

Hospital Infection Control & PREVENTION

The Trusted Source for the Infection Preventionist for More Than Four Decades

December 2013

Volume 40, No. 12

Pages 133-144

CDC looking to CMS to add 'teeth' to new antibiotic stewardship guidelines

Threat of untreatable infections could prompt regulatory action

By **Gary Evans**, Executive Editor



Arjun Srinivasan, MD

The Centers for Disease Control and Prevention is crafting antibiotic stewardship guidelines with an eye toward future enforcement by the Centers for Medicare and Medicaid Services, *Hospital Infection Control & Prevention* has learned.

With the rapid rise of antibiotic-resistant bacteria and the threat of untreatable infections, stewardship programs to carefully monitor and control drug use have become a top public health priority. Infectious disease groups like the IDSA and

SHEA have previously called for CMS regulations aligning appropriate antibiotic use with financial incentives and penalties.¹ The CDC is now adding its considerable clout to the issue, drafting guidelines to help hospitals preserve vanishing drug efficacy as the health care system nears a "post-antibiotic" era.

"I think [CMS regulation] would advance this effort like nothing else," **Arjun Srinivasan**, MD, a medical epidemiologist in the CDC's Division of Healthcare Quality Promotion, said at a Nov. 6 meeting of the Healthcare Infection Control Practices Advisory Committee (HICPAC). "In order to do that there does need to be this type of supporting information — some guidance for health care facilities. We view a lot of this [CDC proposal] as being very supportive and an important step in moving in that

In This Issue

- ❑ **Emerging federal partnership:** Antibiotic stewardship is the latest example of using the CMS to encode CDC guidelines into regs, which sounds good in principle. The glass half full version is — as the CDC was told — many hospitals may simply ignore voluntary guidelines even for such an important issue as staving off a post-antibiotic era cover
- ❑ **Stewardship checklist:** Key features and nine questions, including is there a doctor in the house? 135
- ❑ **Core practices for infection prevention:** A few thousand pages of guidelines later, CDC advisors are close to selecting the best of the best 136
- ❑ **The first "antibiotic steward":** Warned this day would come and told a rather dark anecdote about a husband who takes antibiotics but transmits a fatal drug-resistant infection to his wife. 137
- ❑ **Remove the pump handle:** With *C. diff* causing recurrent infections in neurosurgical patients and threatening other patient groups if infection control measures failed, Timothy H. Dellit, MD, at Harborview Medical Center, had a decision to make 138
- ❑ **Vegas ex-doc gets life sentence:** A mug shot that may give pause to those who are greedy or ignorant enough to reuse and misuse vials, needles and syringes 140
- ❑ **One page, many lives:** APIC hits a handout home run with something you can give to patients and even family members heading to the hospital. 141

AHC Media

Financial Disclosure: Executive Editor Gary Evans, Consulting Editor Patrick Joseph, MD, and Kay Ball, Nurse Planner, report no consultant, stockholder, speaker's bureau, research, or other financial relationships with companies having ties to this field of study.

direction. One of the motivations for doing this is to try to support some of the effort that I think the CMS is interested in undertaking. They clearly recognize the importance of stewardship."

As proposed, the CDC antibiotic stewardship guidelines would include "required elements" such as monitoring antibiotic use.

"We think this is critical," Srinivasan said. "You can't improve something if you don't have a way to measure it."

Other required elements include implementing policies and interventions to improve antimicrobial use, including using antibiograms to show specific bug-drug resistance patterns and developing order sets and clinical pathways with "embedded" treatment recommendations. Another common sense recommendation is for clinicians to take an antibiotic "timeout" after two or three days of treatment to reassess the situation.

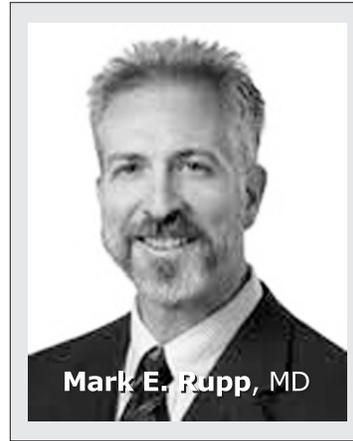
"Antibiotics are often started in the absence of all the clinical information that you would like to have," Srinivasan said. "After a couple of days, culture results, imaging results, patient response are available and that is a good time to reassess."

Policies calling for drug restrictions and prior authorization are also on the table, as is a broader post-prescription review for

streamlining and de-escalation.

"This would not necessarily be a timeout done by the provider, but a timeout done by [the system] to hopefully have a broader understanding of antibiotic use," he said.

CMS could codify recommendations



Mark E. Rupp, MD

The potential involvement of CMS came up after a discussion that included a broad consensus among HICPAC members emphasizing that mere CDC recommendations to adopt stewardship programs would have little effect.

