Preventive measures shown to cut hospital C. diff rates
Simple steps can protect patients, a new study says. But some physicians say quality metrics encourage antibiotic use and increase the number of infections.

By KEVIN B. O'Reilly, amednews staff. Posted Nov. 1, 2010.

Implementing a comprehensive set of infection control measures can cut the incidence of Clostridium difficile significantly, according to a study presented at the American College of Gastroenterology's annual meeting.

Integris Baptist Medical Center in Oklahoma City was able to cut its C. diff rate by 40%, from 11.3 per 10,000 admissions to 6.9, in three months after forming a multidisciplinary "war on C. diff" committee to devise and implement infection prevention measures.

The infection occurs nearly 500,000 times annually in hospitals and nursing homes. The national C. diff rate is 13 per 10,000 admissions, and about 30,000 people die each year of the disease in health care facilities, according to the Centers for Disease Control and Prevention.

The Integris committee reviewed infection control guidelines from the CDC, the Society for Healthcare Epidemiology of America and the Infectious Diseases Society of America and outlined some suggestions to make it easier for physicians, nurses and other health professionals to protect patients.

"Often the trash can in the patient room was in the back near the window, and if you took off your gown and gloves, you could potentially recontaminate yourself. Now we always have the can at the door," said Mark Mellow, MD, lead author of the study and director of the Integris Digestive Health Center. "Now we also make the sink easily accessible, so people wouldn't have excuses for not cleaning."

The hospital, which admits 26,000 patients annually, changed its protocol to allow nurses to order stool sample tests in cases of suspected C. diff, without waiting for physicians, to allow for earlier detection and isolation of infected patients. Integris also discouraged use of proton pump inhibitors, which -- like antibiotics -- can make patients vulnerable to contracting C. diff. But Dr. Mellow said that battle in the hospital's "war on C. diff" has been less successful.

"It's been a hard habit to break," he said of PPI prescribing.

Quality measures' role
Another study presented at the college's October meeting in San Antonio said that Joint Commission and Centers for Medicare & Medicaid Services hospital quality metrics introduced in 2004 and intended to improve pneumonia and surgical infection outcomes may be contributing to higher C. diff rates.

The C. diff rate more than tripled from 16 per 10,000 admissions in 2003 to 58 in 2008 at Bronx-Lebanon Hospital Center in New York City, while the number of antibiotic doses per 1,000 admissions rose 80% during the same period, the study said.

The quality measures "have led to a substantial increase in antibiotic usage," the study said. "We believe this has resulted in an increase in Clostridium difficile infections in our patient population."

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ADDITIONAL INFORMATION:

Waging war on C. diff
In three months, Integris Baptist Medical Center in Oklahoma City cut its Clostridium difficile rate by 40%. Here are the steps it took:

- Implemented standard isolation procedures.
- Moved trash cans near doors to avoid moving around the room after degowning.
- Uncluttered sink areas.
- Stocked rooms with appropriate sized gloves.
- Made stethoscopes more easily accessible.
- Campaigned to limit use of proton pump inhibitors outside critical care units.
- Allowed nurses to order C. diff tests without waiting for physicians.

Source: "Aggressive attack on C. difficile results in significant decrease in hospital infection rate -- the Integris Baptist Medical Center experience," presented at the American College of Gastroenterology's annual scientific meeting in San Antonio, Oct. 18

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C. difficile thriving even without antibiotic use  Oct. 27, 2008