



INTERNATIONAL
CENTRE FOR
**ANTIMICROBIAL
RESISTANCE**
SOLUTIONS



From evidence to action

Working together to mitigate antimicrobial resistance



“NOBODY CAN FIGHT AMR ALONE, IT
IS ONLY THROUGH PARTNERSHIPS
THAT WE CAN MAKE AN IMPACT.”

- Robert Skov, Scientific Director

An invitation to partner

Antimicrobial resistance (AMR) claims more than a million lives every year and is considered one of the greatest global health threats of today and of the future. At ICARS, we work with committed low- and middle-income countries (LMICs) to generate AMR-mitigation solutions that are cost-effective and feasible to implement at a large scale, while relying on national and international partners to maximise our impact.

We offer a partnership to LMICs to co-develop and test context-specific interventions and associated implementation strategies to mitigate AMR. At ICARS we strive for sustainable solutions. In partnership with ministries and country experts, we co-create interventions that are designed to address specific local challenges, led by in-country teams, with a view to scale-up. All our projects also advance the implementation of National Action Plans.

This handout, targeted at LMIC government officials, explains how ICARS is working with countries to mitigate AMR and the kind of support ICARS can offer LMIC ministries that are committed to working together to tackle the major global threat of drug-resistant infections.

To find out more about ICARS, our mission, vision and activities, visit icars-global.org or get in touch with us at contact@icars-global.org.



Advance the implementation of your AMR National Action Plan

Antimicrobial resistance is a threat to the health of humans, animals, crops and the environment. It is a One Health issue that affects societies and economies worldwide. ICARS takes a broad definition of One Health, this means that ICARS will develop projects in all sectors (human, animals, crops and the environment) and apply multidisciplinary approaches including but not limited to the biomedical, veterinary, agricultural and environmental disciplines. We further have a significant focus on social, behavioural and economic sciences.

As of June 2022, 140 countries have developed National Action Plans (NAPs) for the mitigation of AMR according to the Tripartite global database for Antimicrobial Resistance Country Self-Assessment. This is a very positive development that stems from an increase in global awareness of the threat of AMR and in policies aiming to mitigate it. However, as prominently highlighted in the April 2019 final report of the UN Inter-Agency Coordination Group (IACG) on AMR, implementation remains a challenge, particularly in LMICs.

What do we offer?

ICARS provides a range of support, including but not limited to technical expertise and financial assistance. The engagement takes place from conceptualisation to dissemination of results, and informs scale-up understood as the regional or national uptake of effective solutions. ICARS is involved across the entire project lifespan, from the first interaction with the relevant ministry to identify an AMR challenge and co-develop an intervention and/or implementation research project, during the implementation and testing of solutions, through to the development of guidance for scale-up. ICARS' projects include behavioural, economic and policy components to enhance proof of concept and inform scale-up. Countries are encouraged to co-fund interventions.



What is implementation research?

ICARS defines implementation research as research that facilitates the uptake of evidence-based interventions and research findings and addresses implementation bottlenecks using optimal approaches for a particular setting. It is conducted in real world settings in real time using methods that are fit for purpose, focusing on processes and outcomes. Implementation research is relevant, context-specific, demand driven, multidisciplinary, and involves multiple stakeholders.

PARTNERING WITH ICARS

WHO AND HOW

ICARS exclusively works with LMICs because they bear the largest burden of AMR. Any LMIC on the DAC list (the updated list can be accessed on OECD's webpage) is eligible to apply for a funded partnership with ICARS if they provide strong government commitment to addressing AMR.

LMIC **government ministries** are committed to the development and implementation of the research project, with support and advice from ICARS. At the same time, a wide range of stakeholders are involved in the process from the beginning, be they practitioners, researchers or the private sector, to ensure buy-in and maximise the commitment for action from country partners. This results in an intervention that is **co-developed with the country partners**, and an effective implementation phase with efforts from all stakeholders.



The current operating model of ICARS includes co-developing and financing small scale projects to test specific solutions over a **2-3 year period**. ICARS' financial support for each project is approximately **500,000 USD** but this sum can vary depending on the scope, location and size of the research project. We anticipate growth in the size and scope of our projects over the coming years.