"If we are really talking about antibiotic resistance as being a public health emergency that threatens our way of caring for patients, then we are setting the bar way too low with this," said HIPAC member **Mark E. Rupp, MD**, director of epidemiology at Nebraska Medical Center in Omaha. "I would really encourage you to put some teeth into this."

Hospital Infection Control & Prevention[®], including **Infection Control Consultant**[™] and **Healthcare Infection Prevention**[™] (ISSN 0098-180X), is published monthly by AHC Media, LLC, One Atlanta Plaza, 950 East Paces Ferry NE, Atlanta, GA 30326. Telephone: (404) 262-7436. Periodicals Postage Paid at Atlanta, GA 30304 and at additional mailing offices. Web: www.ahcmedia.com

POSTMASTER: Send address changes to **Hospital Infection Control & Prevention**[®], P.O. Box 550669, Atlanta, GA 30355.

AHC Media is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

This activity has been approved for 15 nursing contact hours using a 60-minute contact hour.

Provider approved by the California Board of Registered Nursing, Provider #14749, for 15 Contact Hours.

AHC Media is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

AHC Media designates this enduring material for a maximum of *18 AMA PRA Category 1 Credits*[™]. Physicians should only claim credit commensurate with the extent of their participation in the activity.

This activity is effective for 36 months from the date of publication.

Target audience: Infection control practitioners and infectious disease physicians.

Opinions expressed are not necessarily those of this publication. Mention of products or services does not constitute endorsement. Clinical, legal, tax, and other comments are offered for general guidance only; professional counsel should be sought for specific situations.

Executive Editor: **Gary Evans**, (706) 310-1754, (gary.evans@ahcmedia.com).

Production Editor: **Kristen Ramsey**.

Editorial Director: **Lee Landenberger**.

Copyright © 2013 by AHC Media. **Hospital Infection Control & Prevention**[®] and **Infection Control Consultant**[™] are trademarks of AHC Media. The trademarks **Hospital Infection Control & Prevention**[®] and **Infection Control Consultant**[™] are used herein under license. All rights reserved.

AHC Media

Editorial Questions

For questions or comments, call **Gary Evans** at (706) 310-1727.

Subscriber Information

Customer Service: (800) 688-2421 or fax (800) 284-3291. Hours of operation: 8:30-6. Monday-Thursday, 8:30-4:30 Friday EST. World Wide Web: <http://www.ahcmedia.com>. E-mail: customerservice@ahcmedia.com.

Subscription rates: U.S.A., one year (12 issues), \$499. Add \$17.95 for shipping & handling. Outside U.S., add \$30 per year, total prepaid in U.S. funds. Discounts are available for group subscriptions, multiple copies, site-licenses or electronic distribution. For pricing information, call Tria Kreutzer at 404-262-5482. Missing issues will be fulfilled by customer service free of charge when contacted within one month of the missing issue date. **Back issues**, when available, are \$78 each. (GST registration number R128870672.)

Photocopying: No part of this newsletter may be reproduced in any form or incorporated into any information retrieval system without the written permission of the copyright owner. For reprint permission, please contact AHC Media. Address: P.O. Box 550669, Atlanta, GA 30355. Telephone: (800) 688-2421.

In that regard, the CMS is increasingly seen as a way to codify traditional voluntary guidelines with pay-for-performance incentives. Moreover, the CMS has included an assessment of antibiotic stewardship programs in a pilot survey it is developing to inspect hospital infection control programs. Though conceding that stewardship requirements go beyond the scope of its current regulations, it is telling that the CMS is already advising inspectors to ask about antibiotic stewardship efforts when visiting hospitals.

In any case, a cursory checklist without a clear requirement to designate resources to the effort could lead hospitals to simply designate a physician that would essentially be the director of stewardship in name only, HICPAC members warned.

"If you don't distinguish that we won't have

the 'weight' to take to administration and say we need to build real attention to this problem," said **Susan Huang, MD, MPH, FIDSA**, medical director of epidemiology and infection prevention at University of California Irvine Healthcare in Orange, CA. "If you don't have something that talks about a



Susan Huang
MD, MPH, FIDSA

Stewardship: Key features and six checklist questions

A proposed guideline by the Centers for Disease Control and Prevention on hospital antimicrobial stewardship programs includes the following key aspects, as outlined recently in Atlanta at a meeting of the CDC Healthcare Infection Control Practices Advisory Committee.

Core Recommendation: All hospitals should take action to improve antibiotic use by implementing an antimicrobial stewardship program.

Required Elements for a Stewardship Program

- Implement policies and interventions to improve antimicrobial use.
- Monitor the use of antimicrobials.
- Educate providers on optimal antibiotic use and issues in antibiotic resistance
 - A designated physician who is responsible for efforts to improve antimicrobial use.
 - A designated pharmacist who is responsible for efforts to improve antimicrobial use.
 - ID training (for both) is ideal

Program Structure- Supplemental

- Programs are more effective if the physician and pharmacist have access to experts in and direct support from infection prevention and information technology

Program Functions- Policies and Procedures

- Optimize the antibiotic formulary
- Develop local treatment recommendations

for commonly encountered infections.

