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Pointless visit: CMS inspected Las Vegas HCV outbreak clinic but missed unsafe needle practices

Agency now dramatically stepping up efforts in ambulatory care

Conducting an inspection in a Las Vegas endoscopy clinic shortly before it became the epicenter of the largest "look-back" patient testing effort in medical history, inspectors for the Centers for Medicare & Medicaid Services saw nothing amiss with needle practices that ultimately led to a nationally publicized hepatitis C outbreak, *Hospital Infection Control & Prevention* has learned.

Joseph Perz, PhD

"The clinic that was at the center of the outbreak in Nevada in fact had undergone a CMS certification survey in the summer before the outbreak came to light [in 2007], and around the same time — we realize now — that transmission was occurring," says **Joseph Perz**, PhD, acting team leader for prevention in the Centers for Disease Control and Prevention's division of health care quality promotion.

Special Report: CMS ups the ante after Vegas oversight

Scalded by charges that they missed an opportunity to detect an ongoing outbreak of hepatitis C virus last year in Las Vegas, the Centers for Medicare & Medicaid Services is dramatically scaling up its oversight of ambulatory care. A survey tool developed by the Centers for Disease Control and Prevention in the wake of the incident includes questions about needles, syringes and vials. It appears to be only a matter of time before the CMS "pay-for-performance" pressures applied to hospitals extend to outpatient settings. See Special Report, **pages 133-139**.

In This Issue

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"One of the things we realized in the context of the outbreak was that injection practices and other basic infection control was not something that was being examined as part of the standard survey process."

However, two senior CMS officials in Washington DC, who spoke to *HIC* on condition of anonymity, said the survey in June 7, 2007, was conducted in response to a complaint that was not related to infection control, and thus beyond the scope of the visit to the now closed Endoscopy Center of Southern Nevada. *HIC* subsequently learned there were actually three complaints, addressed in one inspection, but again, none was directly related to infection control. The complaints — which were not substantiated by the inspectors — included post-op bleeding, missed diagnosis, and prolonged waiting, according to CMS records.

In any case — despite a series of outbreaks in ambulatory care in recent years linked to improper injection practices — there still may be a tendency to take such basic infection control measures as a given. "I think it's true — not just for CMS, but other accrediting bodies and many of us across public health — that we tended to take safe injections a bit for granted because it is so basic," Perz says. "Sometimes, you wonder at what point does common sense end and infection control begin?" Still, the CDC and CMS decided to collaborate in an education and pilot survey program in part because the CDC "realized that [CMS surveyors] didn't feel comfortable assessing things like injection safety," he says.

The Las Vegas outbreak resulted in public health officials urging some 50,000 patients (roughly the population of Ames City, IA) 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. **(See *HIC* April 2008, cover story.)** As this issue went to press, nine HCV infections had been linked to the outbreak and another 77 are being investigated as possible cases.

"Improving the safety in outpatient settings is even more challenging than what we are facing in acute care hospitals," says **Denise Cardo**, MD, director of the CDC's division of health care

Look for HIC salary survey, career report in January '09

Amid troubling economic times, don't miss our annual salary and career report for infection preventionists in the January 2009 issue of *Hospital Infection Control & Prevention.*

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CMS tool for ambulatory care includes syringes, vials

Developed by CDC for use in CMS inspections

A survey tool to assess infection control in ambulatory care settings was created by the Centers for Disease Control and Prevention for use by inspectors for the Centers for Medicare & Medicaid Services. The survey includes the following key items for inspection, which are to be checked with either a "yes" or "no" response:

I.Hand Hygiene

A. Soap and water are available in patient care areas

B. Alcohol-based hand rub is available in patient care areas

C. Staff perform hand hygiene:

a. Before and after an invasive procedure (e.g., insertion of IV catheter, intubation/extubation, surgical procedure) even if gloves are worn

b. After contact with blood, body fluids, or nonintact skin (even if gloves are worn)

c. After contact with used, contaminated medical equipment or visibly contaminated environmental surfaces (even if gloves are worn)

Note: To ensure consistency between site visits, hand hygiene should be observed during the "follow-through" of patients from arrival to discharge, with particular attention paid to invasive procedures.

D. Regarding gloves, staff:

a. Wear gloves for procedures that might involve contact with blood or body fluids

b. Wear gloves when handling potentially contaminated patient equipment

c. Remove soiled gloves before moving to next task

E. If a surgical scrub is required, the surgical team performs surgical hand scrub

II. Injection Practices (medications, saline, other infusates)

A. Needles and syringes are used for only one patient

B. Injections are prepared in a clean area that is free from contamination with blood, body fluids, other visible contamination, or used contaminated equipment

C. The patient's skin is prepped with an antiseptic before IV placement

D. List all injectable medication/infusates that are in a vial/container used for more than one patient. This should include the medication name, size of vial (cc/mL) and the typical dose per patient (cc/mL)

E. Single-dose medications/infusates are used for only one patient and not collected or combined (bags of normal saline are ALWAYS single use)

F. Multidose medications/infusates are used for only one patient (note: a "No" answer here is not necessarily a breach in infection control. Circle N/A if no multidose medications/infusates are used.)

G. Medication vials used for more than one patient are always entered with a new needle and new syringe

H. The rubber septum on a medication/infusate vial is disinfected with alcohol prior to piercing after initial entry

I. Medications/infusates that are packaged as prefilled syringes are used for only one patient

J. Medications/infusates are drawn up at start of each procedure

K. Fluid infusion and administration sets (e.g., intravenous bags, tubing, and connectors) are:

a. Used for one patient only

b. Disposed of after use

L. Needles and syringes are discarded intact in an appropriate sharps container after use. ■

quality promotion. "What we have seen in the outbreak investigations are things that should never be happening — like the reuse of syringes and using single-dose vials as multidose. We are working with CMS to improve the way these facilities are being inspected. We have been in several states with CMS surveyors to do the surveys and train them."

Indeed, — whether reacting to the survey incident or the Nevada outbreak in general — CMS is making several moves to beef up oversight of outpatient settings. While declining to comment on questions related to the specific incident, a CMS spokeswoman provided information abut the pilot survey program and the agency's expanding interest in ambulatory

care. **(See CMS survey highlights, p. 135.)**

"CMS worked with state and local authorities in Nevada to ensure that all 50 ambulatory surgical centers [ASC] in NV (which include colonoscopy clinics) had an on-site survey," **Ellen B. Griffith**, CMS spokeswoman, said in an e-mail. "CMS worked closely with the CDC to refine and apply infection control inspection tools in such surveys. CMS and the state survey agency cited deficiencies in a large proportion of the cases due to ASC lapses in infection control. In 2008, CMS also implemented a pilot program of expanded surveys for ASCs in three states, again working closely with the CDC to test improved protocols for reviewing ASC infection control practices. Results of that pilot will be available in early 2009."

