

By mid 2005, VAPHS executives were eager to spread these successes beyond the two University Drive units. Despite clear gains from TPS, however, new infection control practices had not spread naturally to other hospital units. “We made a strategic decision to move away from TPS in order to scale up the fight against MRSA,” Dr. Jain explained. “TPS was not failing; quite the contrary; but it had shortcomings on two important fronts. First, TPS required additional resources – and we were not in a position to hire another 10 to 12 Peter Perreiahs and Ellesha McCrays for our other units. It was slow and expensive. Second, based on my regular participation in unit briefings, I got the sense that the program had the appearance of being run by the team leaders.”

In fact, he adds, the team leaders were so good that “staff’s attitude was ‘what do Peter and Ellesha have for us?’ Staff’s intrinsic involvement was low.”

An Inspiring Surprise

Dr. Jon Lloyd, MRSA prevention coordinator assigned to the Office of Chief of Staff at VAPHS, was looking for a new approach that would be more people-driven, more sustainable, and less resource intensive. Serendipitously, Dr. Lloyd was browsing the website of Plexus Institute when he came upon an intriguing story in *Fast Company* magazine. It was about a process called *positive deviance* that had been used to fight childhood malnutrition in Vietnam.

“The article was like a ball of hot fire on my computer screen,” Dr. Lloyd recalled. “It was the first time I had heard about positive deviance (PD). PD advocated local solutions—solutions that were owned by the people, not imported in by outside experts. Rather than focusing on the elimination of errors and defects, PD focused on

what was going right and providing a framework for doing more of it.”

The insights of Dr. Jain and Dr. Lloyd had been born out in the experiences of Peter Perreiah, who observed, “The hierarchical social structure in hospitals is not good for problems that are democratic—the spread of germs, for example. What you need to fight the spread of germs is a cultural shift.” Entrenched tradition says that attending physicians and chief residents are at the top of the hierarchy, he said, and physician assistants, nurses, and all others, were at the bottom. And people don’t confront doctors. To fight germs, he said, “everyone has to be able to ‘call out’ germ-spreading behavior.”

Dr. Lloyd began conversations with Jerry and Monique Sternin, the husband and wife team who led the PD initiative in Vietnam, and who now heads the Positive Deviance Initiative at Tufts University in Boston. The Sternins had already worked with Waterbury Hospital in Connecticut, where PD was being used in medication reconciliation. Dr. Jain was intrigued that PD was resource neutral and based on the idea of involving everyone.

In March 2005, Jerry Sternin gave a workshop on PD in Pittsburgh, and 50 representatives from ten Pittsburgh area hospitals attended. Dr. Lloyd recalls there was some initial skepticism about



Monique Sternin of the Positive Deviance Initiative and Dr. Jon Lloyd at the VAPHS Heinz Facility

whether a process that had worked with malnutrition in Vietnam would be relevant in U.S. healthcare. But enthusiasm grew. As Dr. Lloyd reasoned, “The U.S. healthcare industry has been too focused, for too long, on fixing errors, too preoccupied with making right what is wrong. Nurses and hospital staff have been bombarded with a litany of top-down, expert-driven directives to fix a broken system. In this context, PD’s focus on what works was greeted with open arms.

“The expertise to tackle MRSA is right under our noses,” he declared. “There are hundreds of experts here. The key is recognizing that the solutions to the problems exist among the staff and the patients.”

Culture Change and Hundreds of Experts

Culture change is clearly not the objective of the PD MRSA project, but it is happening. When every single person in the organization is invited to tackle a problem, transformations begin in the kind of entrenched traditional hierarchies Peter Perreiah describes.

The story of Edward Yates, a member of the housekeeping staff, is one striking illustration. Mr. Yates had been interested in the initiative from the beginning, and had surprised doctors with his knowledge that Chlorox, not alcohol, is needed to kill spores of *Clostridium Difficile*, or C-Diff, another virulent antibiotic resistant bug. Mr. Yates was later chosen by unit staff to conduct one of the regular MRSA briefings for some 15-20 staff members, including leading physicians. All present shared pride as he reported that the Heinz’s 2 South Unit had no MRSA infections, no colonizations, and had achieved a 100 percent swabbing rate. To Jerry Sternin, the fact that a well-informed member of the housekeeping staff was informing doctors and administrators at the top of the hierarchy, was one of the most gratifying instances of cultural change in action.