- Develop order-sets and clinical pathways that incorporate treatment recommendations.
- Develop plans to educate providers on clinical microbiology
- Ensure antimicrobial courses have proper documentation of dose, duration, indication.
- Ensure all providers re-assess courses of antimicrobials after 2-3 days of treatment ("antibiotic time out")

Program Functions- Monitoring Use

- Measures of consumption- overall use
- NHSN Antimicrobial Use module
- Local monitoring of use
- Measures of appropriate use
- Appropriate therapy for select agents and/or infections (e.g. CDC tools, drug use evaluations)

Proposed Stewardship Checklist

1. Does this facility have a physician leader identified to optimize antibiotic use?
2. Does this facility have a pharmacist leader identified to optimize antibiotic use?
3. Does facility leadership support efforts to optimize antibiotic use at this facility?
4. Is there at least one intervention to optimize antibiotic use integrated into clinical care at this facility?
5. Does this facility monitor antibiotic use?
6. Is information on optimizing antibiotic use provided to prescribers at least annually? ■



Tom Talbot, MD

program and what it entails they won't invest in it. A part of what we struggle with all the time is can you get your administration to agree that you need a-quarter FTE, much less a full FTE that you probably really need?"

Several other HICPAC members concurred that a proposed antibiotic stewardship program recommendation would have to include the need for program support at the institution level.

"You really need to put this more in the

context of support," said **Tom Talbot, MD**, chief hospital epidemiologist at the Vanderbilt University School of Medicine in Nashville. "I think you could say 'devoted resources,' whatever those are — personnel support, some money for IT. That puts a little more skin in the game. This kind of support you could argue is in line with institutional incentives for quality goals."

Analogous to infection prevention

The gravity of the present situation should ensure traction on the issue, one that is all too familiar to IPs. The overuse and misuse of antibiotics across the health care spectrum is driving selective pressure for the emergence of drug resistant bacteria. A recent CDC report on the pressing challenge concluded that "up to half of antibiotic use in humans and much of antibiotic use in animals is unnecessary and inappropriate."²

HICPAC distilling IC down to core practices

Spoiler alert – 'administrative support' makes cut

In looking over years of recommendations and various rankings, the Healthcare Infection Control Practices Advisory Committee realized that all of those pages left unanswered a recurrent question: Which of the many recommendations reflect the most important infection control practices to protect patients?

OK, hand hygiene is easy, but beyond that it gets a little more challenging as the Centers for Disease Control and Prevention's advisory panel tries to crystalize the most important practices in the reams of guidelines.

"We started out by looking at what are those things that are mentioned across all of the guidelines," says HICPAC member **Ruth Carrico, PhD, RN, CIC**. "They have different grades in the different guidelines."

The ongoing process will result in the first set of core infection prevention measures, something HICPAC hopes can be used for educational purposes in multiple settings.

"The accrediting agencies, for example, could use the core measures to not only train their surveyors, but teach them what sort of things they should be looking at when they go into facilities," she says.

They could also be used for education in medical and nursing schools, pharmacy and dental training, she said. As it currently stands, those looking for key recommendations may find different answers in different guidelines, with HICPAC's review of the evidence process sometimes giving little weight to an established intervention. The "wake-up call" was finding that hand hygiene received a low supporting grade for evidence in neonatal intensive care because there was no research or clinical trials to promote the cardinal rule of infection prevention in that particular setting, she said.

While still under discussion, the measures discussed at a recent HICPAC meeting included these core groups:

- Hand hygiene
- Safe injection practices
- Standard precautions
- Training and education of healthcare personnel
- Patient and family education
- Environmental cleaning and disinfection
- Administrative support
- Monitoring and feedback of performance measures ■

Administering unneeded antibiotics has patient consequences, including the development of *Clostridium difficile* infections after carpet bombing the gut with some broad-spectrum agent. (See related story, p. 138.) Thus the need for stewardship programs, which are mentioned in various CDC guidelines and statements but not as a definitive, stand-alone document.

"We think it is important for CDC to have a formal and more comprehensive recommendation on antibiotic stewardship," Srinivasan said. "Stewardship is considered a core strategy."

In that sense it is a strategy that should be embraced as a responsibility by all health care providers, he added. The idea is analogous to the way infection control has evolved from the bailiwick of a lone practitioner to become part of the responsibility of all health care workers, Srinivasan noted.

"I thought about this [in terms of] of infection control, which for a long time was perceived as a job of the IP that was either done for you or to you," he said. "Now, the issue is infection control is 'your job' — as an internist, an intensivist, a gastroenterologist. The IP and health care epidemiologist are there to help you — give you tools and train you. But it is not their job to do it. We need to have exactly that same shift here [for antibiotic stewardship]."