The three states in the pilot study are Maryland, North Carolina, and Oklahoma. According to Griffith, the survey results should be useful in informing CMS action to improve patient safety, particularly in the following three areas:

1. Surveyor guidance: Identify areas where CMS guidance for surveyors ought to be expanded, clarified, or improved.

2. Targeting surveys: Expand methods by which CMS can best identify subsets of ASCs that most need survey attention.

3. Infection control:

a. *Data:* Assess the extent of infection control issues in ASCs.

b. *Tool:* Test the CDC infection control review tool and assess the extent to which key elements of the CDC tool might be advantageously used in the survey process;

c. *Fiscal Impact*: Assess the fiscal impact of using such a tool in an expanded survey.

In addition to the three-state pilot, the CMS has directed all states to do a targeted survey starting in October 2009 to obtain a 10% sample of "those ASCs that the states thought might most need survey & certification attention," Griffith says. Moreover, CMS recently announced that a final rule will appear in the Nov. 18, 2008, *Federal Register* detailing changes to the agency's outpatient ambulatory surgical center payment system.

"There is a discussion in the final rule of our plans to expand the hospital-acquired conditions concept to other health care settings (as health care-acquired conditions)." Griffith said. "Even before we develop payment policies in ambulatory settings that would deny payment for health care-acquired conditions, we are addressing the Nevada HCV outbreak through our survey and certification process. The hospital- or health care-acquired conditions policies affect Medicare's payment for services to individual patients. The survey and certification process looks at whether the health care facility is complying with licensing or accreditation standards. In most cases, CMS will work with a facility to develop an appropriate plan to correct a violation and bring the facility into compliance with standards; but if the facility is unwilling or unable to come into compliance, Medicare may revoke the facility's billing privileges."

Having certainly gotten the attention of hospitals by slashing reimbursement for certain infections, CMS could be the critical driver that has been lacking in improving infection control in ambulatory care. Indeed, with its control of the purse strings, CMS could exact considerable leverage on both freestanding and hospital-affiliated clinics of all stripes. The final rule includes several infection control requirements for ambulatory settings, but the issue of nonpayment still is under discussion. **(See final rule highlights, p. 138.)**

"Although CMS is committed to strengthening the tie between payment and quality, we are still in the very early stages of deciding whether to address adverse health care events through our payment or coverage policies, and how to adapt the concept of the hospital-acquired conditions provisions, which are specific to the hospital Inpatient Prospective Payment System, to other types of services that are paid using other methodologies," Griffith said.

Part of the problem is obvious to any infection preventionist — an infection acquired in a clinic could easily go unreported in the absence of an outbreak. However, direct observation and enforcement of process measures via surveys should improve care quality. "The survey process can help but it's not an absolute guarantee of safety practice because there is variation among providers even within a given clinic or other facilities," Perz says. Nevertheless, another good sign is that the CDC and CMS now appear to be on the same page about infection control in ambulatory care.

"We are finding that by working more closely with CMS we can help ensure that infection control recommendations developed through CDC are included in things like 'conditions for coverage' for health care providers that take funding from CMS," Perz says. "Frankly, it's one way to get providers to pay attention — to have the payer point explicitly to those types of requirements. A good example of that is our work with CMS to

include specific infection control recommendations for dialysis settings and the conditions for coverage for end-stage renal disease."

Indeed, the CDC recently announced that its 2001 infection control recommendations for dialysis have been codified into CMS regulations. "It is quite specific, and we call special attention to handling of potential medications and, in particular, the use of single-dose vials in dialysis settings," Perz says. "There was a parallel in Nevada where medications that are actually not approved as multidose vials were being used as if they were multidose vials. It's a problem we are becoming more and more aware of."

CDC admits own mistake

However, in doing so, the CDC had to somewhat awkwardly concede that it may have been part of the problem in dialysis, as the agency clarified that a 2002 CDC communication to CMS "suggested that reentry into single-use parenteral medication vials (i.e., to administer medication to more than one patient), when performed on a limited basis and under strict conditions in hemodialysis settings, likely would result in low risk for bacterial infection. However, the 2002 communication did not address risks for bloodborne viral infections (e.g., HCV and hepatitis B virus infection). This report is intended to clarify and restate CDC's recommendation on parenteral medication to include bloodborne viral infections. The recommendations in this report supersede the 2002 CDC communication to CMS."[1]

In other words, the practice of reusing single-dose vials for multiple draws is officially banned, particularly in the considerable wake of the Vegas outbreak. "There was a [CDC] communication that, in the end, was picked up widely in the dialysis community as offering a recipe for how to use these single-dose vials for multiple draws, so we wanted to be clear that that was off the table," Perz says. "We had seen it misapplied, misinterpreted, and we had seen continued transmission where drugs like erythropoietin were suspected in having a role in infections like HCV. In the time since that original communication, there was accumulating evidence that it was not a safe practice."

In a related development, the CDC is working with industry to see if there are opportunities to improve medical devices and medication packaging to reduce reuse and cross-contamination of injection equipment and vials, he added. "That includes injection equipment and other devices to access, transfer, or administer parenteral medications — as well as labeling improvements and economical 'right-sized' containers," Perz notes.

Despite such progress on varied fronts, broad improvement of infection prevention in ambulatory care remains a work in progress. But the Nevada outbreak and the growing involvement of CMS suggest the inertia is finally giving way to movement. Nevada also is expected to consider a state law next year that will include periodic inspections by infection prevention consultants. Such model legislation and other requirements could create a potential business boom in IP consulting if regulation is widely applied in outpatient settings. **(See related story, p. 138.)**

"We are acknowledging the shift in care and trying to make sure that basic safe care practices are understood by providers wherever they are practicing," Perz says. "CDC continues to be [called in] on outbreaks and incidents that involve unsafe injections. Nevada was certainly the most notable example — maybe of all time. But unfortunately, it is just one in a steady stream of such incidents. We are contacted on a regular basis where unsafe handling of injectable medications is either suspected or shown to be the cause of infections. And not just hepatitis by the way, but bacterial infections as well."

