

MORE WE THAN ME:

HOW *the* FIGHT AGAINST MRSA LED *to a* NEW WAY of
COLLABORATING *at* ALBERT EINSTEIN MEDICAL CENTER

by
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“Brief is this existence, like a brief visit in a strange house. The path to be pursued is poorly lit by a flickering consciousness whose center is the limiting and separating ‘I’...when a group of individuals becomes a ‘we’, a harmonious whole, they have reached as high as humans can reach.”

—Albert Einstein, 1954

Maureen Jordan is the administrative director of respiratory care at Albert Einstein Medical Center. She is a self-described *type A* personality who likes to get things done, so she thought it was ridiculous when colleagues acted out the transport of a critically ill patient and asked her to take notes.

The action involved a nurse, a physician, an escort service employee, a ventilator, an oxygen tank, a stretcher and a creatively noncompliant “patient” played by Dr. Jerry Zuckerman, Einstein’s medical director of infection prevention and control. “I was amazed,” Ms. Jordan says months later. “I saw so many things that could cause infection and cross contamination. I made a

list of all the things that needed to be addressed. And we had fun.”



Albert Einstein Medical Center

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Ms. Jordan's list and discussions that followed among escort employees and other frontline staff involved in transporting patients from one location to another in the hospital produced a new policy. Then there was an in-service for the staff. "But since they generated it themselves, we didn't need to sell it," she says.

Neither the federal Centers for Disease Control and Prevention (CDC) nor the Society for Healthcare Epidemiology of America (SHEA) has a policy on who should wear gowns and gloves during a transport, explains Dr. Jeffrey Cohn, chief quality officer for the Albert Einstein Healthcare Network in Philadelphia, so it made sense for Einstein staff to work out one for their own environment.

While colleagues were working on protecting patients during transports, another escort service employee was devising a creative solution to another problem. Jasper Palmer can demonstrate with a showman's flair how to don a gown and gloves then quickly slide out of the gown, twirl it around his right arm and stuff it into a glove. He compresses the bulk of the personal protective gear worn when tending isolation patients into a wad the size of a baseball. "You don't have to have overflowing trash bins," he says.



Dr. Jerry Zuckerman

Ms. Jordan and Mr. Palmer are among the hundreds of the people at Albert Einstein Healthcare Network in Philadelphia who have joined SMASH, an organization-wide effort to fight MRSA (Methicillin Resistant *Staphylococcus Aureus*) and other virulent infections that are afflicting hospital patients across the country. In dozens of small ways, Einstein's successful efforts are embodied in triumphs and insights that emerged from countless cultural collisions and negotiations. Those encounters, many unexpected and unplanned, some subtle and some contentious, have generated new and altered relationships, practical innovations, changes in language, and some impressive outcomes.

A National Priority

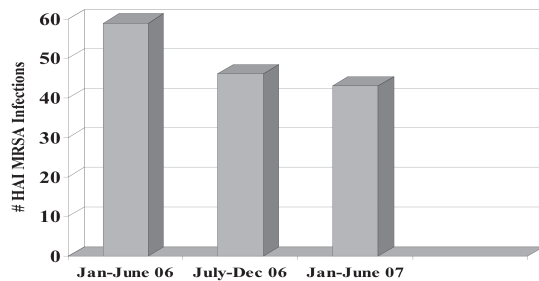
With awareness of deadly hospital-acquired MRSA infections reaching fever pitch, hospitals nationwide are struggling to reduce infection rates. In October 2007, the *Journal of the American Medical Association* reported CDC research showing MRSA is causing 94,000 serious infections and killing almost 19,000 people annually. The CDC has identified control and prevention of MRSA and other drug-resistant microbes as a national priority. At Einstein, a prevention initiative based in cultural change is bringing heartening results.

"We had 106 MRSA infections (within the Network) in 2006, and we're on a path to have 85 in 2007," Dr. Cohn told a gathering of health care professionals in November. "That's 20 patients who left the hospital earlier than they would have, 20 patients who returned to their lives 25 days earlier than they would have, and seven who are not dead due to an infection we gave them."

A month later Dr. Cohn reported that the overall hospital-associated MRSA infection rate for fiscal year 2007 had declined 22 percent from fiscal year 2006, dropping from 0.9 per thousand patient days to 0.7 per thousand patient days in

the 575-bed Medical Center and the acute care beds at Einstein's Elkins Park facility. The fiscal year runs from July to June. From July to September 2007, which is the first quarter of fiscal year 2008, the HA MRSA infection rate was 0.5 infections per thousand patient days, showing that a substantial decline continues.