Ruth Carrico,
PhD, RN, CIC

And while infection preventionists were cited as having important supporting roles in such programs, the CDC's primary focus at the outset is to get physicians and pharmacists on board. A

basic hospital checklist the CDC is creating opens with the question: "Does this facility have a physician leader identified to optimize antibiotic use?" (See related story p. 135.)

"There has to be a person, a physician who is assigned the responsibility — it can't be dif-

The first 'antibiotic steward' warned this day would come

Fleming's prediction included a macabre example

A Scotsman named Alexander Fleming, the discoverer of penicillin, could well be the first antibiotic steward — at least in theory. In a 1945 speech accepting the Nobel Prize, Fleming warned about the rise of antibiotic pathogens and became the first to call for a kind of antibiotic stewardship approach to preserve penicillin efficacy.

"I would like to sound one note of warning," he said. "Penicillin is to all intents and purposes non-poisonous so there is no need to worry about giving an overdose and poisoning the patient. There may be a danger, though, in under-dosage. It is not difficult to make microbes resistant to penicillin in the laboratory by exposing them to concentrations not sufficient to kill them, and the same thing has occasionally happened in the body. The time may come when penicillin can be bought by anyone in the shops. Then there is the danger that the ignorant man may easily under-dose himself and by exposing his microbes to non-lethal quantities of the drug make them resistant."

To illustrate his point, Fleming told a rather charmingly chilly anecdote as a hypothetical illustration of the problem: "Mr. X. has a sore throat. He buys some penicillin and gives himself, not enough to kill the streptococci but enough to educate them to resist penicillin. He then infects his wife. Mrs. X gets pneumonia and is treated with penicillin. As the streptococci are now resistant to penicillin the treatment fails. Mrs. X dies. Who is primarily responsible for Mrs. X's death? Why, Mr. X, whose negligent use of penicillin changed the nature of the microbe." ■

fused to a committee," Srinivasan said.

HICPAC member **Ruth Carrico**, PhD, RN, CIC, told HIC that "certainly the IP is going

to be critical to making sure all of this happens, but what they are saying is the first tier is to get the leadership for the stewardship program. Then we can start looking at what are we finding in terms of our monitoring and use. Then, who are the key partners? I think it will be kind of a 'trickle down' thing because really every nurse has a role in antimicrobial stewardship. They need to make sure that a drug is being given and [know] why it is being given. Every person has a role as these programs are developed."

As with so many aspects of infection prevention, there appears to be a risk of lax or non-compliance if the hospital policy is perceived as a low priority. Thus the interest in CMS involvement, though it comes with the warts-and-all concession that some hospitals are simply not going to adopt a meaningful stewardship program without a regulatory requirement.

"The key is going to be to somehow have a link between what we have in these guiding documents and what we have in terms of regulation," said Carrico, a former IP who is now an associate professor at the School of Public Health and Information Sciences at the University of Louisville, KY. "We're just not willingly doing what we know needs to be done. We keep putting ourselves in the position of somebody having to tell us to do it or it's going to affect our payment."

Though HICPAC is not expected to formally sign off on the guidelines and open its typically extensive review process, the CDC sought committee input on the idea of creating a how-to guideline that would serve the dual purpose of emphasizing the importance of antibiotic stewardship across the health care continuum.

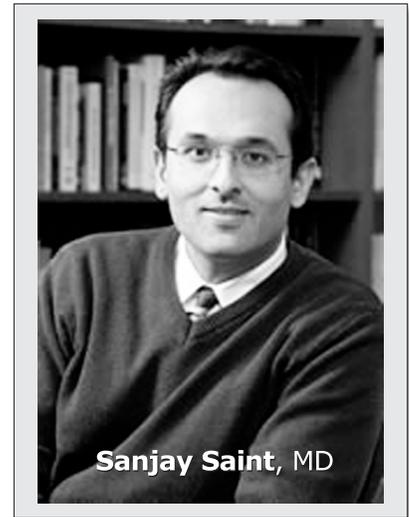
There was much discussion of creating a document that could provide guidance to both small and larger facilities, providing a baseline for all while highlighting stewardship activities that go beyond a minimum level program.

"The fundamental recommendation will be that all hospitals take action to improve antibiotic use by implementing an antimicrobial stewardship program," Srinivasan said. "Our vision is to really link each of these elements with very specific guidance, tools, success stories and implementation stories."

Indeed, the document may have as much

or more value for internal use, particularly if the CDC details exactly how to address identified gaps at a given facility, said HICPAC member

Sanjay Saint, MD, director of the University of Michigan Patient Safety Enhancement Program in Ann Arbor.



Sanjay Saint, MD

"Right now we are talking about this as an external document that someone [uses] to kind of evaluate the hospital, but I see the real value as an internal document ideally on a website where the hospitalist or the chief of medicine can look at this and answer does your facility have a physician that you have identified?" he said. "If they answer 'no' then you would also give them guidance about how to identify that physician leader. Who would be appropriate, how much time should be allotted? I think that will help them implement antimicrobial stewardship programs."