Antimicrobial resistance is a public health threat that requires immediate attention. A robust global action is needed. The consequence of our partnership with ICARS will be a strengthened antimicrobial stewardship in Georgia, however, as we have been planning it from the very first day, the outcome of this project will be beneficial and applicable beyond Georgia as well - for other countries of the region.

Giorgi Chakhunashvili MD., PhD.
Georgian National Center for Disease
Control and Public Health (NCDC)

A UNIQUE APPROACH

How ICARS works

It is the unique way of working, the “**how to?**”, that distinguishes ICARS from others in the AMR landscape.

ICARS provides a unique value proposition – a funded partnership, where we collaborate with LMICs to **co-develop evidence-based, context-specific, cost-effective and sustainable solutions** to combat AMR and advance NAP implementation.

But how?

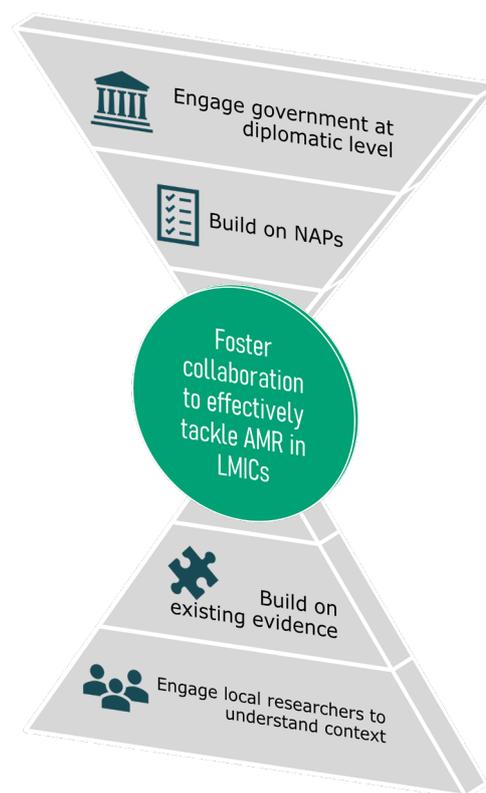
Each country is different both in its approach to tackling AMR and in the type of issues that accelerate AMR at a local level.

National commitment is crucial to ensure up-take and translation of interventions into large scale sustainable action including national policies, programmes and practices. By combining a top-down and bottom-up approach, ICARS secures commitment and ownership from the relevant government ministry (or ministries) while rooting the projects in scientific research conducted at local and national levels.

Through visits, workshops, frequent discussions and reviewing existing evidence, ICARS and the country partners gain a deep understanding of the key challenges existing at the country-level. By working with ministries and local-level

stakeholders to understand the context, we ensure that research projects are tailored to respond to the individual needs and challenges of each country. Research activities are therefore guided by the problems that countries are committed to solve and the individual knowledge gaps they have identified.

Feasible solutions must furthermore be cost-effective, especially in LMIC settings where resources are scarce. They should provide an incentive for stakeholders to implement them in practice. Perhaps most importantly, sustainable solutions require close attention to the enablers of behaviour change in the specific context. Only through behaviour change can solutions be maintained and have real long-term impact. In that regard, implementation research is an important tool for increasing the effectiveness of solutions in the long run.



OUR STRATEGY

Our strategy is based on five interconnected pillars. The co-development process described on the following pages mainly covers project activities under Pillar 1, Testing Solutions. Visit our website to find out more about activities that contribute to our other strategic pillars.