Dr. Zuckerman sent a congratulatory message December 21 to the Medical Center's Surgical Intensive Care Unit (SICU) noting that updated



AEMC saw a significant reduction in healthcare-associated MRSA infections over a 12-month period.

data showed no new HA-MRSA infections and no instance in which the bacteria was transmitted to a patient who previously did not carry it. He wrote: *The last MRSA clinical infection was 88 days ago!!!! The last MRSA transmission was 42 days ago!!!!!!*

A notice on a SICU bulletin board announced there had been no central-line associated blood stream infections from that unit since last May. For Dr. Cohn and many others who have worked on infection control for the last year and a half, the SICU achievement after a rocky start offers encouragement and powerful lessons for what's possible after January 2008 when the intensive prevention initiative is expanded to cover all of the network's acute care inpatient treatment areas.

Positive Deviance in Healthcare

Positive Deviance (PD) in healthcare-associated MRSA prevention bridges the gap between what healthcare workers know and what they do. They know the evidence-based infection reduction protocols but they don't always follow them. The PD approach focuses on how to foster reliable adherence to known infection prevention precautions at all times by everyone who comes in contact with patients and their environment.

Patients do not develop MRSA infections unless the germ is transmitted to them and they become colonized. Of

those who do become colonized with MRSA bacteria, 30 percent will develop MRSA infections. So the key to preventing infections is preventing transmissions.

Every front line healthcare worker, and that includes doctors, nurses, aides, therapists, housekeepers and all support service staff, have countless opportunities to transmit bacteria from patient to patient. They also are the very best on-site experts on how to prevent transmissions in their own work.

PD is based on the idea in every community there are individuals or groups who are

solving problems better than colleagues who have exactly the same resources. Using PD, eliminating MRSA infections will come from acknowledging the expertise of frontline staff and eliciting a sense of ownership of the problem and its solution from all the staff members who come in contact with patients. Once they discover and own solutions, they will carry them out. As Dr. Jerry Zuckerman, medical director of infection prevention and control at Albert Einstein Medical Center, puts it, "People don't turn their backs on things they create." ■

A “Deviant” Approach

The story began in February 2006, when Dr. Cohn and Dorothy Borton, an RN with more than 30 years of clinical infection prevention experience, learned about The Robert Wood Johnson Foundation grant to support a pioneering effort spearheaded by Plexus Institute and the Positive Deviance Initiative at Tufts University to use the positive deviance (PD) approach to fight MRSA. The idea is that PD, which does not rely on new drugs or technology, encourages the kinds of cultural changes that help people consistently adhere to practices known to control infections. Presenters at a kickoff meeting hosted by the Hospital Council of Western Pennsylvania in Warrendale included Plexus Institute President Curt Lindberg; Jerry Sternin, the leading international authority on PD and the director of the Positive Deviance Initiative, who outlined the opportunities of using PD in healthcare; Dr. John A. Jernigan, a medical epidemiologist with CDC who described the national MRSA problem; and representatives from Veterans Administration Pittsburgh Healthcare System (VAPHS), which had piloted



Dr. David Hares

the use of PD in MRSA prevention. Attendees included hospitals participating in the Southwestern Pennsylvania MRSA Prevention Collaborative and the Maryland Patient Safety Center, and representatives of the Pennsylvania Hospital Association and Voluntary Hospitals of America (VAH) of Pennsylvania.

Dr. Cohn and Ms. Borton were there, and they were captivated by what they heard. Ms. Borton, who also serves on the Healthcare Associated Infections Advisory Panel of the Pennsylvania Patient Safety Authority, remembers Dr. Cohn was on his cell phone planning the start of Einstein’s program

before their homeward flight out of Pittsburgh.

“We knew that the percentage of MRSA isolates cultured in our microbiology lab was steadily increasing, and we noticed that isolation lists kept getting longer, and that HA-MRSA infections occurred more frequently,” Ms. Borton recalls. “And the timing was right. We had just started a transformational process, and this dovetailed wonderfully into that, with a different approach.”

“We had talked about connecting more with what is happening on the front lines, and getting a much greater sense of engagement and ownership among those who are on the front lines,” says Dr. Cohn. “And PD as a tool is all about the front lines. I was convinced if we could learn to do this well, it would be in complete alignment with our transformational work.”

