## Hospital infections' cost tallied

In a first, a report broke down 19,154 cases in Pa. last year.

By Josh Goldstein Inquirer Staff Writer November 15, 2006

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Jeanne Stagloff expected that the surgery to repair a tear in her right knee would have her back on the ski slopes in no time.

But soon after her operation in February, the 56-year-old tax accountant developed an infection. As a result, Stagloff needed two additional operations, eight days in a Montgomery County hospital, and more than six months of rehabilitation.

Each year, thousands of patients contract infections in hospitals, a problem detailed for the first time yesterday in a report surveying 168 Pennsylvania hospitals.

Last year, 19,154 patients in Pennsylvania were infected in a hospital - driving up health-care costs, lengths of hospital stays, and death rates, the report said. The study examined 1.6 million hospitalizations.

The report, from the Pennsylvania Health Care Cost Containment Council, is the first in the country that allows people to examine infection rates hospital by hospital.

"The simple fact is that every patient that enters a hospital is at risk for a hospital-acquired infection," said Marc P. Volavka, executive director of the council.

Such infections are the result of "flawed processes" of care and hygiene, not the inevitable consequence of treating ever-sicker patients, Volavka said.

The independent state agency found that patients infected during their care spent nearly 400,000 extra days in hospitals. Those infections added an estimated \$1 billion to the cost of health care in Pennsylvania last year.

More significant, 2,478 patients died after contracting infections during their care, the agency reported. The death rate for patients with infections was 12.9 percent, compared with 2.3 percent for other patients.

The council said it could not determine whether the infections had led to those deaths or whether the patients' underlying conditions had been the cause.

The report puts Pennsylvania at the forefront of a nationwide effort to improve hospital care and reduce medical errors.

It is key to the state's effort to improve care, said Ann S. Torregrossa, senior policy manager in the Governor's Office of Health Care Reform.

"At least we have begun to see the magnitude of the problem," she said. "Until you know the scope of what you are dealing with, you really can't work to eliminate" infections.

The report showed that 673 of nearly 33,300 patients at the Hospital of the University of Pennsylvania contracted an infection. That was a rate of 20.2 per 1,000 patients - higher than the 14.0 per 1,000 in its peer group.

But the report did not explain whether Penn's numbers can be attributed to a particularly good tracking system or a high infection rate.

P.J. Brennan, chief medical officer at the Penn health system, said it was important to look deeper into the numbers.

At Penn, three-quarters of the 121 patients who died of bloodstream infections had "do not resuscitate" orders, so they were not treated for infections, he said.

A major cause of infection is poor hand washing by caregivers, said Maryanne McGuckin, a senior research investigator at Penn's School of Medicine who has studied the problem for 30 years.

Hand washing is also a cheap and easy way for hospitals to cut infection rates by 30 percent or more, she said.

"Combine poor hand hygiene with sicker patients and more surgical procedures, and you get a perfect equation setting patients up for infections," McGuckin said.

John J. Kelly, chief medical officer at Abington Memorial Hospital and an infectious-disease doctor, said public pressure from reports such as the council's should push hospitals to do better.

Volavka cautioned that his agency's report was a baseline and should not be used to compare hospitals because the tracking and reporting of infection rates varies widely.

Still, hospitals support the release of the data "as part of their continuing commitment to transparency and quality improvement," said Andrew Wigglesworth, president of the Delaware Valley Healthcare Council, which represents hospitals.

Statewide, the Cost Containment Council found 12.2 hospital-acquired infections per 1,000 cases. The rate was 13.2 in Philadelphia and 10.5 in the four suburban counties.

The agency examined four types of hospital-acquired infection: bloodstream infections from IVs inserted in large veins, ventilator-associated pneumonia, urinary-tract infections from catheters, and surgical-site infections.

Philadelphia, with its cluster of academic medical centers, may have higher infection rates because its hospitals treat more complex cases and devote more resources to infection surveillance.

The Cost Containment Council grouped hospitals to account for differences in the severity and complexity of their cases.

The top tier included academic medical centers such as Temple University and Thomas Jefferson University Hospitals. It also included suburban hospitals such as Abington and Crozer-Chester Medical Center.

Hospitals in the lower peer groups served fewer patients with less complicated conditions. For example, the third tier included Chestnut Hill Hospital in Philadelphia and Riddle Memorial Hospital in Delaware County.

In addition, certain patients, such as organ-transplant recipients and burn victims, were excluded because their conditions made them more prone to infection.

All the experts agreed that patients could help reduce hospital infections by becoming informed consumers of care. That means asking their doctors about rates of infections and other complications.

Jeanne Stagloff wishes she had known better: "I didn't know what questions to ask."