

Pfizer Quality Improvement Request for Proposals

Competitive Grant Program – using Pfizer Internal Review Process

Multidimensional AMS Evaluation Framework Under China's Evolving Policy Landscape

Overview

This competitive program seeks to advance hospital-based antimicrobial stewardship (AMS) by supporting quality improvement projects that embrace elements of implementation science to close the persistent Know-Do Gap. The program will evaluate and improve AMS awareness and implementation readiness, evidence-based clinical practice, and hospital-level scientific management, translating established evidence into sustained and scalable practice.

Geographic Scope

Mainland China

Project Types and Area of Interest

Applicants are encouraged to address gaps in the implementation of evidence-based AMS practices in hospital settings, with a focus on inpatient care, through implementation science-informed quality improvement projects. Each proposal should focus on one stream and is not required to address all three:

Stream 1. Real-World Clinical Practice Evaluation: Improve bedside implementation of the WHO → START → ADJUST → STOP clinical pathway, including patient identification, empiric and targeted therapy, treatment adjustment, duration, and discontinuation.

Stream 2. Scientific Management Evaluation: Evaluate hospital-level AMS implementation, guideline adherence, and resource utilization.

Stream 3. Awareness Evaluation: Evaluate the impact of education, policy updates, or guideline implementation on Healthcare Professional (HCP) awareness and readiness to adopt AMS practices.

Key Milestones



Funding Range and Project Length

Individual projects requesting up to $59,000 for Streams 1 or 2 and $30,000 for Stream 3 will be considered.

Maximum project length is 2 years.

I. Eligibility

Geographic Scope/Location of Project:

- Mainland China

Applicant Eligibility Criteria

- The following may apply: medical, dental, nursing, allied health, and/or pharmacy professional schools; healthcare institutions (both large and small); professional organizations; government agencies; and other entities with a mission related to healthcare improvement.
- Only organizations are eligible to receive grants, not individuals or medical practice groups (i.e., an independent group of physicians not affiliated with a hospital, academic institution, or professional society).
- Collaborations within institutions (e.g., between departments and/or inter-professional), as well as between different institutions / organizations / associations, are encouraged. Please note all partners must have a relevant role and the requesting organization must have a key role in the project.
- The applicant must be the Project Lead/Principal Investigator (PI) or an authorized designee of such individual (e.g., Project Lead/PI's grant/research coordinator).
- The Project Lead/PI must be an employee or contractor of the requesting organization.
- Requesting organization must be legally able to receive award funding directly from Pfizer Investment Co., Ltd. We strongly recommend that applicants confirm this with their organization or institution prior to submitting an application. Grants awarded to organizations that are subsequently found to be unable to accept funding directly from Pfizer Investment Co., Ltd. may be subject to rescission.

II. Requirements

Primary Area of Interest:

- Antimicrobial Stewardship (AMS)

General Area of Interest for this RFP:

It is not our intent to support clinical research projects. Projects evaluating the efficacy of therapeutic or diagnostic agents will not be considered.

- This RFP-QI program is proposed as a structured implementation science-based evaluation framework to support QI proposals across three eligible research streams, each addressing a distinct dimension of AMS evaluation under China's evolving policy landscape. Applicants should select the single stream that best aligns with their proposed QI project; individual proposals are not required to address all three streams.
    - Stream 1. Real-World Clinical Practice Evaluation: study to assess the impact of bedside implementation of evidence based clinical pathway (WHO→START→ADJUST→STOP) on optimization of right patient identification empirical treatment, targeted treatment and treatment duration.

- Stream 2. Scientific Management: to evaluate the impact of hospital-level AMS implementation on guideline adherence and resource utilization.
- Stream 3. Awareness Evaluation: to evaluate how education, policy updates, and guideline changes influence HCP awareness and readiness to implement AMS practices.

- Improvement indicators across 3 Streams：
  - Stream 1: Appropriate empiric therapy rate, microbiology-guided adjustment rate, appropriate targeted therapy rate, appropriate discontinuation rate and DOT, clinical cure, 30-day readmission, length of stay (LOS), AUD, etc.
  - Stream 2: Guideline adherence, clinical cure, 30-day readmission, length of stay (LOS), AUD, etc.
  - Stream 3: AMS awareness, AMS implementation readiness, Microbiological specimen submission rate, AMS MDT consultation, appropriate antimicrobial use rate, etc.
  - Implementation Indicators (IS) — applicable across all 3 streams: acceptability, adoption, feasibility, fidelity, penetration, sustainability, etc.
- Definition:
  - WHO → START → ADJUST → STOP clinical pathway: a stepwise framework that maps the key decision points of antimicrobial therapy, consistent with the clinical pathway followed in evidence-based infection guidelines.
  - WHO (identify the right patient): assess whether the patient has clear signs of infection, and perform risk stratification considering disease severity, immunocompromise, and risk of resistant pathogens.[4]
  - START (initiate appropriate empiric therapy): select an appropriate antimicrobial agent and administer it at the appropriate time.
  - ADJUST (optimize therapy): adjust antimicrobial therapy based on microbiology results and discontinue unnecessary antimicrobial coverage.
  - STOP (manage treatment duration): Improve duration optimization, avoiding overtreatment and undertreatment. This step is assessed by duration of therapy, days of overtreatment, and length of stay.
- **Note:**
  - Applicants must clearly define measurable success indicators that reflect the situation before the intervention and improvement after the intervention and provide a corresponding evaluation plan that is aligned with the objectives of the proposed quality improvement project.
  - Suggested educational topics include clinical pathway optimization to meet policy requirements; the use of CDSS and AI-based tools to support AMS implementation; and the measurement of AMS outcomes linked to resource utilization.