A Call for Volunteers

By May 2006, Einstein launched its own PD/MRSA initiative, inviting several hundred executives, managers and department heads as well as doctors, and nurses and support staff to a kickoff session. Dr. Cohn shared his own wrenching MRSA story. Some years earlier, when

“We’re here to help people, not to infect them.”
– Dallas Douglass

he was a practicing oncologist, he treated a college professor in his 50s who had been diagnosed with a serious but treatable cancer. The prognosis was years of remission. Instead, the man died of lung failure resulting from a blood stream MRSA infection that he almost certainly got through an IV line put in place for chemotherapy. “It was devastating for the family and as the doc who had embarked him on this treatment, I felt horrible,” Dr. Cohn says. A board member recounted his experience with a staph aureus infection. Dr. Zuckerman described what MRSA bacteria is and does. Dr. David Hares, an internal medicine physician trained in Argentina who recently earned an MBA at the University of Michigan, had served an internship with a biotech company trying to develop a MRSA treatment. He had accepted the job of Einstein’s quality manager just days earlier, but he quickly joined the session, recounting the numbers of people that MRSA sickened and killed. Jerry Sternin and his colleague and wife Monique Sternin talked about positive deviance and how it has worked in healthcare. As the session ended, Dr. Cohn invited anyone interested in volunteer-

Despite universal knowledge of best practices, healthcare workers routinely fail to follow them.

ing to help in the new fight against MRSA to come to a session at 9 AM the next day.

“We were very nervous,” Dr. Cohn recalls. “Would anyone show up?” A circle of a dozen chairs initially went unoccupied as a few people straggled into the room a little after 9 AM. “Einstein time,” scoffed several doctors who noted that meetings often start late. Eventually, some 50 doctors, nurses, aides, administrators, housekeepers, and clergy were among those who added more chairs to the circle and sat down. The conversations started that day would grow into a concerted effort involving several hundred

people. Pilot projects began in four units and people who work with patients in numerous capacities throughout the hospital began to examine their own roles in preventing infections.

“I think we were able to see some complexity principles at work in that hour or two,” Dr. Cohn says in retrospect. “There was self organization, and people without a clear agenda saying how do we proceed, how do we make sense of this next task. Within 30 to 40 minutes, people had self organized into subgroups.” Some would be short lived, such as the group that put itself out of business after figuring out where and how to start, and other groups would continue working on such issues as measurement, communication and support for the pilot units.

Early Skeptics

Despite dedication and enthusiasm, the initiative did not come together with magical ease and speed. Many were skeptical in the beginning, and Dr. Cohn concedes some still are.

Dr. Zuckerman became the physician champion for SMASH. That’s an acronym for *Stop MRSA Acquisition and Spread in our Hospitals*, the



Dr. Jeffrey Cohn, chief quality officer, with Conrad Johnson, coordinator of escort service, and Maureen Jordan, administrative director of respiratory care

name staff members voted to call the PD/MRSA initiative. Dr. Hares, a PD enthusiast, is project manager for SMASH. But Dr. Zuckerman was an early skeptic. “I asked where is the evidence, where is the science?” he remembered. “The science and the guidelines tell us what we should all be doing for infection prevention and control. However, despite universal knowledge of best practices, healthcare workers routinely fail to follow them. PD is a very different process, which strives to invoke behavioral and cultural changes. It focuses on the ‘how to’ of implementing best infection prevention practices, an area that infection control professionals have struggled with for a long time.”

Despite his qualms, Dr. Zuckerman says he has been swayed by the preliminary reduction in infection rates. He also thinks the PD approach has contributed to increased cooperation and teamwork and involvement of front line staff. Late last summer he observed, “We’ve made more progress on this in the last six months than we have in the last 14 years.”

“PD is about people coming up with novel ideas that work for them, right there... People don’t reject their own solutions.”

Elaine Flynn, RN, the infection control professional for Moss Rehab including Einstein’s 30 bed brain injury unit at Elkins Park, wanted to know more about MRSA because 29 percent of the patients arriving in her unit already had MRSA infections or colonizations, and there had been a recent outbreak. Further, because the goal

is to return patients to their communities, social and group activities are encouraged, and they spend little time in their rooms. “These patients are medically very complex, and most have had surgical interventions and lengthy stays in acute care before they get to us,” she explains. But she was also an early skeptic. She expected lectures at that May morning meeting, but instead

Dr. Cohn and Dr. Hares asked questions. “I was doubtful. I thought they were trying to get information from us, and I suspected their motives,” she says. But she kept thinking about it, and realized that posing questions suggests you can come up with answers. A dozen of her colleagues got together later and agreed the brain injury unit should start a pilot program.



Wanda Davis, Housekeeper in Tower 8.
A true “positive deviant.”



Gene Spross

When Should We Start? How About Now?

