

America Has a \$27 Billion Sepsis Crisis

B bloomberg.com/news/articles/2017-07-14/america-has-a-27-billion-sepsis-crisis

New data suggest a striking rise in the deadly syndrome, but hospitals have a profit-motive to find it—and it may have been there all along.

By

John Tozzi

14. Juli 2017, 10:00 MESZ

Sepsis—a frequently lethal condition in which the body’s immune system attacks its own organs while trying to fight off infection—is the top killer in U.S. hospitals, and the country has only recently begun to understand the scope of the problem.

A new government [report](#) suggests that sepsis cases tripled in the decade from 2005 to 2014, causing 1.5 million hospital stays by the end of that period. That’s alarming, but it may be misleading, too. Experts who study sepsis say the apparent increase is actually a reflection of how doctors are getting better at identifying cases they used to miss.

The medical world “is actually recognizing a much more common condition than we realized in the past was actually there,” says Greg Martin, a critical-care doctor and professor at Emory University School of Medicine who studies sepsis.

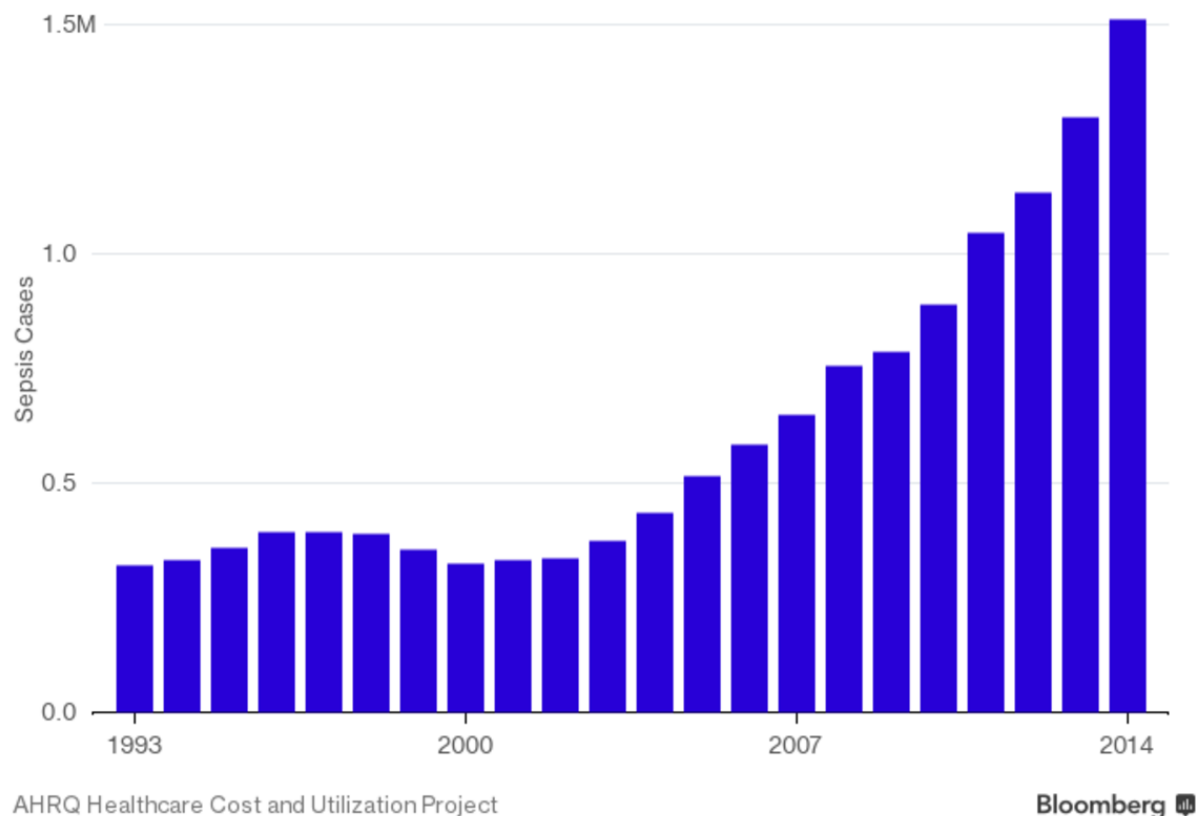
Sepsis is a fast-moving illness that occurs when the body’s own attempt to defeat an outside infection damages tissues and organs. There’s no single test to diagnose it—doctors must piece together a combination of symptoms and biological signals. It can make the heart race, cause trouble breathing, give patients fever or chills, and cause extreme pain. It’s more likely to occur in older people and those with other illnesses. It may play a role in [up to half of all hospital deaths](#).