Target Audience

- The primary target audience includes physicians, clinical pharmacists, microbiology and laboratory professionals, infection prevention and control professionals, multidisciplinary AMS teams.
- The ultimate beneficiaries are hospitalized adult patients receiving antimicrobial therapy. Each applicant should define the applicable patient age group based on the selected clinical setting and proposed QI project.

Disease Burden Overview

- Inappropriate antimicrobial use remains an important challenge in inpatient care in China. A study evaluating carbapenem prescriptions among inpatients found that 56% of the prescriptions were considered inappropriate. The main gaps included inappropriate indications, incorrect selection of carbapenems, and inadequate etiological and treatment-effectiveness assessments.[1] Inappropriate and excessive antimicrobial use increases selective pressure on bacteria, thereby contributing to the emergence and spread of antimicrobial resistance.
- Antimicrobial resistance has become a major public health burden in China. In 2019, more than 600,000 deaths in China were estimated to be associated with bacterial antimicrobial resistance, including approximately 145,000 deaths attributable to it.[2] A multicenter retrospective study involving 15,990 inpatient episodes across four tertiary hospitals in China found that multidrug-resistant infection or colonization was associated with an absolute increase of 1.50 percentage points in in-hospital mortality and an additional 5.48 days of hospitalization, compared with susceptible infection or colonization.[3] These findings highlight the need for quality improvement initiatives that translate established evidence and guidelines into more appropriate, consistent, and sustainable antimicrobial use in inpatient care. These inappropriate antimicrobial prescribing decisions may reflect interconnected gaps in healthcare professional awareness and readiness, the bedside implementation of evidence-based clinical pathways, and hospital-level scientific management of antimicrobial stewardship (AMS) programs.

Recommendations and Target Metrics

Evaluation Dimension	Suggested Metrics - Changes of
Stream 1	• Appropriate empiric therapy rate, microbiology-guided adjustment rate, appropriate targeted therapy rate, appropriate discontinuation rate and DOT, clinical cure, 30-day readmission, length of stay (LOS), AUD, etc.[4]
Stream 2	• Guideline adherence, clinical cure, 30-day[4] • Readmission, length of stay (LOS), AUD, etc.[4]
Stream 3	• AMS awareness, AMS implementation readiness, AMS MDT consultation, appropriate antimicrobial use rate, etc.[5]
Implementation Indicators (IS)	• Applicable across all 3 streams: acceptability, adoption, feasibility, fidelity, penetration, sustainability, etc.[6]

- For all proposals across Streams 1 to 3, outcome metrics should be measured at baseline (pre-intervention) and at post-intervention follow-up, with results reported as change from baseline (e.g., pre-post comparison).

Definition:

- DOT (Days of Therapy): number of days a patient receives any antimicrobial agent, with each agent counted separately; expressed per 1,000 patient-days.
- AUD (Antimicrobial Use Density): defined daily doses (DDDs) per 100 patient-days.
- AMS MDT consultation: multidisciplinary consultation on antimicrobial therapy involving ID physicians, clinical pharmacists, and/or microbiologists.

- Appropriate antimicrobial use: prescribing consistent with indication, agent selection, dose, route, and duration per national guiding principles and applicable guidelines.

Gaps Between Actual and Target, Possible Reasons for Gaps

- China has an extensive body of infection-related guidelines and expert consensus statements, supported by widespread guideline education programs. However, guideline adherence in routine practice remains low. For example, only 21.5% of antibiotic prescriptions for acute upper respiratory infections were found to be guideline-adherent. This gap does not primarily reflect a lack of guideline knowledge among clinicians. Rather, in complex clinical scenarios, consistently applying guideline recommendations is difficult when decisions rely mainly on individual experience and memory. This reflects a well-recognized challenge: translating research evidence into routine clinical practice may take approximately 17 to 20 years.[7] Together, these observations point to a persistent Know-Do Gap: evidence exists, but it is not consistently implemented, sustained, or transferred.

