

# Hospital Infection Control & PREVENTION

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## The challenge of change: Infection preventionists see the pros and cons of new national paradigm

*'This is not one person's job; it is every person's job.'*

Success has raised the bar. No sooner did infection preventionists (IPs) begin demonstrating that it was actually possible to drive certain infection rates down to a vanishing point when federal payers essentially said, "Good, keep them at zero because we are not paying for them." However, such mandates also require expanded "ownership" of infection control. The IP silo has been toppled. Finally, in a new era, infection prevention must be everyone's job.

Beginning Oct. 1, 2008, the Centers for Medicare & Medicaid Services (CMS) has slashed reimbursement on three



**Janet Frain**

"preventable" occurrences: catheter-associated urinary tract infections; central line catheter-associated bloodstream infections; and mediastinitis. There have been warnings of unintended consequences, but most observers see the CMS action as just the beginning of a new "pay-for-performance" agenda for infection prevention. Indeed, it is hard to argue against such mandates when highly publicized studies have reduced some infection rates near absolute zero, dashing the dogma that most

are an inevitable consequence of care.<sup>1-5</sup> (See *HIC*, January 2007, pp. 1-9.)

In particular, a program developed at Johns Hopkins Hospital in Baltimore and implemented by 108 intensive care units in the Michigan Keystone project dramatically reduced catheter-related bloodstream infections (CR-BSIs). Drawing national praise, it was heralded as a prime example of the "getting to zero" movement as the median participating ICU

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went from an infection rate of 4% to near zero over an 18-month period.<sup>6</sup> Therein began the current era of great expectations, but such success is worthy of pause and commemoration in its own right. After all, in a

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— Gary Evans, Editor

field long dominated by benchmark ranges and acceptable percentiles, setting a goal of preventing all infections is akin to a moon shot in the early days of the space program.

"We are finally actually realizing that it is possible to get to zero," says APIC president **Janet Frain**, RN, CIC, CPHQ, CPHRM. "There are interventions and sustained performance that can actually get you to zero. I think that has made a big difference in how the infection preventionist [is perceived] in organizations."

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## *IPs cannot do it alone*

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For better or worse, gone are the days when many health care-associated infections (HAIs) were viewed as the unavoidable result of keeping very sick patients alive on invasive devices. Now even the sickest of patients expect to leave the hospital infection-free because they and their consumer advocates and political representatives are increasingly convinced that all infections are preventable. Among those that apparently did not get the memo are methicillin-resistant *Staphylococcus aureus*, *Clostridium difficile* and a host of other bugs and opportunistic maladies. They are not preventable unless someone steps into the breach

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# Infection preventionists poised to lead the way

*Current fires may forge future leaders*

If infection preventionists can work their way out of the current wilderness of change, there is some feeling they may be poised for a leadership role in a health care system becoming painfully aware of the power of prevention. That's due in no small part to the Centers for Medicare & Medicaid Services (CMS) decision to slash reimbursement on some infectious complications. **(See cover story.)**

Frustrated with the continuing annual toll of health care infections, critics have sometimes come close to labeling IPs as much a part of the problem as the solution. On the contrary, infection prevention is a science perfectly positioned to lead a broader quality revolution in health care, says **Peter Pronovost**, MD, PhD, medical director of the Center for Innovations in Quality Patient Care at Johns Hopkins University School of Medicine.

"To be honest with you, I think infection preventionists are years ahead of anyone else [in medicine] in looking at preventable harm," he tells *Hospital Infection Control & Prevention*.

It's been eight years since the Institute of Medicine's report "To Err is Human" — which in large part sparked the patient safety movement — but many medical disciplines still can not answer "are we safe enough?" he says. The infection control community can be a model "because to a large extent for some infections,

they can answer the question," he says. Look at the structural and human resources that have been put into infection prevention, the use of standardized definitions and surveillance programs throughout the country, Pronovost emphasizes.

"Those are not perfect, but they are pretty darn good," he says. "There is an infrastructure for hospitals to invest in to monitor these infections and implement best practices. For other types of preventable harm — like deep venous thrombosis or decubitus ulcers — we don't have any of that. There are no definitions that are agreed upon for measuring harm from them. The CDC doesn't have an infrastructure to monitor them. Infection control is a model that I hope is expanded to other types of preventable harm. What I can see in the future is infection control experts — who know epidemiology and monitor infections in the hospital — migrating to outcome measures [in general]. They will expand their expertise to monitor a variety of other types of preventable harm."

Such a role for IPs has certainly been discussed over the years, with health care observers noting that infection preventionists have the skills to do everything from reducing patient falls to stemming the increasing tide of outbreaks in ambulatory clinics. The tipping point may be the CMS action to reduce reimbursements, a blow to the bottom line that may make a preventionist of any ilk a hot commodity. In that regard, IPs will be sufficiently preoccupied in the short term trying to show they can prevent infections — let alone other adverse outcomes. But one can dream. ■

and prevents them. And IPs cannot do it alone.

