



MICHIGAN SOCIETY OF HEALTH-SYSTEM PHARMACISTS

FOR IMMEDIATE RELEASE

Nov. 5, 2015

Contact: Leah Ball, MPA director of communications

(517) 377-0232

Antimicrobial Stewardship Team to be Recognized for Developing Innovative Program

Lansing, Mich. – The University of Michigan (U-M) Health System antimicrobial stewardship team (AST) will receive the 2015 Michigan Society of Health-System Pharmacists (MSHP) Professional Practice Award at this year's MSHP Annual Meeting on Nov. 6.

The MSHP Professional Practice Award recognizes and honors a pharmacist or organization for involvement and participation in an innovative project (e.g., published research, projects or services implemented) that contributes to professional practice. This year's recipients are being honored for their work on advancing blood culture review and developing a process that is now used hospital-wide at their facility. The AST consists of Greg Eschenauer, Kristin Klein, Jerod Nagel, Twisha Patel and pharmacists of the University of Michigan.

This group piloted a program at U-M Health System reviewing all positive blood cultures. Real-time pages were received following each gram-stain, organism identification and susceptibility over a three-month period. For patients deemed to have true bacteremia, the team reported significant improvements in time to appropriate therapy, which resulted in decreases in mortality, intensive care unit length of stay and recurrent bacteremia. During the pilot program, the AST also developed a novel algorithm to help differentiate blood culture contaminants from true pathogens, along with a decision tree to provide guidance on appropriate times to de-escalate antimicrobial therapy based upon microbiology data.

Following the pilot, the AST developed a process for clinical pharmacists to receive real-time pages, and provided extensive education to all pharmacists in the health system. The program was rolled out hospital-wide, allowing pages to be reviewed 24 hours a day, seven days a week.

In addition to the process they developed at the health system, several publications have highlighted positive studies conducted by the team. *Clinical Infectious Diseases* published a piece on the integration of rapid diagnostic testing (RDT) via matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF), which utilizes mass spectrometry to rapidly identify organisms following isolation from clinical specimens. MALDI-TOF with AST intervention decreased time to organism identification and improved time to effective antibiotic therapy as well as optimal antibiotic therapy. In addition, the *Journal of Clinical Microbiology* published a similar study, which found that RDT with real-time AST intervention can reduce the time to identification of coagulase-negative *Staphylococcus* (CoNS) from blood cultures, improve the time to optimal therapy for patients with true bacteremia, decrease unnecessary antibiotic therapy and decrease the need for additional vancomycin therapeutic drug monitoring in patients with blood cultures contaminated with CoNS.

MSHP is a practice section of MPA consisting of more than 600 health-system pharmacy professionals. Since its founding in 1883, MPA has been a leader in the professional and scientific advancement of pharmacy and in safeguarding the well-being of individual patients in Michigan.

###