In addition to CMS involvement, accreditation, medical licensing and staff training issues all have to be addressed to improve the situation, Cardo says. "The good news is that because of Nevada everyone is paying attention," she says. "We are receiving calls and the involvement of consumers is extremely important. They are pushing for action not just at the local level but also at the federal level. That can help us move forward in a faster way."

Reference

1. Centers for Disease Control and Prevention. Infection control requirements for dialysis facilities and clarification regarding guidance on parenteral medication vials. *MMWR* 2008; 57(32):875-876. ■

APIC forms consulting arm to meet new regs

Hospitals now, ambulatory care on horizon

The Association for Professionals in Infection Control and Epidemiology (APIC) has announced the launch of APIC Consulting Services Inc. (ACSI), a full-service consulting company specializing in infection prevention and control. A wholly owned, for-profit subsidiary of APIC, ACSI will work with acute, ambulatory, and long-term care facilities; hospital systems; insurance companies; and government organizations to advance infection prevention.

ACSI's three primary lines of business include development of programs to reduce multidrug-resistant organisms, outbreak recovery, and preparation for state and federal regulatory compliance and accreditation. ACSI consultants have experience in all aspects of infection prevention and control, from emerging pathogens to surveillance technology assessment to construction issues, APIC announced.

Kathy Warye

While the growth market for such a business would appear to be ambulatory care, the initiative actually began as a response to inquiries from hospitals facing increasing regulatory and accreditation requirements. "Now that they are facing nonreimbursement for many infections, they want to make sure that their infection prevention program is as robust as it can be to ensure that they are not losing more money then necessary on preventable conditions," says **Kathy Warye**, APIC CEO.

The consulting business model raised liability questions so APIC launched its first for-profit venture using a national network of infection preventionists. That said, there is no intent to replace hospital-based IPs, but rather complement their efforts, Warye emphasized.

"We could help them meet requirements for CMS, Joint Commission or state requirements for public reporting," she tells *Hospital Infection Control & Prevention*. "There are so many variations on that theme now — with additional state requirements — that is one of the things that is really overwhelming infection preventionists. We could be of assistance to them in areas like that, set up the program, and then enable the IP to manage it once we departed."

A logical extension of the consulting service would be into ambulatory care, an area that is facing increasing scrutiny and regulatory activity in the wake of the hepatitis C outbreak in Las Vegas.

"I certainly think that ambulatory care is an area tremendously in need of greater infection prevention and control expertise," Warye says. "The situation in ambulatory care was one of the factors that we considered when we established this business. I think, over time, there are going to be additional requirements. Whether they come from CMS or Joint Commission — that handwriting is on the wall."

(Editor's note: For more information, see www.apicconsulting.com.) ■

CMS sharpens IC regs in ambulatory centers

Call for designating a trained professional

The Centers for Medicare & Medicaid Services (CMS) recently announced that a final rule will appear in the Nov. 18, 2008, *Federal Register* detailing changes to the agency's outpatient ambulatory surgical center (ASC) payment system. The infection control requirements — including comments and responses by the CMS — are summarized as follows:

Condition for Coverage: Infection Control. (§416.51)

The proposed infection control CfC was divided into two standards. Under standard §416.51(a), "Sanitary environment," we would require the ASC to provide a functional and sanitary environment for the provision of surgical services by adhering to professionally acceptable standards of practice. We proposed to allow the ASCs to have flexibility in designing their own infection control program that would meet CMS regulations and also meet the needs of their particular facility.

The second proposed standard at §416.51(b), "Infection control," would require the ASC to maintain an ongoing program designed to prevent, control, and investigate infections and

communicable diseases. The program would be required to designate a qualified professional who has training in infection control, integrate the infection control program into the ASC's QAPI program and be responsible for providing a plan of action for preventing, identifying, and managing infections and communicable diseases and for immediately implementing corrective and preventive measures that result in improvement. Because the prevention and control of infection is so critically important to overall patient and staff health and safety, we have proposed to elevate the current standard-level requirement to a condition-level requirement and expand the requirements to include the designation of a qualified professional to direct the infection control program.

Comment: A few commenters asked for clarification regarding the requirement that the designated professional have training in infection control. One commenter suggested the inclusion of examples of nationally recognized organizations that ASCs may seek out for guidance and continuing education. Other commenters suggested the designated infection control individual be identified as an infection control professional rather than infection control officer.

Response: We are not mandating one specific set of guidelines or infection and control standards that an ASC must employ but rather, it must consider, select and implement from nationally recognized guidelines [i.e., those by the Centers for Disease Control and Prevention]. Hospitals and hospital organizations as well as national health care organizations also would have information regarding infection control. Training in infection control is available through a variety of services such as health care organizations, professional associations, and government entities. At this time, we will continue to allow the ASCs the flexibility in setting up the infection control program in a manner which best meets the organization's needs. Moreover, we expect that the ASC will be able to provide verification of staff training and current competency related to infection control standards of practice. We do not find that it is necessary to associate a title with the qualified professional who directs the program.

Comment: Several commenters requested flexibility in designating an infection control professional to serve multiple facilities that are under common ownership.

Response: There may be rationale for those ASC facilities that are under common ownership to utilize a single infection control professional to direct more than one facility program concurrently. However, we believe that this type of arrangement would potentially hinge on the proximity of the ASCs to each other, the frequency of on-site visits by the designated individual, and the ability of each facility to respond to an infection control issue in a timely manner. We will address these and other issues in more detail in subregulatory guidance.

Comment: One commenter questioned the rationale for elevating infection control to the condition level. A commenter noted that requiring the program to be under the direction of a designated professional who has training in infection control, should not be necessary in the smaller ASC setting.

Response: The infection control requirement located at §416.44(a)(3) currently requires both large and small ASC organizations to establish a program for identifying and preventing infections, maintaining a sanitary environment, and reporting the results to appropriate authorities. Considering the huge growth in the ASC industry since we issued the current ASC regulations in 1982, we believe that infection control in a surgical facility should be a high priority. All ASCs, regardless of size, must therefore have an infection control program where the person in charge is knowledgeable and is aware of current advances in the field. ■

APIC finds rampant *C. diff*, new strain suspected

Estimated daily death toll: 301

An unlucky 13 out of every 1,000 inpatients in recently surveyed hospitals were either infected or colonized with *Clostridium difficile*, a rate that is 6.5 to 20 times higher than previous incidence estimates.