Examples of in-house expertise abound, once people start looking. Darryl is a veteran in his 30s who acquired a MRSA infection at VAPHS and has endured four surgeries at the site of his infected leg wound. He devised his own polite way of fostering hand hygiene. When doctors or nurses enter his room without washing their hands, he said, he avoids eye contact with them, and looks instead at the sink. If the offender is impervious to subtlety, he added, “I just look back at the doctor, then back at the sink, until they wash their hands.” Wall signs urging EVERYONE to wash or sanitize hands are another focus for a patient’s gaze. Darryl has shared his strategy with dozens of other veterans, adding advice to signal with a smile, not a smirk. He emphasizes that patients can be part of the solution, not the problem.

Engaged staff tend to be innovative. Tanis Smith is a recreational therapist who presides over activities for veterans in the H.J. Heinz III 256-bed long-term care facility. One evening last May, 34 veterans, many in wheel chairs, many with oxygen tubes, gathered for a bingo game. Many are MRSA positive, and patients in long-term care are not isolated because social interaction is vital to their recovery. Ms. Smith handled the cards deftly, and called out winning numbers in a melodious voice. When the game finished, her voice again floated from the microphone. She



Message on the Front Wall of a MRSA Isolation Room at VAPHS

knew how the veterans look forward to recreation nights, she knew shared cards and game pieces spread microbes, and she leavened her admonitions with humor.

"I will come to you and squirt some foam on your hands," she announced. "It is not shaving cream, do not apply it on your cheeks. It is not whipping cream, do not eat it. Rub your hands with the foam or the little bacteria in your hands will nibble at you."

Walking down the aisle, Ms. Smith squirted anti-bacterial foam into the patients' open palms, repeating: "Get your zap and get your snack." A veteran with only one arm held out his hand and Ms. Smith squirted a dab of foam on to her palms, washing his hand with hers. Only two veterans decline the zap. "They believe those who are 'man enough' need not worry about little critters," she said. But the majority understood. "Interestingly, once a few veterans begin to practice hand hygiene in public, there is increasing pressure on others to comply."

Peter Knickerbocker, a pre-med student at the University of Pittsburgh, volunteers at the hospital and holds weekly chats with patients to elicit their ideas on how to fight MRSA. Some suggestions: Get MRSA patients to share their stories; give each patient a hand sanitizer with instructions for use upon admission; get patients to share knowledge about hand hygiene when they play bingo, gather in smoking areas, or watch football.

In July 2005 the Sternins returned to Pittsburgh for another PD workshop with the VAPHS staff, infusing the effort with new energy. A core group of PD champions began to emerge. Heidi Walker and Candace Cunningham became full-time MRSA coordinators. When Ms. Walker left, Cheryl Creen assumed her position. Dr. Jain

and Dr. Lloyd, who readily listened and encouraged new ideas, along with Ms. Creen and Ms. Cunningham, led the in-house effort, which was fine-tuned by weekly phone calls with CDC MRSA control officials in Atlanta and the Sternins in Boston.

The Sternins have pioneered the use of PD to tackle seemingly insurmountable problems all over the world. In 1991, the Vietnamese government asked Jerry Sternin, as director of Save the Children, to combat the malnutrition

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-Dr. Jon Lloyd

that afflicted 65 percent of all children in Vietnamese villages. Facing what seemed an impossible task, the Sternins found families whose children were healthy despite having the same meager resources as their neighbors. They were the positive deviants. These families were feeding their kids several times a day and adding tiny shrimp, crabs and greens to their meals. Those foods were freely available, but most disdained them. But the Sternins knew just telling people to give their children unfamiliar foods and feed them more often wouldn't work. Instead, they helped the community design a program in which mothers of malnourished children could see their own youngsters become healthier as

they adopted the practices of the “positive deviant” mothers. Over the next several years, PD was used nationwide in Vietnam, and more than 2.2 million people improved their nutritional status.

