



BUILDING SUSTAINABLE OPERATIONAL RESEARCH CAPACITY TO TACKLE ANTIMICROBIAL RESISTANCE

■ The Challenge

Antimicrobial resistance (AMR) is a global public health challenge with the potential to kill as many as 10 million people per year by 2050 and cost the world economy as much as \$100 trillion. AMR makes standard treatments ineffective and allows infections to persist and spread to others.

■ The SORT IT Solution

The **S**tructured **O**perational **R**esearch and **T**raining **I**niTiative (**SORT IT**) seeks to make countries “data rich, information rich and action rich”. SORT IT is a global partnership-based initiative coordinated by TDR, the Special Programme for Research and Training in Tropical Diseases, and implemented with partners. We will use SORT IT to build operational research (OR) capacity that will generate and promote use of evidence on the emergence, spread and health impact of AMR for tackling this global problem.

■ The Success in 90 Countries

SORT IT has been successfully scaled up to 90 countries over 8 years (with approximately 800 participants) and addressed topics such as multidrug-resistant tuberculosis, malaria, maternal and child health, and outbreaks and emergencies. The approach has proven to be adaptable to various geographic contexts, thematic areas and research methodologies. About 85% of participants publish in peer-reviewed journals and 69% of studies report an impact on policy and practice. This model is now being adapted to tackle AMR.

The SORT IT Objectives



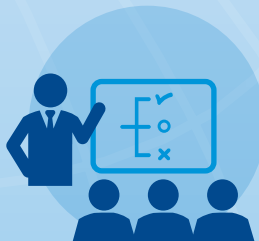
1

Conduct and publish operational research



2

Build sustainable operational research capacity



3

Build structures and processes for evidence-informed decision-making



4

Enhance mechanisms for knowledge sharing

The SORT IT Approach

- *Training:* A 10 to 12 month training cycle comprised of four modules: protocol writing; quality assured data capture and analysis; manuscript writing for publication; and evidence-informed decision making.
- *Participants (12 per workshop):* Implementers and front-line health workers selected using strict eligibility criteria.
- *Target countries:* Nepal, Myanmar, Ghana, Sierra Leone, Uganda (Fleming Fund early adopter countries), Colombia, Ecuador.
- *Scientific scope:* Research priorities addressing country needs and aligned with the Global Action Plan on AMR: <http://www.who.int/antimicrobial-resistance/global-action-plan/en/>.
- *Strategy:* A bottom-up approach through engagement with stakeholders in countries. AMR focal points and OR fellows will facilitate this process.
- *Mentors:* From TDR's global SORT IT roster.
- *Collaborating institutions:* WHO country offices; U.K. Department of Health and Social Care (DHSC-UK); National Institute for Health Research; Fleming Fund; core implementing partners including The International Union Against Tuberculosis and Lung Disease; The Institute of Tropical Medicine, Antwerp; Vital Strategies; Médecins Sans Frontières; national disease control programmes.

“SORT IT is contributing to the global effort to fight AMR through developing operational research capacity that can be used to monitor country-level progress in real time.”

– Marc Sprenger, Director, WHO Antimicrobial Resistance Secretariat

The Monitoring & Evaluation

Performance Indicator	Targets
Participant satisfaction score	80%
Successful milestone completion	80%
Publication within 18 months	80%
Assessment of research studies for impact	80%

