SHEA Newsletter

Edited by Robert A. Weinstein, MD

READERS' VIEWS

This issue of the Newsletter includes a new section, Readers' Views. It is hoped that this section will be used by our membership to bring attention to, and air concerns about, issues important to hospital epidemiology; to promote interchange of ideas, and if needed, to call for straw polls on controversial subjects; to present solutions to common and/or vexing problems that our membership faces; and, when necessary, to challenge conventional wisdom.

SHEA members are urged to contribute to this section. Submissions should be typed, double-spaced; may be up to five pages in length; and should be submitted to the Newsletter Editor at the address noted below. A relatively short "turn-around" time shouid allow prompt publication of contributions.

Dr. Robert W. Haley, a well-known epidemiologist and SHEA member who has extensive experience dealing with topical and controversial issues, has kindly agreed to initiate this section with the following contribution.

Who Will Generate Surgeon-Specific Rates? The Gauntlet Is Down

In the February 1988 issue of *Archives of Surgery* the Surgical Infection Society (SIS) published a remarkable "Standard on Wound Surveillance for Infection," urging that surgeon-specific wound infection rates, stratified by a wound index, be provided on a regular basis to surgeons throughout the country.' The statement, adopted unanimously at a May, 1987 meeting of the SIS, reads as follows:

> In hospitals conducting 2000 or more operations per year involving surgical incisions through skin with subsequent primary closure, prospective wound surveillance will be conducted by the hospital epidemiologist (or other qualified person) of every such wound on a sufficiently frequent basis to determine if the wound heals primarily or if an infectious complication develops. Direct observation of surgical wounds by the surveyor is necessary to fulfill the requirements of this standard.
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> The surveyor will be responsible to and will report directly to the chief or director of surgery
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> Patients discharged from the hospital without apparent infectious wound complications will be followed up on or about the 30th day after surgery to determine if the wound has continued to heal without apparent complication. Such follow-up may be conducted by any method that will yield reliable data. The percentage of successful follow-up will be recorded.
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> Surgeon-specific and specialty service-specific wound infection rates will be determined by infection risk class and will be reported confidentially and in timely fashion to the chief or director of surgery. Personal surgeon-specific infection rates will also be reported confidentially and in timely fashion to each member of the surgical staff. It is recommended that data be appropriately coded to maintain confidentiality. Each hospital will determine the infection risk classification to be used in recording its data.1

Actually, to those who have been closely following the aggressive young society of surgeons interested in infection prevention, the statement itself was not surprising -- merely the playing out of a growing interest of surgeons in the preventive power of specific epidemiologic feedback. What was surprising were the results of a straw poll of the SIS membership indicating great dissatisfaction with the kind of information on wound infections they are presently receiving and with the quality of the job being done by the infection control programs in their hospitals.'

So frustrated was the SIS membership with the inability to get their hospital epidemiologists to provide quality data and specific rates that they called for accurate surgeon-specific rates to be mandated by the Joint Commission and to have the surveillance activity and personnel report to the surgical staffs rather than to the infection control committees. Thus, the surgeons of the SIS have thrown down the gauntlet. Who is going to generate accurate, specific wound infection rates?

In view of this challenge one wonders what is the position of SHEA on this issue. Reduction of wound infection rates following the feedback of surgeon-specific rates was first reported around the turn of the century, was rediscovered by Cruse in the 1970s, was validated in a controlled epidemiologic study in the SENIC Project, and has since been reported from at least ten hospitals in several countries. At a meeting of the American Hospital Association's Technical Panel on Infections Within Hospitals, Walter Hierholzer, Jr., MD concluded, "This result has come up in too many studies with different designs to be

explained by confounding. They couldn't all have the same bias." The American College of Surgeons' Manual on Control of Infection in Surgical Patients has recommended the practice since its first edition in 1976, the CDC *Guideline for the Prevention of Surgical Wound Infections* has recommended it since 1982 (category II), and the Joint Commission's "Agenda for Change" has recently targeted surgical wound infections as one of its hospitalwide "clinical indicators."

Why the reluctance among hospital epidemiologists to determine these rates? I suspect several problems. First, in the 1970s we all learned to produce the old reports of "infection rates by site, service, and pathogen" from line-listing infections and dividing by hand-counted denominators. This precomputer technology is too tedious to produce rates stratified by surgeon and risk class. How many SHEA members are facile at managing data and producing epidemiologic reports of stratified rates by computer?