PD recognizes that knowledge doesn’t always change behavior. As Jerry Sternin emphasizes, “It’s easier to act your way into a new way of thinking than to think your way into a new way of acting.”

Creativity Unleashed

To begin new actions, the VAPHS staff began what they called “discovery and action dialogues.” Dozens of interviews with all segments of hospital staff—nurses, doctors, custodians, van drivers, lab technicians—as well as patients and volunteers were conducted that July to elicit ideas for preventing MRSA. Several walls of yellow Post-it Notes captured a vast assortment of infection prevention ideas. By the end of 2006, hundreds of solutions had been generated by more than 500 staff members from all specialties and vocations at VAPHS. For instance, foam cleaning dispensers were placed in the recreation room, library and cafeteria where staff and ambulatory patients handle communally used items. Foam pouches were made available on a necklace. Larger trash bins accommodated the increasingly used gowns and gloves. Ira Richmond, associate director for patient care services at VAPHS, reports PD has supported the concept of shared governance. “The clinical issues are back in the hands of the front line workers—where they belong,” she observed. “And because the staff owns the solutions they propose, they comply with them.”

Joyce Ewing, nurse manager at the Surgical Intensive Care Unit (SICU) at University Drive, explains that at weekly briefings for all staff and MRSA coordinators, participants review data and if any patient has gone from MRSA negative to MRSA positive, they try to figure out how the transmission happened. Participants are encouraged to identify barriers to controlling infection, and it is safe for a person to say “I didn’t have what I needed to do the right thing.” Ms. Ewing notes that means some problems can be solved on the spot. Ms. Cunningham cautions, however, that “culture change” has to be an ongoing process, and that there is no one policy or solution

“Most hospitals around the country are still in denial mode, with a policy rather like the military: don’t swab, don’t know.”

- Cheryl Creen

that works everywhere, all the time.

Individually tailored ideas continued to flow. Cathy Hill, a nurse at the Heinz long-term care unit, wanted to make germs visible. She searched the internet and found a Glo-Germ, a product that is invisible as liquid, gel or powder, which glows under ultraviolet light. When VAPHS organized a day for staff to take stock of its MRSA efforts, Ms. Hill surreptitiously applied the powder to the pens people used to sign in. Later in the day, participants were ushered to the ultraviolet equipment and astounded to see how the powder had spread. “It was on everything, everything they touched,” Ms. Hill recalled. Their hands, heads, glasses, watches, plates, cups, and clothing all glowed, all giving dramatic evidence of fast, relentless, silent transmission.

Kathleen Risa, a nurse and MRSA prevention coordinator for the Department of Veterans Affairs-led national MRSA initiative, pushes elevator buttons—used by hundreds of people every day—with her knuckle, because fingertips are more likely to be vectors for bacterial transmis-

sion. And speaking of fingers, staff realized that one computer keyboard, where a dozen people, ten fingers each, type on 105 keys for hundreds of daily entries, is an infection minefield.

Increased consciousness generated many anti-transmission strategies. For instance, a toilet stall can be opened by using the inside of a jacket as a glove; flushing can be done with a foot, and an “elbow side arm swivel” can turn off the water faucet after hand washing. Glen Buzzelli, a SICU nurse, searched for EKG leadwires that were inexpensive enough to discard after use. “You wouldn’t believe all the bad stuff that can get on these EKG lines,” he said.

Jennifer Scott, a Heinz nurse, recalls the time a patient was sinking rapidly and a “code red” alert went out over the intercom. The patient had every germ a person can get, she said, and doctors, nurses, assistants, respiratory therapists, and people from other floors were dashing in and out. She remembers someone standing sentry outside the door, making sure no one got in without gowns and gloves. No one got in without proper gear. But Ms. Scott remembers thinking, “What about the crash cart, the portable cart on which all the emergency supplies and resuscitation equipment were wheeled down? How is it cleaned? What happens to a monitor that has to be placed on an infected patient’s bed, just so the cord will reach the nearest outlet....what happens to the cord?” Ms. Scott calls her “MRSA radar” a new way of thinking. She thought of the code, but also questioned: where do the cart and supplies go

during and after use? Would a clear plastic covering prevent a germ-laden EKG monitor from being a vector? Anything that moves among patient rooms has to be cleaned, she knew, and some equipment, such as stethoscopes and blood pressure cuffs, mustn’t move at all. It stays in the isolation rooms.