Colombia



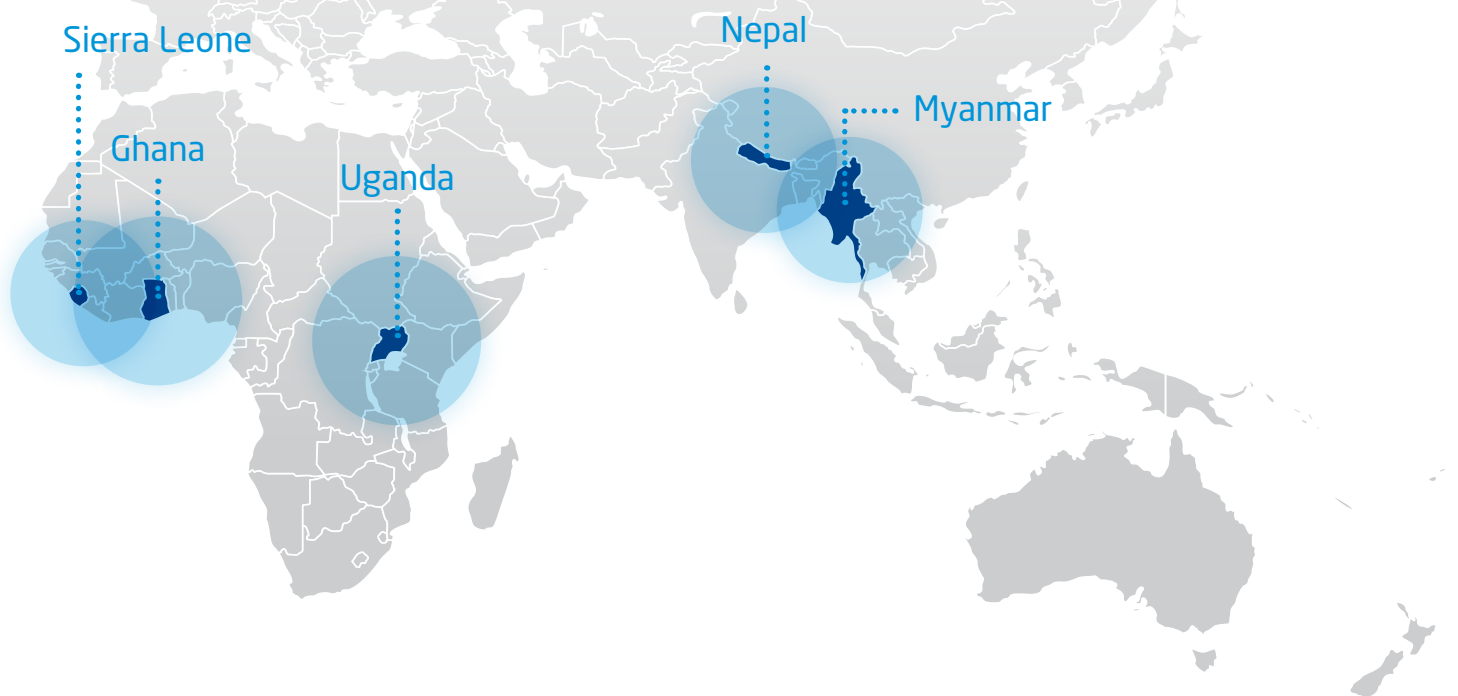


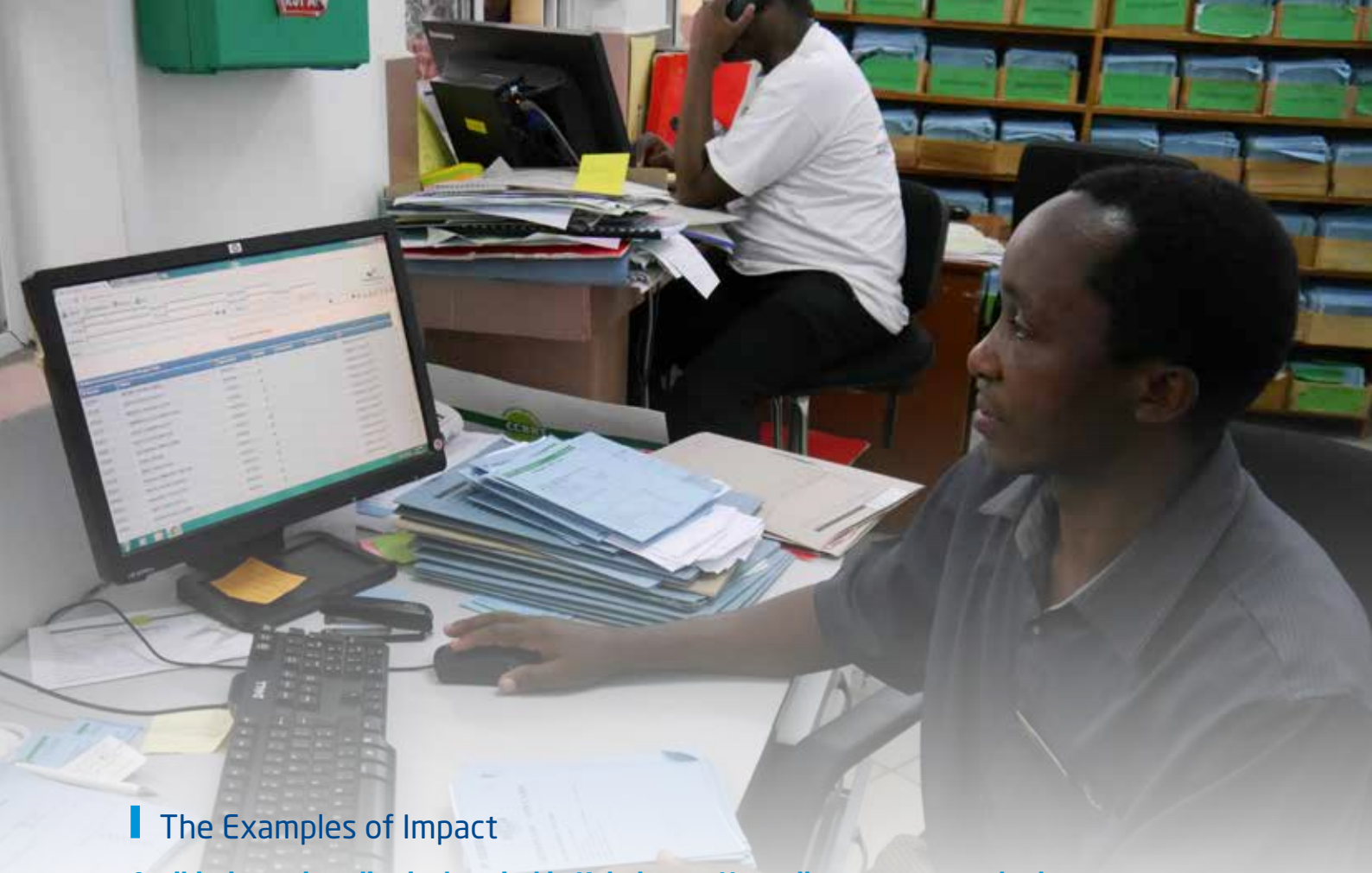
■ The Expected Results

At least 72 priority OR projects and about 90 individuals trained; six country AMR focal points and six OR fellows as future OR leaders; an AMR community of practice; an enlarged SORT IT partnership base; publications; policy/issue briefs; and integration of OR activities within national strategic plans.

■ The Long-Term Strategic Impact

- Improved policy and/or programme practice for preventing the emergence and spread of AMR.
- Sustained capacity and leadership by trained SORT IT participants to publish, teach and use evidence beyond the life of the programme.
- Expanded scope and use of routine programme data.
- A community of practice at national and international levels through north-south and south-south links.





The Examples of Impact

Antibiotic use in a district hospital in Kabul, Afghanistan: are we overprescribing?

Bajis S *et al.*, Public Health Action. 2014;4:259-64.

Study findings

- Outpatient antibiotic prescriptions were 60% (double the WHO recommendation of 30%)

Impact

- Education of health staff and the community on rational antibiotic prescribing practices.

Non-adherence to standard treatment guidelines in a rural paediatric hospital in Sierra Leone. De Bruycker M *et al.*, Public Health Action 2013; 3: 118-124.

Study findings

- Non-adherence to treatment guidelines for lower respiratory tract infections was 86% and for malaria, 12%.

Impact

- Urgent review of supervision and monitoring of drug practices and introduction of hospital paediatric prescribing guidelines.

TDR, the Special Programme for Research and Training in Tropical Diseases, is able to conduct its work thanks to the commitment and support from a variety of funders. These include our long-term core contributors from national governments and international institutions, as well as designated funding for specific projects within our current priorities. For the full list of TDR donors, please visit our website at: <https://www.who.int/tdr/about/funding/en/>



Department
of Health &
Social Care

The U.K.'s Department of Health & Social Care has contributed designated funding for this SORT IT AMR initiative which is branded as the NIHR-TDR partnership.

NIHR | National Institute
for Health Research

TDR is co-sponsored by the following organizations:



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More information on SORT IT is available at <http://www.who.int/tdr/capacity/strengthening/sort/en/>
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