

Pfizer and BSAC Announce a Quality Improvement RFP

Establishing Antimicrobial Stewardship (AMS) Centres of Excellence to Improve Patient Outcomes by Addressing Access Disparities

Competitive Grant Program – using Expert Review Panel





### I. 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.

Pfizer's GMG competitive grant program involves a publicly posted Request for Proposal (RFP) that provides detail regarding a specific area of interest, sets timelines for review and approval, and uses an expert review panel (ERP) to make final grant decisions. Organizations are invited to submit an application addressing the specific gaps in practice as outlined in the specific RFP.

The British Society for Antimicrobial Chemotherpay (BSAC) is a learned professional organisation providing a portfolio of global education on infection related topics and a leading influencer of responsible antimicrobial use globally.

The purpose of this RFP is to solicit programs that have identified a resource limitation within their healthcare organization that impacts establishment of a holistic and sustainable antimicrobial stewardship (AMS) program. The RFP will support delivery, to successful applicant institutions, of a programme of work to support the development of local AMS programs and will culminate with accreditation of centres and lead to a network of AMS Centres of Excellence across the world that can share learning within their region.

For all AMS grants, the grant requester (and ultimately the grantee) is responsible for the submission of requested information, engagement with the AMS accreditation process and implementation of identified improvement actions supported by the grant. Pfizer must not and will not be involved in any aspect of project development, nor the conduct or monitoring of the AMS accreditation process.

## II. Eligibility

### Geographic scope

Global, covering resource limited settings within both High-Income Country (HIC) and Low- and Middle-Income country (LMIC) settings

# Applicant eligibility criteria

- Only institutions are eligible to receive grants, not individuals or medical practice groups.
- Institution would ideally be part of a network of hospitals or institutions of a healthcare provider or within a region to ensure potential for dissemination of learnings/best practice and to achieve broadest impact.
- Institution must have identified a resource limitation(s) in their healthcare organisation that negatively impact on the ability to establish a holistic and sustainable AMS program.
- Institution must have information/data available relating to national and local structures and processes that demonstrates their current position with respect to AMS.
- The Lead applicant must have a medical or postdoctoral degree (MD, PhD, or equivalent), an advanced nursing degree (BSN with a





	MS/PhD or Doctorate of Nursing Practice), or a degree in Pharmacy, Microbiology or Epidemiology
III. Requirements	
Date RFP Issued	• January 27, 2022
Clinical Area	Anti-infectives
Specific Area of Interest for this RFP:	<ul> <li>It is our intent to support submissions that focus on establishing or improving sustainable and holistic hospital AMS programs in resource-limited health facilities and / or in support of underserved populations.</li> </ul>
	<ul> <li>Multi-disciplinary collaborations are encouraged, and all partners must have a relevant role.</li> </ul>
	<ul> <li>There is an interest in receiving responses from institutions with established AMS programs as well as those without formal programs but with some local information and management support to develop AMS.</li> </ul>
	<ul> <li>Awardees will receive support via a structured framework of needs assessment, tailored education program, toolkits of broader, generic training programs, establishment of multi-disciplinary team practice, formal evaluations and culminating in an accreditation process.</li> </ul>
	<ul> <li>The RFP will support awardees over a period of 24-30 months to incrementally develop/improve local AMS programs and to establish centres of excellence.</li> </ul>
	<ul> <li>The RFP goal is to seed the development of a global collaborative community of AMS practice, through the establishment of accredited AMS Centres of Excellence that:</li> </ul>
	<ul> <li>Develops and validates a quality management system (QMS) approach to AMS best practice.</li> </ul>
	<ul> <li>Identifies barriers to high quality AMS practice and develops/ implements interventions to overcome these.</li> </ul>
	<ul> <li>Fosters and shares locally developed and tested approaches to improving practice using QMS tools such as "plan-do-study-act" (PDSA cycle).</li> </ul>
	<ul> <li>Develops sustainable AMS programs which can share exemplar practice to spread learning to other institutions across their region.</li> </ul>



### **Target Audience:**

 Institutions providing hospital-based care for patients with infections that have identified resource limitations and / or underserved populations, within both Higher Income Countries (HICs) and Lower Middle Income Countries (LMICs).