REFERENCES

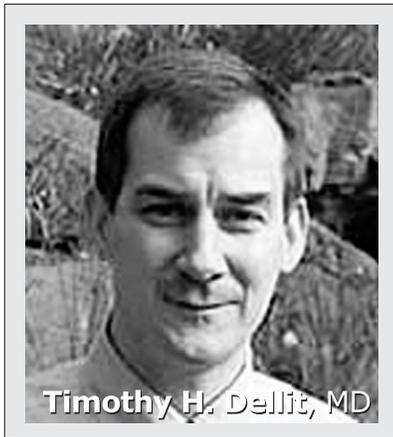
1. Policy Statement on Antimicrobial Stewardship by the Society for Healthcare Epidemiology of America (SHEA), the Infectious Diseases Society of America (IDSA), and the Pediatric Infectious Diseases Society (PIDS) *Infect Con Hosp Epi* 2012;(Special Topic Issue: Antimicrobial Stewardship)33[4]:322-327.
2. Centers for Disease Control and Prevention. Antibiotic Resistance Threats in the United States, 2013: <http://1.usa.gov/15yIo29> ■

Shutting down flow of antibiotics stops *C. diff*

There comes a time in infection control when there are enough epidemiological indicators and sufficient risk of patient harm that one must take decisive action, a la public health pioneer John Snow removing the Broad Street water pump handle to end a legendary cholera outbreak in 19th century

London.

In this case the pathogen is *Clostridium difficile* in 21st century Seattle. *C. diff* infections (CDIs) were besetting neurosurgical ICU patients with external ventricular drains (EVDs) on continuous systemic delivery of cefazolin as prophylaxis against infections. Driven by the emergence of the highly virulent NAP1 strain, *C. diff* kills some 14,000 patients a year in the U.S. The NAP1 strain is often resistant to florquinolones, which are commonly used to treat many other hospital infections. The compounding problem — and the reason *C. diff* was recently cited as an “urgent threat” by the CDC¹ — is that antibiotic use in general predisposes patients to acquire CDI, which can emerge after the commensal bacteria in the gut have been wiped out by treatment for other infections.



Timothy H. Dellit, MD

With *C. diff* causing recurrent infections in neurosurgical patients and threatening other patient groups if infection control measures failed, **Timothy H. Dellit, MD**, associate medical director at

Harborview Medical Center in Seattle, had a decision to make. The epidemiological evidence raised the question of whether continuous antibiotic prophylaxis was causing *C. diff* in the patents with EVDS, which are placed as drains to prevent fluid buildup around the brain after surgery. Moreover, in reviewing the literature, Dellit questioned how many infections the prophylaxis was actually preventing.

“We said if there really is not data out there to support the use of systemic prophylaxis, and at the same time we may be causing harm with an increased incidence of *Clostridium difficile*, why don’t we just stop?” he said. “So that’s what we did. We discontinued the use of cefazolin.”

The antibiotic stewardship intervention worked, significantly reducing CDIs without triggering any other infection problems in the EVD patients that had been on cefazolin pro-

phylaxis, Dellit said recently in San Francisco at the IDWeek conference.

Avoided costs in the \$150,000 range

As cefazolin is a relatively inexpensive drug, the primary cost savings that resulted from the intervention were as a result of the 14 fewer cases of CDI from 2011 to 2012 within that one ICU, he said.

“Each CDI case has an attributable cost of anywhere from \$5,000 to \$15,000, so the health care cost avoidance can certainly add up quickly,” he said.

“We were able to demonstrate that in patients in whom you use an antibiotic impregnated catheter for your EVDs you do not need to use additional systemic antibiotic prophylaxis for the duration that the catheter remains in place,” Dellit said. “I think this is a really nice example of how we have to include antimicrobial stewardship along with our infection control practices to get a better control of *C. diff*.”

Of course, the decision to try and reduce CDIs by discontinuing antibiotic prophylaxis was made after a careful analysis of the situation, which was a recurrent problem with CDIs despite use of infection control measures.

“Our approach is really a combination of both infection control — focused on hand hygiene and in particularly with soap and water, the use of appropriate barrier precautions and environmental cleaning,” he said. “But we had to combine [those measures] with antibiotic stewardship to decrease the overall selection pressure for *Clostridium difficile*.”

Before the antibiotic stewardship intervention, Harborview’s neurosurgical ICU had 23 cases of CDI in 2010, with a rate of 2.4 per thousand patient days. In 2011, there were 19 CDIs, a rate of some 2 infections per thousand patient days, he said

Infection control measures were scrutinized but no clear break in technique seemed to explain the problem, he added.

“We actually did hand hygiene observation audits on every unit every month,” he said. “We implemented the use of soap and water [as opposed to alcohol hand rubs]. We did contact precautions not only for the duration of symptoms, but as long as they

remained in the intensive care unit. We did monthly environmental cleaning audits on high touch surfaces and we did terminal cleaning with a chlorine-containing product. Despite these infection control measures we did not see a significant impact on the case volume for *C. diff* infections."

