

PCT-aided antibiotic stewardship and the impact on CDI

Long term use of antibiotics and cumulative exposure are significant risk factors for CDI¹

CDI is estimated to cause almost half a million illnesses in the United States each year, and an estimated 29,300 deaths.²

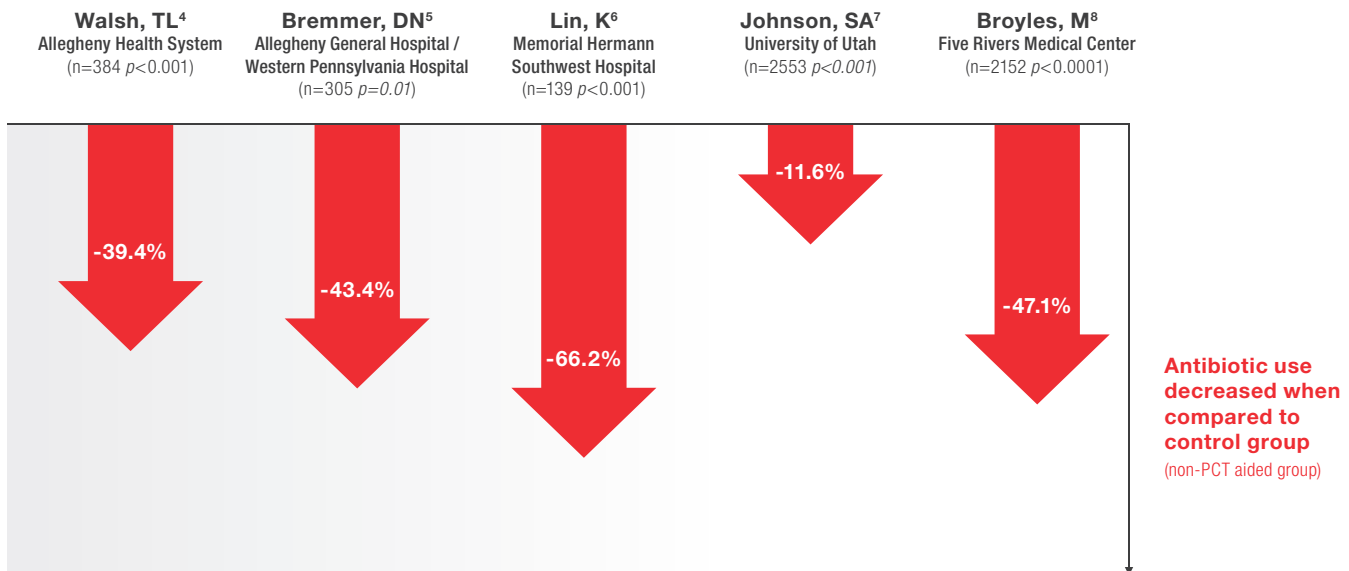
CDI *Clostridioides difficile* infection

About **1 in 6 patients** with CDI will get it again in the subsequent 2–8 weeks.²

One in 11 people over 65 diagnosed with a healthcare-associated CDI die within a month.³

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Strong evidence supports safe reduction of antibiotics when using PCT-aided antibiotic stewardship protocols



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Integration and impact of PCT as part of antibiotic stewardship program

The addition of PCT to the existing antimicrobial stewardship practices at Five Rivers Medical Center contributed to significant reductions in median days on antibiotic therapy, all-cause readmission, adverse events from antimicrobials, all-cause hospital mortality and *C. difficile* infections.⁸

Antibiotic stewardship programs that focus on the overall reduction of total dose as well as number and days of antibiotic exposure and the substitution of high-risk antibiotic classes for lower-risk alternatives may reduce the incidence of hospital-acquired CDI.¹

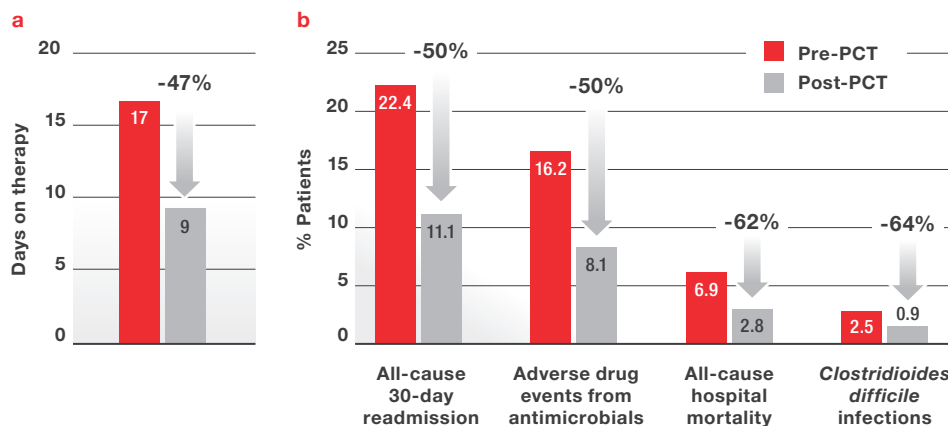


Figure 20 (a) Median days on therapy four years before PCT implementation (pre-PCT, 985 patients) and four years after PCT implementation (post-PCT, 1167 patients). (b) Percentage of patients suffering complications pre-PCT and post-PCT (adapted from Broyles MR et al., Open Forum Infect Dis 2017)⁸

The cost impact of CDI

Possible CMS 1% penalty on Medicare reimbursement to hospitals experiencing HAI rates (CLABSI, CAUTI, SSI, MRSA, CDI) in the top 25th percentile⁹

Average total costs for CDI management per case were \$21,448¹⁰



CAUTI Catheter-Associated Urinary Tract Infection | **CDI** Clostridioides difficile Infection | **CLABSI** Central Line-Associated Bloodstream Infection
MRSA Methicillin resistant Staphylococcus aureus bacteremia | **SSI** Surgical Site Infection for abdominal hysterectomy and colon procedures

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