The other pilot units are the SICU, Tower 8, a 20-bed oncology and transplant unit; and Levy 4W, a “step-down” unit, where patients are seriously ill and suffer from many types of organ failure. Melissa Morris, RN, the Levy 4W nurse manager, says many patients were arriving with *Clostridium difficile*-associated diarrhea, a virulent infection known as C-diff, and Vancomycin-resistant enterococci, or VRE, as well as MRSA. “We weren’t screening (on admission), but we would discover it later. We knew if we could control it on entry we could do better,” Ms. Morris says. Ms. Morris’s 20-year-old son had suffered from a MRSA infection that required three rounds of incision and drainage procedures and antibiotics, and a nurse on the unit had also endured incision and drainage procedures to treat a MRSA infection. “We had actually seen the effects, so we felt passionately about this,” she says.

The efforts unfolded differently in each unit. In the Brain Injury unit, there was an emphasis on educating patients, families and visitors about MRSA facts and infection prevention. Some patients hadn’t been told or didn’t remember they had MRSA. Ms. Morris says active surveillance showed nearly 20 percent of Levy 4W patients were colonized for MRSA, but not infected, when they arrived. “We wouldn’t have known about that, and those patients would have been in with other patients instead of in isolation,” she says. While the incidence of other infections has not been formally reported, Ms. Morris notes: “If you’re doing prevention you are protecting patients against all of them.”

“When one unit is successful it motivates other units. So they step up and do it, and those who have already worked on it will support them.”

A fifth unit, Levy 7, a 46-bed medical surgical unit, joined SMASH in August. Gene Spross, RN, the Levy 7 nurse manager, had been going to SMASH meetings early on. She thought PD sounded great, but wondered if it could work in her unit, with its 80 employees in two physically separated sections. Still, she kept learning more.

“My staff knew something exciting was going on, and they wanted to be part of it,” she says. “They were honest when they met with Dr. Hares—they said we know we don’t always do everything we should. Dr. Hares asked, when do you think you could start this process? Four or five answered ‘how about right now!’” SMASH participants go out of their way to help each other. Ms. Spross is being mentored in her efforts by Dallas

Douglass, RN, the nurse manager of Tower 8, who in turn was mentored by Ms. Morris. And Ms. Morris observes that helping is part of the process: “When one unit is successful it motivates other units. So they step up and do it, and those who have already worked on it will support them.”

On all SMASH units, every patient is screened for MRSA, first upon admission, and then upon transfer to another unit or discharge from the hospital. The MRSA test is conducted by a nasal swab, which is processed in the hospital laboratory. The admission “swab-ins” were accomplished efficiently, but “swab-outs” proved more difficult to do routinely because the transfers and discharges are often rushed and unpredictably timed. Patients who test positive for MRSA are put in isolation, and staff who enter their rooms to care for them are to wear gowns and gloves. Vigilant hand hygiene means all staff members must wash their hands or use hand sanitizer

before and after every contact with every patient, regardless of MRSA status. Every patient room has hand hygiene pumps, which also appear in hallways. Sanitizing gel for hands is ubiquitous.

Regular Meetings & Butterflies

Discovery and Action Dialogues, or D&ADs, as they came to be called, are scheduled as needed on the units. Some dialogues are spontaneous one-on-one exchanges. Some are short bursts of engagement among staff members and mentors. The idea is to talk about an issue, discover whether anyone has already come up with uncommon strategies to address it, and if not, then create an action plan that is as concrete as possible. Volunteers are sought to see that specific steps are carried out. No ideas are ridiculed or dismissed. Ideas are “butterflies” to be examined with care and treated gently. In one D&AD with respiratory therapists, participants worried that the pens they carried in and out of the rooms might be vectors for transmissions, so pens were to be purchased to keep in isolation rooms. Ms.

Morris reported that during a D&AD with her staff on Levy 4W, a medical clerk came up with the idea of having a pink sheet on all patient bedside charts that showed MRSA status and swab-in, swab-out data.

Dr. Cohn, Dr. Zuckerman, Ms. Borton or Dr. Hares generally attend Friday meetings where staff from pilot units discuss their progress with prevention, barriers that get in the way of prevention, and possible solutions. The sessions are “open door” and members of several units and support services are invited or attend on their own. By late November, discussions at these regularly scheduled Friday meetings flowed like a dance, with partners in conversation augmenting each other’s analysis and proposals. But that ease and purpose took months to develop. Numerous earlier sessions were facilitated by the three Einstein physicians and several nurses. Coaches, including Dr. Jon Lloyd, now senior clinical advisor for MRSA prevention for Plexus Institute, Jerry Sternin, and consultant Sharon Benjamin from Plexus Institute and Plexus Chair Henri Lipmanowicz often participated in conference calls.



