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US hospitals boost effort to kill bugs

January 2, 2007

As infections that patients pick up in hospitals grow increasingly resistant to antibiotics, US facilities are turning to more aggressive measures.

This includes a "search and destroy" approach borrowed from Europe.

Each year staph infections and other powerful bugs that thrive in hospitals kill 90,000 people and result in \$US4.5 billion (\$A5.8 billion) in excess costs, according to the US Centres for Disease Control and Prevention (CDC).

A study published earlier this month in the American Journal of Medical Quality found hospitals lost \$US27,000 (\$A35,000) for each patient who gets a preventable infection there.

Insurers reimburse many hospital stays by the diagnosis rather than per day, and payment drops off the longer patients stay in the hospital.

"A lot of hospital administrators don't realise how expensive these infections are," said Lance Peterson, head of epidemiology at Evanston Northwestern Hospital, located outside Chicago.

However, the costs have not escaped the notice of the government and private insurers that collectively fund most of the \$US2 trillion (\$A2.5 trillion) US health-care tab.

Antibiotic resistant strains, or "super bugs", now account for about two-thirds of infections associated with health care.

Vancomycin is most often used to treat the stubborn infections, but some have become resistant to the antibiotic.

Betsy McCaughey, founder of the non-profit Committee to Reduce Infection Deaths, said most evidence showed that three steps could dramatically cut infection deaths in hospitals.

But she said most US facilities were not implementing these practices - meticulous hand-washing between procedures, cleaning equipment between patient use, and identifying infected people before they enter the hospital.

"About 90 per cent of patients treated in a hospital know well ahead of time they will be admitted, and can be tested in a doctor's office a week before," McCaughey said.

The CDC suggests that hospitals screen high-risk patients, such as those with weak immune systems, but does not recommend testing all patients for infection. That leaves hospitals to experiment with myriad approaches, resulting in a lack of consistency, experts said.

In fact, big for-profit chains like Tenet Healthcare Corp and Triad Hospitals leave policies on handling infections up to local administrators.

Evanston Northwestern, affiliated with Northwestern University and part of a small local network, is one of a handful of US hospitals to implement "universal surveillance" - testing every patient that walks in the door for an infection. When it gets a positive result, it isolates the patient, gives him or her a powerful antibiotic, and requires all people going into the room to wear gowns and gloves.

For every patient with an untreated infection, four or five start carrying it in their nose, Northwestern's Peterson said.

The hospital's "search and destroy" approach steals a page from some European countries like the Netherlands, where hospital-acquired infections are rare.

A key component of Evanston's effort is Becton Dickinson & Co's new gene-based test, which gives results in a few hours, compared to a few days with an older product.

About 160 of the 5,000 US hospitals use the test, up from 60 a few months ago.

But some experts question whether the rapid gene-based test is more cost-effective than the older - and much cheaper - culture-based version that takes a few days to interpret.

Robert Weinstein, a doctor at Chicago's Cook County hospital and the recipient of a CDC grant to study the issue, said the new test needed peer-reviewed data to support widespread use.

Tenet spokesman Steven Campanini said the company did not deem the test as essential.

Each test costs about \$US25 (\$A33), and the equipment needed to run it costs about \$US30,000 (\$A40,000). If hospitals don't want to make that capital investment, there are leasing and other payment options.

McCaughey says the test is definitely preferred for emergency patients who can't be tested ahead of time, but does not make the old test obsolete for other patients.

"It is easier to use," she said.

"If you don't have a rapid test, you have to isolate the patient until the test comes back."

Meanwhile, public and private insurers are employing both a carrot and a stick to push hospitals to make changes.

On a national level, the US government is considering halting payments for avoidable infections to patients on Medicare, the federal health insurance program for about 43 million elderly and disabled.

Illinois, Pennsylvania and a handful of other states require reporting infection rates, and about two dozen others are considering a mandate.

States fund health care through the Medicaid insurance program for the nation's 53 million needy.

In Illinois, private insurer Blue Cross Blue Shield is giving Evanston Northwestern a bonus payment of about 10 per cent for avoided infections.

Many insurers are also "trying to ratchet down the payments" for the preventable infections, Peterson said.

In Texas, about two dozen hospitals in the Blue Cross Blue Shield network agreed to use a software tracking system that seeks to identify the infections, made by Cardinal Health.

The insurer shares the cost with each hospital, and the hospital must share the results with the insurer, said Rick Haddock, senior director of special programs of Blue Cross of Texas.

"We're trying to find a better mousetrap," he said, adding that the effort has saved \$US1.6 million (\$A2 million) and prevented 326 infections over several years.