"In fact, we are being very conservative with that [estimate]," said lead investigator **William Jarvis**, MD, an infection prevention consultant who conducted the study for the Association for Professionals in Infection Control and Epidemiology (APIC).

Moreover, 94.4% of the patients were symptomatically infected rather than colonized, and many had the type of severe disease that has

been associated with the emergence of a hypervirulent new epidemic strain called North American Pulse-field Type 1 (NAP1). However, it is difficult to say whether the NAP1 strain is driving the trend, because the vast majority of hospitals surveyed are not looking for particular strains. In addition, only 1.9% of *C. diff*-infected patients were identified by culture and only 4.2% of health care facilities routinely perform cultures for *C. diff*, the survey found.

William Jarvis, MD

The Centers for Disease Control and Prevention has previously identified the NAP1 strain — which often is associated with outbreaks due to its increased virulence — in approximately 26 states, Jarvis said at a recent press conference in Orlando announcing the results.

"It really requires a specific clinician to be concerned [enough] to obtain a specimen and send it to the very limited labs that have the capability to identify the strain," he told *Hospital Infection Control & Prevention*. "One of the questions is: is the impact of *C. diff*-associated disease [increasing]? We cannot address that directly because we are only doing a one-point-in-time [prevalence survey], but we asked if patients had different severities of illness. Twenty-six percent required ICU admission, 18.2% had shock, and 16.5% required vasopressors. So, we certainly have data to suggest that *C. diff* infection is severe. The question is, is that due to NAP1 or not? And we can't answer that because no one in our study was looking for it."

The survey of infection preventionists collected data from 12.5% of all medical facilities in the United States that care for virtually every type of patient, including those at acute care, cancer, cardiac, children's, long-term care and rehabilitation hospitals. Responses were received from facilities in 47 states.

IPs were asked to determine on one day during the period of May-August 2008, all *C. diff* inpatients in their facilities. A total of 1,443 patients were identified with *C. diff* from among the 648 participating hospitals. Overall, 41% of respondents said their rates of *C. diff* had increased, while an identical percentage said they remained stable.

"We believe these study results should be a wake-up call for health care providers everywhere," **Kathy Warye**, CEO of APIC said at the press conference. "Those of us [here] today are concerned that *C. diff* is not getting the attention it deserves. A year after [a similar APIC MRSA survey,] results were released, we polled our members and discovered that MRSA interventions had gone up 76%. So studies like this can be very powerful."

C. diff gastrointestinal infections typically range in severity from asymptomatic colonization to severe diarrhea, pseudomembranous colitis, toxic megacolon, intestinal perforation, and death. According to the survey, on any one day, the number of patients who die with *C. diff* infections ranges from 165 to 438 — with an average of 301.The survey estimated that at least 7,178 inpatients on any given day in American health care institutions have *C. diff,* resulting in an associated cost of $17.6 million to $51.5 million. **(See study results, p. 141.**)

In addition to the emergence of the NAP1 strain, other factors contributing to the rise of *C. diff* include an aging U.S. population, the widespread use of broad-spectrum antimicrobials, and inadequate infection control measures. According to APIC, the latter include delayed diagnosis, delayed isolation precautions, poor hand hygiene and inadequate environmental cleaning. Indeed, the pathogen raises difficult questions for antibiotic use, infection control and environmental eradication, which often requires some kind of bleach solution.

Transmission occurs primarily in health care facilities, where exposure to antimicrobial drugs sets up the gut for onset of disease, triggering diarrhea that leads to a contaminated patient environment by the spore-forming anaerobic bacillus. Prior administration of fluoroquinolones in particular seems to trigger the appearance of cases, but the survey found that some sort of antibiotic stewardship program was in place in only about half the responding facilities. Even where such oversight is reported, it is unclear what precisely is being done to prevent the misuse of drugs. " Antibiotic stewardship sounds real good, but what does that mean and what does it actually accomplish," Jarvis said. "We are lacking studies that show what works best for controlling antibiotic use; and the more I go around the country, the more I realized it really requires an infectious diseases specialist dedicated to that issue."

Number crunching: APIC outlines elephant in room

A breakdown of 1,062 C. diff *patients*

The Association for Professionals in Infection Control and Epidemiology Inc. national prevalence study of *Clostridium difficile* infection (CDI) in U.S. health care facilities resulted in the following key findings:

1. The total number of patients identified with *C. difficile* colonization/infection was 1,443. Of those, the following detailed data were provided for 1,062 (73.5%) of the patients:
- 55.9% were female, 44.1 % were male
- 69.2% were >60 years of age
- 67.6% had comorbid conditions (renal failure, diabetes, or heart failure)
- 57.9% had an initial episode of mild or moderate disease
- 10.94% had severe to complicated disease
- 89.8% of patients were detected by enzyme-linked immunoassay for A and B toxins (rather than culture)
- 1.9% were detected by culture
- 54.4% were detected <48 hours of admission
- 45.5% were detected >48 hours of admission
- 72.5% were considered health care-associated infection
- 26.6% required ICU admission, 18.2% had shock and 16.5% required vasopressors.
- 35.1% had long-term facility residence within 30 days of onset
- 79.4% had antimicrobial exposures before onset. (17.14% as surgical prophylaxis)
- 47.4% had hospitalization within 90 days of onset
- 46.5% had resolution of diarrhea within six days (CDC definition of cure)

2. 84.7% of all *C. difficile*-infected patients were on the medical services, meaning they were being treated for general medical conditions like diabetes and pulmonary and cardiac problems.
3. 79.4% of *C. difficile*-infected patients received antimicrobials before their CDI onset. A wide variety of antimicrobials were associated with CDI. Furthermore, a wide variety of treatment regimens were used to treat the CDI.
4. Detailed data on the facilities that participated in the survey include:
- There was an average 1.5 infection preventionists at participating facilities
- Of participating health care facilities, 65.3% were urban and 34.7% rural
- Facilities had a median of 224 licensed beds and ranged in size from six to 1,097 licensed beds
- Facilities had a total of 110,550 inpatients during survey period, averaging 171 patients per facility
- 26.5% of facilities were medical school-affiliated and 24.4% were tertiary care facilities
- Most used a hypochlorite solution for environmental disinfection
- 46.7% reported having an antimicrobial stewardship program (62% of medical school affiliated and 41% of nonmedical school-affiliated facilities) ■

Even the basic issue of hand hygiene is complicated when it comes to *C. diff*, which is difficult to remove by the alcohol hand rubs now ubiquitous in hospitals. Thus, the recommendation in caring for *C. diff* patients is to resort to good old soap and water, but the mixed message is certainly not helpful. "We know that alcohol will not kill the spores," Jarvis said. "Not that soap and water kills the spores, but rather that it rinses it off of your hands." Indeed, some have questioned whether the rise of *C. diff* is a direct result of the CDC's switch to a heavy emphasis on alcohol-based hand hygiene rubs earlier in this decade. Jarvis expressed doubt that the cause and effect is that direct, but conceded it is "a theoretical issue. Certainly, when we know we have a *C. diff* patient or when we are doing environmental cleaning of such a patient's room, then it behooves us to use [soap and water] for hand washing and bleach [for room cleaning]," he said.