Saving patients from sepsis, sometimes called septicemia or septic shock, depends on quickly getting them antibiotics, fluids, and other measures to stabilize them. New York State recently issued rules requiring hospitals to follow treatment guidelines after the [high profile sepsis death](#) of a 12-year-old boy whose diagnosis doctors initially missed. [Other states may follow](#).

The recent attention is understandable. A federal tally of hospital billing data shows a dramatic and steady rise in sepsis cases. A new brief from the Agency for Healthcare Research and Quality, a federal agency that studies clinical practices, found that sepsis was the most common reason for hospital stays, with the exception of pregnancy and childbirth. Treating it cost \$27 billion in 2014, or about \$18,000 per case.

Hospital Stays for Sepsis Appear to Be Rising Dramatically

Experts say cases of sepsis may have been undercounted for years



But relying on hospital discharge data, which describe how hospitals bill for patient visits, may elide the true trends in disease rates. “Coding doesn’t always match what’s really happening,” Martin, the Emory University professor, says.

[Research](#) presented at a conference in May and funded by the Centers for Disease Control used clinical data from digital health records at 412 hospitals to estimate how common sepsis is nationally. That analysis came up with a similar number to the new federal report: About 1.67 million cases in 2014. It also found that the number has been stable since 2009. In other words, the same number of sepsis cases may have been there all along.

The difference now seems to be that doctors are getting better at spotting it, hence the upward tick in hospital coding.

“There’s a large focus on increasing awareness of sepsis,” says Chris Seymour, an assistant professor of critical care and emergency medicine at University of Pittsburgh School of Medicine. “The hope is that by alerting the public as well as general practitioners and other people who treat simple infections, that we can educate them about the signs and symptoms,” he says.

Sepsis payments can be more than three times the fees for pneumonia, an infection that frequently precedes sepsis.

Hospitals also have incentives to record sepsis cases that may have previously been attributed to other diagnoses. Doing so can make them [look better](#) on federal measures of hospital quality and increase reimbursements, Emory’s Martin says. Sepsis payments can be more than three times the fees for pneumonia, an infection that frequently precedes sepsis, he says.

The same federal [data](#) that shows sepsis cases tripling in a decade also shows hospital stays for pneumonia dropping by one-third in the same period. If doctors are getting better at identifying sepsis, and hospitals have an

incentive to bill for it, that could explain why a patient who got a diagnosis of pneumonia in 2005 might be considered a case of sepsis ten years later.

Still, the steady upward march of hospital visits attributed to sepsis suggests there is some true increase underlying the numbers, says Anne Elixhauser, a senior research scientist with the Agency for Healthcare Quality and Research, who co-authored the report. When a change is simply related to coding or reimbursement, the increase is typically a more sudden, single-year jump, not a decades-long trend.

True sepsis rates are rising partly because the population is aging, says Steven Simpson, director of pulmonary and critical care at University of Kansas Medical Center. Medicine is also getting better at keeping alive people with serious illnesses, such as organ recipients, cancer patients, and those with autoimmune conditions like HIV—all more susceptible to sepsis. And people without health insurance or access to care may delay treatment for a lesser infection until it becomes more severe.

“Sepsis has been growing, growing, growing for a long time,” Simpson says.

The increasing problem of antibiotic resistant superbugs that render medicines impotent may also play a small role in rising sepsis cases, he says, but it’s not driving the trend. As resistant organisms become more common, however, the danger is likely to increase. “If you have an infection and you are treated with an ineffective antibiotic, you are more likely to develop sepsis,” Simpson says. “Sepsis is what we save our antibiotics for.”