Barriers

- The publication of evidence and clinical guidelines does not necessarily ensure their timely and consistent adoption in routine practice. Translating research evidence into clinical practice may take approximately 17 to 20 years[7], highlighting a persistent Know-Do Gap. Implementation science helps identify context-specific barriers and facilitators, guides the selection of targeted strategies, and evaluates implementation outcomes such as adoption, fidelity, and sustainability alongside clinical and process outcomes. This approach provides greater insight into why QI interventions succeed or fail and supports the development of more durable and transferable improvements. In the Stewardship 2.0 era, embracing elements of implementation science is essential to translate evidence into sustained, scalable practice.[8]

Current National Efforts to Reduce Gaps

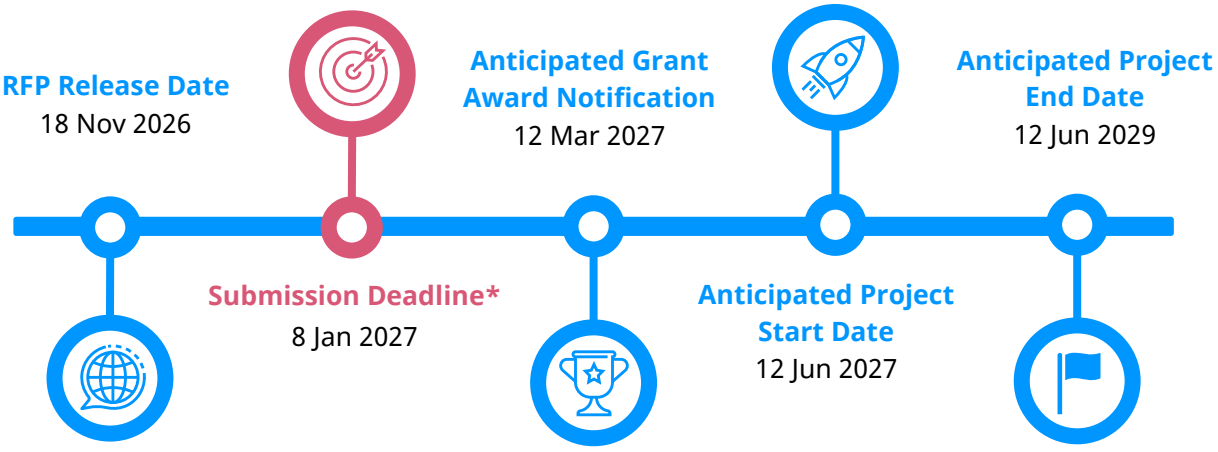
- China has established a strong evidence and policy foundation for antimicrobial stewardship through the National Action Plan to Contain Antimicrobial Resistance (2022-2025)[9], the Guiding Principles for the Clinical Use of Antimicrobial Agents[10], and a broad range of infection-guidelines and expert consensus statements issued by professional societies. Appropriate antimicrobial use has also been incorporated into hospital accreditation and public hospital performance assessment. While these initiatives clearly define what evidence-based practice should achieve, further efforts are needed to ensure that recommendations are consistently implemented and sustained in routine clinical care. Quality improvement initiatives that embrace elements of implementation science are therefore essential to translate established evidence into sustained, scalable AMS practice.

Expected Approximate Monetary Range of Grant Applications

IMPORTANT: Grants will be distributed following a fully executed agreement and submission of Final Protocol, Documentation of IRB/IEC Approval, Regulatory Approval (if applicable), Exemption or Waiver.

- Individual projects requesting up to $59,000 for Streams 1 or 2 and $30,000 for Stream 3 will be considered. The estimated total available budget related to this RFP is $295,000.
- Award amounts include direct costs, institutional overhead costs (capped at 28% per Pfizer policy), and indirect costs.

Key Dates:



IMPORTANT: Be advised applications submitted after the due date will not be reviewed.

*Please note the deadline is 23:59 Eastern Standard Time (e.g., New York, GMT -5)

How to Submit:

IMPORTANT: Please read this section carefully since applications submitted not following these instructions will not be accepted and will be cancelled.

- Click here to navigate to this Competitive Grant Program's unique Program Application Form.
  - First-time users should create a Requester Portal account by clicking **Not a member?**
- OR
- Navigate to: https://pfizermarcie.my.site.com/pfzrequester and sign in.
- In the upper navigation bar, click **Grant Programs** to see all available programs.
- Select **Quality Improvement**
- Click **Apply** on the **2027 I&I CN AMS QI** to open the Program Application Form.
- Requirements for submission:
  - Complete all required sections of the online application
  - **IMPORTANT**: Upload proposal (see Appendix) in the Proposal/Protocol field.
  - For more information on navigating Pfizer's new grant management system (MARCIE), please refer to this helpful User Guide.