Looking at the patient population two common themes emerged, the primary risk group had EVDs in place, were on systemic antibiotic administration and had antimicrobial catheters.

"One of the things that we recognized is that they were all getting systematic antimicrobial prophylaxis for the duration that the EVD was in," he said. "In other words, they were getting a gram of cefazolin every 8 hours until that EVD came out. And in some of these patients that could be over two weeks. It gave us pause."

Looking at the literature revealed no clear consensus about the use of systemic antibiotics and/or antimicrobial impregnated catheters in EVD patients. However, Harborview clinicians decided to drop the belt and suspenders approach in discontinuing the cefazolin prophylaxis while keeping the antimicrobial-impregnated-catheters. While wary of the patients getting other infections, the researchers expected a drop in CDIs based on other studies that have shown that *C. diff* can be prevented by scaling back on antibiotic use.

"In terms of *C. diff* cases within our neurosurgical ICU, we were able to reduce that from 19 to 5, and the rate was reduced from 1.97 to .51 CDIs per 1000 patient days," Dellit said.

To see if any other infections spiked up as a result of discontinuing the prophylaxis, clinicians looked for percentage changes in positive cultures. Overall, they were about the same. "The important thing for us was that they didn't go up because we wanted to make sure that we weren't causing harm by discontinuing the prophylaxis," he noted.

REFERENCE

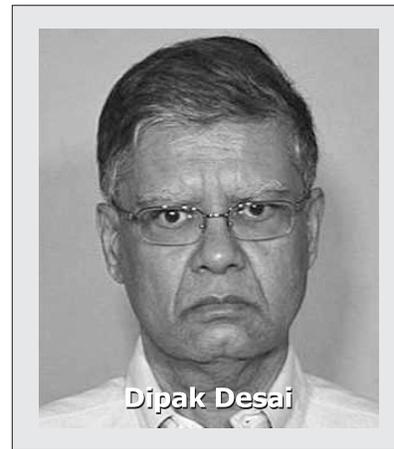
1. Centers for Disease Control and Prevention. Antibiotic Resistance Threats in the United States, 2013: <http://1.usa.gov/15yIo29> ■

Vegas ex-doc gets life for HCV outbreak

Patient: 'He has to answer to his God'

By Gary Evans

Editor's note: This article originally appeared in HICprevent (<http://bit.ly/hrg4pA>), the blog of Hospital Infection Control & Prevention.



In lieu of patient safety signs and infection control reminders, every ambulatory clinic in the country should just post the scowling countenance of one **Dipak Desai**, defrocked MD, who will spend

the rest of his life in prison for practicing in flagrant disregard of injection safety.

It may well give pause to those who are greedy or ignorant enough to reuse and misuse vials, needles and syringes. Maybe a single outbreak would be averted, perhaps many more, for to look upon that face is to see the "hubris"¹ that a Desai colleague described or know the "chiding"² an anesthesiologist faced for suggesting a patient needed more of the precious propofol.

Desai's two endoscopy clinics were in Las Vegas, where patients may fairly expect the gambling to end when they seek health care. In this case — which came to harsh light in 2007 and 2008 — nine patients were infected with hepatitis C virus and two died. More than 100 cases of HCV were possibly acquired in the outbreak, which resulted in some 65,000 patients recommended for testing.

On Oct. 24, 2013 the 63-year-old Desai was sentenced to life in prison, having been found guilty of 27 criminal charges including second-degree murder, according to published reports.³ Prosecutors successfully

argued that he oversaw a “penny-pinching” practice where patient safety was trumped by profit. The practices described included using single-dose vials on more than one patient, which can spread blood borne viruses from patient to patient.

Patty Aspinwall, who contracted HCV from a 2007 procedure at one of Desai’s now shuttered clinics, had a stoic reaction to the sentencing.

“He has to answer to his God, and I have to continue living life the best I can.” she told the *Las Vegas Review-Journal*.

She wears latex gloves when she cooks to protect her family, the newspaper reported.

REFERENCES

1. Harasim, P. “The lives affected by Dr. Dipak Desai” *Las Vegas Review-Journal* Oct. 24, 2013 <http://bit.ly/1d3VztV>
2. Packer, A. “Propofol vials carried room to room, witness says in Desai trial” *Las Vegas Review-Journal* May 29, 2013. <http://bit.ly/HQFugj>
3. Associated Press. “Ex-doc sentenced to life in Vegas hep C case” <http://bit.ly/HXuIpe>

Photo credit: Dipak Desai, Las Vegas Metro Police Dept ■

One page that may save a few lives

APIC: Spread the word on patient handout

It seems benign enough, with its simple language and cartoon bugs, a piece of paper like so many others that might be handed to patients or family members upon admission. But make no mistake about it, the Association for Professionals in Infection Control and Epidemiology (APIC) has put some powerful medicine in the hands of vulnerable patients with a newly designed education handout. (See *APIC infographic p. 142*)

Spread the word.

