

Bridging the Gap: Improving Antimicrobial Access and Use Across One Health

Presentation on the WG Report
PACCARB Public Meeting
June 29, 2021

PACCARB

Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria

Process

- Tasked by Secretary in October 2020 to provide recommendations on persistent research gaps in antimicrobial access and use; and antimicrobial stewardship within a virtual care landscape
- WG held several internal meetings with presentations from SMEs in addition to the PACCARB Public Meeting in February 2021.
- Through thorough deliberation, WG developed seven high level recommendations.

Report Organization

- Figure in the Executive Summary shows the seven overarching recommendations
- Body of the report is split into two parts:
 1. Priority research gaps in human, animal, and crop health.
 2. Promoting antimicrobial stewardship in the virtual care setting.

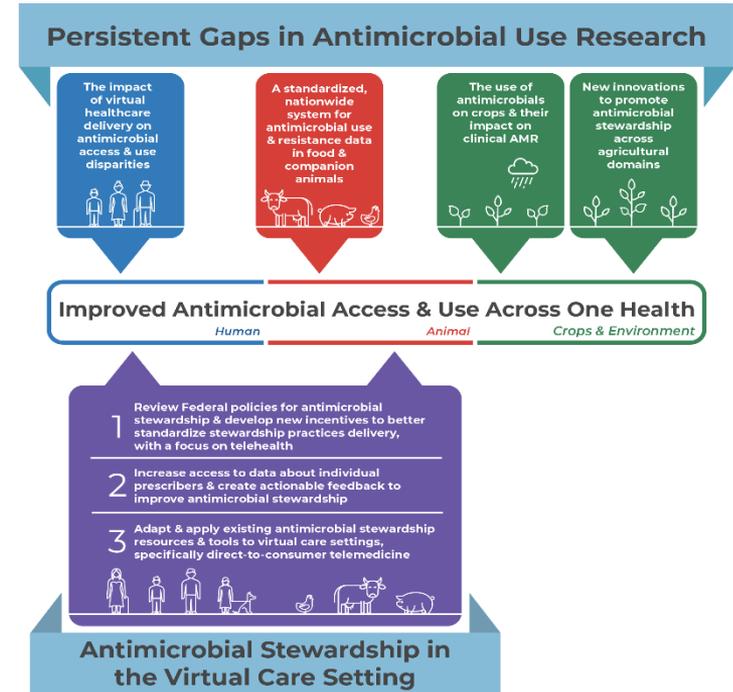


Figure 1: Summary recommendations from the PACCARB for improving antimicrobial access and use across One Health. Please see the report for the full recommendations.

Recommendation 1

INCREASE FUNDING OF RESEARCH INVESTIGATING THE IMPACT OF VIRTUAL
HEALTHCARE DELIVERY ON NEW AND EXISTING HEALTH DISPARITIES
RELATED TO ANTIMICROBIAL USE

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Sub-Recommendations

- 1.1: Incentivize or develop a pilot program to collect nationwide data on human antimicrobial prescribing within virtual care delivery to better understand how antimicrobial prescribing may vary by characteristics often associated with health disparities.
- 1.2: Fund additional qualitative and quantitative research beyond known drivers of antimicrobial prescribing.

Recommendation 2

INCREASE UNDERSTANDING AMONG HUMAN AND ANIMAL HEALTH PROFESSIONALS ABOUT THE USE OF ANTIMICROBIALS WITHIN CROPS AND OTHER AGRICULTURAL DOMAINS AND THEIR IMPACT ON CLINICAL ANTIMICROBIAL RESISTANCE

Recommendation 2

INCREASE UNDERSTANDING AMONG HUMAN AND ANIMAL HEALTH PROFESSIONALS ABOUT THE USE OF ANTIMICROBIALS WITHIN CROPS AND OTHER AGRICULTURAL DOMAINS AND THEIR IMPACT ON CLINICAL ANTIMICROBIAL RESISTANCE

Sub-Recommendations

- 2.1: Add more agricultural and crop experts to AMR-focused organizations and create standard definitions for key terminology to foster consistent understanding across disciplines.
- 2.2: Fund critical research to address data gaps for risk assessments to better understand how antimicrobials interact with the environment. Risk/benefit analyses of alternative methods that could promote long-term benefits should also be conducted.