Dora Gentile is another staff member whose ingenuity turned to action. She had worked at the VAPHS University Drive surgical unit when the Toyota Production System was used. When she moved to the hospital’s post-anesthetic care unit (PACU), she realized to her horror that MRSA precautions were not being followed. After a discovery and action dialogue, she and colleagues began their own PACU initiative. Ms. Gentile requested the MRSA status of surgery patients, and helped arrange for those who were MRSA positive to be taken directly from their isolation rooms to the operating room. They had been awaiting surgery with MRSA negative patients, in a room where anesthesiologists moved from one patient to another hooking up IV line and monitors. Ms. Gentile and colleagues also cleaned out a storage room and converted it to a post-op iso-



Dora Gentile, right, with PACU colleagues.

lation recovery room with equipment exclusively for MRSA positive patients.

Ms. Creen says increased surveillance is key to fighting MRSA. The goal is to give every patient a nasal swab test for MRSA upon admission, transfer, or discharge. That way every patient's MRSA status is known, and if a patient with a negative test upon admission later tests positive, a transmission has occurred. Most hospitals around the country are still in denial mode, she says—with a policy rather like the military—don't swab, don't know. "They'll say 'we don't have a MRSA problem,' but I always ask 'how do you know?'" Karen Stofan, a unit clerk, envisioned a record refinement—to determine when a MRSA positive person is no longer positive. She began checking lists of patients whose positive tests were months old. In some cases, new tests proved they had become MRSA negative.

VAPHS patients who are infected with MRSA stay in isolation rooms or in rooms with other MRSA patients. A large red rectangle is painted on the floor around their beds, signifying the need for gowns and gloves to be donned before entering, and removed upon departure.

Charts showing cases of MRSA among new patients, or any cases of transmission to patients in the last week, are prominently displayed at nursing stations. Swabbing rates are tracked so nurses are encouraged to be vigilant about surveillance as well as prevention. Open display of performance charts engages everyone in the problem and the solution.

MRSA information is broadly shared among hospital units. Heinz patients tend to stay longer and receive care in multiple locations. When occupational and physical therapists know who is MRSA positive, precautions can be done respect-

fully, without stigmatizing. Information sharing also helps generate ideas that work across units.

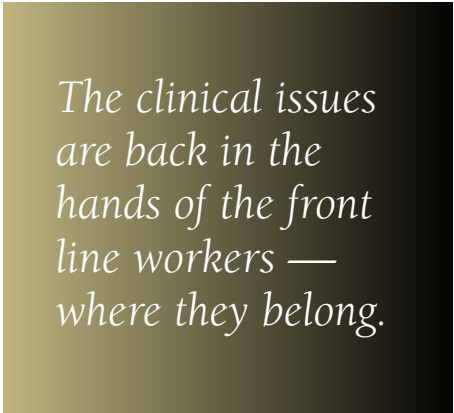
Ms. Creen described "floor-wide" events designed to allow for non-hierarchical, stress-free informal interactions among individuals with diverse functions, creating what she calls a "cul-

ture of cohesiveness." Ms. Stofan elaborated. There was an Ides of March day when everyone had to come with a Shakespeare quote. Then there was Edgar Allen Poe Day, Christmas in July, and Cinco de Mayo Day. Through communication and shared experiences, victories can be celebrated, and

disappointments met with resolve.

