STATEMENT OF PROBLEM

Inappropriate use of antibiotics contributes to antibiotic resistance, which is when microbes are able to resist the drugs created to destroy them. Each year in the U.S., at least 2 million people become infected with bacteria that are resistant to antibiotics, and at least 23,000 people die each year as a direct result of these infections.

In 2016 the Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria recommended antibiotic stewardship efforts to pediatric outpatient settings, where the vast majority of antibiotic use occurs. This followed a similar 2014 recommendation from Centers for Disease Control and Prevention (CDC) that all acute care hospitals implement antibiotic stewardship programs. These programs systematically guide appropriate use of these medicines.

NEXT STEPS

Requiring these programs in pediatric outpatient settings should be the next policy goal since the vast majority of antibiotic use occurs in these settings. Setting standards for antibiotic prescribing in outpatient settings will address a growing public health threat and also help families receive more effective care at a lower price.

It’s Important for Policymakers to Know These Facts

- Antimicrobial stewardship programs ensure that patients get the right antibiotics at the right time for the right duration.

- These programs improve individual patient outcomes, reduce the overall burden of antibiotic resistance, and lower costs for insurers and families that pay for prescriptions.

- A proven effective clinical practice model exists that is scalable and adaptable.

- Clinicians are willing to adopt best practices for quality improvement.

- Parents can be motivated partners to improve antimicrobial stewardship.
KEY RECOMMENDATION 1:

Federal and state agencies should require health care systems to implement antimicrobial stewardship programs in outpatient settings. CHOP research has demonstrated effectiveness, feasibility and scalability of such programs. CDC Core Elements of Outpatient Antibiotic Stewardship provide a framework for antibiotic stewardship for outpatient clinicians and facilities that can guide policy at multiple levels to require:

- COMMITMENT
  - Commit to improving antibiotic prescribing by dedicating the necessary resources

- ACTION FOR POLICY AND PRACTICE
  - Implement at least one policy or practice with demonstrated success at improving antibiotic prescribing

- TRACKING AND REPORTING
  - Track antibiotic prescribing practices and report data back to clinicians

- EDUCATION AND EXPERTISE
  - Offer resources to families on appropriate antibiotic use and provide clinicians access to expertise and training on antibiotic stewardship

KEY RECOMMENDATION 2:

Encourage EHR vendors to incorporate antimicrobial stewardship for outpatient settings into their suite of clinical effectiveness support modules. The hard work in determining what data elements need to be tracked and provided back to clinical practices has already been completed.

RESEARCH SUPPORTS RECOMMENDATIONS

Researchers from the Center for Pediatric Clinical Effectiveness (CPCE) at Children’s Hospital of Philadelphia recently published a research brief that summarizes seven years of study to improve the effectiveness and acceptability of outpatient antibiotic stewardship. In the process, they developed an evidence-based clinical care model that is adaptable for any EHR platform.