

GUIDE FRAMEWORK

Five Steps to Combat Antimicrobial Resistance

Through Evidence-Based Antibiotic Prescribing



Gather



Urgency



Identify



Define



Evaluate

GUIDE Framework for Stewardship for Prescribers Launch | November 17, 2025

World AMR Awareness Week 2025: Act Now: Protect Our Present, Secure Our Future

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South Centre Launches GUIDE Framework: A Five-Step Tool to Combat Antimicrobial Resistance Through Evidence-Based Prescribing and Stewardship

Short Description

The South Centre hosted a webinar introducing the GUIDE Framework, a practical five-step antimicrobial stewardship tool designed to support prescribers, AMS teams, and policymakers in developing countries to optimize antibiotic use and combat the growing threat of antimicrobial resistance.

On November 17, 2024, the South Centre convened a global webinar to launch the GUIDE Framework for Evidence-Based Antibiotic Prescribing, marking a significant step forward in the fight against antimicrobial resistance (AMR). The webinar, led by Dr. Rasha Abdelsalam Elshenawy, AMRAMS Global Health Policy Expert, and AMR and Stewardship consultant at South Centre, introduced a practical tool designed specifically to address the challenges faced by developing countries in implementing effective antimicrobial stewardship.

THE URGENT NEED FOR ACTION

Antimicrobial resistance has emerged as one of the most pressing global health threats. Recent evidence shows that AMR caused approximately 4.95 million deaths in 2019 alone, with projections indicating a 70% increase by 2050 to nearly 10 million deaths annually. The World Health Organization's recent GLASS report reveals that one in six bacterial infections is now antibiotic-resistant, underscoring the critical need for coordinated action to preserve the effectiveness of available antibiotics (Figure 1).

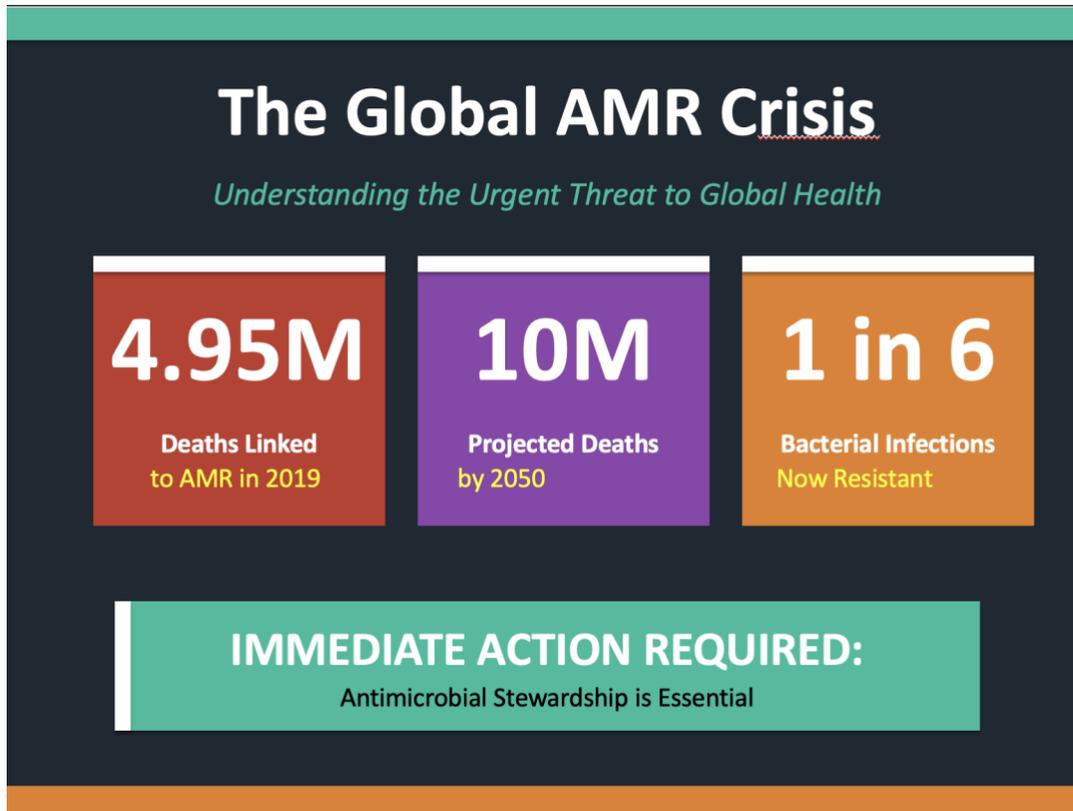


Figure 1. The Growing Threat of Antimicrobial Resistance

(Sources: WHO GLASS Report 2025, Lancet Global Burden of Disease Study)

