Infectious Diseases Society of America

Infectious Diseases Physicians: Leaders in Prevention, Stewardship, and Combating AMR

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As Antibiotic Discovery Stagnates .. A Public Health Crisis Advances

MIDSA

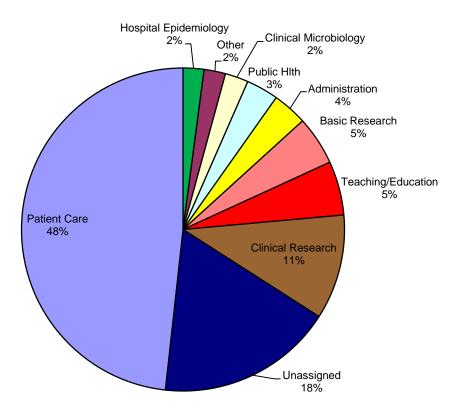
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Agenda

- IDSA and ID physicians
- Persistent threat of antimicrobial resistance (AMR)
- Need for infection control & prevention and antimicrobial stewardship in the context of AMR
- Unique expertise and experience of ID physicians
- ID physician workforce issues

IDSA Membership

Primary Professional Activity



10,000+ strong

Why AMR? To Protect and Save Patients' Lives

Premature Death



Rebecca Lohsen (17 yr)--Dead



Mariana Bridi da Costa (22 yr)--Dead



Carlos Don (12 yr)--Dead



Ricky Lannetti (21 yr)--Dead

Life-Altering Disability



Tom Dukes: colostomy, lost 8" colon



Addie Rerecich, 11yo Double lung transplant Stroke, nearly blind \$6 million hospital bill



ID Physicians: Enabling Medical Advancements

- Medical advances that save and improve lives can be complicated by infections that can cause loss of life and limb.
- Infection prevention programs and ID physician patient management enable safe and successful medical care:
 - Chemotherapy
 - Solid organ and bone marrow transplants
 - Care of premature infants
 - Management of rheumatoid arthritis, other auto-immune diseases
 - Joint Replacements
- Antimicrobial resistance threatens to turn back medical progress.

Antimicrobial Resistance: Multiple Solutions Needed

Caring for patients with or at risk of multidrug resistant infections Research on resistance, antimicrobial drug and diagnostic R&D

ID Physicians

Antimicrobial stewardship and infection prevention/control programs

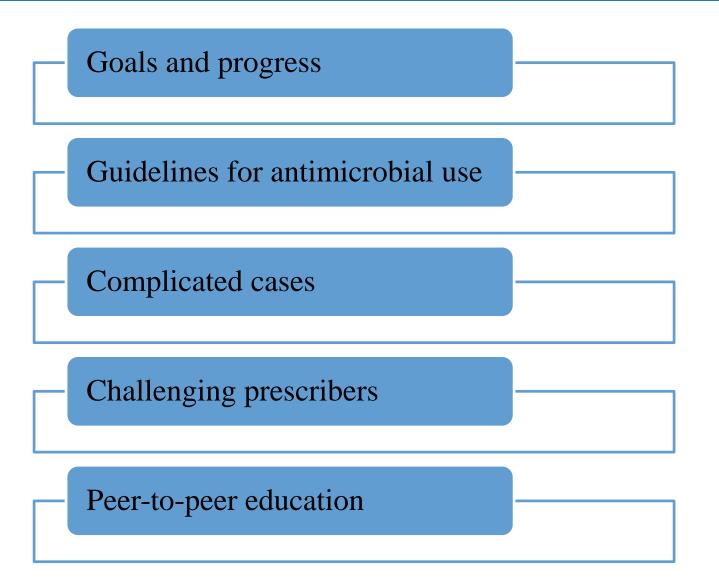
Surveillance and data collection

Power and Potential of Antimicrobial Stewardship Programs (ASP)