One of the "action and discovery dialogues" generated the idea for a patient's group, and one early project was to create an anti-MRSA brochure. The hospital-produced brochure is entitled *Resistant Bacteria: Methicillin Resistant Staphylococcus Aureus and Vancomycin Resistant Enterococcus*. The patient-produced brochure has a different title: *Keeping America's Veterans Healthy – A guide to MRSA – A simple way to shorten your stay*. Both brochures discuss risk. The patient-produced brochure stresses that everyone who enters a hospital risks becoming a carrier whereas the hospital-produced brochure notes that healthy people face very little risk of becoming infected. Both statements are true but they are framed differently. The patient-produced brochure exhorts veterans to become active in MRSA prevention. The brochure concludes: "Join in the effort to prevent its spread to other veterans. Ask a nurse how you can help." Such conversations help spread the effort.

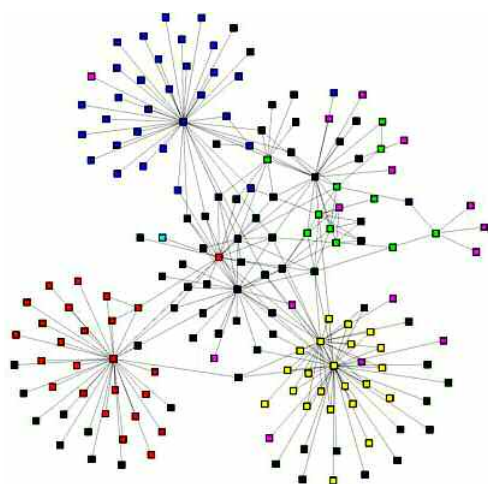
The PD approach not only encouraged staff members to identify successful MRSA prevention practices, it stimulated them to self-organize to



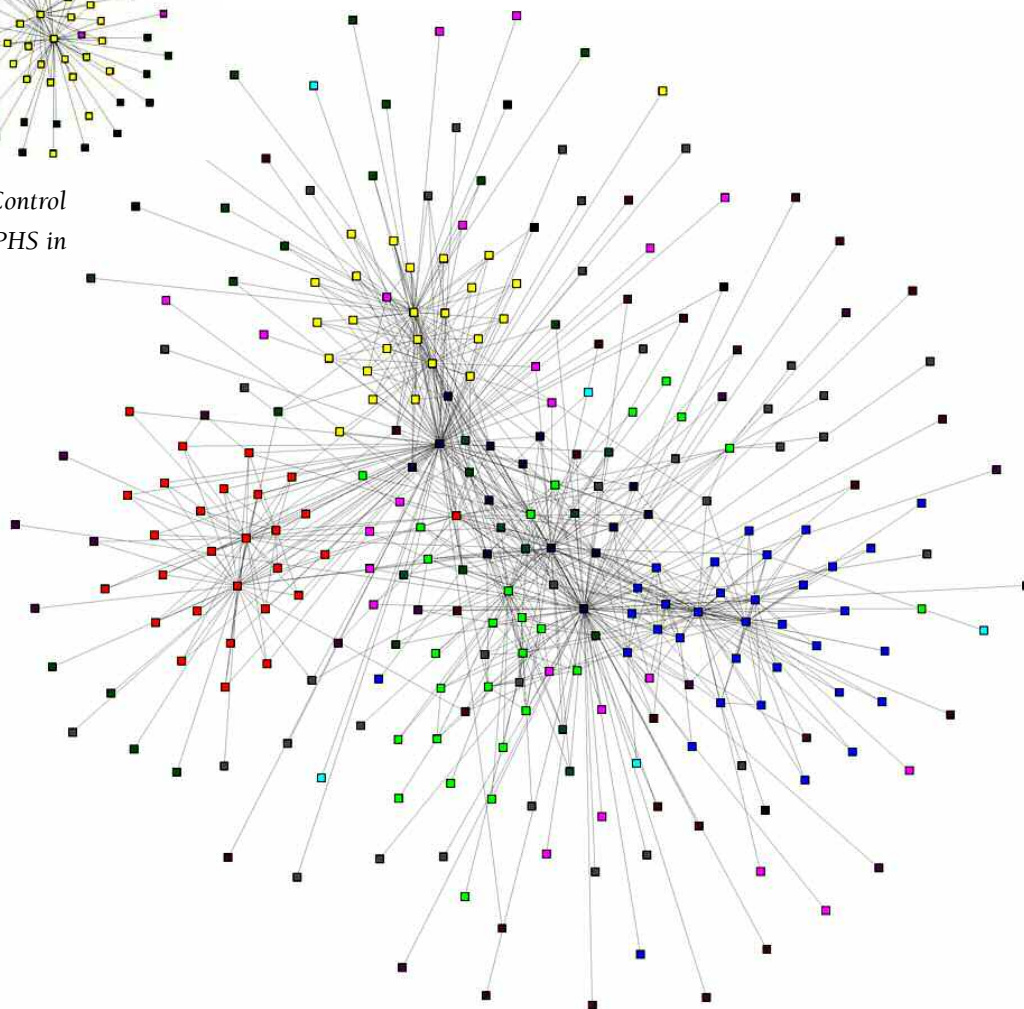
*The clinical issues
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put those practices into effect and generate innovative new practices. The process brought many more people into the MRSA prevention initiative, fostered many new working relationships and greatly enhanced connectivity among people within units and throughout the hospital. This