Dr Viviana Munoz Tellez, Head of the AMR Programme at the South Centre, emphasised the particular challenges facing developing countries: "Antimicrobial stewardship is important and with evidence-based prescribing and evidence-based use of antimicrobial stewardship... we have limited resources of antibiotics. There is no more discovery of antibiotics. So we need to ensure that the resources we have from this antibiotic are used effectively for the patient who really needs it in a severe condition."

A FRAMEWORK BUILT ON EVIDENCE AND EXPERIENCE

The GUIDE Framework represents the culmination of extensive research and over 23 years of clinical expertise in antimicrobial stewardship. Dr Rasha Abdelsalam Elshenawy, AMR/AMS Global Health Policy Expert and AMR and Stewardship consultant at the South Centre, developed this evidence-based tool to bridge the gap between global policy guidance and practical implementation at the healthcare provider level.

The framework integrates existing international guidance, including the WHO AWaRe classification system and the UK Health Security Agency's "Start Smart then Focus" guidelines, into a streamlined five-step approach that can be adapted to diverse healthcare settings, particularly those with limited resources (Figure 2).

THE FIVE STEPS OF GUIDE

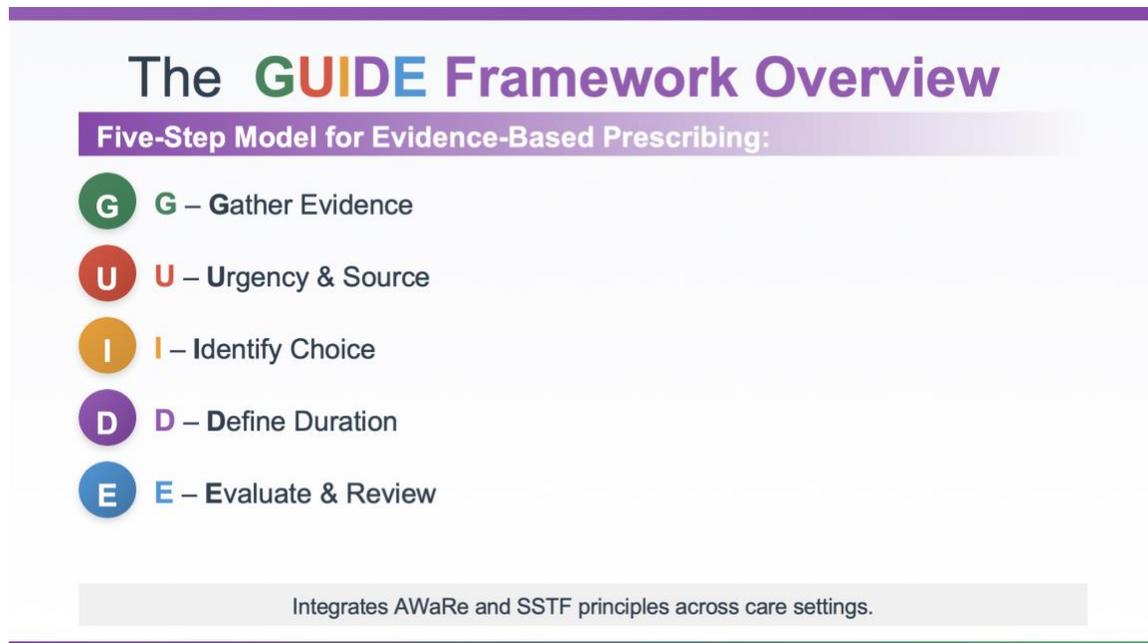


Figure 2. Five Steps for Evidence-Based Antibiotic Prescribing of GUIDE Framework

The GUIDE acronym represents a systematic approach to antibiotic prescribing:

G – Gather Evidence: Assess infection signs and patient risk factors. The fundamental question at this stage is whether the patient shows signs and symptoms of bacterial infection requiring antibiotics. This step emphasizes diagnostic stewardship and the importance of distinguishing viral from bacterial infections.

