C. difficile lengthens hospital stays by 6 days
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A new study published in the CMAJ (Canadian Medical Association Journal) reports that hospital-acquired Clostridium difficile infection increases length of stay in hospital by an average of six days.

C. difficile is the most common cause of infectious diarrhea in hospital, and it is estimated that 10% of patients who become infected in hospital will die.

Researchers used The Ottawa Hospital Data Warehouse to analyze data on 136,877 admissions to The Ottawa Hospital between July 1, 2002 and March 31, 2009. A total of 1393 patients acquired C. difficile in hospital during this time, and these patients spent 34 days in hospital compared with 8 days for patients who did not have C. difficile. However, the researchers also found that patients who became infected with C. difficile tended to have more serious illnesses and would have been more likely to stay longer in hospital anyway. When the researchers controlled for the level of illness using a mathematical model, they found that hospital-acquired C. difficile increased the length of stay in hospital by six days.

"We believe our study provides the most accurate measure yet of the impact of hospital-acquired C. difficile on length of hospital stay," says lead author Dr. Alan Forster, a senior scientist at the Ottawa Hospital Research Institute and associate professor at the University of Ottawa. "C. difficile is a very serious problem for patients and for the health care system, however the good news is that tools such as The Ottawa Hospital Data Warehouse are providing us with more accurate information about C. difficile infection than we've ever had before, and this is helping us improve our infection-prevention efforts and also analyze their cost-effectiveness."

In a related commentary Dr. David Enoch, Peterborough and Stamford Hospitals, United Kingdom, and coauthor write that prevention and strict control measures are important for controlling the spread of the disease. "Adhering to basic evidence-based precautions can rapidly reduce the transmission of C. difficile and its associated mortality," they state. "Surveillance is essential to assess the efficacy of interventions."