

POSTER ABSTRACTS

220. Ongoing Impact of an Antimicrobial Stewardship Program at A Large Academic Medical Center, 7 years of experience

Susan Kline, MD, MPH¹; Kimberly Boeser, PharmD, BCPS AQ-ID²; Teresa Rakoczy, RN, BSN³; Amanda Guspier, MPH³; Anita Guelcher, RN, BSN³; Christine Hendrickson, RN, BSN³; Pamela Phelps, PharmD²; ¹Medicine/Infectious Diseases, University of Minnesota Medical School and University of MN Medical Center, Fairview and University of MN Amplatz Children's Hospital, Minneapolis, MN; ²Pharmacy, University of Minnesota Medical Center, Fairview and University of Minnesota Amplatz Children's Hospital, Minneapolis, MN; ³Infection Prevention, University of MN Medical Center, Fairview and University of MN Amplatz Children's Hospital, Minneapolis, MN

Session: 39. Antibiotic Stewardship
Thursday, October 9, 2014: 12:30 PM

Background. The University of Minnesota Medical Center (UMMC), Fairview is a 300 bed tertiary care facility. UMMC has had a long-standing, comprehensive antimicrobial stewardship program (ASP).

Methods. The stewardship team is comprised of a full-time PharmD and ID staff members who rotate through the service. The team allows providers to order restricted

antimicrobials, per hospital guidelines and policies, without upfront approval, followed by a chart review. Recommendations are placed in the electronic medical record as a progress note. Verbal recommendations may also be made. The number of patient on restricted antimicrobial, total number of interventions and acceptance rates, antimicrobial cost per patient day (pt day), antimicrobial utilization, and patient outcomes are evaluated annually.

Results. The team made 15,940 recommendation from 2007-2013; 9,569 (60%) accepted, 3071 (19.3%) agree with management, 3300 (20.7%) declined.

There was a downward trend in Hospital Acquired (HA) *C. difficile* diarrhea from January 2007–December 2013 from 1.2 to 0.5/1,000 pt day. From 2009-2013 a decrease was seen in HA VRE infections from 0.53 to 0.22/1,000 pt days and in HA MRSA infections from 0.2 to 0.09/1,000 pt days. Newly acquired HA ESBL infections increased from 2009-2013 at 0.09 to 0.21/1,000 pt days.

Cost savings, after adjusting for inflation, continued from year to year. The greatest cost savings was from 2006-08 in which antimicrobial doses/pt day declined by 7%, antibiotics costs declined by \$7.40/pt day. In 2012, we observed our lowest antibiotic cost/pt day at \$36.36 which is a difference of \$19.03 before implementation of the program. We observed an increase in antibiotic cost/pt day in 2013 to \$42.17 which is the same as 2011. The reasons for the increase are currently under investigation.

Conclusion. The ASP has continued to cost justify the program by reducing antibiotic use and antibiotic costs per patient day. Quality of care was not adversely affected. We began to observe a decrease in HA VRE and *C. difficile* infections after 3 years of operation, and MRSA after 5 years. The effects of the program and the Infection Prevention Department appear to be synergistic. Future areas for focus include rising ESBL HAIs and increased antimicrobial costs in 2013.

Disclosures. All authors: No reported disclosures.