"I think the biggest change is that for years only infection control owned the problem," says **Peter Pronovost**, MD, PhD, one of the pioneers of the zero-infection movement and the lead researcher at the aforementioned program at Johns Hopkins Hospital in Baltimore. **(See Q&A, p. 113.)** "What is different now is that the practicing clinicians in any [given] area have to own the problem and partner with the infection control people, but it means to some extent that the infection prevention community has to give up ownership."

It's a problem most IPs are more than willing to share, but all the while the field is trying to stay science-based and not let the expectations swing wildly in the other direction. Everybody from patients to health care administrators is suddenly aware of HAIs. It has certainly upped the stakes, but the positives are manifold.

"IPs in some cases have been screaming for years about their data and the prevention strategies," says Frain, director of integrated quality services at Sutter Medical Center in Sacramento. "It hasn't exactly fallen on deaf ears, but maybe it didn't get the attention it

should have. Now the pendulum has swung the entire other direction and everybody is looking to the IP for their data and will argue about a single infection. It really has changed the conversation — the dialogue. It is not about, 'We're at the 50th percentile so we're doing great.' It's about every patient and every infection now. That kind of debate is great."

Compliance still is an issue, of course, but the broadening view of infection prevention responsibilities could finally carve some inroads there as well. "One of the other positives of this whole infection prevention [change] is that it has decentralized the accountabilities," Frain says. "Administrators [and the Joint Commission] are holding folks accountable who need to be held accountable. I will tell you from years past and all the surveys I have been through that that has not always been the case. It's been, 'This is your [responsibility] why isn't it working?'"

For example, The Joint Commission continues to underscore the importance of hand hygiene compliance in its annual patient safety goals. Sure, we know that the cardinal principle of infection prevention is historically poorly practiced, but the accountability factor and the expectation for improvement keep increasing. And with that comes the deepening perception that organizations — not their IPs — bear the ultimate responsibility for patient safety. "That is one really positive aspect: the idea that this is not one person's job; it is every person's job," Frain says.

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### ***CMS makes it a matter of money***

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That concept will be critical if IPs are to survive the new reimbursement mandates by the CMS. Nobody wants to be the sole reason the facility is getting less money. That certainly shouldn't be the perception, but what we are about to see unfold is something of a work in progress. Just how are these infections going to be prevented? Will the answer vary by facility?

"The concept of not paying for complications makes a lot of sense, but it is only going to work — that is it is only going to be wise and just — if these [infections] are measurable and indeed largely preventable," says Pronovost, medical director of the Center for Innovations in Quality Patient Care at Johns Hopkins University School of Medicine. "We don't have

great ways to measure most of these things and we don't have the large-scale studies like we did in Michigan to show that most of these are indeed preventable. All of them are likely preventable to some extent. I think clinicians were somewhat misguided in [putting them in] the 'inevitable bucket' for years, but I also think the movement now to put them all in the 'preventable bucket' is equally misguided."

The efforts of IPs and their colleagues over the coming months will help clarify if and under what conditions the CMS infections are largely preventable. Frain finds no fault with the goal of eliminating infections, but wonders what impact the CMS mandate will have in such lean-budget times for hospitals. "This is a huge concern to hospitals — the fact that they risk getting a reduced reimbursement for those conditions," she tells *HIC*.

Typically, IPs will perform an annual risk assessment to focus their infection prevention programs on high-risk target areas. It's an approach in line with veteran epidemiologist Dr. Robert Haley's time-honored "surveillance by objective" philosophy: focus your limited resources on your biggest problems. "Many risk assessments drive your surveillance activities into the intensive care units," Frain explains. "That's why you see data on ventilator-associated pneumonias and central line bacteremias from the ICUs — because that's where we focus our energy."

To put it bluntly, UTI prevention has not been at the top of the list at many hospitals, given the general perception that the vast majority of them are easy to treat and relatively inexpensive. No more. The benign neglect of the UTI no longer flies with CMS, but will that spell less resources to prevent a more serious infection? It's an open question, and it doesn't take a psychic to predict what the CMS answer will be: prevent both.

"With the broad-brush approach now from CMS, hospitals are struggling with how they are going to do surveillance — much more active surveillance — throughout the hospital," Frain says. "Because catheter-associated UTIs happen on nursing units as well as ICUs. The same with bloodstream infections — they happen outside the ICU. Most hospitals target their highest-risk patient populations — which are in the ICUs — so we are struggling with how we are going to identify these [newly required] patients."

