

Reply to Goldenberg

To the Editor—We reviewed with interest that Goldenberg¹ reports a similar outcome in his recent study that validates our institution's findings. This strengthens the evidence that polymerase chain reaction (PCR) testing for *Clostridium difficile* may increase the prevalence of positive tests, in addition to the rate of *C. difficile* infection (CDI).² Dr. Goldenberg's UK study also reinforces the fact that testing with PCR and observing increased CDI rates is a global phenomenon, not a local laboratory finding.

However, with the notice in increased sensitivity, it is difficult to separate patients who are truly infected from those who are colonized. For example, if a hospitalized patient who has been on antibiotic therapy has a loose bowel movement and *C. difficile* PCR is positive, would this represent colonization or a CDI? This comes into play when states, such as Ohio, mandate reporting positive *C. difficile* test results without contextual interpretations.

In the current age of mandatory public reporting, wherein public display of CDI rates implicitly compares a hospital's quality of care,³ the method for CDI case ascertainment should be identified. This also pertains to the United Kingdom, where hospitals may be fined for their elevated rates of CDI. Now with data from 2 different institutions reporting increased CDI rates, this adds another reason for the need to incorporate case mix adjustment into consideration—the complexity of the patient population, the severity of illness, and the testing methodology should be taken into account.⁴ Publicly reported rates in the absence of context can oversimplify the complex nature of infections and have the unintended consequence of a disincentive to perform thorough surveillance.

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Decreasing the Prevalence of *Clostridium difficile* in a Long-Term Care Facility

To the Editor—*Clostridium difficile* is an inimitable bug that normally lives in the gut. When an antibiotic is taken to treat an infection or an H2 antagonist is used to decrease the production of acid in the stomach, helpful or normal bacteria are destroyed, causing an overgrowth of the *C. difficile* bacteria. *Clostridium difficile* localizes to the large bowel, where it manifests as diarrhea and colitis (*C. difficile* infection, or CDI). The symptoms of CDI can be mild (a low-grade fever, mild diarrhea [5–10 watery stools a day], mild abdominal cramps and tenderness, and nausea) or life threatening (severe diarrhea [10–15 stools per day], severe abdominal cramps, a temperature of 102°–104°F, blood or pus in the stools, weight loss, dehydration, and peritonitis).¹

In recent years, CDI has become endemic in many hospitals, resulting in substantial excess healthcare costs and excess hospital-days. Data on the actual associated costs of CDI are not freely available because there is no mandatory reporting mechanism by the Centers for Disease Control and Prevention for *C. difficile*. According to the study “National point prevalence of *Clostridium difficile* in US health care facility inpatients, 2008,” published in the *American Journal of Infection Control*, 13 out of every 1,000 patients, or approximately 7,178 inpatients, are infected or colonized with *C. difficile* every day.² It is estimated that an average-sized hospital can expect 100 cases of CDIs each year, with an extra annual cost of \$632,000 and 2,100 lost bed-days. These infections kill between 165 and 438 patients every day and cost between \$17.6 and \$51.5 million.³

The risk for disease increases in patients with antibiotic exposure, gastrointestinal surgery, extended length of stay in healthcare settings, a serious underlying illness, immunosuppressant conditions, and advanced age. As a nurse caring for patients with many of these characteristics, I am especially interested in CDI prevention, as are the managers of the small