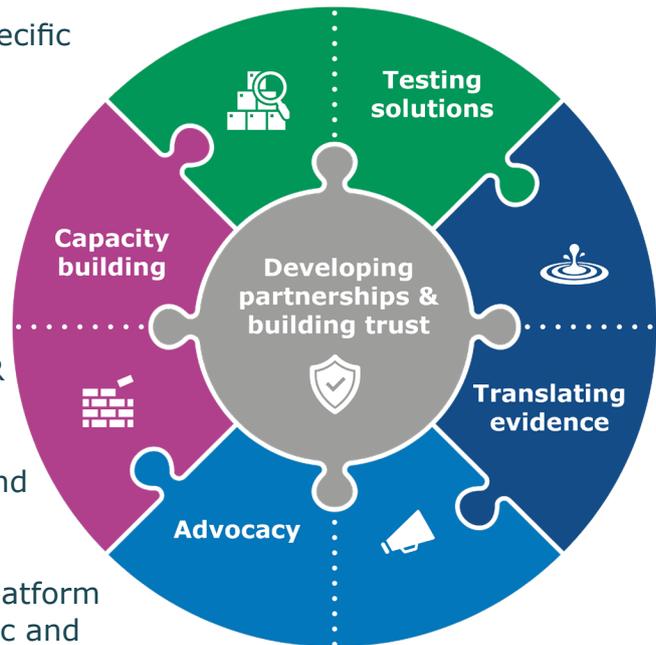
Pillar 1 Develop and test context-specific solutions for AMR mitigation

Pillar 2 Support the translation and uptake of existing evidence and innovation into policies, programmes and practice

Pillar 3 Advocate for context-specific, country-owned AMR mitigation solutions

Pillar 4 Support targeted capacity and capability building

Cross cutting pillar A trustworthy partner and platform for delivering context-specific and country-owned solutions



GET INSPIRED

Current projects

A One Health lens

ICARS takes a broad definition of 'One Health'. This means that ICARS will develop projects in all sectors (human, animals, crops and the environment) and apply multidisciplinary approaches including but not limited to the biomedical, veterinary, agricultural and environmental disciplines. We further have a significant focus on social, behavioural and economic sciences. Projects and activities can have a monosectoral focus on AMR intervention and implementation research while recognising the impact of and on other sectors.



As of June 2022, ICARS is in the process of implementing nine projects across the One Health spectrum in Georgia, Vietnam, Kyrgyzstan, Tanzania, Zambia and Colombia, with many more projects currently in co-development.

ICARS PROJECTS IN IMPLEMENTATION PHASE

Examples from Africa, Asia, and Latin America



Colombia

Reducing weaning diarrhea and antimicrobial use in piglets by improving provision of colostrum and use of vaccines



Georgia

Improving antimicrobial stewardship in hospital settings



Tanzania

Introducing a simple on-farm composting solution to reduce antibiotic levels in soil and fertiliser



Vietnam

Reducing the use of colistin in pig production, through alternatives (e.g. vaccination, less-critical antibiotics, zinc oxide)



Zambia

Combating AMR and antimicrobial residues in the poultry sector

APPLICATION PROCESS

Going from idea to approved proposal

Upon discussions with LMIC government ministries, ICARS initiates a stepwise process ensuring the co-development of high-quality research projects with potential to mitigate AMR and generate new evidence that can be implemented at a large scale and have real-world impact.

As part of our framework for engagement, we have developed an inclusive three-phase application process. It covers every step, from an LMIC's Expression of Interest to partner with us, the collaborative scoping and co-development of the research project(s), to the submission of a proposal that will be reviewed ahead of acceptance.

1

PHASE 1

Expression of Interest (EoI)

Ministries in low- and middle-income countries can initiate a partnership with ICARS by submitting an EoI, using the ICARS project application portal on our website. The EoI should outline key antimicrobial resistance challenges in the context of the country's AMR National Action Plan and propose an AMR intervention to test. A template is available on the ICARS website. The deadlines for submission of the EOIs are 15th of February, June and October. If the EoI is aligned with ICARS vision, mission and pillars, the ministry will receive a positive response, and the co-development process begins.

2

PHASE 2

Concept Note

The Concept Note should ideally be submitted 2-3 months after approval of the EoI. Applications are led by the responsible Ministry(s) in the applicant country. The ministry takes ownership of the project and brings research institutions, universities, and other public and private stakeholders into the co-development of the project. As a partner in the process, ICARS mobilises its research advisors and subject matter experts to shape the project by ensuring that the methodology is appropriate, relevant stakeholders are engaged and consideration is given to how the project could potentially be sustainably scaled-up to mitigate antimicrobial resistance in the country.