produced more sharing of ideas, practices and results. These changes are depicted in the following two network maps. Staff members on four units were asked who they worked with on MRSA prevention before the start of the PD process and 23 months later.



Network of MRSA Control Relationships at VAPHS in July 2005

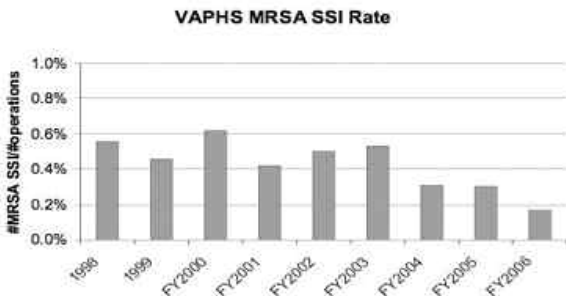


Network of MRSA Control Relationships at VAPHS in June 2007

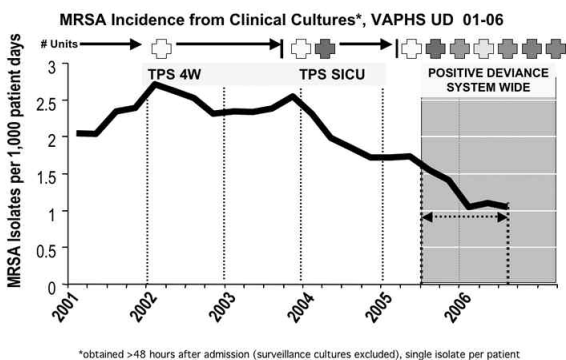
Encouraging Numbers

What accounts for declining MRSA rates at the two VAPHS facilities, and how much of the decline can be attributed to system-wide adoption of positive deviance practices? VAPHS has surveillance data that tells the story in graph form.

Hospital acquired surgical site MRSA infections declined 50 percent between July 2005, when PD practices began, and October 2006.



Since the beginning of the MRSA initiative in the University Drive units in 2002, the incidence of MRSA has declined significantly. During the period when Toyota Production System was used, there was a 35 percent decline hospital-wide. During the period when Positive Deviance was used, MRSA incidence declined 55 percent. From 2002 to the present, there has been an overall 64 percent hospital-wide reduction in the incidence of MRSA.



While it is impossible to identify the specific contributions of TPS and PD to this effort, PD is viewed as highly important in the continuing decline. As Jon Lloyd noted, “The true significance of this result is that while surgical site MRSA infection rates are declining at VAPHS,

they have quintupled over the past decade nationally. A true cultural transformation has occurred from within—with support from the leadership that demonstrated faith in its people—which manifests itself in a growing sense of ownership among staff and patients of the MRSA problem and their creation and implementation of hundreds of small solutions.”

The effort and engagement continue, with staff still compiling plans for future actions—getting patients to use hand wipes to cleanse TV monitors, bed rails and other points of contact, getting hand hygiene compliance from ambulance drivers, and increased focus on the emergency department, for instance.