With reimbursement at stake, there will no

doubt be energy and time spent trying to determine if patients were admitted or transferred with, for example, a UTI. Determining that they have one later could open the question of whether it was hospital-acquired and thus make it, under the new rubric, nonreimbursable. Beyond such logistical issues, smaller hospitals with fewer resources may have to make some tough calls about priorities.

"That is the hardest part," Frain says. "If you are struggling with resources anyway, these types of initiatives that effect the bottom-line will sometimes force administration to have to make some difficult decisions and pull resources from something else in order to fund staffing or personnel for infection prevention purposes. They could pull from the bedside — especially the smaller facilities where you have people wearing multiple hats and there are no discretionary funds set aside for this."

There's a conundrum for you. Will all the effort to make infection prevention the be-all and end-all of patient safety draw resources away from other as-important activities? Regardless, CMS seems to now have everybody's attention. "No hospital wants less reimbursement from Medicare," Frain says. "Medicare really, for many facilities, is the bread and butter. You lose Medicare..."

Still, a true cultural transformation may be the end result of all this if infection prevention becomes the province of the many instead of the one. Veteran IPs with nursing backgrounds can only imagine the power of truly changing the mentality of the worker at the bedside.

"Had I known then what I know now, I would have nursed totally different," says **Patti Grant**, RN, BSN, MS, CIC, an IP at Medical City in Dallas. "I don't think any of us at the bedside really realized what a daily impact we can have."

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## Iconoclast or bridge builder? Pronovost Q&A

[Editor's note: **Peter J. Pronovost, MD, PhD** is a professor in the departments of anesthesiology and critical care, surgery, and health policy and management at the Johns Hopkins University School of Medicine. He also is the



**Peter J. Pronovost**

medical director of the Center for Innovations in Quality Patient Care at Johns Hopkins.

Though his background is not in health care epidemiology, he is a lead author of a groundbreaking study on catheter-related bloodstream infections (CR-BSI) that is frequently cited as proof that health care-associated infections (HAIs) are preventable rather than inevitable.<sup>1</sup> The CR-BSI prevention implemented at Johns Hopkins and in ICUs throughout Michigan emphasizes:

1. Hand hygiene  
 2. Full-barrier precautions during catheter insertion  
 3. Skin cleansing with chlorhexidine  
 4. Avoiding the femoral insertion site  
 5. Removal of unnecessary catheters.

A checklist used by clinicians to ensure aseptic technique during catheter insertion has become one of the more well known aspects of the program. **(For a copy of the checklist, see Hospital Infection Control & Prevention, February 2008, p. 15.)** Having driven CR-BSI rates to near zero where it has been implemented, discussions are currently underway to expand the program into 10 other states and several countries in Europe. We recently conducted an in-depth interview with Pronovost for this issue of HIC.]

**Q. You testified at an April 16, 2008 Congressional hearing on preventing HAIS that “one of the basic issues is that we have failed to view the delivery of health care as a science.” Can you elaborate on that?**

**A.** The advances in biomedical science have been nothing short of breathtaking over the last decade. We have sequenced the human genome, we cure most childhood cancers, and AIDS has now become a chronic disease. This is really awe-inspiring, and yet we have around 100,000 people dying from infections annually. I try to reconcile that and say, “How is this possible?” Though it is a complicated problem, the simple answer is that the biomedical community in health care has had a very myopic view of science. Science is studying a new gene, finding a new antibiotic that is effective. Looking at the use of that antibiotic is viewed as the “art of medicine.” We don’t invest — either financially or in human capital — in really studying the delivery of health care as a science. It is a science — and it is not just epidemiology. It is behavioral change. It is economics. Because we haven’t viewed it as a science, we haven’t made the kind of progress that we could have. We have looked for quick short-term answers — a kind of just-go-do-it attitude in quality and safety. I think that has been misguided.

**Q. You have said that infection preventionists can not “own” this problem. When you use a checklist tool — like the one that has been so successful in your program — is it essentially to expand “ownership” by improving compliance?**

**A.** It is all about changing behavior. The health care community has been challenged to change evidence into practice. Part of that challenge is we haven’t summarized evidence in a way that reflects how busy clinicians think or that is particularly useful to them. Practice guidelines are often 100- to 300-page documents with hundreds of conditional probabilities. They are a necessary synopsis of the evidence, but they can’t be the end product because they are not useful to the busy clinician or nurse at the bed side. What we need is a more functional format, and the checklist is elegant in its simplicity. The science of converting both tacit and empiric evidence from a guideline to a checklist is immature. We took the CDC guidelines [for CR-BSI prevention] and made them into five items. Where they the

right five things? Well, who the heck knows, to be quite honest? I won’t say we pulled them from the hip, but I’m a clinician and a clinical researcher so I looked at how strong the treatment effects were, how strong the evidence was, and [weighed the] barriers to putting that research into practice. We simply said this is likely to work; this isn’t likely to work. It looks like we got it right.

