Update on AHRQ’s Antibiotic Stewardship Activities

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September 13, 2017
AHRQ’s CARB Activities – Part of Patient Safety and HAI Programs

• AHRQ role: Help clinicians and health care organizations improve the care delivered to patients

• Patient Safety: a central part of AHRQ’s role – prevent harm to patients.
  ➤ Antibiotic stewardship is a patient safety issue.

• CARB: AHRQ is active in all 3 domains
  ➤ Antibiotic stewardship (AS)
  ➤ Prevention of transmission of resistant bacteria
  ➤ Prevention of healthcare-associated infections (HAIs) in the first place
Antibiotic Stewardship: From Research to Implementation

• Support **research** to develop improved **methods** for conducting antibiotic stewardship: **what to do**

• Support **research** to develop effective **implementation strategies** for conducting antibiotic stewardship (implementation science): **how to do it**

• **Translate** research findings into **tools** for implementing antibiotic stewardship

• **Promote implementation** of antibiotic stewardship with effective methods, strategies, and tools
New CARB FOAs published August 2016

- To stimulate investigator-initiated research in all 3 domains of CARB
- All settings – acute care, long-term care, and ambulatory care
- Two mechanisms
  - R01 – large research grants
  - R18 – demonstration and dissemination grants
Research for Improving Antibiotic Stewardship

• Updates on currently funded projects
  ► Utilizing diagnostic stewardship to address antibiotic overuse in pediatric intensive care units
  ► Examining influences on physician and nurse decisions about antibiotics in nursing homes
  ► Evaluating and improving antibiotic use in ambulatory settings
  ► Evaluating antibiotic use and appropriateness in dental practices
Research for Improving AS Implementation Strategies

• Updates on currently funded projects
  - Comparing AS approaches between acute care hospitals and effect on antibiotic use
  - Improving antibiotic prescribing in nursing homes through a multicomponent intervention
Translating Research into Tools

- Nursing Home Antimicrobial Stewardship Guide
  - Based on 4 AHRQ-supported research studies
  - Wide dissemination in progress
    - ID Week, October 2016
    - AMDA – The Society for Post-Acute and Long-Term Care Medicine, March 2017
    - Dissemination with CDC and CMS
Promoting Broad Implementation

• AHRQ Safety Program for Improving Antibiotic Use
  ▶ Apply the Comprehensive Unit-based Safety Program (CUSP) to Antibiotic Stewardship – change the culture of prescribing
  ▶ Launched September 2016
  ▶ First cohort kickoff April 2017 – integrated delivery systems (IDS)
    o 10 sites each from 3 IDS
    o Include acute care, long-term care, ambulatory care settings
  ▶ Actively recruiting for acute care cohort – December 2017
  ▶ To follow: long-term care (2018) and ambulatory care (2019)
  ▶ Up to 500 sites in each setting-specific cohort
Promoting Broad Implementation

- AHRQ Safety Program for Long-term Care: HAIs/CAUTIs – nationwide CUSP project
  - Significantly reduced CAUTI
  - Specific resources to support antibiotic and diagnostic stewardship – reduce “culture of culturing”
PACCARB Recommendations

• Coordination across agencies
  ► CDC and CMS input into implementation projects, participation on Technical Expert Panels
  ► CUSP Antibiotic Stewardship Project consistent with CDC Core Elements
  ► Monthly coordination calls between CMS (QIN-QIOs, HIINs) and AHRQ regarding implementation projects

• Partnerships
  ► Implementation projects have strength of partnerships with national experts in antibiotic stewardship and implementation
  ► AS project’s partnerships with integrated delivery systems – learning with the private sector
PACCARB Recommendations

• Promote culture of antibiotic stewardship for providers and professionals
  ► CUSP engages all front-line staff, not just prescribers
    o Explicit focus on behavioral aspects of practice
    o “Culture of culturing”
    o Communication around issues of antibiotic prescribing

• Ensure development of evidence-based ASPs
  ► Support generation of new evidence in research portfolio
  ► Translation of research into toolkits (e.g., NH AS guide)
  ► AS national project
    o Utilizes evidence-based Core Elements
    o Evidence reviews completed for AS in all three settings regarding AS interventions,
      – Utilize human factors engineering framework to allow for readers’ ease of implementation
      – Being published for wide dissemination
PACCARB Recommendations

• Increase attention to AS in outpatient settings
  ▶ Research funding supports several outpatient projects
  ▶ AS national implementation project includes a cohort specifically focused on outpatient setting, will also help explore ways to monitor AS in this setting

• Research recommendations
  ▶ Published new CARB FOAs encouraging applications focused on AS, prevention of transmission of antibiotic-resistant organisms, as well as HAI prevention
  ▶ Encourage and support research on improved methods for performing antibiotic stewardship and influencing prescriber behavior
  ▶ All 3 healthcare settings—acute care, long-term care, ambulatory care
  ▶ Translation of research into tools