Questions:

- Please click here to view "Frequently Asked Questions" regarding the Competitive Grant Program.
- If you have questions regarding this RFP, please direct them in writing to the Grant Officer, Juan Liu (GMGChina@pfizer.com), with the subject line "2027 I&I CN AMS QI – 18NOV2026"

Review and Approval Process

- Grant requests received in response to a general RFP are reviewed by Pfizer to make final grant decisions.

Mechanism by which Applicants will be Notified:

- All applicants will be notified via email by the dates noted above.
- Applicants may be asked for additional clarification during the review period.

Grant Agreements:

- If your grant is approved, your institution will be required to enter into a written grant agreement with Pfizer. Please click here to view the core terms of the agreement.
- Under Pfizer's competitive grant program, modifications to grant agreements will not be reviewed unless a genuine conflict exists as between applicable law and the terms of the relevant grant agreement. Applicant is encouraged to share the core terms with counsel for approval prior to submitting an application.
- Except where prohibited by applicable law and, in any case, subject to review by Pfizer Legal, payment of grant funding may only be paid to the grantee organization.
- This RFP is supported by Pfizer Investment Co., Ltd. and, if approved the payment will be issued by a Pfizer China based legal entity.

About Pfizer Grants

- Pfizer 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 competitive grant program involves a publicly posted general Request for Proposal (RFP) that provides detail regarding a general area of interest, sets timelines for review and approval, and uses an internal Pfizer review process to make final grant decisions. Organizations are invited to submit an application addressing the research gaps as outlined in the specific RFP.
- For all quality improvement grants, the grant requester (and ultimately the grantee) is responsible for the design, implementation, and conduct of the independent initiative supported by the grant. Pfizer must not be involved in any aspect of project development, nor the conduct or monitoring of the quality improvement program.

About Pfizer QI Grants

Quality improvement (QI) projects are systematic, data-guided, sustainable activities designed to bring about immediate, positive changes in the delivery of healthcare in particular setting[11,12]. Quality improvement seeks to standardize structure and processes to reduce variation, achieve predictable results, and improve outcomes for patients, healthcare systems, and organizations. Structure includes things like technology, culture, leadership, and physical capital. Process includes knowledge capital (e.g., standard operating procedures) or human capital (e.g., education and training)[13].

QI projects systematically apply what is already known into the local practice, intended to quickly improve patient care within a specific setting. The goal of QI projects is to close a gap in performance at a specific health care system. The "performance" is a standard in health care that is not

efficiently/appropriately/consistently being done[14]. For these reasons, QI focuses on translating existing knowledge into programs or practices to immediately improve the quality of services to individuals and populations within a local institution or setting[15]. The risk of participation in QI is the same as the risk of receiving standard clinical care[16] since the standard of care remains the same for all patients.

In contrast, research projects use a systematic approach to discover something that is unknown. Research projects add new knowledge to what was previously unknown in literature through testing of a hypothesis or a scientific question[14]. Research aims to generate knowledge with broad applications, often through controlled studies. The subjects may or may not benefit directly from the knowledge gained. Research studies aim to evaluate an innovation, study something new, or analyze a process not yet rigorously studied[16].

References

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Appendix

IMPORTANT: RFP Submission Requirements

Applications will be accepted via the online portal listed in the How to Submit section. Project Proposals/Protocols should be single-spaced using Calibri 12-point font and 1-inch margins. Note there is a 15-page limit exclusive of references. When uploading your Full Proposal please ensure it addresses the following sections:

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 overall 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 your 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 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. Describe the overall population size as well as the size of your sample population

Project Design and Methods

- Describe the planned project and the way it addresses the established need.
- If your methods include educational activities, please describe succinctly the topic(s) and format of those activities.

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

- 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 project start/end dates.

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

- The budget amount requested must be in Chinese Yuan (CNY).
- While estimating your budget please keep the following items in mind:
  - General organizational running costs such as legal fees, insurance, heating, and lighting etc. should be included in an Institutional Overhead (if required). These costs are not specific to a grant request and therefore, should not appear as line items in budgets. However, costs that are specific to the study (e.g., some countries require insurance to be taken out on a per-study basis for clinical research) would be acceptable to be included as line items.
  - The inclusion of these costs cannot cause the amount requested to exceed the budget limit set forth in the RFP.
  - Pfizer does not provide funding for capital purchases (infrastructure expenses such as equipment, purchases of software or software licenses, technology or bricks and mortar). Equipment hire/leasing is acceptable and may be included in project budget.
- It should be noted that grants awarded through GMG cannot be used to purchase Pfizer therapeutic agents (prescription or non-prescription).
- Pfizer maintains a company-wide, maximum allowed overhead rate of 28% for independent studies and projects. Please click here for details.

Required Documents

- Project Plan or Proposal