**Q. One aspect of the program is that team members can speak up and stop the procedure. More to the point — nurses can remind physicians if they missed an important step on the checklist. Has that been a critical element?**

**A.** It’s been absolutely key. The checklist simplifies the evidence but if you have a checklist that nobody uses it’s not going to do very much good. Look, I am a struggling practicing doc; I still do a lot of ICU time. I know that I forget things. I know that I am in a hurry and may forget to wash my hands or use full barrier precautions. We have to work as a team. But when I first said this you would have thought it was World War III. The nurses rolled their eyes and said, “My job isn’t to police the docs. If I do, I’m going to get my head bit off.” And the docs said, “Peter, you can’t have a nurse question me in public. It makes it look like I don’t know things.” To which I said, “Welcome to the human race. We all don’t know things.”

The striking thing was the debate wasn’t about the evidence. The debate was about the power and political struggle between physicians and nurses. We took that discussion to a higher order and made patients our North Star. I pulled the groups together and said, “Is it tenable that we harm patients here at Johns Hopkins or in Michigan?” People said “no.” And I said, “Then how could you as a nurse see someone not wash their hands and keep silent?” That’s not acceptable so you need to speak up. At the same time you can’t be hung out to dry [for doing this], so docs, “Let me be really clear. The nurse is going to stop you and unless it is an emergency you are going to go back and fix the defect. If you give them flak, nurses page me any time of day or night. There is not going to be discussion on this. You will be supported. Period.” The remarkable thing was I was never paged. We are all the same team working toward a common goal, and that is the best patient care possible. It’s a huge culture change. Once you have that it’s easy to

fix things. Now our ICU team is saying what's next? Let's work together. But if we didn't change that culture it would have never been possible.

**Q. Under testimony during the hearing you agreed a uniform national infection rate reporting system could be beneficial if it was accompanied by ongoing efforts to prevent infections. Will legislative mandates have to be the answer?**

A. I'm uncertain about this because the Michigan results happened without public reporting. When we were working with many hospitals in New Jersey they implemented public reporting during our intervention. It was striking that the discussion with hospital CEOs in many cases switched from doing good to looking good. When it was public, the focus went from using checklists to arguing about whether that numerator (infection) really belongs in there. I mean literally hospital CEOs were arguing with people that that wasn't really an infection. The challenge is that we are using surveillance definitions to monitor these rather than clinical definitions. And because they are a surveillance tool they have some bias. There is some subjectivity to them. These definitions were developed in a much lower-stakes environment when the focus was just on monitoring improvement. I don't know if they are going to be valid enough for the kind of high stakes environment where you are not paid for infections, where there is public reporting, and quite frankly, where you may subject yourself to lawsuits. I think that those things have more risk for harm than good. Because as long as a measure has any kind of noise or subjectivity to it — which it will, when you start increasing the stakes — its economics 101: The measures are going to be gamed. You can imagine in what direction.

**Q. You have certainly shaken up traditional perceptions of infection prevention. Do you see yourself as something of an iconoclast?**

A. No, I view myself more as a bridge builder or a consensus builder. I live in two communities. I live in an academic research community and I live in a quality improvement, real-world practice community. For too long those two communities have been running in opposite directions. The quality community has avoided science and said we don't need it — just go do things. The research community has had a very myopic view. I see myself laying down the

planks to connect those two worlds. Then we can go from basic science to clinical science and improved health care delivery is actually realized. Right now, there is a huge gap in that translation. We're not going from research to practice. Insurance, regulators, IPs, clinicians — we are all looking for the same thing. We all want improved health care at reduced costs. That's achievable if we learn to play in the sandbox together, so maybe me and you have to give up our politics and our hierarchies but the goal is something greater. When it works like in Michigan it is truly breathtaking because patient outcomes improve, costs drop and, more importantly, it puts joy back into the daily work life of many clinicians and administrators. People are energized about this. It's rewarding and they feel good about their work. As they should, because they are doing really sacred work." ■

## Another HCV outbreak rocks ambulatory care

*Seven infections, 1,200 patients alerted in NC*

In a finding that will increase national calls for oversight of ambulatory care settings, seven patients reportedly acquired hepatitis C infection while undergoing stress tests at a cardiology practice in Larinburgh, NC. Initial findings suggest patient-to-patient transmission due to unsafe injection practices, the state health department reports.

The report comes on the heels of an HCV outbreak among outpatients in Las Vegas, which led to widespread demand for more regulation and oversight of freestanding ambulatory care clinics. **(See related story, p. 116.)** North Carolina officials are trying to contact some 1,200 patients who were seen at the office of Matthew Block, MD, at the Scotland Cardiology clinic from June 25, 2007, through Aug. 26, 2008. The patients are being urged to be tested for HCV, hepatitis B, and HIV.

