Strengthen Antimicrobial Resistance Surveillance in the United States

National Antimicrobial Resistance Surveillance Strategic Map: 2017-2020

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A. Provide Foundational Components for Surveillance
   1. Encourage Appropriate Use of Diagnostic Testing/Culturing
   2. Provide Timely Delivery of Guidance to Detect and Respond to Novel/Emerging AR Threats
   3. Promote Standards for Cumulative Antibiograms at the Facility, Regional and National Levels
   4. Provide Antimicrobial Resistance Surveillance Workforce Development Curriculum
   5. Increase Public Health, Lab and Clinical Informatics and Bioinformatics Capacity
   6. Establish Roles, Responsibilities and Priorities of Public Health and the Clinical Sector

B. Enhance the Capacity and Use of Laboratory Diagnostics for Surveillance
   1. Ensure Clinical Labs Have Access to Up-to-Date, FDA-Approved, Reimbursable Tests for Antimicrobial Resistance
   2. Sustain Antimicrobial Resistance Work in Public Health Labs and Expand Where Needed
   3. Provide Technical Education about Antimicrobial Resistance Testing
   4. Enable Capture of Data Using Standardized Vocabulary Codes for New Tests and Other AR Data
   5. Implement a Strategy to Extract Suppressed Antimicrobial Susceptibility Test Results

C. Improve Quality and Availability of Surveillance Data
   1. Evaluate, Enhance & Promote Existing Systems, Processes & Tools
   2. Leverage Shared Technical Infrastructure and Services
   3. Increase Automation across the Surveillance Continuum
   4. Establish and Align Standards for Data Collection, Transmission and Provisioning
   5. Maintain Epi, Lab and Clinical Information Systems with Appropriate Vocabulary and Code Sets
   6. Ensure Sufficient Data to Track Resistance Patterns across Settings and Organisms

D. Strengthen the Analysis and Use of Surveillance Data for Action
   1. Improve and Automate Detection of Emerging Resistance
   2. Integrate Epi, Lab and Clinical Data
   3. Improve and Automate Outbreak/Cluster Detection
   4. Build AR Situational Awareness at the Facility, Community and Regional Levels
   5. Integrate Lab, Epi and Antimicrobial Use Data for Human, Animal and Environmental Health
   6. Communicate Results and Suggested Actions

E. Secure Resources and Legal and Policy Supports to Implement, Govern, and Sustain the System
   1. Establish and Implement a Governance Structure
   2. Align with CARB and Successor Objectives
   3. Nurture Strategic Partnerships
   4. Support Stakeholders in Navigating the Regulatory Environment
   5. Provide Timely Communication and Evaluation to Stakeholders

F. Leverage Public Health-Clinical Partnerships and Policy

G. Incorporate New Technology (e.g., Advanced Molecular Detection) and Epidemiological Analytic Methods