Pfizer Global Medical Grants and Global Bridges at Mayo Clinic Quality Improvement Request For Proposals (RFP)

## Antimicrobial Stewardship (AMS) Programs to Address Health Inequities in Resource Limited Settings

Background	Pfizer Global Medical Grants (GMG) supports the global healthcare community's independent initiatives (e.g., research, quality improvement, or education) to improve patient outcomes in areas of unmet medical need that are aligned with Pfizer's medical and/or scientific strategies. One such strategic priority is decreasing the disproportionate burden of poor health outcomes faced by patients who receive healthcare in resource limited settings, specifically to address health inequities relating to treatment of infectious diseases.
	Global Bridges Healthcare Alliance, based at Mayo Clinic, is dedicated to supporting global communities of practice to advance evidence-based patient care. Since 2014, Global Bridges has worked collaboratively with Pfizer GMG to support medical education and quality improvement programs in multiple clinical areas, including tobacco dependence treatment, oncology, amyloidosis, and anti-microbial stewardship.
Date RFP Issued	July 15, 2021
Rationale and Purpose of this RFP	<ul> <li>The purpose of this RFP is to solicit programs that have identified a disparity that impacts antimicrobial stewardship in a resource-limited setting and proposes an intervention to address the disparity to improve and measure patient outcomes.</li> <li>Inappropriate use of antimicrobial medicines results in adverse events (including death), increased microbiological resistance, and wasted resources.<sup>1,2</sup></li> </ul>
	• Patients in resource-limited settings are more likely to be prescribed inappropriate antibiotics to treat their infections. Studies found that inappropriate use of antibiotics was associated with the following: culture, gender, educational status, marital status, age, number of children, health insurance and poor health care services. <sup>3</sup>
	<ul> <li>Antimicrobial resistant infections disproportionately affect underserved populations.</li> </ul>
	<ul> <li>In England, Asian patients were more likely than White British subjects to have ESBL bacteriuria.<sup>4</sup></li> </ul>
	<ul> <li>In US, in severe infections (sepsis), the largest determinant of death was socioeconomic status with black patients 2x compared to white patients.<sup>5</sup></li> </ul>
	<ul> <li>In US, hospitalized Black or Hispanic sepsis patients are 7% more likely to die than white, while those categorized as "Asian and Pacific Islander" or "Other" race are 18% or 21% more likely to die than white patients.<sup>6</sup></li> </ul>
	$\circ$ AMR affects all countries, but the burden is disproportionately higher in

AMS to Address Inequities in Resource Limited Settings

	<ul> <li>low-income and middle-income countries.<sup>7</sup></li> <li>Patients receiving care in low resource facilities do not have equitable access to effective and holistic antimicrobial stewardship (AMS) programs. As a result, these patients often receive suboptimal care reflective of racial and socioeconomic inequalities negatively impacting their outcomes and the cost of care. The inequitable access to AMS programs increases the inappropriate use of anti-infectives, hinders access to novel anti-infectives, and consequently disproportionately impacts the burden of AMR.</li> </ul>
Clinical Area	Anti-infectives
Geographic Scope	Global
Eligibility	<ul> <li>Only organizations are eligible to receive grants, not individuals or medical practice groups.</li> <li>Institution must be part of a network of hospitals or institutions to ensure dissemination of learnings/best practice and to achieve broadest impact.</li> <li>The Project Lead must have a medical or postdoctoral degree (MD, PhD, or equivalent), an advanced nursing degree (BSN with a MS/PhD), or a degree in Pharmacy, Microbiology or Epidemiology.</li> </ul>
Review, Funding and Administration of Projects	Project proposals will be reviewed and recommended by an independent expert advisory panel. Projects selected for funding will be funded directly by Pfizer Inc. Funded projects will be led independently by the grantee organizations. Operational and technical guidance for funded projects will be provided by Mayo Clinic, as needed.
Characteristics of a Successful Proposal	<ul> <li>Projects that will be considered for support will focus on intervention programs to address clearly identified local antimicrobial inequities aligned to social determinants (such as antibiotic usage w/age, gender, race, socioeconomic status).</li> <li>It is our intent to support quality improvement projects. The aim of the projects will be interventions inside hospital settings.</li> <li>Proposals must include locally collected data on the antimicrobial stewardship (AMS) inequity (e.g., antibiotic usage with age, gender, race, socioeconomic, region) that describes the current base-line state at the institution (i.e. prior to any proposed intervention).</li> <li>In addition to the proposed intervention steps, successful proposals must include a plan to collect post-intervention data to measure and to assess improvement in the identified inequity, and also publish data/outcomes to share lessons learned across</li> </ul>

	the health-care system.
	• It is expected that the intervention programs selected for funding will be initiated in early 2022 and be no more than 24 months in duration.
Out of Scope of this Call	It is not our intent to support clinical research projects. Projects evaluating the efficacy of therapeutic or diagnostic agents will not be considered. Additional examples of <b>out of scope</b> projects include clinical research projects, basic science research, prevalence studies, and registry development. Projects may include an educational element but initiatives that solely focus on knowledge
	improvement (e.g., journal clubs, grand round programs, lectures) will not be eligible for consideration.
Funding Available	Individual projects requesting up to \$50,000-\$100,000 USD will be considered. The estimated total available budget related to this RFP is \$1,000,000 USD.
	We anticipate supporting a mix of proposals from developed countries and LMICs.
Howto Submit	<ul> <li>Please go to <u>http://www.cybergrants.com/pfizer/Ql</u> and sign in. First-time users should click "Create your password".</li> <li>For the question "Are you replying to a Request for Proposal as part of the Competitive Grant Program?" select Yes</li> <li>Select the following Primary Area of Interest: Infectious Disease – General/Non-Specific</li> <li>Select the following Competitive Grant Program Name: 2021 HOS G – AMS Health Equity (Global Bridges)</li> <li>Complete all required sections of the online application. See Appendix A for details.</li> <li>Please note that applications must be submitted in English.</li> <li>If you encounter any technical difficulties with the website, please click the "Technical Questions" link at the bottom of the page.</li> </ul>
	28, 2021 at 10am EDT. Register using this <u>link</u> .
Timing	Proposals must be completed in the CyberGrants system no later than <b>5:00pm New York</b> time on Thursday, 26 August 2021. Applications received after this date will not be reviewed.
	All applicants will be notified of the outcome of their application by email in October. Applicants may also be contacted to provide further clarification to support the review.
	If your grant is approved, the agreement is expected to be signed by both parties within 2021 and without change. Please click <u>here</u> to view the core terms of the agreement. The agreement will be with Pfizer Inc. (based in the United States).
	Anticipated project start date for funded projects is early 2022.