The power of human interaction: Gene Spross, Nurse Manager Levy 7, talks to Joe Reilly, supplies manager, and Dottie Borton, RN, infection control. The unit had a problem with supplies, and they were running out of gowns. They sat down, face to face, after the Friday meeting and solved the problem in less than three minutes.

Nothing About Me Without Me

“The complexity of taking care of patients, of hundreds of interactions every day, in a complex environment, that’s where PD comes into play,” says Dr. Zuckerman. “With the traditional approach, leadership gets an idea of what’s wrong and imposes a solution. The natural reaction is ‘that won’t work for us.’ PD is about people in the community identifying the problems you can’t see from the outside, and coming up with novel ideas that work for them, right there. It’s about community ownership. Because solutions are community driven, they are likely to be accepted. People don’t reject their own solutions.

“If the discussion involves another person or another group, they have to be brought in,” Dr. Zuckerman continues. “That’s how you expand the community. If you don’t know how a room is cleaned, you bring in housekeeping.” Several support services, including food services, radiology, patient transport and therapy departments have been instrumental in supporting vigilant infection control and finding ways to remove barriers to consistency. In fact, Dr. Cohn notes that some of the people Jerry Sternin calls “unusual suspects”, the people who have not traditionally been invited to work on infection control, are among Einstein’s “heroes.” “Environmental Services (housekeeping) and transport have folks who care passionately and have tremendous pride in the role they can play in preventing infection,” Dr. Cohn says. “The people in the Storeroom where supplies are kept have played important roles.”

Supplies, for instance, were a major issue when SMASH began. There weren’t enough gowns, or gloves, or they were the wrong sizes, or nurses and doctors thought they were too hot or poorly designed. Several new designs had undesirable features. After considerable research and 400 staff votes, the original gowns were selected as the best. But then there was the issue of availability. “Lack of equipment was identified as a

barrier to infection control,” says Ms. Douglass, of Tower 8. “Sometimes you’d see gowns hanging on the back of doors because people intended to re-use them. That’s no good.” Storerooms weren’t always fully stocked, and closed cabinets prolonged a search. Some units tried keeping supplies in boxes on tables in the hall ways. But that didn’t solve the problem, and it created clutter. Ms. Douglass says one innovation suggested by a staff member has been enormously helpful. Plexiglas supply boxes now adorn the walls outside every patient room in all SMASH units. The supplies, swabs for nasal MRSA tests, gowns, and gloves in boxes color coded for size are handy and visible. “My staff is doing a great job,” Ms. Douglass says. “Nurses and aides are very acutely aware of supplies, and they keep those boxes filled. No one waits for someone else to do it.

“You can see the teamwork growing,” she continues. “People from other units ask the staff questions about how we are doing. And there is less friction. No one gets ruffled about a reminder on hand hygiene or gowning and gloving.” She calls herself a “true believer” in PD, which she says fits well with the shared governance that has been in place for 10 years among Einstein nurses.



A powerfully simple innovation: Plexiglas supply boxes, with visible inventories, now adorn the walls outside every patient room in all SMASH units.

The patient transport “improv” illustrates teamwork evolving. There had been complaints about transporters from escort service walking around the hospital in contaminated gowns, Maureen Jordan says, so they took them off. But who should wear them? A therapist had raised questions. Under the new policy, a nurse who prepares the patient for transport removes the gown worn inside the patient room. The respiratory therapist, who may have to adjust a patient’s breathing tube, always wears gown and gloves. The patient is draped with a clean sheet so that any equipment or oxygen cylinders placed on the stretcher won’t touch contaminated bedding. The escort, who does not wear protective gear, won’t touch the patient, but will push the stretcher, push buttons to open doors and elevators, and touch anything else that needs to be moved. At the end of the transport, the receiving team gets information about the infection status of the patient and is prepared to gown and glove in the patient’s room.

The details were worked out by the people who actually do the transporting with the guidance of Ms. Borton. Jerry Sternin has explained

that the PD approach to eliminating MRSA relies on acknowledging the expertise of those on the front lines because they have the best chance of seeing when and how transmission occur, and they are in a position to both prevent and cause transmission. In all PD work, he has emphasized the vital need to engage and elicit ownership of the people whose behavior might need to change to solve a problem.

“We’ve all learned to value each other,” Ms. Jordan says of the improv exercise. “We used to be conscious of a scale of importance, but this takes that away. Escort service has been a real leader, and I am amazed at what I have learned. Role playing is a great way to come up with new ideas, and it makes us all observant about everything we do.”