With many of the reported cases occurring shortly after admission, hospitals need to look for patients with severe diarrhea and be prepared to place *C. diff* patients under contact isolation. However, most of the infections were not considered truly community-acquired, with some linked to previous health care treatment. Though there have been increasing reports of *C. diff* in the community, the problem is still primarily transmission within hospitals. "Fifty-four percent were diagnosed at less than 48 hours after admission, which would make you think that those are community-acquired infections," Jarvis reported. "However, when we gave them the CDC criteria for differentiation of community vs. health care-associated, 73% of the patients identified had health care-associated infections."

To reduce the risk of transmission, APIC has published a "Guide to the Elimination of *Clostridium difficile* in Healthcare Settings."

APIC recommendations include:

- a risk assessment to identify high-risk areas for *C. diff* within the institution, a surveillance program to outline activities, and procedures to provide early identification of *C. diff* cases;
- adherence to CDC hand hygiene guidelines;
- use of contact precautions (e.g., gloves, gowns, and separating *C. diff* patients from other patients);
- environmental and equipment cleaning and decontamination, especially items that are close to patients such as bedrails and bedside equipment;
- antimicrobial stewardship programs with focus on restriction of antibiotics associated with *C. diff* and unnecessary antimicrobial use.

(Editor's note: For more information about the APIC study and guidelines, go to www.apic.org.) ■

IPs, patient advocates: Can marriage be saved?

Despite antagonism, a powerful partnership

The infection prevention community has lost some measure of credibility in the public and political eye and must embrace the patient advocacy movement to regain a leadership role, said **Steve Weber**, MD, a health care epidemiologist at the University of Chicago.

Speaking recently in Chicago at a Joint Commission infection control conference, he said IPs must "retake the lead on these issues — to really reclaim our place as the folks that are best positioned to make the difference."

In a current climate that can blur the line between patient advocacy and antagonism, IPs run the risk of being seen as part of the problem as outraged patients demand action to prevent health care-associated infections (HAIs). Citing strongly worded messages from the growing number of consumer web sites and advocacy groups, Weber said patient stories resonate powerfully with legislators.

"The Consumers Union — not a fringe group by any stretch — [has a] slogan on their web site: 'End hospital secrecy and save lives,'" he said. "We might disagree with [many of the charges], but the fact of the matter is this is what the folks who represent us in Congress and state legislatures are hearing. From the outside looking in, we are not seen as the experts or authorities anymore. We might be at our institution, but when we step out of that community, people are looking at us and saying, 'Why [do HAIs] happen in hospitals?"

Weber's remarks carried particular emotional heft because he followed an impassioned speech by Victoria Nahum, who founded the Safe Care Campaign after the death of her son Josh due to an HAI. Such patient advocates can provide compelling emotional context to the mission of IPs, if a spirit of collaboration can overcome an "us-and-them" mentality that too often divides the groups, Weber said.

"It is easy to see what a powerful ally [Nahum] could be in our institutions and to our profession," he said. "If we want to reclaim leadership, we need to really understand that and not be the ones who are giving technical, qualified [explanations about HAIs]. We need to be ready to get out there and say, 'Here is what we think is a good practice, and here is what we don't think is a good practice.'"

IPs must convince patient advocates that they may not have the passion of a lost loved one driving them, but they have dedicated their careers to preventing HAIs. "We need to align with them instead of being lumped together with the other forces in health care that frankly don't see this as such a serious problem," Weber said.

However, bridging this divide involves conceding past failures, including the historic problem of achieving health care worker compliance with basic hand hygiene. With many studies showing that workers only wash their hands appropriately in about half of patient encounters, achieving compliance rates in the 70% range are ironically seen as successes, he noted.

"A lot of you have public relations posters or banners hanging outside your institution touting this or that," he said to conference attendees. "How many would like to see a sign that says, '[Welcome to our] hospital, where one-third of contacts with your loved one will not [include] a basic infection control measure.' It's awfully embarrassing. I think we need to move beyond the era of saying this is impossible and that is the best that we can do. Accepting that [level] is not appropriate."

Though conceding that past efforts have not been sufficient could give IPs credibility with patient advocates, Weber acknowledged that it may be frustrating in light of individual campaigns

and efforts to achieve better compliance. The reality though is that legislators considering HAI bills are not going to start out by writing, "whereas, folks in infection prevention have really been working hard on this," he noted.

Likewise, IPs can expect little sympathy to the traditional argument that it is increasingly difficult to prevent infections in patients with high severity of illness. "I know this is unfortunate and difficult to think about — and it is not to undermine or devalue any of the incredible and generally heroic work that has [been done] by folks in this room over the last few years and beyond," Weber said. "But the fact is from

CNE/CME *questions*

21. An example cited of the CMS codifying CDC guidelines is in the area of:
A. hepatitis C testing.
B. active screening for MRSA.
C. dialysis settings.
D. emergency departments.

22. A survey tool to assess infection control ambulatory care in settings included which of the following:
A. Needles and syringes are used for only one patient.
B. Injections are prepared in a clean area
C. Single-dose medications/infusates are used for only one patient and not collected or combined.
D. All of the above

23. The CMS final rule ASCs states that "considering the huge growth in the ASC industry since we issued the current ASC regulations in 1982, we believe that infection control in a surgical facility should be a high priority."
A. True
B. False

24. In a one-day "snapshot" survey, how many hospital patients out of every 1,000 were infected or colonized with *Clostridium difficile*?
A. seven
B. 13
C. 23
D. 47

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. **The semester ends with this issue.** 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

21. C; 22. D; 23. A; 24. 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. ■

COMING IN FUTURE MONTHS

■ Salary survey and career report

■ Breaking down The Joint Commission 2009 pt safety goals

■ Strategies to meet CMS UTI changes

■ New administration, more IP regulations?