# Disease Burden Overview:

Antimicrobial resistance (AMR) is widely recognized as one of the biggest threats to global health today, with the potential to affect anyone, of any age, in any country. AMR limits the effectiveness of antimicrobials, reducing the range of susceptible pathogens and the confidence that treatment will be successful. The review on AMR published in 2016 highlighted the grave impact on mortality, 10 million deaths per year by 2050, if action is not taken to address inappropriate antimicrobial use.<sup>1</sup>

The World Health Organization published its Global Action Plan on Antimicrobial Resistance in 2015 and called upon individual countries to set out their ambitions around tackling AMR via National Action Plans (NAPs) which should include elements of AMR surveillance and AMS. A key focus for the WHO was to support and enable national and local systems for surveillance of antimicrobial use and resistance to contribute to AMR data collection systems, including the Global Antimicrobial Resistance Surveillance System (GLASS).<sup>2</sup>

AMS is important to control, contain and mitigate AMR. AMS has been defined as the coordinated interventions designed to improve and measure the appropriate use of antimicrobials by promoting the selection of the optimal antimicrobial drug regimen, dose, duration of therapy, and route of administration.<sup>3</sup>

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>4</sup>

AMR affects all countries, but the burden is disproportionately higher in low-income and middle-income countries. Factors such as poor hygiene and sanitation, limited access to adequate healthcare infrastructures, and lack of regulations contribute to AMR and the COVID-19 pandemic has exacerbated the problem. 5

Patients receiving care in low resource facilities may not have equitable access to effective and holistic AMS programs. As a result, underserved populations in high income countries 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:



# • In England, Asian patients were more likely than White British subjects to have ESBL bacteriuria.<sup>6</sup>

- In US, in severe infections (sepsis), the largest determinant of death was socioeconomic status with black patients 2x compared to white patients.<sup>7</sup>
- 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>8</sup>

# Recommendations and Target Metrics:

Key targets for this RFP are for institutions to:

- Engage management support and governance structures to establish/optimize functioning of an AMS Team to deliver the local AMS program.
- Incrementally establish local surveillance data for key pathogens and antimicrobial use.
- Develop and implement national or local guidelines for empirical treatment of common infections in collaboration with clinical leaders.
- Enable healthcare professionals involved in prescribing, administration and monitoring of antimicrobials to have access to and participate in education and training on AMR and AMS relevant to their role.

In the longer term it is also envisaged that institutions will:

- Contribute their local data to the GLASS and national/regional antimicrobial use reporting systems.
- Disseminate the learning in the country/region to other institutions within their network.
- As an accredited AMS Centre of Excellence, to provide support and mentor other institutions within their network/region to establish/further develop AMS programs.

## Characteristics of a Successful Proposal

- A clear overall goal of the submission in terms of your institution's AMS program.
- Specific reference to the resource limitations faced and/or clear description of the underserved population that establishment of robust antimicrobial stewardship programme will benefit.
- Confirmation of management support for AMS with a description of associated governance and reporting structures.
- Details of who will provide leadership of the proposed project and the specific role of each staff member/ partner in the proposed



project including those of any institutions / organizations / associations that will support and facilitate the execution of the project.

- A comment on capability of your institution to collect data i.e., what are your options for the collection of baseline data (computerized or manual for example)
- Details of any data or gap analyses already collected or undertaken.
- Details of how clinical teams will be engaged in the quality improvement programme to ultimately support informed antimicrobial prescribing and participation in education and QI interventions.
- Target for education and training in terms of number and professional staff groups.
- An evaluation plan detailing how you will measure the success of the project, in addition to the evaluation that will be provided as part of the programme.
- Description of how you plan to provide advice and support to develop capacity for AMS and act as partner mentor for one or more institutions.
- Supporting statement detailing why you think your institution is worthy of receiving a project grant with reference to the local project team available to support the work and the resource limitations/inequity with respect to patient populations. Also include what being accredited as an AMS Centre of Excellence would mean for your institution, its staff, and patients.

