

AAEM Works for Antibiotic Stewardship on the National Stage

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Antibiotic stewardship is best summed up as the right antibiotic for the right patient at the right dose at the right time. This simple concept represents a major clinical, quality of care, public health, and patient safety challenge for emergency physicians.¹ It is with great pride that I report on AAEM's efforts on this important topic.

On June 2, 2015 it was my distinct honor to represent AAEM at the White House One Health Forum on Antibiotic Stewardship. This event brought together over 150 of the brightest minds in infectious disease, representatives from key professional societies, high-ranking government officials, and leaders from the medical diagnostic, pharmaceutical, agriculture, and food/retail industries.² AAEM was the only voice representing emergency medicine at this historic event. Participants were selected based on their specific commitments to implement initiatives over the next five years designed to combat the spread of resistant bacteria through the responsible use of antibiotics.

AAEM's invitation to this event reflects both the leadership role taken by the Academy in partnering with the CDC to raise awareness of the issue, and an appreciation by AAEM's board of directors of the significant impact antibiotic-resistant bacteria have on emergency physicians and the patients we treat. In 2013 AAEM signed on as a collaborating organization with the CDC's antibiotic stewardship campaign, Get Smart.^{3,4} The CDC sought this collaboration due to its increasing awareness that the ED is the nexus of our health care system, and decisions about antibiotic use made there affect both admitted and discharged patients. This partnership seeks to raise awareness among emergency physicians on the link between antibiotic stewardship and resistant bacteria.

As a participant in the White House forum, AAEM strengthened its national leadership role and committed to improving antibiotic stewardship in the ED over the next five years with the following initiatives.

1. Develop a series of position statements pertaining to best practices in emergency care antibiotic stewardship.
2. Support the development of antibiotic use quality measures specific to emergency medicine that take into account the health care system factors that influence physician prescribing.
3. Produce a series of podcasts on optimizing infectious disease management in the ED.
4. Continue to offer cutting edge educational sessions on infectious disease topics at the annual Scientific Assembly.
5. Seek opportunities to partner with other professional organizations on the development of infectious disease clinical practice guidelines for emergency physicians.
6. Publish an annual antimicrobial stewardship article in *Common*

Sense, to coincide with the CDC's Get Smart About Antibiotics Week activities each November.

7. Commission an AAEM Antimicrobial Stewardship Task Force to lead the Academy's effort to develop position statements and educational offerings, and guide the Academy's relationship with government agencies and other key professional organizations such as the Infectious Disease Society of America.

The forum represented the culmination of several years of accelerating activity among the federal government and international organizations regarding the danger to human health posed by antibiotic resistant bacteria such as carbapenem-resistant *Enterobacteriaceae* (CRE), methicillin-resistant *Staphylococcus aureus* (MRSA), and *Clostridium difficile*. In 2013 the Centers for Disease Control and Prevention (CDC) released the first comprehensive U.S. report on this threat, which revealed two million annual infections and 23,000 deaths directly attributed to antibiotic-resistant bacteria.⁵ These staggering figures were followed in 2014 by a World Health Organization report that revealed the global scope of increased bacterial resistance, and warned of the impending "post-antibiotic

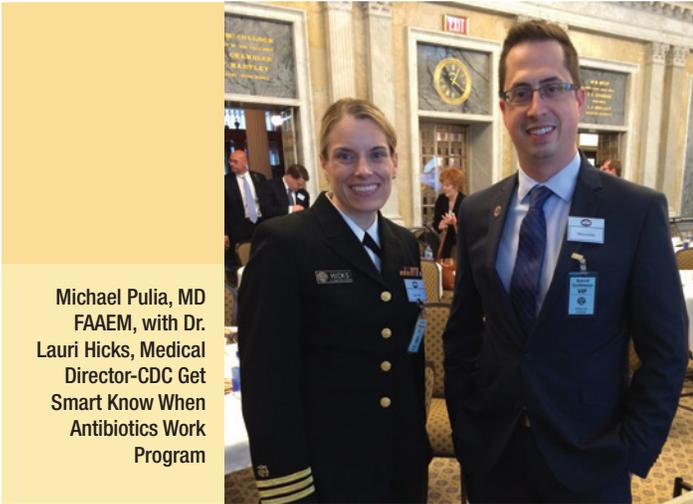
era."⁶ In response to these reports and CDC recommendations, the White House released a National Action Plan for Combating Antibiotic-Resistant Bacteria. The White House forum was the kickoff event for the National Action Plan, which has five central elements: 1) slow the emergence and spread of resistant bacteria, 2) strengthen national bacterial surveillance, 3) advance the development and use of rapid diagnostic tests to identify and characterize resistant bacteria, 4) accelerate research and development of new antibiotics and vaccines, and 5) improve international collaboration in each of these areas.⁷

The highlight of the forum's opening session was a panel discussion moderated by CDC Director Dr. Tom Frieden. The panel included executives from major health systems and food producers, each of whom made substantial commitments to improving responsible antibiotic use in their respective organizations. Lisa Monaco, Deputy National Security Advisor, closed the session with a powerful reminder that antibiotic resistance represents a threat to public health and is therefore treated as a serious national security issue by the administration. Participants were then divided into sessions based on their focus on either human or animal health. The human health session consisted of four panel discussions: 1) Improving Inpatient Prescribing, 2) Improving Outpatient Prescribing, 3) Improving Long-Term Care Prescribing, and 4) Developing New Tools-Better Therapies and Diagnostics.

During the Q&A session following the outpatient prescribing discussion, I was able to speak to all the attendees about the important role of the ED in American health care (nearly three-fourths of all hospital admissions and one-third of all acute care visits in the U.S.) and the unique challenges to antibiotic stewardship faced by emergency physicians,

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Smart Know When
Antibiotics Work
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who provide care for acutely ill patients in an inherently stressful environment, often with incomplete information. Every head in the room shook in acknowledgment and support as I made that point and then called for increased funding on research and development of rapid bacterial diagnostics and biomarkers for use by front-line clinicians. I explained that emergency physicians desperately need better tools to rapidly identify patients in need of antibiotics, and to help guide the use of these powerful therapeutic agents in a precise and responsible manner. I also made a point of highlighting our role as the health care safety net and pointed out that our patients often do not have reliable follow up — another important consideration in the antibiotic decision making process.⁸ Following

my comments, many attendees expressed excitement that emergency medicine was represented and sought ongoing collaboration with AAEM, including representatives of the CDC, IDSA, and diagnostic industry.

The event also incorporated powerful testimonials from some who lost loved ones to antibiotic resistant bacterial infections, and then harnessed their sorrow into passionate advocacy. This served as the ultimate reminder of the impact these deadly organisms can have on individual patients and their families. AAEM is leading emergency medicine in raising awareness and turning the tide on antibiotic-resistant bacteria, so that we can more effectively care for our patients and reduce such tragic outcomes.

If you are interested in learning more about AAEM's antibiotic stewardship efforts or would like to volunteer to serve on the Antimicrobial Stewardship Task Force, please contact me at mspulia@medicine.wisc.edu.



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