“We are putting a huge communications push behind this,” says **Carol McLay** RN, MPH, DrPH, CIC, chair of the APIC communications committee. “Not to just media outlets themselves, but we are going to a lot of dif-

ferent health care associations, organizations. We’re hoping we can really create a groundswell.”

Some 100,000 patients die every year of health care associated infections (HAIs), a good portion of which can almost certainly be prevented. Time to empower the patient and bring the IP to their bedside. A single break in technique could be all that stands between the frail immune system of a family member and a teeming colony of carbapenem-resistant Enterobacteriaceae coming down the hall on the hands of a health care worker.

Created after a few brainstorming sessions recently in Fort Lauderdale at APIC’s annual meeting, the simple handout holds the potential to literally save lives. Of course APIC’s infographic urges patients to wash their hands often and remind health care workers to do the same. But it also includes simple tips and reminders about medication and injection safety, considering an antimicrobial bath before surgery, and asking if your catheter is still medically indicated.

Concerning the latter, for example, medical epidemiologist and UTI researcher **Sanjay Saint**, MD, warns that each day a urinary catheter remains in place the patient runs about a 5% risk of acquiring a UTI. He has also found that catheters can be “lost in place” by busy medical staff, heightening the risk of infection and a cascade of other adverse events by creating a bacterial highway to the bladder.¹ (See *Hospital Infection Control & Prevention July 2008, p. 17*)

“We tried to distill this down to the most important elements and put it into a much more visual format” says **Liz Garman**, APIC communications director.

In addition to providing critical infection prevention tips, APIC highlights the role of one of the most important people in the stay of a hospital patient: the infection preventionist. As part of its continuing effort to bring the IP to the bedside and make patients aware of a role that has been somewhat obscured over the years, APIC has an IP profile complete with Sherlock Holmes’ iconic deerstalker hat.

“Infection preventionists use their detective skills to find the bad germs and make sure everyone is doing the right things to keep

(Continued on p. 143.)

Infection Prevention *and You*

You are an important part of infection prevention!



Wash your hands with soap and water or use hand sanitizer often.

Ask healthcare workers and your visitors to do the same.



If you are having surgery, ask if you should shower with a germ-killing soap ahead of time.



Speak up for your care!



Clean your hands and make sure everyone around you does too.



Take medications as directed.



Sneeze and cough into your elbow, not your hand.



Ask about safe injection practices. Remember: **One Needle, One Syringe, only One Time.**



Every day, ask if you still need your catheter.



If your room looks dirty, ask to have it cleaned.



Who are infection preventionists?

Infection preventionists use their detective skills to find the bad germs and make sure everyone is doing the right things to keep you safe.



Catheters or other devices will be placed in your body after your skin receives proper cleaning.

Healthcare workers will clean their hands before and after they care for you.



Your healthcare workers will wear gloves, gowns, and masks at the right times.

If you are in isolation, you and your visitors may need to do this too.

Your room and any equipment that is used on you will be clean.



What are healthcare-associated infections?

Healthcare-associated infections are a result of germs entering your body during medical care.



Catheter-associated urinary tract infections

When germs travel along a urinary catheter and cause an infection in your bladder or kidney.



Surgical site infections

An infection that happens after surgery in the part of the body where the surgery took place.



Bloodstream infections

When germs enter the blood by way of a catheter or tube that is placed in your vein.



Pneumonia

Infection of the lungs.



Learn more www.apic.org/InfectionPreventionAndYou

www.facebook.com/APICInfectionPreventionAndYou

twitter.com/apic

(Continued from p. 141.)

you safe," the handout tells the patient.

Within that simple sentence hangs a considerable tale. These erstwhile "infection control nurses" or "practitioners" once were mere shadow figures to unsuspecting patients, collecting arcane data on "nosocomial" infections as their fledgling field began in the fabled silos. With liability concerns and uncertain science in these early days of health care epidemiology, infection prevention labored under a "psychopathology of secrecy," as distinguished hospital epidemiologist **Vicky Fraser**, MD, once described it to *HIC*. Of course those days are long past. Infection control and HAIs are now much more understood by the public, but one still must wonder if a few hospital administrators might be a little reluctant to remind patients of the real threat of infections and the protective presence of their local IP. Will they hand out the handout?

"I'm sure there are some hospitals that may be a little hesitant to use it, but for the most part we are beyond that in this new age of transparency," McLay says. "Patients need to be empowered and informed so they can play an active role in their care. We want every patient in the hospital to have a copy of this. I would love it if when patients are first admitted to the hospital they receive [the APIC handout] in their admission packet along with a big bottle of hand sanitizer."

Hear, hear.

Editor's note: The APIC patient handout is also available online at <http://professionals.site.apic.org>. With the full support of APIC, HIC urges readers to copy and distribute the form included in this issue to patients, family and friends.

REFERENCE

1. Saint S, Kowalski CP, Kaufman SR. Preventing hospital-acquired urinary tract infection in the United States: A national study. *Clin Infect Dis* 2008; 46:243-250. ■

CNE/CME Instructions

To earn credit for this activity, please follow these instructions.