A Rocky Start and a “Huge” Achievement

Dr. Cohn thinks the SMASH program in SICU may have had a rough start because it was started by leaders without strong community ownership. A cultural collision also may have impeded

Barriers to MRSA Control

- Apathy and denial about the problem
- Lack of understanding of:
- The goal: To prevent new colonization of previously uncolonized patients
- Key role of asymptomatic colonization in transmission
- Effectiveness of contact isolation
- Infection risks associated with MRSA colonization
- Benefit of prevention on outcomes
- Lack of compliance with hand hygiene
- Lack of compliance and inconvenience of contact isolation
- Time pressure on staff
- Long duration of colonization
- Lack of data re: MRSA colonization status
- Lack of data re: Hand hygiene/ contact isolation compliance

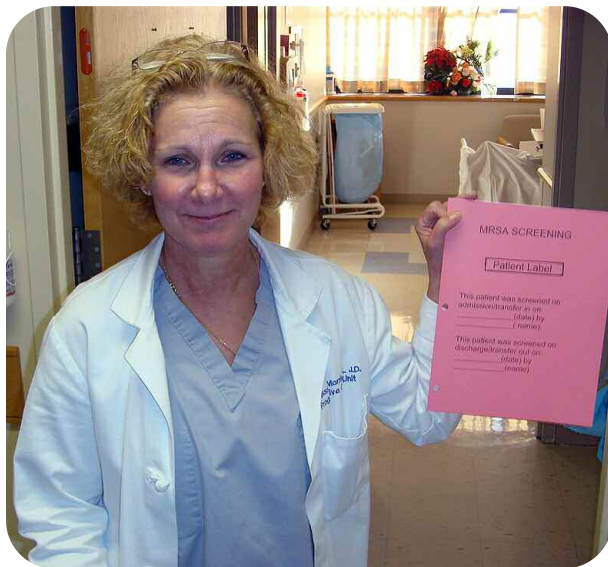
progress. “The SICU nurses are very skilled and very tough,” observed Dr. Hares, who helped facilitate SICU meetings. “They are not touchy-feely. When we went to SICU and asked what do you feel, what do you think, that was a mismatch. Their culture is *you tell us a better way and we will carry it out.*”

Karen Niewood, RN, the clinical manager for SICU, says members of the unit initially suspected SMASH was another “initiative of the week” that would soon fade. Further, they doubted that MRSA could be eradicated. “Our patients are critically ill. They need very intensive, often very immediate, interventions to save their lives. Swabbing for MRSA just didn’t seem like the highest priority. When Dr. Hares and Dr. Zuckerman first approached us we were skeptical.” she says. She pauses, and then adds, “But if you save someone from a motor vehicle accident, and they die two months later from an infection, you ask yourself what else could have been done?”

Ms. Niewood began researching the literature on MRSA, and attending meetings to learn what other units were doing. She shared her knowledge and the articles with colleagues. As a result of a SICU SMASH meeting, a unit bulletin board pro-

claims “SMASH in Action: 95% swab in, 95% swab out”. The touted absence of central-line associated bloodstream infections is another initiative, Ms. Niewood notes, but the many principles are the same as SMASH—vigilant hand hygiene and use of protective gear. Dr. Hares says Ms. Niewood was instrumental in bringing about change in SICU, because of her competence, generosity with time and effort, and her ability to encourage people to find a few minutes for conversation.

Nancy Pokorny, RN, a nursing career specialist also met with SICU and agrees the unit was a “tough nut to crack” as far as SMASH goes. The fast-paced stressful ICU has its own culture. Last year Dr. Lloyd and others listened to a discussion on whether efforts should be continued to get the SICU staff involved in SMASH. Ms. Pokorny suggested they might be more accepting of someone with a surgical trauma background. She also urged Dr. Hares to tell the staff that he had experience in critical care. “I thought they needed a surgeon for credibility,” she added with a wry smile, adding that Dr. Lloyd said he found from his own experience that it did make a difference to staff. When Dr. Lloyd got Dr. Zuckerman’s message proclaiming there had been no clinical MRSA infection for 88 days, and no transmissions



Melissa Morris



Nancy Pokorny

for 44 days, he responded, “Congratulations to the SICU Marines. Semper Fi.”

When the initiative started, Ms. Pokorny says, the staff thought nurses were being targeted, to the exclusion of others who have contact with patients. She remembers one meeting with six or eight nurses last summer that became especially uncomfortable when a nurse from a different critical care unit stood in the doorway, declining an invitation to enter the meeting room, and provocatively demanded to know why Dr. Zuckerman was the only physician present. The nurse, whose clinical manager had sent him to the meeting, may have presumed that a colleague was being unfairly blamed for a MRSA transmission. A MRSA transmission was being discussed, Ms. Pokorny recalls, but the focus was on how it might have happened, not who was at fault. The nurse proposed nurses should receive bonuses for preventing infections, and Dr. Zuckerman mildly suggested he come up with a business model.