The VAPHS’ quest to prevent, control, and eradicate MRSA has not gone unnoticed at the CDC, at the U.S. Department of Veterans Affairs, at the Agency for Healthcare Research and Quality, and with private granting agencies such as The Robert Wood Johnson Foundation.

The Department of Veterans Affairs held a roll-out event in Pittsburgh to launch its national anti-MRSA initiative, titled “Getting to Zero,” with VAPHS, under the leadership of Dr. Jain, as the lead agency. Representatives of 17 VA hospitals attended, and the remaining 136 VA hospitals were covered by the national initiative, beginning in March 2007.

The core of the VAPHS “getting to zero” MRSA Prevention Initiative has four elements:

1. Standard Precautions: hand hygiene; before and after every patient contact;
2. Active Surveillance Cultures: nasal swab; at admission, discharge, transfer;
3. Contact Precautions for all MRSA Positive Patients (colonized and infected) isolation; hand hygiene, gown, glove, and mask; designated or disinfected equipment;

4. Leadership Support: fostering a cultural transformation from the inside out; setting the direction for the intervention; providing freedom and opportunities for staff to co-create; and eliminating barriers to problem solving.

Dr. Jain presented the program to VA staff along with a description of the VAPHS MRSA experience, “warts and all,” and pledged to share standardized processes, web-based educational materials, infection control and clinical microbiology expertise and experience, and assistance with data collection and analysis.

As part of the “leadership support”, the 17 Phase One VA hospitals could apply to have positive deviance training as part of the larger initiative. In addition to VAPHS, five VA hospitals out of 17 chose to use PD. The Robert Wood Johnson Foundation, through a grant to Plexus Institute, is supporting an additional six beta sites and a network of 40 partner hospitals for a parallel MRSA prevention initiative, each with a PD component. Dr. Jernigan of the CDC invited representatives from the 17 VA and six Plexus beta-sites to

learn how to use the National Healthcare Safety Network (NHSN) MRSA Surveillance System to track progress on MRSA rates. Data will be available soon, which will shed light on how PD practices can be used in addressing difficult healthcare challenges.

“You have to respect the process,” Dr. Lloyd

observed. “...opening the floodgates of communication between staff may not be statistically proven to help prevent MRSA, but it certainly can’t be hurting.

“MRSA is a great unifier,” he continued. “Every patient and every healthcare worker is potentially affected...Once you start tackling MRSA head on, it’s like the genie is out of the bottle – you

can’t put the genie back in.” Technical, social and cultural changes will follow and flourish.

Once the NHSN results start coming in from the 17 VA Hospitals and the six Plexus Institute-Robert Wood Johnson beta sites, we’ll know just how well the genie has done. ■

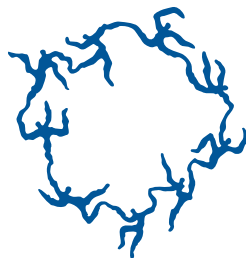
The fact that a well-informed member of the housekeeping staff was informing doctors and administrators at the top of the hierarchy, was one of the most gratifying instances of cultural change in action.

“Do what you can, with what you have, where you are.”

—Theodore Roosevelt

This is an abridged version of a longer story, *When the Task is Accomplished, Can We Say We Did it Ourselves?*, authored by Arvind Singhal and Karen Greiner, which has been condensed here by Prucia Buscell, Plexus Institute. Singhal is Samuel Shirley and Edna Holt Marston Professor of Communication, University of Texas @ El Paso and Greiner is a doctoral student in Communication Studies, Ohio University.

Read the full story at the Plexus Institute Web Site:
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We wish to thank French Sculptor Michel Rico for his permission to use his sculpture, *LaRonde*, as a logo for Plexus Institute.



The mission of VAPHS is to care for America's veterans - providing excellent health care, training their future providers, and advancing medical knowledge through research.

Learn more about the VAPHS MRSA initiative at
<http://www.va.gov/Pittsburgh/mrsa/index.htm>



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