"We suspect that this was patient-to-patient transmission due to unsafe injection practices, but we have not pinpointed the specific practice like they were able to do in Nevada," says **Zack Moore**, MD, medical epidemiologist with the North Carolina Division of Public Health.

The date range corresponds with adoption of a

procedure in the clinic that involved administering the radioactive agent technetium, a “tagging agent” used to identify potential heart problems via nuclear imaging. Investigators are trying to determine if an infection control breach involving needles and/or medication vials occurred during the procedure, he says. “We suspect that may be the case but we did not see that in our inspection — in our observations,” he says. “They have denied reusing any of those [technetium] vials for multiple patients, but that is something we are certainly looking at as a possibility.”

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### ***Two distinct clusters***

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Regarding the seven infected patients, investigators have identified two clusters on two different dates with distinct genotypes. That suggests patient-to-patient transmission on the days in question rather than a provider-to-patient route, says Moore, declining to say if any staff member in the practice was HCV positive. “There were clusters of four patients one day and three on another,” he says. “Within each of those clusters we sequenced very closely-related viruses — indicating a common source of infection. We were never really suspicious of a single health care provider as a source because we knew that the patients fell into two different clusters [by] genotype.”

No source patients have been identified among the clusters. “We are still looking into that, but none of the patients were aware of having HCV and had not been diagnosed with HCV [previously],” he says. “HCV is often asymptomatic, so we suspect that there was a person with chronic infection among those two clusters.”

The health department was alerted about the outbreak by a clinic patient who tested positive for HCV. “He is a frequent blood donor and had clearly documented evidence of new infection,” Moore reports. “He had no traditional risk factors but several health care exposures, so we started looking into those.”

While the specific cause has yet to be identified, it is virtually certain from the epidemiological evidence that transmission involved a basic breakdown in standard infection prevention practices, he says. “In order for this to spread from person to person there has to be some sort of breach in infection control,” Moore says. “That’s clear.” ■

## **IP oversight required: If NV leads will nation follow?**

*‘Half-dozen’ clinic laws under discussion*

Proposed state laws in Nevada in the wake of a highly-publicized hepatitis C outbreak in Las Vegas include proposals to hire infection preventionists (IPs) as consultants to oversee practice in freestanding clinics.

“It’s possible that we could have that sort of requirement within the state of Nevada,” says **Brian Labus**, MPH, a lead investigator in the case for the Southern Nevada Health District in Las Vegas. “We have had those sorts of discussions with the [state] Legislative Committee on Healthcare. Our legislature meets every other year and they will be meeting again in the spring of 2009.”

With another recent HCV outbreak reported in a North Carolina cardiology practice, there is growing sentiment that something must be done to beef up infection prevention oversight in ambulatory care. **(See related story, p. 115.)** Whether it involves IPs or some other approach like increased health department inspections, the aftermath of the Vegas outbreak is expected to set the tone — and possibly the legislative model — for the rest of the nation.

“Nevada must be in the forefront,” says **William Schaffner**, MD, chairman of the department of preventive medicine at the Vanderbilt University School of Medicine in Nashville. “They are grappling not only with what happened in the past, but dealing with this going forward. They might be in a position to instruct us all.”

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### ***Details under discussion***

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A “half-dozen” bills are being drafted in Nevada for consideration at the legislative session, but the specifics are still being hammered out, Labus notes. “Something needs to be done after our large outbreak here,” he tells *Hospital Infection Control & Prevention*. “We’re hoping it could serve as a model for other communities. At this point, we will have to see how the legislature wants to move on it. There will be a lot of discussion. [The involvement of IPs] is something that was discussed and it is a strong

possibility for the upcoming session."

The outbreak resulted in the largest look-back investigation in medical history, with some 50,000 patients seen at two endoscopy clinics advised to be tested for HCV, HIV and hepatitis B. The practices under investigation in Nevada include alleged reuse of syringes and re-entry into single-dose vials of pain medication for different patients undergoing colonoscopies. "We have nine HCV cases that we can link to the clinic and we have 77 cases that are possibly linked," Labus says. "Of those nine, eight are at the main facility and one is at the other location."

The latest count of confirmed HCV cases adds one from the previous reports of eight patients, he clarifies. Investigators have completed genetic testing and are confident in reporting the nine cases, but previous reports of HIV transmission are being dismissed. A reported 11 HIV cases that have been identified are being ascribed to prior infections rather than clinic treatment, he says. "We have no HIV or hepatitis B transmissions related to the clinic," he says.

