Because of the limited number of isolation beds in the general ward and surgical bays, only the most drug-resistant infections and transmissible infections (eg, vancomycin-resistant enterococci and colistin-resistant *Klebsiella pneumoniae*, tuberculosis, and chickenpox) are given exceptional infection control priorities for isolation. Patients with ESBL producers, MRSA, and infectious diarrhea or vomiting—or even carbapenem-resistant gram-negative organisms—are isolated on the basis of the resources available and clinical needs.

To conclude, maintaining isolation facilities is a resourceintensive operation. Apart from making available a physically separable room, there is a need for separate ventilation, plumbing, pressure monitoring system, washing and toilet facilities, nursing care, physical barriers (such as double doors), and elaborate use of PPE. In resource-constrained settings, where the priority is to deliver a degree of care to the majority, high-quality measures such as providing an isolation facility that meets international standards may not be economically viable or practically feasible. From a health economic viewpoint, it may be more reasonable to provide highcost medical and surgical care to patients rather than utilizing the same resources for high-quality but resource-intensive isolation rooms.

The Tata Medical Center is a charitable, nonprofit institution. It aims to deliver state-of-the-art care to cancer patients. There is a need to individualize isolation policies and prioritize isolation based not only on infection concerns but also on clinical needs and resources available. Universal isolation or cohort nursing of patients infected with MDROs is viable when such patients are a minority. In high-prevalence settings, alternative solutions need to be explored.

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# Unnecessary Antimicrobial Use in the Context of *Clostridium difficile* Infection: A Call to Arms for the Veterans Affairs Antimicrobial Stewardship Task Force

To the Editor-We congratulate Shaughnessy et al<sup>1</sup> on their recent investigation of unnecessary antibiotic use in patients at the Minneapolis Veterans Affairs Medical Center (MVAMC) with current or recent Clostridium difficile infection (CDI). As members of the VA Antimicrobial Stewardship Task Force (ASTF), we are particularly interested in studies that demonstrate priority areas to improve antibiotic use. Their finding that 77% of patients received at least 1 unnecessary antimicrobial dose and that 26% received only unnecessary antimicrobials (apart from those directed against CDI) indicates ample opportunity to improve antimicrobial stewardship among our veteran patients with CDI. Furthermore, the estimate that 45% of total non-CDI antimicrobial days were unnecessary was not surprising given the frequently quoted estimate that approximately 50% of all antimicrobial use is inappropriate, regardless of setting.<sup>2</sup> Their findings are particularly notable given that the MVAMC uses highly sophisticated and robust computerized decision support<sup>3</sup> to assist providers in decision making regarding antimicrobial use; one might speculate that medical centers without similar computerized decision support might have even more unnecessary antimicrobial use in the context of CDI. We particularly agree that the period of time immediately following a CDI diagnosis is "a high-risk period when clinicians should be exercising increased caution with antimicrobial therapy."<sup>1</sup> To the antimicrobial steward, a CDI diagnosis thus represents a "call to arms"-a call we are addressing through a series of recently introduced programs, including one to address antibiotic use after CDI diagnosis.