MILESTONE

Memorandum of Understanding (MoU)

Upon ICARS' approval of the Concept Note, an MoU is signed between ICARS and the Responsible Ministry stating the scope and objectives of the research project, as well as the country's willingness to implement the solutions, if successful, on a large scale. Entering into a MoU with ICARS is not a guarantee that the country will receive funding; rather it is an agreement to co-develop a Project Proposal.

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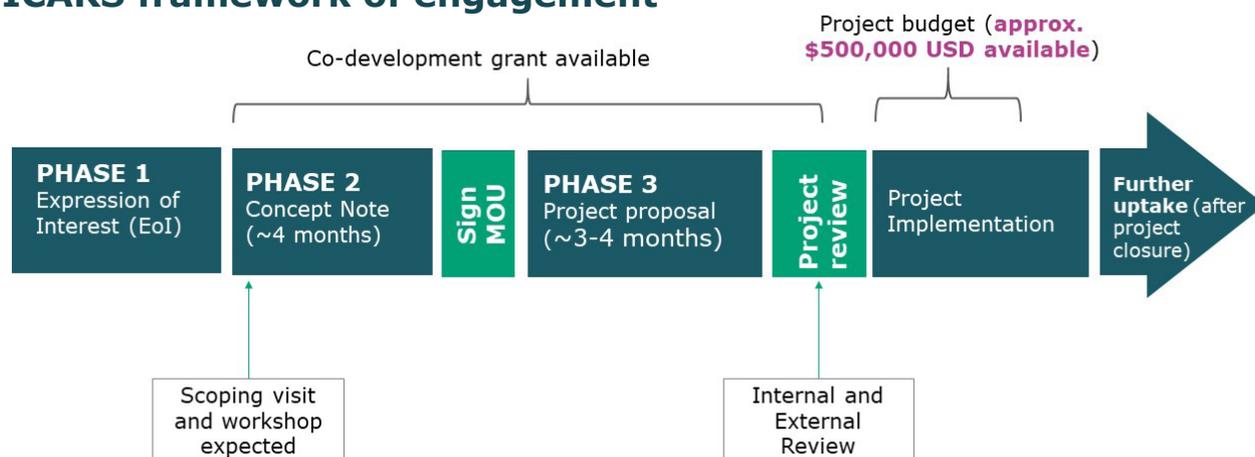
PHASE 3

Project Proposal and Approval

Following the Concept Note and MoU, the detailed Project Proposal is co-developed. Here, the ministry works with the ICARS research advisors and subject matter experts to develop a detailed description of all aspects of the project, including a study design, research methodology, a theory of change, a log frame, a work plan, and a detailed budget. The full proposal should be submitted 3-4 months after approval of the concept note.

The final stage in the application process is the external review of the project proposal by the ICARS' Technical Advisory Forum, who assess the project proposal and provide feedback. Final approval is given by ICARS Executive Management, and the grant is then awarded.

ICARS framework of engagement



INTERESTED IN PARTNERING WITH ICARS?

If your country wishes to partner with ICARS to support efforts in mitigating AMR, please do not hesitate to contact us. ICARS is currently expanding its partnership portfolio and we would be pleased to arrange an informal meeting with ministries and where relevant national agencies to discuss a potential partnership.

ICARS has three evaluation rounds per year to assess **Expressions of Interest (EoIs)**. The submission deadlines for each cycle are listed below. The EoIs should be submitted before the end of day CET of the respective deadlines.

You can find more information about applying, as well as EOI guidelines and templates on our website: icars-global.org/partner

- Cycle 1 – deadline: **February 15**
- Cycle 2 – deadline: **June 15**
- Cycle 3 – deadline: **October 15**

We want to hear from you!

For any questions about our work, the application process or any other details, please write to us at contact@icars-global.org.

Our website might already have some answers!

Visit icars-global.org/partner to find out more. You can also find us on LinkedIn and Twitter @ICARS_global