IPs and public health officials have warned for years that ambulatory settings and physician offices were flying under the radar when it comes to infection prevention. Bolstering the claim, a series of incidents has occurred with disturbing regularity. Last year, a physician anesthesiologist in Long Island was investigated by the New York State Department of Health for allegedly reusing syringes to draw up medicine from multidose vials. The department contacted approximately 8,500 patients who had been treated by the physician prior to Jan. 15, 2005, urging them to be tested for hepatitis and HIV. In recent years, large outbreaks of HBV and HCV infections have occurred among patients in private medical practices, pain clinics, endoscopy clinics, and a hematology/oncology practice.<sup>1</sup> Even as the number of medical procedures performed in physician offices and clinics continues to increase, many of these settings operate with strikingly little regulatory oversight and expert consultation.

"Speaking generally, the vast majority have not developed a consultative relationship with anyone in infection control to come in and give them periodic guidance and oversight," Schaffner says.

The legislative activity in Nevada could result in similar bills elsewhere, possibly opening up new consulting opportunities for IPs. "How to provide the oversight is something that needs

to be debated at the national and state level," he says. "They could require these institutions for licensure to demonstrate that they have an association with some sort of infection control activity. Something that would do immediately is create a new industry of infection prevention consultants."

Indeed, hospital systems have turned to IPs for oversight of rapidly expanding networks of affiliated clinics. "I have over 80 clinics now and a year from now I will have over 100," says **Judie Bringham**, RN, BSN, CIC an IP who oversees infection control in ambulatory settings at Duke University Medical Center in Durham, NC. "We are building by leaps and bounds."

With health care delivery rapidly moving beyond the hospital, it goes without saying that infection prevention activities must follow. "Ambulatory care has to change," she says. "If we can't do our duty to take care of our patients properly somebody is going to have to make us do it. Duke insists on Joint Commission accreditation. Look at what happened in Las Vegas — my gosh, 50,000 people [advised to be tested]. I would hope some kind of regulation would result. But it has happened before, and nothing changed."

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## A modest proposal? Joint Commission flu campaign

*Will hospitals finally step up efforts?*

Joint Commission Resources (JCR) has launched a "Flu Vaccination Challenge" this season targeting health care workers, but organizers only underscored the current woeful situation in setting the immunization goal. In a concession to a longstanding reality, the JCR announced that any facility that achieves a vaccination rate of 43% will "be recognized by JCR for their dedication to helping keep their employees healthy and helping to protect their patients."

According to the Centers for Disease Control and Prevention, the 2005-2006 flu season saw only 42% of health care workers receive a flu vaccination. It's not news to infection preventionists that health care workers have historically snubbed the seasonal flu shot for a variety of reasons, myths and misconceptions.

"We are certainly not asking organizations to stop if they are at 43%," says **Louise Kuhny**, RN, MPH, MBA, CIC, associate director for standards interpretation at the Joint Commission. "The national vaccination challenge goal is a recognition of the [current] national rate. We are hoping that everyone can get on the band wagon and be recognized if they can exceed that."

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### *A patient safety issue*

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The JCR noted that flu infections have been documented in health care settings and workers have been implicated in outbreaks. In other words, it's a patient safety issue as much as an employee health issue. "As a professional devoted to 'do no harm,' flu vaccination gives me an opportunity to help protect my patients," says **Barbara Soule**, RN, MPA, CIC, practice leader in infection prevention and control services at JCR.

The vaccination challenge began in September 2008 and will continue through the flu season until May 2009. Since Jan. 1, 2007, The Joint Commission has required accredited hospitals, critical access hospitals and long-term care organizations to offer the flu vaccination annually, on site, to staff and licensed independent practitioners. The Joint Commission is keeping the campaign separate from its survey process, which probably is a good thing since some of the facilities participating in the challenge reported baseline immunization rates as low as 8%. Other facilities reported existing immunization rates as high as 98%, JCR organizers say. About 1,000 facilities are expected to sign up for the challenge, with those already above the goal using the campaign to push rates higher.

"The Joint Commission surveyors will be unaware of which organizations have signed up for this and which have not," Kuhny says. "It will have no bearing on the survey process, but our requirements will continue. I am also a surveyor. If I was at an organization and they

showed me that they had an 8% vaccination rate last year, I would definitely have some questions about what they had done in terms of their educational program."

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### *Motivating staff*

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The Joint Commission standard requires organizations to offer the vaccine and act on reasons for refusal in subsequent years. "That [means] if you were at 60% last year we expect you to know what you need to do to improve upon that the next year," she says.

The campaign and certificate recognition – which is open to nonaccredited organizations – may become an annual event. "This is a motivating tool for organizations," says **Elizabeth Zhani**, Joint Commission spokesperson. "We are offering them a lot of resources on the web site. There are case studies of organizations that have done these types of programs. So it really is a way for them to motivate their staff to join the health care workers that are getting vaccinated."

