The authors concluded that environmental contamination and lapses in infection control techniques may have facilitated transmission from patient to patient by healthcare workers. In addition, resistance to ampicillin and gentamicin, the antimicrobials used to treat infants with suspected sepsis in this ICN empirically, may have enabled *E hormaechei* to become epidemic.

E hormaechei first was identified as a unique species in 1989; however, this is the first published report of clinical infections due to this organism.

FROM: Wenger P, Tokars J, Brennan P, et. al. An outbreak of *Enterobacter hormaechei* infection and colonization in an intensive care nursery. *Clin Infect Dis* 1997;24: 1243-1420.

Antimicrobial Control Programs Result in Annual Savings Up to $500,000

The current cost of antimicrobial therapy is more than $7 billion annually in the United States, with up to $4 billion used for treatment of nosocomial infections due to antibiotic-resistant bacteria. Antimicrobials account for up to 30% of hospital drug budgets. Moreover, it has been recognized for more than 3 decades that up to 50% of antimicrobial usage in US hospitals is inappropriate. Now that managed-care organizations oversee a greater proportion of healthcare expenditures, there is even greater fiscal pressure to limit antimicrobial costs.

In this era of return to primary care, infectious disease (ID) physicians need to provide evidence that their nonpatient-care activities remain cost-effective. As such, it is important to document the crucial role of the infection control practitioner (ICP) in programs to control antimicrobial costs.

Researchers from the Robert Wood Johnson Medical School and the University of Pennsylvania School of Medicine recently reviewed a representative sample of articles from 1966 to 1995 that dealt with antimicrobial costs. The methodology and cost effectiveness of antimicrobial control programs in the United States and Canada were reviewed to determine the role of the ICP in designing and implementing these programs to make recommendations that maximize the impact that ID physicians could have on containing hospital antimicrobial costs.

Controlling antimicrobial costs was found to be achieved by the use of eight strategies: education, formulary restriction, pharmacy justification, formulary substitution, computer surveillance, laboratory item cost listing, purchase plans, and multidisciplinary approaches. Most strategies had input from ID physicians and resulted in cost savings up to $500,000 annually, particularly during the initiation periods. Educational efforts were successful in reducing costs but needed continual intervention. Formulary restriction was found to be the most straightforward cost-control mechanism. Restriction of target antimicrobials has given way to switch therapy between expensive and less costly agents or between parenteral and oral regimens. Switch therapy is facilitated through the use of innovative order forms and on-line computer interaction. Computer surveillance has the capacity for interactive controls. Purchase plans may give way to centralized pharmacy monitoring, a strategy that is attractive to managed-care organizations.

In the large representative sample of articles, it was found that an ICP was involved approximately 85% of the time in either planning or executing an antimicrobial control program. Comprehensive programs, those that used four or more strategies to control costs, usually featured multidisciplinary teams, working together to implement multiple strategies and to obtain the best economic success. The role of hospital administration was highlighted as a key player by recognizing the benefits of new strategies and the need for designation of leaders to implement the plans.

The authors point out that the function of controlling antimicrobial costs can be usurped quickly by other healthcare providers, including pharmacists and quality-care administrators. Step-by-step details are provided for the ID physician to translate his or her expertise in antimicrobial use into leadership of the antimicrobial management program. For example, the authors suggest that it is important to understand the goals of the managed-care organizations (MCOs) whose focus is on capitated care and savings on all pharmaceuticals, particularly antimicrobials for both inpatients and outpatients. The MCOs may wish to develop their own teams for antimicrobial management programs that serve several hospitals and may be in a better position than smaller hospitals to provide the initial capital outlay for developing such programs and may have a large centralized data processing center to analyze data. Formularies already published by large pharmaceutical claim companies, some insuring up to 59 million lives, should be attractive to MCOs. The ID physicians should approach these consortiums to develop incentive programs based on expenditures for both outpatient and inpatient drugs and devices used to treat infections.

The authors conclude that the ID physicians are best equipped to address cost-containment issues and need to mobilize their colleagues in pharmacy, nursing, and quality management to present a comprehensive and cohesive program to hospital administration that will appeal to the MCOs in their region. They direct the ID physician to use the numerous published algorithms (termed critical pathways and clinical practice guidelines) as a checklist or road map for contemporary implementation of antimicrobial control programs.

FROM: John JF, Fishman NO. Programmatic role of the infectious disease physicians in controlling antimicrobial costs in the hospital. *Clin Infect Dis* 1997;24:471-485.

Additional news items in this issue: NIOSH Publishes Latex Allergy Alert, page 537; Hepatitis B Outbreak in EEG Clinics in Toronto, page 553; Nosocomial Aspergillosis Associated With Construction, page 560; Free Access to MEDLINE on WWW, page 565; TB Skin Testing of BCG-Vaccinated Children, page 574.

https://doi.org/10.1017/S019594170009278X Published online by Cambridge University Press