Ms. Pokorny was disturbed afterwards. She considered the bonus notion unethical, even though she suspected the exchange was at least an opening to get more people involved. At the same time, she sensed there remained distrust for the PD process and the sharing of thoughts, feelings, and actual practices in the group process. “*Nothing about me without we* leaves only me or us to talk about,” she elaborates. “That can be difficult to do initially in these groups, even though they work together.” She recalls Dr. Zuckerman stressing the importance of continued meetings and dialogue. Dr. Zuckerman now says the “us against them” attitude between doctors and nurses is gone, and his sentiment is confirmed by several other staff members.

Very gradually, through dialogue, meetings and action, the SICU achieved tremendous change, says Dr. Hares, talking to each other more and creating their own shared agenda. Dr. Zuckerman says no HA-MRSA infections for three months is “huge” for a surgical ICU, and he says

he’s been told more people there are “looking out for each other, and that assumes more people are doing the right things.” Ms. Pokorny thinks a turning point came when Dr. Zuckerman told the SICU staff, “We’re here to help, facilitate and guide, but this is your community. You guys have to decide whether you want to do this.” In discussion that

“There is no social change fairy. There is only change made by the hands of individuals.”

– Winona LaDuke, Native American Anishinaabeg, scholar, and human rights activist.

followed, SICU responded as a community, and staff members began facilitating their own meetings.

Dr. Cohn thinks two recent crises helped bring the staff together. On October 31, a Philadelphia police officer was shot in the head during a robbery at a nearby Dunkin’ Donuts and brought to Einstein for emergency surgery to remove a bullet from his brain. The officer never regained consciousness, and died some 36 hours later. “It was a very emotionally intense thing for the staff, and those grieving for the officer. The staff did a fantastic job, and they were lauded by the media and the officer’s family,” Dr. Cohn says, so despite their sadness, they were able to take pride in their work. Around the same time, Dr. Cohn says, a much-loved physician was a SICU patient for two or three weeks, with several potential portals where infection could have entered his body. “They took perfect care of him,” Dr. Cohn comments. “I think both of these events opened their eyes to the work they have always

been delivering but in less publicly recognized ways.”

The Numbers Are Heartfelt

Dr. Lloyd says PD is “bathed in data.” And as Dr. Zuckerman puts it, ongoing measurements reinforce change. Staff members at Einstein take the numbers very personally.

Elaine Flynn kept a grid over a 63 week period of transmission and infection rates in the brain injury unit. In December, when the unit had gone nine weeks without a new MRSA infection, the staff rejoiced. “Then there was a transmission, and everyone was really down,” she says. “We all felt bad. When that happens, we go over it to see what we could have done to prevent it.” Nurses on other units confirm good numbers feel good and a transmission brings disappointment and self-examination. “We’re here to help people, not infect them,” says Ms. Douglass. “When they see a downward trend in infections and transmissions, the staff can see the whole continuum of their work and what it means to people.”

Dr. Zuckerman says infection and transmission rates and blood stream infection rates as a whole have been on a downward trend for a year and a half, but he is cautious about attributing the decline to PD and SMASH. All the SMASH units are working on more uniform data on infections, transmissions, swab-ins, swab-outs and hand hygiene compliance.

More data will be collected when SMASH is network wide, and more data will be computerized. He notes the hospital has computer-assisted surveillance which can theoretically detect when a non-infected patient has converted to carry MRSA bacteria.

The SMASH units keep records of MRSA infections, colonizations, and transmissions. Hand hygiene adherence rates, often based on observance by an unidentified outsider, are also recorded. Ms. Niewood of SICU and other nurses think there is value in having staff members record the data by hand. It attaches the numbers to individuals. Dr. Lloyd notes ownership of the data is vital. “This is not a report card,” he says. “When staff create the solutions, they realize that performance data reflect changes they are making



More “We” than “Me”: A SICU Discovery and Action Dialogue

and the solutions they are implementing, and that they own the data. And the data answer what all healthcare workers are dying to know: *how are we doing?* ”

Dr. Zuckerman cautions that it is almost impossible to pinpoint where a specific transmission occurs. But he lauds the sense of individual responsibility that encourages people to strive to do what’s right. Ultimately, he says, that’s what makes for the best infection control.

“I think that before no one believed they were spreading infection,” Ms. Morris observes. “But when you do the hand hygiene, and the gowns and the gloves, and do the data, the results are really noticeable.”