*(Editor's note: For more on the campaign, go to: <http://www.jcrinc.com/26814/audioconf/32205/>.)* ■

## IPs should be wary of measles outbreaks

### *CDC reports surge of cases*

Increasing the possibility of hospital outbreaks via undiagnosed cases, measles infection has hit the United States at epidemic levels this year. More measles cases were reported in the first seven months of 2008 than during the same period in any year since 1996, according to the Centers for Disease Control and Prevention.

Between Jan. 1 and July 31, 2008, 131 cases were reported to CDC's National Center for Immunization and Respiratory Diseases (NCIRD). At least fifteen patients, including four children younger than 15 months of age, were hospitalized. No deaths have been reported. As previously reported in *Hospital Infection Control & Prevention*, an undiagnosed measles case can cause considerable chaos. Unless promptly isolated, once the imported case is discovered a

massive follow-up must ensue to determine the immune status of patients and workers who may have been exposed. Thus, the immediate message for infection preventionists is to think measles in suspect patients and ensure their employee health colleagues have worker records of measles immunity on file. (See *Hospital*

***Infection Control & Prevention, May 2008 cover story.***

Of the 131 patients, 112 were unvaccinated or had unknown vaccination status. Among the 112 unvaccinated U.S. residents with measles, 16 were younger than 12 months of age and too young for vaccination, and one had presumed

**CNE/CME questions**

13. Beginning Oct. 1, 2008, the Centers for Medicare & Medicaid Services cut reimbursements for which infectious complications?
  - A. Catheter-associated urinary tract infections
  - B. Central-line catheter-associated blood stream infections
  - C. Mediastinitis
  - D. All of the above
  
14. Which of the following have not been typically targeted in annual risk assessments to target prevention resources toward high-priority infections?
  - A. Ventilator-associated pneumonia
  - B. Blood stream infections in the intensive care unit
  - C. Urinary tract infections
  - D. All of the above
  
15. In reporting an outbreak of seven hepatitis C infections in patients undergoing stress tests, North Carolina investigators are particularly looking at a procedure that involves administering the radioactive agent technetium to identify potential heart problems.
  - A. True
  - B. False
  
16. Joint Commission Resources (JCR) has launched a 'Flu Vaccination Challenge' this season targeting health care workers, with the JCR calling for organizations to exceed the current national health worker flu immunization rate of:
  - A. 8%
  - B. 42%
  - C. 50%
  - D. 79%

**CNE/CME instructions**

Physicians and nurses participate in this CE/CME program by reading the issue, using the provided references for further research, and studying the questions. Participants should select what they believe to be the correct answers, then refer to answer key to test their knowledge. To clarify confusion surrounding any questions answered incorrectly, please consult the source material. After completing the semester's activity, you must complete the evaluation form that will be provided and return it in the reply envelope to receive a credit letter. ■

**CNE/CME answers**

**13. D; 14. C; 15. A; 16. B.**

**CNE/CME objectives**

After reading each issue of *Hospital Infection Control & Prevention*, the infection control professional will be able to do the following:

- identify the particular clinical, legal, or educational issue related to epidemiology;
- describe how the issue affects nurses, hospitals, or the health care industry in general;
- cite solutions to the problems associated with those issues, based on guidelines from the federal Centers for Disease Control and Prevention or other authorities, and/or based on independent recommendations from clinicians at individual institutions. ■

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evidence of measles immunity because the person was born before 1957. Of the 95 patients eligible for vaccination, 63 were unvaccinated because of their or their parents' philosophical or religious beliefs. The measles vaccine is safe and highly effective against the virus, the CDC emphasized.

Reports include cases from Illinois (32 cases), New York (27), Washington (19), Arizona (14), California (14), Wisconsin (7), Hawaii (5), Michigan (4), Arkansas (2), and Georgia, Louisiana, Missouri, New Mexico, Pennsylvania, Virginia and Washington, DC, with a single case.

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## Overcoming the first fear: There are no ‘dumb’ questions

*Get the answers you need to climb learning curve*

It can be daunting to enter the field of infection prevention, but the first fear the new infection preventionist (IP) must overcome is asking *the question*. You know, the one you may think is “dumb” but you won’t know for sure until after you ask it. Ask it anyway.

“Try not to think that your questions are silly, stupid or ridiculous, which is what you



**Donna Ballard**

always do,” says **Donna Ballard**, RN, an IP at Children’s Medical Center at the Legacy Campus in Plano, TX. “Ask the question and use all of your resources. Remember that this profession — the information and knowledge that we have — is ever changing.”

A relatively new IP with about three years on the job, Ballard has an extensive background in nursing that helped ease the transition into a field with its own arcane nomenclature and mission. At least the word “nosocomial” has been dropped in favor of health care-associated infections (HAIs). Still, since you long ago gave up those dreams of being a private investigator, did you ever think you’d be asked to conduct “surveillance?” However, looking for infections — and making sure they meet the definitions being used in your facility before grandly unveiling them — is one of the key roles of the IP.