If you have any questions regarding this RFP, or to discuss whether your project would be in scope, please contact Katie Kemper at Global Bridges (kemper.katherine@mayo.edu) or the Pfizer Grant Officer, Jessica Romano (jessica.romano@pfizer.com).

#### References

- 1. https://www.cdc.gov/antibiotic-use/index.html
- 2. WHO. The world health report 2007. A safer future: global public health security in the 21st century.: World Health Organization (WHO). 2007.
- 3. Gebeyehu E, et al., "Inappropriate Use of Antibiotics and Its Associated Factors among Urban and Rural Communities of Bahir Dar City Administration, Northwest Ethiopia," PLoSOne, 2015 Sep 17;10(9):e0138179.
- 4. Rao GG, et al., "Key demographic characteristics of patients with bacteriuria due to extended spectrum beta-lactamase (ESBL)-producing Enterobacteriaceae in a multiethnic community, in North West London," Infect Dis (Lond), 2015;47(10):719-24.
- 5. Kempker JA, et al., "Risk Factors for Septicemia Deaths and Disparities in a Longitudinal US Cohort," Open Forum Infect Dis, 2018 Nov 15;5(12):ofy305.
- Jones, J. M., Fingar, K. R., Miller, M. A., Coffey, R., Barrett, M., Flottemesch, T., Heslin, K. C., Gray, D. T. and Moy, E. (2017) Racial Disparities in Sepsis-Related In-Hospital Mortality: Using a Broad Case Capture Method and Multivariate Controls for Clinical and Hospital Variables, 2004-2013, Critical Care Medicine, 45(12), e1209-e1217.
- 7. O'Neill J Tackling drug-resistance infections globally: final report and recommendations, 2016. Available: <u>https://amr-review.org/sites/default/files/160518\_Final%20paper\_with%20cover.pdf</u>

## \*\* OVERVIEW OF QUALITY IMPROVEMENT PROPOSAL REQUIREMENTS ON FOLLOWING PAGES\*\*

### **APPENDIX A**

#### **Quality Improvement Proposal Requirements**

Applications will be accepted via the online portal (<u>www.cybergrants.com/pfizer/QI</u>).

All sections of your application will need to follow the character limits specified in the online application.\*

# Proposals should be single-spaced using Calibri 12-point font and 1-inch margins. Note there is a 10-page limit for proposal documents, exclusive of references.

Please include the following sections:

Goals and Objectives	Briefly summarize the overall goal and objectives of the proposed project.
Assessment of Need for the Project	Include a quantitative baseline data summary, initial metrics (e.g., quality measures), or a project starting point (please cite data on gap analyses or relevant patient-level data that informs the stated objectives) in your target area. Describe the source and method used to collect the data. Describe how the data were analyzed to determine that a gap existed. If a full analysis has not yet been conducted, please include a description of your plan to obtain this information.
Target Audience	Describe the primary audience(s) targeted for this project. Also indicate whom you believe will directly benefit from the project outcomes.
Project Design and Methods	Outline the proposed methodology and key stages or milestones of your planned approach. Maximum project length is two years, which includes analysis and reporting of impact of proposed interventions.
Innovation	Explain what measures you have taken to assure that this project idea is original and does not duplicate other projects or materials already developed. Describe how this project builds upon existing work, pilot projects, or ongoing projects developed either by your institution or other institutions related to this project.
Evaluation and Outcomes	Describe how you will measure the success of your project. What measures and metrics will you use to evaluate the impact of the project? Describe your plan to capture baseline and end-of-project metrics and results. Describe the sustainability of this project. How will the results of the project be shared? How will the project address disparities to support ongoing improvement in antimicrobial stewardship?

Anticipated Project Timeline	Provide an anticipated timeline for your project including project start/end dates.
Organizational Detail	Describe the mission, capability, and relevant previous activity of the applicant organization and how it will facilitate the project. Also include information about collaborating or project-partner organizations as applicable.
Monetary Request	<ul> <li>Please indicate total monetary amount being requested for this project in United States Dollars (USD).</li> <li>While estimating your budget please keep the following items in mind: <ul> <li>Institutional overhead and indirect costs may be included within the grant request. Examples include human resources department costs, payroll processing and accounting costs, janitorial services, utilities, property taxes, property and liability insurance, and building maintenance as well as additional project expenses such as costs for publication, IRB / IEC review fees, software license fees, and travel. Please note: Pfizer does not provide funding for capital equipment.</li> <li>Pfizer maintains a company-wide, maximum allowed overhead rate of 28% for independent studies and projects. Please <u>click here</u> for details.</li> <li>It should be noted that grants awarded through GMG cannot be used to purchase therapeutic agents (prescription or non-prescription).</li> </ul> </li> </ul>

\*The online application also includes the fields noted above. The text in those fields should be the same text that is included in your Full Proposal document.