### **Out of Scope of this Call**

Research projects and/or delivery of interventions which only include education.

# Value of QI grant to institution

- Access to AMS subject matter expert advice and support, including access to a local expert / remuneration for a local expert to assist in data collection.
- Evaluation of current AMS activities, gap analysis and support for action planning to address gaps.
- Bespoke education for AMS team and clinical staff to support establishment/further development of the local AMS program.
- Evaluation of impact of project on local AMS activities.
- Opportunities to share learning within network/region and globally.
- Potential to submit project outputs to international conferences and to publish work in peer-reviewed journals.





	<ul> <li>Establishment of an accredited AMS Centre of Excellence and development of local mentors to support other institutions within network/region.</li> </ul>
Estimated Monetary Value of Pfizer-BSAC Program for successful Institutions:	<ul> <li>Successful institutions will receive a supported program of work that will include gap analysis, delivery of bespoke training, impact evaluation programme and accreditation of the institute's AMS programme over a three-year period.</li> </ul>
	<ul> <li>The estimated value of the supported program of work to be delivered in partnership with successful institutions will be approximately \$75,000 dependent on the size and requirements of your institution. This value is delivered through the programme of work provided to institutions during the duration of the project.</li> </ul>
	<ul> <li>Please note that no funds will be transferred directly to the organizations awarded through this competitive grant program.</li> </ul>
Key Dates:	RFP release date: January 27, 2022
	<ul> <li>Full Proposal Deadline: April 6, 2022</li> <li>Please note the deadline is 23:59 Eastern Time (New York, GMT - 5).</li> </ul>
	Review of Full Proposals by External Review Panel: May 2022
	Anticipated Full Proposal Notification Date: June 2022*
	<ul> <li>Grants distributed following execution of fully signed Letter of Agreement</li> </ul>
	*Processing time may take longer for organizations outside of the U.S
	<ul> <li>Anticipated Project Start and End Dates: Projects can begin once grants are fully contracted, and the project will run for up to 3 years.</li> </ul>
How to Submit:	<ul> <li>Please go to www.cybergrants.com/pfizer/QI and sign in. First-time users should click "REGISTER NOW". [Note: there are individual portals for each grant application type (e.g., knowledge, LOI, research full proposal, and QI full proposal). Please be sure to use the URL above.]</li> </ul>
	Click the "Start A New Quality Improvement Application" button.
	For the question "Competitive Grant?" select Yes
	<ul> <li>Select the following Competitive Grant Program Name: 2022 HOS</li> <li>G: AMS Centres of Excellence (BSAC)</li> </ul>
	<ul> <li>Requirements for submission: Complete all required sections of the online application form and upload your Quality Improvement Project Full Proposal (see Appendix A).</li> </ul>



	<ul> <li>If you encounter any technical difficulties with the website, please click the "Technical Questions" link at the bottom of the page.</li> <li>IMPORTANT: Be advised applications submitted through the wrong application type and/or submitted after the due date will not be</li> </ul>
	reviewed by the committee.
Questions:	<ul> <li>If you have questions regarding this RFP, please direct them in writing to the Grant Officer, Jessica Romano (Jessica.Romano@pfizer.com), with the subject line 2022 HOS G: AMS Centres of Excellence (BSAC)."</li> <li>If you have any technical questions about AMS relating to your application please contact Jacqueline Sneddon, BSAC Programmes Manager (JSneddon@bsac.org.uk)</li> </ul>
Grant Agreements:	<ul> <li>If your grant is approved, your institution will be required to enter into a written grant agreement with Pfizer. Please click <a href="here">here</a> to view the core terms of the agreement.</li> <li>Pfizer has drafted the terms of these agreements to be balanced and reasonable and to further the goals of both parties.         Negotiating grant agreements requires significant resources, so please ensure that your institution (including your legal department) is able and willing to abide by these terms before proceeding with submission of your application as they will need to be accepted in their entirety.     </li> </ul>
Review and Approval Process	<ul> <li>A specific grant program RFP uses an expert review panel (ERP) to make final grant decisions.</li> <li>The panels are comprised of professionals from the medical community with advanced degrees and expertise in particular clinical areas, or specific needs of a geographic region/learner group, or expertise in research, continuing professional development or quality improvement</li> </ul>
Mechanism by which Applicants will be Notified:	<ul> <li>All applicants will be notified via email by the dates noted above.</li> <li>Applicants may be asked for additional clarification during the review period.</li> </ul>