■ Patient education and the IP

the outside looking in, we need to acknowledge that we are not at 'zero'; we are not making the differences that people need to see."

Dramatic infection reduction programs like the Keystone project in Michigan have captured the public's imagination, raising expectations in the process. "It was great to see the public [reaction], but it was scary to see people in our field say, 'I never knew this could happen.' What have been working on all these years if we did think we could at least try to get zero?"

In general, the field must err on the side of action rather than research, Weber noted. The recent publication of a brief concise infection control recommendations in a landmark compendium should help that effort. **(See *Hospital Infection Control & Prevention,* November 2008, cover story.)** ■

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iP Newbie
Practical Tips for the New Infection Preventionist

Infection preventionist: Name unifies diverse field

By **Patti Grant**, RN, BSN, MS, CIC
Infection Preventionist
Medical City Dallas Hospital, Dallas

(Editor's note: In this issue of IP Newbie, *we feature a column for new professionals written by* Patti Grant, *an infection preventionist and editorial advisory board member of this publication. An IP since 1990, Grant was profiled in the debut issue of this supplement. She has a passion for mentoring that will add invaluable "in-the-trenches" insights for new practitioners in the field.)*

Patti Grant, RN, BSN, MS, CIC

One of the most exciting developments in our profession is the new designation of "infection preventionist" (IP). It pulls all of our entry disciplines of RN, LVN, MT, RT, MPH, PhD, etc., into one unified front that describes exactly what we do. So I've officially gone from an ICP to an IP, yet didn't feel the gradual change of purpose. Looking back, I was an IP all along. I didn't sit in my office eating bonbons waiting for something bad to happen, and then go out and try to control the infection crisis. The majority of time we're working within our facility culture, via formal and informal organizational and network structures, to prevent infection and not stagnant waiting for an outbreak. We are a proactive, not a reactive, group of professionals.

Whatever your reason for becoming an IP, more likely than not, you remember *very clearly* when and why you changed gears. Regardless of how we got started, there's one pearl of wisdom I wish I'd learned and accepted from the beginning: *I will remain in a constant semihigh-pressure learning mode thus feeling the pangs of being a novice IP, no matter how many years I serve.* This is a good thing if you keep it in perspective. You will never get bored, as our discipline changes constantly.

Expect to be the 'go-to person'

Since 2002 "health care-associated infection (HAI)" has become a household term and we're now in the glare of our legislatures and the media. At the end of the day, being a new IP can't help but be exciting as you secure your references, resources, and networking partners. As in the past, the IP of 2008 and beyond will remain in the limelight of his or her facility as the "go-to person" for all questions of biological hazard-, epidemiologic-, and data management-driven challenges. The difference you will experience as *routine* as a new IP is that the general public are starting to know who we are. This recognition will help IPs secure the resources needed in our patient safety effort to prevent infections and untoward health care events. In many respects, I envy the environment you will be trained in, as you will accept as commonplace the challenges this new recognition brings.

This column is a great opportunity for sharing all the excellent mentoring that has been given me since 1990, for I am the product of IPs willing to share their knowledge and time. It is our responsibility to give back to others so we remain strong and purposeful in our efforts to prevent infection. Without being a fundamentals training section, in future months, this supplement can explore challenges and ways the new IP can maneuver within the system and lessen the stress involved with this challenging learning curve.

For now,I'd like to offer to share my list of favorite bookmarks on the internet and the list serves that are free and make my job easier. The response might take awhile, yet go ahead and send an e-mail to **patti.grant@hcahealthcare.com** and ask for one or both of these lists. Also, call at least two other IPs you know and ask for their list(s), and you'll quickly have a wealth of resources to surf the web and have specific places to go the next time *that question* is asked. For that question will not be answered without your expertise and ability to share the knowledge of an IP. ■

Wisdom Teachers
Voices of Experience in Infection Prevention

Epi' newbie: Be sure job comes with resources

CEOs may not be aware of demands of changing field

As a new generation of health care epidemiologists comes into the work force, these physicians may find that hospital administrators have a troubling lack of awareness about the resources required to run an infection prevention program in today's increasingly regulatory environment. Thus, in a lesson that applies to infection preventionists as well, the job interview must be in part a "negotiation" unless you want to be ceremoniously appointed the executive vice president of Unfunded Mandates.

William Schaffner, MD

"There is the old adage, 'you don't feed the fish after you've got them in the boat,'" says **William Schaffner**, MD, chairman of the department of preventive medicine at Vanderbilt University Medical Center in Nashville, TN. "The time of negotiation becomes the most critical event as you look forward to your life as a hospital epidemiologist. You have to be willing to say 'no,' because if you are [going to take the job regardless,] all power goes to the other side."

Sage advice from a seasoned professional, as Schaffner was sleuthing around as an EIS officer for the Centers for Disease Control and Prevention when many of today's epidemiologists were in short pants. He now occasionally mentors young infectious disease fellows heading out for their first health care epidemiology job, reiterating the aforementioned caution.

"The hospital administration may have a profound underappreciation of the amount of time that will be required to do a first-rate job as a hospital epidemiologist and chair of an infection control committee," he says.

The demands for data and compliance on all fronts make program resources a critical bargaining chip. "Administrators and these senior leaders may have a notion of what hospital epidemiology was like 10 or 15 years ago," Schaffner says. "Today, with the interest of a variety of regulatory agencies, the public and increasing requests — even demands — for data by units within your institution, you have to spend much more time gathering and displaying the data and educating people."

The great divide

Though those in infection prevention may feel this climate change is old news by now, there still is a persistent divide between job requirements and hospital program resources. "There is a large gap between demand and resources — there is no doubt," he says. Schaffner is getting reports back that administrators may present their prospective epidemiologist with job duties that read long on a list but vague in specifics. "Go into this very specifically and make sure that the expectations are stated explicitly, and that they confirm that the resources you are going to have — including your salary — are necessary to get the job done," he advises

Thus, in a sense, the hiring process becomes a point of education as well as negotiation, as candidates must emphasize that they need the tools to meet the job's current demands. That includes a top-flight team of infection preventionists.

"These are people who would supervise the IPs so you want to make sure that you have a sufficient number and that you can see to their professional development and evolution," Schaffner says. "You should immediately make it clear that you want someone who — if they are not certified — will become certified."