Second, it is simply human nature to look for all the reasons why we can't or shouldn't do whatever is new, difficult, time-consuming, and on the cutting edge. Arguments for and against the value of surgeon-specific rates are readily available[2]; a two-hour videotape ("Surveillance by Objectives for Infection Control: Point/Counterpoint") is also available from the Medical Learning Center, St. Thomas Hospital (PO Box 380, Nashville, TN 37202; telephone: 615-386-2007).

While the argument rages, the fact remains that the surgeons have discovered the value of epidemiologic feedback for helping them improve the care of their patients. They want this service delivered to them accurately, and they want it managed in a responsible, confidential, and nonpunitive manner. In view of the pervasive movement to measure quality of care., to use quality measurements to effect change, and for hospitals to be held accountable for doing it well, some form of epidemiologic feedback to reduce wound infections to the irreducible minimum will not long be optional.

The only real question now is *who* is going to generate the rates? There are at least four serious contenders: the surgeons themselves, infection control, quality assurance (QA), and external authorities. While the surgeons may be seen to have a conflict of interest that could jeopardize the accuracy of the rates, they also have the most intense interest in improving the care of surgical patients and reducing malpractice risks. The new "standard" of the SIS is intended to put them in the driver's seat. Although infection control and hospital epidemiologists might appear to be more objective, it is not clear that they have the skills and resolve to take on the job. In fact, the percentage of hospital infection control programs providing specific rates to surgeons has been steadily declining, from 19% in the mid-1970s to a low of 6% in CDC's 1986 survey. At present, QA departments appear unlikely candidates because their creators, the Joint Commission and HCFA, have previously defined their role as numerator-counting line-listers, but the "Agenda for Change" may well create a demand for outcome measurement that could propel QA into the rate business. The threat that external authorities will take it over is real. given the HCFA mortality initiative and the directions of the "Agenda for Change." Continued reluctance within the hospitals will only hasten external control.

A famous aphorism among consulting statisticians goes, "If statisticians don't analyze data, others will." I might paraphrase it, "If epidemiologists don't generate accurate and specific rates, others will." I see SHEA at a critical crossroads. The health care world is desperately seeking energy and expertise to measure outcomes and improve quality. The rank and file of our organization must sort out the conflicting claims of efficacy from false enthusiasm, "Old Guard-ism," and inertia. We must decide whether ours is going to be a society *of hospital epidemiologists. To be epidemiologists we must generate the specific rates that will allow our colleagues to reduce adverse outcomes in their patients.*

The Surgical Infection Society has thrown down the gauntlet. You know someone is going to pick it up. Will it be SHEA?

REFERENCES

1. Condon RE, et al: Does infection control control infection? Panel discussion—Surgical Infection Society 1987. *Arch Surg* 1988; 123:250-256.
2. Scheckler WE: Surgeon-specific wound infection rates—A potentially dangerous and misleading strategy. *Infect Control Hosp Epidemiol* 1988; 9:145-146.

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SHEA Wit and Wisdom

Dear *SHEA Newsletter:*

I was very taken by "Interested Reader's" advice in the last issue of the *Newsletter*. In my own experience dealing with authorship, I have learned an equally sobering lesson. This could best be summed up as, "*If the contributions claimed by each co-author in an investigation are summed, the total is always greater than 300%.*"

As a correlary to this lesson I would note the importance of acknowledging all co-investigators and colleagues, preferably in a public forum whenever possible. This type of activity (the so-called "good dog" approach) greatly facilitates future interactions with one's colleagues and subordinates. It always pays to oil the wheel before it squeaks.

Don "Company **Man" Regan, MD**

Dear "Company Man,"

Thank you for sharing those very wise observations with us. One can never be too effusive in praise of colleagues and subordinates. You are truly a man of tremendous insight and obvious talent and your letter has added a great deal to this month's *Newsletter*. Again, many thanks for your willingness to contribute. We hope that others among our extremely talented readership also will be willing to share their insights.

The Editor

Brief items of interest for the SHEA Newsletter may be sent to Robert A. Weinstein, MD, SHEA Newsletter Editor, Division of Infectious Diseases, Michael Reese Hospital, Lake Shore Drive at 31st St., Chicago, IL 60616. Copy must be typed, double-spaced, and may not exceed five pages.