- Best antimicrobial use
 - Drug choice, dose, duration
- Reducing inappropriate antimicrobial drug use is improving patient safety
 - Reduce adverse events (including C. diff infections)
 - Limit development of resistance
 - Reduce health care costs

Bottom Line: Stewardship improves patient safety and <u>outcomes</u>

Role of the ASP ID Physician: Create a Culture of Stewardship



Infection Prevention and Stewardship

- Two separate but complimentary functions
 Separation important to ensure sufficient resources
- Infection Prevention and Control Programs
 - Develop infection prevention and control policies
 - Reduce and monitor HAIs
 - Prepare for and respond to outbreaks
- The best way to reduce antimicrobial drug use is to prevent infections in the first place

Unique Value and Expertise of ID Physicians

- Patient care
- Microbiology and resistance patterns
- Diagnostics (options, use, interpretation, impact on prescribing)
- Antimicrobial drug use, adverse events, impact on resistance
- Quality and institutional leadership
- Connecting health care facilities, public health, biosecurity, research

Trends in the ID Physician Workforce

Data from the National Residency Match Program

- 2010-11: 342 ID fellowship applicants/89% of positions filled
- 2016-17: 221 ID fellowship applicants/65% of positions filled
- 2017-18*: 320 ID fellowship applicants/80% of positions filled

*Change in match procedures ("all in")

Cause for cautious optimism, **BUT...**

- 20% of ID fellowship positions still unfilled (many other specialities fill nearly 100%)
- Arguably growing need for ID physicians to address growing threats

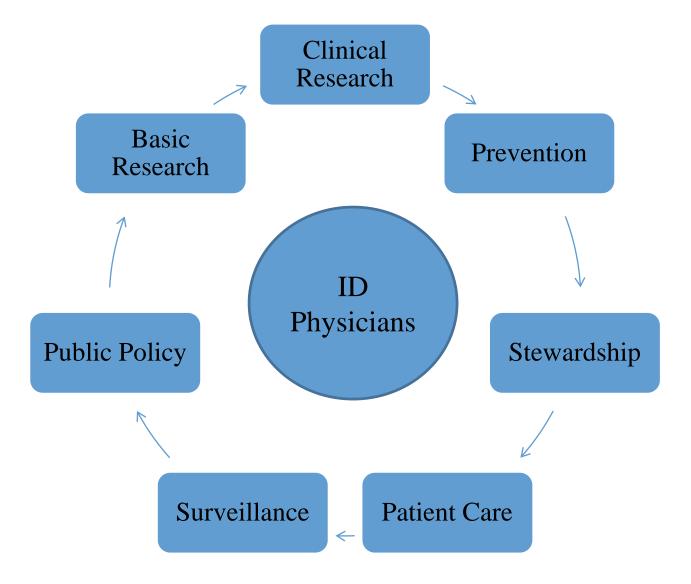
Undervaluing ID Physicians

- 2014 IDSA survey 600 Internal Medicine Residents
 - Very few plan to pursue ID
 - Far higher number indicated great interest in ID; among that group, salary was most often cited reason for not pursuing ID
- Average salaries for ID physicians are significantly lower than those for most other specialties.
- Over 90% of the care provided by ID physicians is accounted for by evaluation and management (E&M) services. These are undervalued by the current payment systems compared to procedural practices (e.g., surgery, cardiology, and gastroenterology).
- Young physicians' debt burden (\$200,000 average, class of 2014) is driving many toward more lucrative specialties.

IDSA Investments in the ID workforce

- Sponsoring a study to evaluate ID Workforce needs
- Increasing mentorship and scholarship opportunities
- Launching a campaign to educate key audiences (medical students and residents, payers and policymakers) on the value of ID physicians
- Continuing research to document the value that ID specialists bring to the healthcare system, public health and biomedical research
- Working with policymakers to improve ID physician payment and provide loan repayment opportunities

ID Physicians: Central to Combating AR



Charting a Course Forward