“I definitely think surveillance is tricky,” Ballard says. “It is challenging to me now, and no matter how much we try and balance that there is always that human factor. Just as an example,

three different cardiologists can look at an EKG and see three different things. I make big decisions about the information that is presented to me, and that is both challenging and scary.”

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### *An intriguing profession*

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Nevertheless, such hardboiled detective work also gets in your blood, as Ballard found out when she participated years ago in a mock Ebola virus outbreak drill as the manager of a nursing unit. “I was involved as a manager in a unit during this citywide disaster drill,” she says. “It just really intrigued me — the whole idea of the bugs and the sleuthing that you have to do to find them.”

Another appealing factor is the IP’s mission to get the facts and calm the fears, playing a unifying role across all medical fields. “We are dealing with human beings, gossip and fear,” Ballard says. “It’s nice to try and strike a balance in my role. Our profession is based on science and we are proud of that.”

That’s more important than ever as the public and lawmakers become more aware of HAIs, which are becoming increasingly viewed as preventable regardless of the circumstances. “You’re doing the best you can to make the correct decisions based on the science that you are provided with,” Ballard says. “It is an ultra-challenge when you have [pressure from] people who may not have that knowledge.”

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### *Struggle for compliance*

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Then there’s the endless struggle to get health care workers to comply with hand hygiene and other prevention measures — a bane to IPs whether they are new or career veterans.

“That’s a challenge, and being new just adds to all of that,” she says. “People look at you and when they hear it’s only been [three years] on the job, they do judge you on that. But you have to remind people that just because you may have only been in infection control for a few years doesn’t mean you haven’t been focused on your [prior medical career], whether it’s, for example, a nurse or a med tech. We all have our different backgrounds that make us good for this job.” ■

## Patience, grasshopper: This too will pass

*'You are never going to know it all.'*

It was years ago on a Friday (of course) that a relatively new infection preventionist (IP) received a frantic phone call informing her that a phlebotomist that had been going from unit to unit the last couple of days had come down with chickenpox. As in varicella, as in exposures and incubation periods, as in staff and patient immune status, as in . . . panic.



**Patti Grant**

"That kind of stuff just never goes away," says **Patti Grant**, RN, BSN, MS, CIC, looking back over an infection prevention career that began in 1990. "The IP is always the go-to, answer person. But if you stay in the profession long enough, you will learn to love it."

Now an IP at Medical City in Dallas, Grant has worked at both small and large facilities. Asked if there was another early moment when she ran headlong into the learning curve, Grant doesn't hesitate. "I still do today. I'm serious. That is why I have such a passion for new and intermediate folks. You get to a point after you have been doing this long enough that you just accept that you are never going to know it all."

Many know Grant as an established leader in the field as both a long-time editorial board member of *Hospital Infection Control and Prevention* and an active member and officer of APIC. Yet she remembers quite well, restless for change after a decade in nursing,

deciding to take on an opening in infection prevention. "After demoting myself about four salary grades — thank you very much — I went home on a Friday the leader of a nursing unit and went back on Monday as an IP," she says. "And nothing had miraculously jumped into my head in those 48 hours. That's how I got started."

It was always just a "temporary thing," Grant recalls, a transitional phase between the next career move. "The long-story-short version is that I originally got into infection prevention and control because I didn't want the 24/7 responsibility of running a nursing unit," she says. "In retrospect, how funny is that?"

Indeed, as the beeper went off and the latest crisis unfolded, Grant became more impassioned about this strange new field and its daily challenge to protect staff and patients. A defining moment came early in her career when a colleague couldn't go to the annual APIC conference and Grant drew a last minute ticket to ride. "It put me on fire," she says. "I realized what an awesome organization APIC is and that I had all these resources available."

And lo these many years later, what is Grant's chief counsel to the IP newbie? Patience. "There is no fast way to learn this," she says. "It takes one to three years to grow an IP. Be patient with yourself. Understand that even someone who has done it 10 years has days like you are having."

Here are some of Grant's tips to survive and thrive in infection prevention:

- **Find a mentor.** If you are flying solo reach out to the local APIC chapter and begin networking with colleagues.
- **Get thee to an IP 101 class.** "You want to go somewhere where in two to four days you have everything dumped on you that you minimally need to do your job."
- **Master the routine things:** "If you can identify the routine and boring that must be done on a daily basis, then you will always have some surge capacity for problems. Always have projects that you can go to that you know — if you can get them done — will make your hospital safer from infections."
- **Work across disciplines:** Network with the quality and risk management folks and in particular, get to know your laboratory staff. "Almost everything we do starts with a positive lab [culture]." ■