

prescriptions for selected antibiotics has been followed by significant reductions in their use.^{12,13} Computer alerts generated at the time of drug prescription also show promise in addressing the complex problem of antimicrobial misuse.^{14,15}

A range of healthcare-system-based options to reduce inappropriate use has been proposed,¹⁶⁻¹⁸ but, to be effective, any restrictions ultimately will have to be accepted by those laboring under them. Each hospital will need to adopt strategies that are most likely to be workable, given the hospital's resources, the personalities of its staff, and its philosophy.¹⁹

Before publication of the HICPAC guidelines, vancomycin use had risen substantially; one university hospital documented a 20-fold increase from 1981 through 1991.¹⁰ Recent isolations of *S aureus* with decreased susceptibility to vancomycin underscore the problem of the intense selective pressure applied by this use.^{20,21} We would ask physicians to accept as reasonable and in the best interest of patients the trade-off of limits on their prerogative to prescribe certain antibiotics in exchange for a friendlier hospital microbial milieu.

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Surgical Patients With *Clostridium difficile*-Associated Diarrhea

Gina Pugliese, RN, MS
Martin S. Favero, PhD

Crabtree and coinvestigators from the University of Virginia Department of Surgery prospectively studied all episodes of treated *Clostridium difficile*-associated diarrhea (CDAD) in surgical inpatients at the University of Virginia Hospital from December 1996 through March 1998. CDAD accounted for 3.2% (32) of 1,000 total infections. Compared with a randomly selected control group with other nosocomial infections, patients with CDAD had a longer period from the time of admis-

sion to diagnosis of infection (19 ± 4 vs 9 ± 1 ; $P=.01$), were more likely to be female (66% vs 37%; $P=.009$), and had a higher overall crude mortality (31% vs 11%; $P=.01$), although there were no deaths directly attributable to CDAD. Ciprofloxacin (19%) and cefoxitin (16%) were the most common individual antibiotics prescribed before the diagnosis of CDAD. The average time from completion of antibiotic therapy to diagnosis of CDAD was 7 ± 2 days (range, 0-58). Sixteen percent (5/32) developed CDAD after administration of prophylactic perioperative antibiotics only. The authors concluded that the high crude mortality rate associated with

CDAD suggests that this may be an important predictor of poor outcome among infected surgical patients. Antibiotics used commonly but not classically associated with CDAD frequently precipitate this infection. In addition, the use of prophylactic antibiotics is not without risk, as demonstrated by the substantial percentage of CDAD occurring after routine administration of these agents.

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