Recommendation 3

INCREASE FUNDING TO SUPPORT RESEARCH AND DEVELOPMENT OF NEW INNOVATIONS TO PROMOTE ANTIMICROBIAL STEWARDSHIP EFFORTS IN SEVERAL AGRICULTURAL DOMAINS

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Sub-Recommendations

- 3.1: Incentivize the uptake of new and existing innovations to better predict infection, increase precision of the application of antimicrobials, and map antimicrobial resistance within the environment.
- 3.2: Support the development of additional antimicrobial pesticides to address increasing bacterial and fungal pressures in crops.

Recommendation 4

SUPPORT AND ENCOURAGE A STANDARDIZED NATIONWIDE SYSTEM FOR
THE COLLECTION OF DATA ON ANTIMICROBIAL USE AND RESISTANCE IN
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Sub-Recommendations

- 4.1: Fund a national system and incentives for participation governed by state and local commodity groups for the voluntary reporting of antimicrobial use and resistance data by veterinarians, veterinary hospitals, and producers.
- 4.2: Conduct a risk/benefit analysis that is focused by commodity group and producer segment to understand the competitive value gained by the standardization and collection of data.

Recommendation 5

COLLATE, REVIEW, AND EVALUATE CURRENT FEDERAL POLICIES, REGULATIONS, AND REQUIREMENTS FOR ANTIMICROBIAL STEWARDSHIP AND DEVELOP NEW INCENTIVES TO BETTER STANDARDIZE STEWARDSHIP PRACTICES ACROSS DIFFERENT MODALITIES OF CARE DELIVERY, WITH A FOCUS ON TELEHEALTH.

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Sub-Recommendations

- 5.1: Allocate additional funding to the CDC to expand support for state and local health departments to implement programs and hire trained staff to track and provide feedback on antimicrobial use data to outpatient prescribers.
- 5.2: CMS should develop an external, non-Federal task force that will review the effectiveness, current incentives, and develop a recommended list of new ones to encourage additional data reporting.
- 5.3: The FDA should review and provide additional guidance on the VCPR requirements to better incorporate a virtual care framework and ensure standardization across different modalities of care.

Recommendation 6

INCREASE ACCESS TO DATA ABOUT INDIVIDUAL PRESCRIBERS AND CREATE ACTIONABLE FEEDBACK TO IMPROVE ANTIMICROBIAL STEWARDSHIP.

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Sub-Recommendations

- 6.1: Payers, large health systems, state and local health departments, and other stakeholders should provide consistent and ongoing feedback of physician performance for antimicrobial prescribing in the virtual care setting.
- 6.2: For veterinary practitioners, implementation of a feedback system could similarly help to reduce variability in antimicrobial prescribing and promote more standardized stewardship practices.
- 6.3: Allocate grants and other resources to support research validating the proposed feedback process and to assess its effect on adherence to antimicrobial stewardship practices.

Recommendation 7

ADAPT AND APPLY EXISTING ANTIMICROBIAL STEWARDSHIP RESOURCES
AND TOOLS TO VIRTUAL CARE SETTINGS, SPECIFICALLY DIRECT-TO-
CONSUMER TELEMEDICINE

Recommendation 7

ADAPT AND APPLY EXISTING ANTIMICROBIAL STEWARDSHIP RESOURCES AND TOOLS TO VIRTUAL CARE SETTINGS, SPECIFICALLY DIRECT-TO-CONSUMER TELEMEDICINE

Sub-Recommendations

- 7.1: Characterize antimicrobial use in DTC telemedicine, including gathering appropriate and actionable data on the type of prescribers and their prescribing practices to provide more meaningful information for those practitioners.
- 7.2: Adapt and tailor existing educational and communication tools to better support antimicrobial stewardship and appropriate prescribing behaviors within the DTC telemedicine landscape.
- 7.3: Fund the creation of tools to help streamline the development of protocols and antimicrobial use decision-making processes for veterinary practitioners.

Important Takeaways

- Fully integrate crop and environmental health experts in all AMR discussions and research opportunities.
- Support state and local commodity groups to continue to build a stronger relationship of trust between veterinary practitioners and Federal partners.
- Adapt existing outpatient stewardship interventions to the direct-to-consumer telemedicine context and work with companies to align corporate incentives with goals of antimicrobial stewardship.

Discussion and Vote