

Number crunching: APIC outlines elephant in room

A breakdown of 1,062 C. diff patients

The Association for Professionals in Infection Control and Epidemiology Inc. national prevalence study of *Clostridium difficile* infection (CDI) in U.S. health care facilities resulted in the following key findings:

1. The total number of patients identified with *C. difficile* colonization/infection was 1,443. Of those, the following detailed data were provided for 1,062 (73.5%) of the patients:
 - 55.9% were female, 44.1 % were male
 - 69.2% were >60 years of age
 - 67.6% had comorbid conditions (renal failure, diabetes, or heart failure)
 - 57.9% had an initial episode of mild or moderate disease
 - 10.94% had severe to complicated disease
 - 89.8% of patients were detected by enzyme-linked immunoassay for A and B toxins (rather than culture)
 - 1.9% were detected by culture
 - 54.4% were detected <48 hours of admission
 - 45.5% were detected >48 hours of admission
 - 72.5% were considered health care-associated infection
 - 26.6% required ICU admission, 18.2% had shock and 16.5% required vasopressors.
 - 35.1% had long-term facility residence within 30

days of onset

- 79.4% had antimicrobial exposures before onset. (17.14% as surgical prophylaxis)
 - 47.4% had hospitalization within 90 days of onset
 - 46.5% had resolution of diarrhea within six days (CDC definition of cure)
2. 84.7% of all *C. difficile*-infected patients were on the medical services, meaning they were being treated for general medical conditions like diabetes and pulmonary and cardiac problems.
 3. 79.4% of *C. difficile*-infected patients received antimicrobials before their CDI onset. A wide variety of antimicrobials were associated with CDI. Furthermore, a wide variety of treatment regimens were used to treat the CDI.
 4. Detailed data on the facilities that participated in the survey include:
 - There was an average 1.5 infection prevention-ists at participating facilities
 - Of participating health care facilities, 65.3% were urban and 34.7% rural
 - Facilities had a median of 224 licensed beds and ranged in size from six to 1,097 licensed beds
 - Facilities had a total of 110,550 inpatients during survey period, averaging 171 patients per facility
 - 26.5% of facilities were medical school-affiliated and 24.4% were tertiary care facilities
 - Most used a hypochlorite solution for environmental disinfection
 - 46.7% reported having an antimicrobial stewardship program (62% of medical school affiliated and 41% of nonmedical school-affiliated facilities) ■