



October 16, 2020

Martin J. Blaser, MD

Henry Rutgers Chair of the Human Microbiome Professor of Medicine and Microbiology – RWJMS
Director, Center for Advanced Biotechnology and Medicine Rutgers University
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Lonnie J. King, DVM, MS, MPA, DACVPM

Professor and Dean Emeritus Ohio State University
LJK Veterinary Advisors, LLC 1023 Holt's Ferry
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Dear Drs. Blaser and King:

On behalf of the Secretary of Health and Human Services, Alex M. Azar, II, I would like to thank you for your continued leadership of the Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria (Advisory Council). The Advisory Council continues to inform and lead discussion of the most pressing issues facing us as we battle the threat of antibiotic resistance. The COVID-19 pandemic poses new challenges in this fight, and I thank you and the Advisory Council for gathering and presenting the most current information available on the intersection of antibiotic resistance and COVID-19 at your recent public meeting in September, 2020. The presentations and discussions helped raise awareness of the issues that have emerged and may still arise as we address two concurrent public health crises. As we continue our fight against antibiotic resistance during this pandemic, your expertise is once again needed to provide input on two important issues.

Task#1 – Inter-professional Education on Antimicrobial Resistance (AMR)

Education and training of our healthcare professionals is an essential component of our fight against antibiotic resistance. We must continually evaluate the effectiveness of our professional education system and incorporate modern curricula and training regimens for human health, veterinary and agricultural settings. Inter-professional education is one such strategy that deserves our attention; it occurs when two or more professions (for example, students, residents and health workers) learn with, about and from each other to enable effective collaboration and improve health outcomes.¹ Inter-professional education has the potential to lead to better implementation of infection prevention and control strategies, as well as more appropriate use of and reduced need for antibiotics, including both antibacterial and antifungal agents, in healthcare and agricultural settings.

I would like the Advisory Council to explore the status of professional education opportunities and availability, and the extent to which they incorporate inter-professional components in human, veterinary and agricultural disciplines as they relate to antibiotic stewardship and infection prevention and control.

Deliverable Requested by Sept 2021: A report on the status of inter-professional education for antibiotic stewardship and infection prevention with an assessment of the extent to which a common curriculum across professions exists, and identification of opportunities for improvement. Your investigation should explore curricula for frontline healthcare workers, animal care providers and agricultural extension agents, as well as administrators and others who make purchasing decisions so that all aspects of healthcare, animal care and agricultural provisions are considered holistically. As part of your findings, please provide observations and recommendations as to whether and how U.S. educational institutions, federal agencies, training programs and specialty boards can strengthen national and state board certification and continuing education of medical and veterinary professionals.

Task #2 – Variations in Access, Prescribing and Use of Antibiotics

Appropriate use of antibiotics across One Health depends on several factors. For human health, the availability and quality of healthcare, level of knowledge among patients, and many socioeconomic factors play a key role. We know that health disparities exist among different populations in many aspects of healthcare, including those demonstrated in the current COVID- 19 outbreak. As our healthcare system evolves, new and alternate models for providing patient treatment are arising to facilitate access to healthcare, such as telehealth, walk-in retail clinics and urgent care centers. As these models become more ubiquitous, it is important to assess both the opportunities and challenges they may provide for improving antibiotic stewardship, and how they may affect currently observed disparities in antibiotic prescribing.

Additionally, given the broad variety of species and animal care settings in the veterinary sector, there are numerous factors that can impact how antibiotics and antifungals are used. Differences in how antibiotics are prescribed among veterinary settings and the different agricultural commodities may vary and should be further explored.

Therefore, I would like the Advisory Council to provide an overview of the existing variations in the prescribing, access, and use of antibiotics and antifungals (as appropriate) across the One Health spectrum (medical, veterinary, and agricultural settings), and identify any knowledge gaps that are observed. Please explore how these factors may be impacted by the availability of health resources, education level and access to appropriate information and training.

Deliverable Requested by Sept 2021: A two-part report addressing human and animal health, respectively. One part should address health disparities and inequities related to how antibiotics are accessed and used. This report should include an investigation into differences in perception and usage of antibiotics among minority groups and other historically disadvantaged populations. Your findings should explore and incorporate the role that new modalities of outpatient care, such as medical telehealth options and retail walk-in clinics, may play in alleviating or deepening disparities or inequities, and the opportunities and challenges they may present in advancing antibiotic stewardship efforts.

¹ World Health Organization. (2010). Framework for action on interprofessional education and collaborative practice. World Health Organization. <https://apps.who.int/iris/handle/10665/70185>

For the other part of your report, please consider the current differences among various animal care and plant agriculture settings, and the factors that may be affecting antibiotic use. It should include a discussion of how to encourage stewardship and mitigate any variances in antibiotic prescribing and use in these diverse settings and modalities.

Please form two new working groups to address these two tasks, and host two public meetings to gain stakeholder feedback to inform your reports. Thank you again for your continued dedication and I look forward to learning about your proceedings in the coming months.

Sincerely yours,

A handwritten signature in black ink, appearing to read "B. Giroir", with a long horizontal flourish extending to the right.

Brett P. Giroir, M.D.
ADM, USPHS
Assistant Secretary for Health