The ASTF, since being chartered by the VA Office of Patient Care Services in May 2011,<sup>4</sup> promotes the development and expansion of antimicrobial stewardship activities throughout the VA system. One function of the ASTF is to create model antimicrobial stewardship policies that can be adapted by individual VA facilities under the guidance of their pharmacy and therapeutics committees. Model polices are introduced and explained via monthly educational webinars and are made available through the ASTF SharePoint site, which serves as a forum for communication of ideas to promote good antimicrobial stewardship. In addition, ASTF members use the site to actively participate in the dissemination of information and tools that can be used by clinicians implementing and expanding antimicrobial stewardship programs. Other Professional Organization Guideline Recommendations for Antimicrobial Duration of Therapy for Select Infections Disease condition Recommended duration of therapy Clostridium difficile infections Mild to moderate (initial episode or first recurrence) 10-14 days (metronidazole) Severe, uncomplicated (initial episode) 10-14 days (vancomycin) Skin and skin structure infections Uncomplicated, culture-negative cellulitis 7 days<sup>a</sup> Complicated MRSA 7-14 days (based on patient response) Genitourinary infections Catheter-associated urinary tract infection 7 days if prompt resolution of symptoms or 10-14 days for delayed clinical response, regardless of whether the patient remains catheterized or not; 5 days if using levofloxacin in a patient who is not seriously ill; 3 days in a female ≤65 years old without upper urinary tract symptoms after catheter has been removed Asymptomatic bacteriuria in a pregnant female 3-7 days 5 days (nitrofurantoin); 3 days (trimethoprim-sulfamethoxazole, if local Acute uncomplicated cystitis in an adult female resistance rates among uropathogens are <20% or if infecting isolate is known to be susceptible); single dose (fosfomycin) Intra-abdominal infections Established intra-abdominal infection where source control is achieved 4-7 days Acute stomach and proximal jejunal perforations where source con-24 hours trol is achieved within 24 hours, in the absence of acid-reducing therapy or malignancy Bowel injuries attributable to penetrating, blunt, or iatrogenic trauma ≤24 hours that are repaired within 12 hours and any other intraoperative contamination of the operative field by enteric contents Acute appendicitis without evidence of perforation, abscess, or local ≤24 hours peritonitis Pneumonia Community-acquired pneumonia Minimum of 5 days; should be afebrile for 48-72 hours and have no more than 1 associated sign of clinical instability before discontinuation of therapy Hospital-acquired, ventilator-associated, and healthcare-associated If initial antibiotic regimen is appropriate, consider shortening the durapneumonia tion of therapy from the traditional 14-21 days to periods as short as 7 days, provided that the etiologic pathogen is not Pseudomonas aeruginosa and that the patient has a good clinical response DFIs Continue antibiotic therapy until there is evidence that the infection has General recommendation resolved but not necessarily until a wound has healed Specific situations Mild DFI 1-2 weeks (though some require an additional 1-2 weeks) Moderate to severe DFI (without osteomyelitis) 2-4 weeks DFI with osteomyelitis 4-6 weeks (shorter if entire infected bone is removed and probably longer if infected bone remains) CRBSIs Uncomplicated CRBSI due to coagulase-negative staphylococci other 5-7 days or observation alone if no intravascular or orthopedic hardthan Staphylococcus lugdunensis (catheter removed) ware is present and additional blood cultures (performed on samples collected when the patient is not receiving antibiotics) are obtained after catheter withdrawal to confirm the absence of bacteremia CRBSI with persistent bacteremia and fungemia >72 hours following 4-6 weeks from first negative blood culture following catheter removal catheter removal, associated endocarditis, or suppurative thrombophlebitis CRBSI with associated osteomyelitis 6-8 weeks from first negative blood culture following catheter removal Catheter-associated exit site or tunnel infection without associated 7-10 days following catheter removal and incision and drainage (if bacteremia or fungemia indicated)

TABLE 1. Veterans Affairs Antimicrobial Stewardship Task Force Summary of Infectious Diseases Society of America (IDSA) and

NOTE. CRBSI, catheter-related bloodstream infection; DFI, diabetic foot infection; MRSA, methicillin-resistant *Staphylococcus aureus*. \* Non-guideline-based recommendation, based on Jenkins et al.<sup>6</sup>

One model policy is an initiative that directs clinical pharmacists to review medication profiles of C. difficile-positive hospitalized patients to identify potential candidates for therapeutic interventions, with a particular focus on potentially unnecessary non-CDI-directed antimicrobial therapy. The policy recommends that severe CDI cases be referred for infectious diseases consultation. If a potential candidate for non-CDI antimicrobial therapy intervention is identified, the pharmacist communicates with the primary team through a templated note that addresses the importance of minimizing unnecessary antimicrobial exposure in patients with CDI. To assist stewards in making recommendations regarding duration of therapy, a table summarizing pertinent recommendations endorsed by the Infectious Diseases Society of America and other organizations was provided; a streamlined version of this table is presented here (Table 1). The policy was presented and released to the VA community in August 2012. Based on preliminary follow-up of ASTF educational events, nearly half of all VA facilities reported that they were likely to prepare or update a policy limiting non-CDI-directed antibiotic exposure in order to improve outcomes for patients with CDI. Further system-wide evaluation of implementation and outcome-related utilization of the example CDI policy is planned.

Largely because of its integrated electronic medical record system and recent findings that indicate considerable variation in antimicrobial usage across VA medical centers nationwide,<sup>5</sup> we feel that the VA has immense potential to serve as a home for innovation in antimicrobial stewardship, and we look forward to ongoing discussions with our VA infectious diseases colleagues nationwide as to how we can best meet this potential.

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## *Clostridium difficile* Surveillance: A Multicenter Comparison of LabID Events and Use of Standard Definitions

To the Editor—Rates of hospital discharges with Clostridium difficile infection (CDI) increased in the United States from 38 to 85 per 10,000 discharges from 2000 to 2009.<sup>1,2</sup> Because of increased concern about the rising incidence of CDI, the Centers for Medicare and Medicaid Services (CMS) began requiring all acute care hospitals to submit LabID event data to the National Healthcare Safety Network (NHSN) in 2013 and plans to publicly report these data on the Hospital Compare website beginning in 2014. CDI and LabID event rates are both based on positive laboratory test results, but LabID events do not incorporate clinical assessment and may, therefore, overestimate true incidence. The CMS's requirement that hospitals submit LabID events, not CDI data, is partly