1. Read and study the activity, using the provided references for further research.
2. Log on to www.cmecity.com to take a post-test; tests can be taken after each issue or collectively at the end of the semester. First-time users will have to register on the site using the 8-digit subscriber number printed on their mailing label, invoice or renewal notice.
3. Pass the online tests with a score of 100%; you will be allowed to answer the questions as many times as needed to achieve a score of 100%.
4. After successfully completing the last test of the semester, your browser will be automatically directed to the activity evaluation form, which you will submit online.
5. Once the completed evaluation is received, a credit letter will be e-mailed to you instantly. ■

CNE/CME Objectives

Upon completion of this educational activity, participants should be able to:

- Identify the clinical, legal, or educational issues encountered by infection preventionists and epidemiologists;
- Describe the effect of infection control and prevention issues on nurses, hospitals, or the health care industry in general;
- Cite solutions to the problems encountered by infection preventionists based on guidelines from the relevant regulatory authorities, and/or independent recommendations from clinicians at individual institutions. ■

COMING IN FUTURE MONTHS

■ MERS hit or miss for the U.S. as flu season continues

■ Post-antibiotic era warnings heard overseas

■ Will CMS add more infection control requirements to its regs?

■ Is the Great Recession over? It is, why didn't I get a raise? Our annual Salary Survey of IPs

■ Prescient or imprudent: A look at some of the bug combinations being made in the lab (that we know about)

CNE/CME Questions

1. The Centers for Disease Control and Prevention is crafting antibiotic stewardship guidelines with an eye toward future enforcement by the:
 - A. Food and Drug Administration
 - B. Occupational Safety and Health Administration
 - C. Centers for Medicare and Medicaid Services
 - D. Environmental Protection Agency
2. The CDC is considering elements for antibiotic stewardship programs that include:
 - A. antibiograms to show specific bug-drug resistance patterns
 - B. clinical pathways with “embedded” treatment recommendations
 - C. an antibiotic “timeout” two or three days after initiation of treatment
 - D. All of the above
3. Which of the following was NOT on a list of core infection control practices under discussion by the CDC’s Healthcare Infection Control Practices Advisory Committee?
 - A. Safe injection practices
 - B. Patient and family education
 - C. Monitoring and feedback of performance measures
 - D. Mandatory seasonal flu shots for health care workers
4. Clinicians at Harborview Medical Center in Seattle drastically cut infections due to *Clostridium difficile* by discontinuing prophylaxis with which antibiotic?
 - A. cefazolin
 - B. ciprofloxacin
 - C. vancomycin
 - D. metronidazole

EDITORIAL ADVISORY BOARD

Consulting Editor:

Patrick Joseph, MD

Chief of Epidemiology

San Ramon (CA) Regional Medical Center and
President, California Infection Control Consultants
San Ramon

Kay Ball,

PhD, RN, CNOR, FAAN
Associate Professor, Nursing
Otterbein University
Westerville, OH

Ona G. Baker Montgomery,

RN, BSN, MSHA, CIC
Infection Control Coordinator
Department of Veterans Affairs
Medical Center
Amarillo, TX

Patti Grant,

RN, BSN, MS, CIC
Director: Infection Prevention/
Quality
Methodist Hospital for Surgery
Addison, TX

William Schaffner, MD

Chairman
Department of
Preventive Medicine
Vanderbilt University
School of Medicine
Nashville, TN

Eddie Hedrick,

BS, MT(ASCP), CIC
Emerging Infections Coordinator
Disease Investigation Unit
Environmental Health and
Communication Disease
Prevention
Missouri Department of Health
and Senior Services
Jefferson City

Marie Ciacco Tsivitis,

MPH, CIC
Hospital Infections Program
New York State Department
of Health
Albany, NY

Katherine West,

BSN, MSEd, CIC
Infection Control Consultant
Infection Control/
Emerging Concepts
Manassas, VA

To reproduce any part of this newsletter for promotional purposes, please contact:

Stephen Vance

Phone: (800) 688-2421, ext. 5511
Fax: (800) 284-3291
Email: stephen.vance@ahcmedia.com

To obtain information and pricing on group discounts, multiple copies, site-licenses, or electronic distribution please contact:

Tria Kreutzer

Phone: (800) 688-2421, ext. 5482
Fax: (800) 284-3291
Email: tria.kreutzer@ahcmedia.com
Address: AHC Media, LLC
One Atlanta Plaza
950 East Paces Ferry NE, Suite 2850
Atlanta, GA 30326 USA

To reproduce any part of AHC newsletters for educational purposes, please contact:

The Copyright Clearance Center for permission

Email: info@copyright.com
Website: www.copyright.com
Phone: (978) 750-8400
Fax: (978) 646-8600
Address: Copyright Clearance Center
222 Rosewood Drive, Danvers, MA 01923 USA