Dr. Cohn notes literature and Einstein’s analysis shows patients who acquired MRSA are more expensive to treat than patients with similar conditions who do not have MRSA infections. But he says clinical outcomes, not cost, are the rationale for Einstein’s program.

Can SMASH Achievements Be Sustained?

When the question was raised at a regional meeting in November, several Einstein employees were indignant. Of course infection control vigilance will last, several insisted, because they will make it last. It is their process.

The plan for a network-wide program offer some clues on maintaining the effort. The decision had many roots. Doctors making rounds were noticing SMASH units were better than others at having personal protective gear available,

and staff more consistently followed hand hygiene and isolation precautions. Ms. Spross and Ms. Douglass and several other nurses were beginning to think SMASH should be universal. Dr. Hares and Dr. Carlos Urrea, another quality management physician, and Ms. Borton, the infection control nurse, were starting conversations with additional units.

Dr. Cohn says a joint decision was reached last spring. “We all looked at what we were doing, and uncovering, and the value of making all these previously invisible MRSA patients visible, and knowing our patient population, and we knew it was the right thing to do,” he says. “Then the state mandated MSRA testing for high risk patients. We have a lot of people from long term care, or chronic

renal failure, who would be viewed as high risk. It just made sense.”

Dr. Cohn was also making specific plans. The majority of Einstein’s patients are admitted through the Emergency Department. He has already had D&ADs with the department leadership, and plans for the department’s effort are well underway. Dr. Cohn has grappled with the question of how to use PD while mandating compliance, and says he has not come up with a perfect answer. He says, for instance, that it makes sense for wall cabinets that make supplies visible to be used house-wide, and it isn’t necessary to let each unit discover they need them.

“We’ve taken the spread of SMASH to all of our stakeholders to say this is what needs to happen: we will do surveillance cultures on all our admissions not known to be already colonized,” he explains. “We say we want to help you under-

Several Einstein employees have noticed that people at all levels of the organization address each other more respectfully, and that speech is more inclusive. Most respond politely to reminders about MRSA prevention practices, no matter the source.

stand how to dialogue with your staff, and know how it will impact on them, so you can give them a choice of how it is getting started in their micro system. But the decision to do it is not an option.”

Ms. Borton thinks most staff members will gladly join the effort because the news stories, public attention, and in-house efforts have raised awareness and made the importance very clear. “Besides,” she says, “It’s the ‘in’ thing to do.”

In addition, several Einstein staff members think changed relationships and a sense of ownership will support continuation of newly developed infection control practices and behavior. Ms. Borton says it has been nice to see all employees being valued as members of a team. She also notices that staff members now view infection control professionals as a resource, not as enforcers.

“When I used to walk on to a unit, people would make a great show of doing things the correct way, but I got the sense that as soon as I walked away, their actions would change,” she says. “If you asked them two years ago who is in charge of infection control, they would say it’s the infection control professionals. If you ask now, they’ll say they are, and they are comfortable making suggestions and asking how to fix things. They have truly taken ownership of this effort.”

Maureen Jordan offers a similar observation, and cites her own personal changes.



The work goes on: Another dialogue at Albert Einstein Medical Center.

“I was used to identifying a problem and getting the correction implemented, 1,2,3,” Ms. Jordan says. “*Here’s my time line, let’s get this done.*” But then, three months later, the same problem would be happening and people would be doing things the old way. Now it’s not just me preaching. It’s people feeling they have created something that they own.”

Even language has changed. Several Einstein employees have noticed that people at all levels of the organization address each other more respectfully, and that speech is more inclusive. Most respond politely to reminders about MRSA prevention practices, no matter the source. Ms. Borton notes nurses offer reminders graciously, and doctors tend to be pleasantly unflummoxed. Dr. Zuckerman summarizes the change with the observation, “there’s more ‘we’ than ‘me’.”

Swab-in and swab-out aren’t in standard dictionaries yet, and butterflies have a whole new meaning. “When we talk about butterflies we mean ideas that are floating over the middle of the table,” explained an Einstein nurse at a meeting of healthcare professionals. “When there is a butterfly, someone has to catch it, not strangle it, or squash it, but catch it and work on it.” Several staffers have favorite butterfly stories. Dr. Hares recalls one that brought about some specific new practices. Dr. Carlos Urrea was meeting with a new unit not yet formally in SMASH. He asked staff members to write down what they were doing to prevent infection.

“One nurse said she wipes her shoes with Sani-wipes when she leaves the hospital,” Dr. Hares recalls. “That was to protect her family, but Carlos asked what does it mean here? The nurse manager used that story and it led to wiping down many more pieces of equipment on the unit with disinfectant wipes. That was a butterfly.” ■



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