Another disturbing trend that has come up in some interviews is that administration may not see clinical work in the wards as part of the strict definition of a hospital epidemiologist, Schaffner notes. On the contrary, "it is absolutely essential that you be on the wards, seeing patients, consulting," he stresses. "That's where you can see what's happening, talk to the nurses and your colleagues in surgical and medical specialties. They see you out there as one of them." ■

The Joint Commission Update for Infection Control

News you can use to stay in compliance

'The numbers don't match': Joint Commission urges more infection-related sentinel event reporting

Leading IP cites caveats that may explain discrepancy

Citing a dramatic disconnect between the tens of thousands of patients dying annually with health care-associated infections (HAIs) and the paltry number that actually are being reported as sentinel events, The Joint Commission is urging hospitals to file the voluntary reports to help improve patient safety.

"The question here is — we've got a lot of data, we've got lot of sentinel events — where are the infections?" said **Louise M. Kuhny**, RN, MPH, MBA, CIC, senior associate director of standards interpretation at the Joint Commission. "The CDC is saying we are having 90,000 infection [deaths] a year, the mortality is high, we have all these problems; where are the infections? We would like to know because it doesn't seem that they are being reported through the sentinel event database."

At a recent Joint Commission meeting in Chicago, Kuhny revealed that of the 4,977 sentinel events reported from 1995 through March 2008, only 104 were infection-related. "We certainly know that there were way more than 104 infection-related events in 12-13 years," she said. "We are encouraging this reporting."

The most recent data only underscore the trend of underreporting, as The Joint Commission received fewer than 15 sentinel event reports related to infection in 2007.

"We're concerned . . . because the numbers don't match," Kuhny said. "We're not getting the reporting. We're not getting [reports of] noncompliance with this, either. [Hospitals] probably have all the systems in place to report, yet we know that all of this morbidity and mortality is [occurring]. In 2007, we didn't even have 15, and we know that there are tens of thousands out there."

Indeed, according to the most recent published data, the Centers for Disease Control and Prevention estimates that 5%-10% of hospitalized patients develop an HAI, corresponding to approximately 2 million HAIs associated with nearly 100,000 deaths each year in U.S. hospitals.[1]

Patient safety goal established in 2004

To be fair, it was not until issuance of its 2004 patient safety goals that the Joint Commission officially called for unanticipated patient deaths and serious injuries related to HAIs to be investigated as sentinel events requiring a root-cause analysis (RCA). **(See Q&A, p. 2.)** NPSG.07.02.01 — which remains in place for 2009 — calls for hospitals to:

"Manage as sentinel events all identified cases of unanticipated death or major permanent loss of function related to a health care-associated infection.

Rationale: A significant percentage of patients who unexpectedly die or suffer major permanent loss of function have health care-associated infections. These unanticipated deaths and injuries meet the definition of a sentinel event and, therefore, are required to undergo an RCA. The RCA should attempt to answer the following questions: Why did the patient acquire an infection? Why did the patient die or suffer permanent loss of function?

Elements of Performance: The hospital manages all identified cases of unanticipated death or major permanent loss of function associated with a health care-associated infection as sentinel events (that is, the hospital conducts an RCA).

The root-cause analysis addresses the management of the patient before and after the identification of infection."

How often are HAI events unanticipated?

The "unanticipated" aspect of the definition may be part of the problem, as patients being kept alive by invasive devices may certainly have an HAI among their end-term sequela. In addition, reporting the RCA results is voluntary, but strongly encouraged to identify trends and improve patient safety. "It is a voluntary reporting system, so not all sentinel events of any kind must be reported," said **Denise Murphy**, RN, MPH, CIC, vice president and chief safety and quality officer at Barnes-Jewish Hospital in St. Louis. "I think hospitals report those that are most serious in terms of *how* they happened. All sentinel events mean harm, but those that can educate us most in terms of process breakdowns to look out for are what most executive teams would demand be reported."

A frequent lecturer at infection prevention meetings, Murphy has urged IPs to embrace the Joint Commission initiative and conduct RCAs as warranted. "HAIs that are unexpected or 'unanticipated' are what we should be counting," she said in a separate interview after The Joint Commission meeting. "We do that here and do a sentinel event investigation — including a debriefing as soon as we learn of the event — followed by a root-cause analysis. The 'unanticipated' aspect is why you don't see 100,000 HAIs being reported to The Joint Commission."

For example, the death or injury of an ICU patient who develops ventilator-associated pneumonia (VAP) despite the use of infection prevention "bundles" and other cutting-edge interventions is tragic but not completely unanticipated. "[However,] if you have a 30-year-old patient undergo elective surgery, not wake up after anesthesia, require mechanical ventilation and then get a VAP, this was not anticipated or expected and should be debriefed and followed up with an RCA," Murphy explains. "The RCA would look into all aspects of patient safety and why such an adverse event occurred. In fact though, it might be written up as an unanticipated surgical outcome [instead of] the VAP."

By the same token, if a 30-year-old patient undergoes an elective knee replacement due to a sports injury — as opposed to a serious underlying illness such as juvenile diabetes — and then develops a surgical-site infection (SSI), that could be considered a sentinel event, she notes.

"The SSI was not anticipated in a healthy 30-year-old," Murphy says. "Now, even there, a superficial SSI would not be counted. But if the 30-year-old came into the hospital for three incision-and-drainage surgeries, had months of antibiotic therapy, then lost the prosthetic knee due to infection — there is your sentinel event."

Caveats and cost benefits

Thus, given Murphy's points, there is more to the picture than the jarring juxtaposition of the numbers.

"I am not trying to make excuses — HAIs are always horrible outcomes," Murphy says. "But they are not always unanticipated. The patient's underlying conditions at the time of admission or time of a procedure will often help dictate whether or not this was a totally unanticipated outcome that led to death or permanent disability — or risk thereof. The 'risk thereof' is where you could end up investigating every thing as a sentinel event."

In that sense the "cost benefit" of doing an RCA must be considered. "I don't mean dollar cost," she says. "I mean that infection prevention and control programs have finite resources, and we have to decide every day how to best 'spend them.' Taking the time to educate health care teams, assess the safety of our patient care processes, help teams redesign patient care, and build in prevention is where I'd put most of our resources. And I'd use those IP resources to debrief and help risk management do a root-cause analysis every time an HAI was unanticipated and led to death or serious disability."