#### **References:**

- 1. The Review on Antimicrobial Resistance: Tackling Drug-resistantInfections Globally, May 2016. 160525 Final paper with cover.pdf (amr-review.org)
- World Health Organisation, Resource materials for in-country development and implementation of national action plans to address antimicrobial resistance September 2021 <u>amr-resource-pack-2021.pdf</u> (who.int)
  - 3. National Institute for Health and Care Excellence. Antimicrobial stewardship: systems and processes for effective antimicrobial medicine use, August 2015. Overview | Antimicrobial stewardship: systems and processes for effective antimicrobial medicine use | Guidance | NICE
  - 4. Gebeyehu E, et al., "Inappropriate Use of Antibiotics and Its Associated Factors among Urban and Rural Communities of Bahir Dar City Administration, Northwest Ethiopia," PLoS One, 2015 Sep 17;10(9):e0138179. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0138179
  - Giorgia Sulis, Sena Sayood & Sumanth Gandra (2021) Antimicrobial resistance in low- and middleincome countries: current status and future directions, Expert Review of Anti-infective Therapy, DOI: 10.1080/14787210.2021.1951705
  - 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.
     DOI: 10.3109/23744235.2015.1055588
  - 7. 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. https://doi.org/10.1093/ofid/ofy305
  - 8. 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. DOI: 10.1097/CCM.0000000000002699



## **Appendix A**

## **Quality Improvement Project Full Proposal Requirements**

Applications will be accepted via the online portal. Full Proposal documents should be no longer than 10 pages in length (12-point font and 1-inch margins) excluding Organization Detail and References. When uploading your Full Proposal please ensure it addresses the following.

Goals and Objectives	Briefly state the overall goal of the project. Also describe how this goal aligns with the focus of the RFP and the goals of the applicant organization(s).
	List the <i>overall</i> objectives you plan to meet with your project both in terms of learning and expected outcomes. Objectives should describe the target population as well as the outcomes you expect to achieve as a result of conducting the project.
Assessment of Need for the Project	Please 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 <i>your</i> target area. Describe the source and method used to collect the data. Describe how the data was analyzed to determine that a gap existed.
	If this data isn't already available, please comment on capability of your institution to collect data $-i.e.$ , what are your options for the collection of baseline data (computerized or manual for example).
Target Audience	Describe the primary audience(s) targeted for this project e.g. Staff within institution, specific patient populations. Also indicate whom you believe will directly benefit from the project outcomes. Describe the overall population size as well as the size of your sample population.
Project Design and Methods	The project design and methods are pre-determined and are included as appendix.
Innovation	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	In terms of the metrics used for the needs assessment, describe how you will determine if the practice gap was addressed for the target group. Describe how you expect to collect and analyze the data.  Quantify the amount of change expected from this project in terms of your target audience.  Describe how the project outcomes will be broadly disseminated.
Anticipated Project Timeline	Provide an anticipated timeline for your project including feasible project start date.
Additional Information	If there is any additional information you feel Pfizer should be aware of concerning the importance of this project, please summarize here.
Organization Detail	Describe the attributes of the institutions / organizations / associations that will support and facilitate the execution of the project and the leadership of the proposed project. Articulate the specific role of each partner in the proposed project.
Budget Detail	Whilst no funds will be transferred directly to the organizations awarded through this competitive grant program, you are invited to include details of any requests for any additional support that you feel is required in addition to the supported programme of work and accreditation that is offered.