Reference

1. Yokoe DS, Classen D. Improving patient safety through infection control: A new health care imperative. *Infect Control Hosp Epidemiol* 2008; 29:S3-S11. ■

Joint Commission's Q&A on HAIs as sentinel events

(Editor's note: The following frequently asked questions were posted on The Joint Commission web site regarding the issue of health care-associated infections and sentinel events. They were marked as most recently

reviewed in March 2008.)

Q. Regarding the "manage as sentinel events" requirement, how do we know which cases should have a root-cause analysis?

A. The intent of this requirement is to manage any unanticipated death or major permanent loss of function as a sentinel event, *even if* the patient acquires a nosocomial infection, not simply because the patient has acquired an infection. This is really a reminder of an existing requirement, not a new requirement. The decision to designate and review an occurrence as a "sentinel event" should be based on the outcome of the case (unanticipated death or major permanent loss of function), not on any presumptive cause.

Q. If this is not a new requirement, why make it a national patient safety goal?

A. Even though the requirement for root-cause analysis in response to an *unanticipated death or major permanent loss of function* is not new, many cases that meet this definition have not been considered sentinel events — apparently because infection was associated with the outcome. In other words, there has been an assumption that the presence of infection excludes a case from consideration as a sentinel event. This is not, and never has been, an intended exclusion. As a result, there are very few cases of infection-associated sentinel events in the Sentinel Event Database (in relation to other types of sentinel events and to the number of infection-associated cases known to be occurring annually). The Joint Commission believes that managing these cases as sentinel events will provide additional information, not so much about the infection itself, but about managing patients at risk for infection and who have acquired an infection. In this manner, the new goal, while not necessarily a new requirement, will contribute to reducing the risk of patient harm from health care-associated infection.

Q. Many patients who die with nosocomial infections are very sick and may have multiple other problems. How do we determine whether the patient's death was "unanticipated?"

A. This determination is based on the condition of the patient at the time of admission to the organization. A death or major permanent loss of function should be considered a sentinel event if the outcome was not the result of the natural course of the patient's illness or underlying condition(s) that existed at the time of admission. For example, an otherwise healthy patient who is admitted for an elective procedure, develops a wound infection, becomes septic, and dies should be considered a sentinel event. However, cases in which the patient is immunocompromised or elderly with multiple comorbidities are more difficult to classify. The knowledge that a certain percentage of patients with a given condition will die does not mean that the death of any one of these patients is "anticipated." If, at the time of admission, the patient's condition is such that he or she has a high likelihood of not surviving the episode of care (e.g., the hospitalization), then that patient's death would not be considered a sentinel event. Otherwise, it should be managed as a sentinel event, that is, a root-cause analysis should be conducted.

Q. How should I go about doing a root-cause analysis on an infection?

A. Just as the identification of an occurrence as a sentinel event is not dependent on whether the patient did or did not have an infection, the root-cause analysis we are looking for is not just an analysis of the infection (if there was one), but of the event itself, i.e., why did the patient die or suffer major permanent loss of function. It is anticipated that this analysis will identify system and process factors that through appropriate redesign can reduce the risk of serious adverse patient outcomes even as the risk of nosocomial infection remains high.

Q. I am an [infection preventionist], and my day is already full with the usual surveillance, analysis, and prevention activities. How can I do all these root-cause analyses and still have time for my regular important work?

A. There is no expectation that the burden of conducting the analysis will be placed on the infection control professional, although if there were an associated infection, the IP's participation on the root-cause analysis team could be very beneficial.

Q. Won't this require a significant increase in our surveillance activities?

A. No, there is no expectation for increased or otherwise modified surveillance activities.

Q. Where is the evidence that root-cause analysis will help reduce the risk of health care-acquired infections?

A. The efficacy of root-cause analysis to identify system failures and thus direct improvement

has been convincingly demonstrated over the past several decades in most high-risk fields and, more recently, in health care for the broad array of serious adverse events that occur. While it is true that the effectiveness of root-cause analysis specifically for reducing harm from nosocomial infections has not been proven, that may be only because it hasn't been given an adequate chance with this specific type of event. Nor has the traditional rate-based approach, by itself, been sufficient. Perhaps a combined approach might move us further along. ■

Tips to conduct your annual IP risk assessment

Bring in key partners in setting priorities

Under standard IC.01.03.01, The Joint Commission requires that the hospital identifies risks for acquiring and transmitting infections. This is done primarily through an annual risk assessment, which forms the bedrock for the infection prevention program activities, emphasized **Barbara M. Soule**, RN, MPA, CIC, Joint Commission practice leader in infection prevention and control services.

"The risk assessment is the foundation of your infection prevention program," she said recently in Chicago at a Joint Commission infection control conference. "If you do it well and come up with your priorities it provides focus for your activity and resources."

Soule offered the following tips and key elements of an infection prevention risk assessment:

Partnerships

Form partnerships with:

- Key stakeholders, e.g., physicians, nurses, technicians, laboratory, special support services, administration to provide data and information, experiences, concerns reflecting their responsibilities, e.g., ICU staff, occupational health, biomedical services, risk management.
- Those who have the information you need.
- Opinion leaders in the organization.
- Leadership for support and endorsement.

Team

- Create a team to help analyze the information from the assessment
- Engage three to five key staff to work as a team on the assessment
- Patient safety and performance improvement staff or committees to assist

Gather Data and Information

- Organization Data
- Gain access to key reports in the organization, e.g., services provided, populations served and characteristics and volumes, special environmental issues.
- Tap into organization data (medical records, lab records, admission and discharge numbers
- Review IC program surveillance data

Scientific Data

- Review the literature for new trends in infection control journals and other sources
- Link to key web sites (e.g., health departments, CDC, APIC, SHEA, IDSA)

Community Data

- Connect with the local health department to identify trends that may affect infection risk in the facility
- Issues of emerging pathogens and bioterrorism plans

Systematic Methods and Templates

- Develop a systematic way of looking at data
- Turn qualitative data into quantitative when possible
- Develop a ranking scheme to determine highest priorities
- Team ranks data to determine priorities

Educate Others to Assist in Assessment

- Provide support and guidance for others to perform their risk assessments:
- Provide an educational session
- Share organization's IC data from surveillance, outbreaks, morbidity, mortality
- Design a simple template
- Create ease of performing and submitting information

Disseminate the Information

- Market the risk assessment importance and share results.
- Develop concise, clear report with key points highlighted
- Acknowledge those who participate in the process ■

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