U – Urgency and Source: Identify the infection source and determine urgency. For patients with sepsis or severe infections, antibiotics must be initiated within one hour. For stable patients, careful investigation guides targeted therapy. This step recognizes the critical importance of rapid response while avoiding unnecessary broad-spectrum antibiotic use.

I – Identify Choice: Select the appropriate antibiotic following local guidelines while considering the WHO AWaRe classification. The framework encourages prescribers to start with Access antibiotics (first-line, narrow-spectrum options) whenever appropriate, reserving Watch antibiotics for specific situations and Reserve antibiotics for severe conditions only.

D – Define Duration: Establish antibiotic duration from day one based on local and national guidelines. Clear documentation of treatment duration prevents indefinite antibiotic courses and supports safe transitions of care.

E – Evaluate and Review: Conduct structured reviews at key timepoints (48-72 hours, day 5-7, and beyond) to assess clinical progress and determine whether to stop, switch, de-escalate, or continue antibiotics with clear justification.

BRIDGING POLICY AND PRACTICE

A distinguishing feature of the GUIDE Framework is its dual applicability. At the individual prescribers level, it provides a decision-support tool for daily prescribing decisions. At the organizational and national levels, it offers a structured approach for policy implementation, audit activities, and integration into electronic health records.

The framework addresses several critical challenges identified in developing country contexts, including limited laboratory diagnostic capacity, constraints on specialist consultation availability, and the need for tools that function effectively across primary, secondary, and tertiary healthcare facilities (Figure 3).

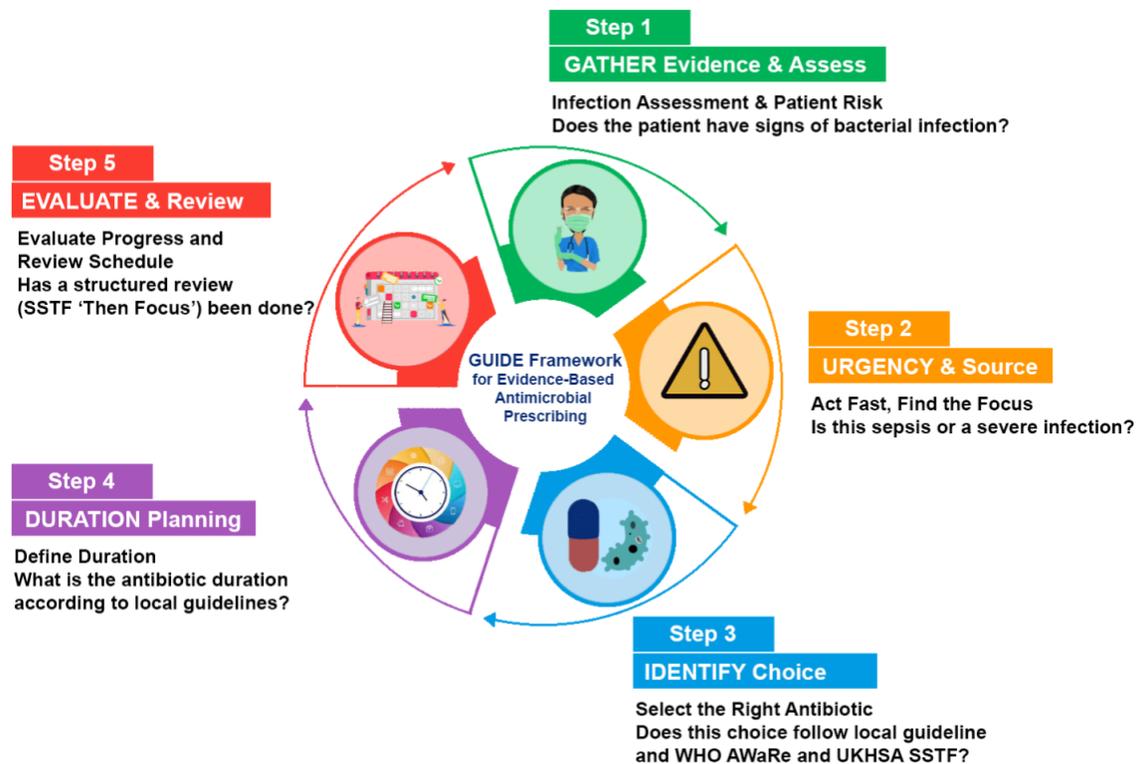


Figure 3. Overview of GUIDE Framework - Five Steps for Evidence-Based Antibiotic Prescribing

GLOBAL PARTICIPATION AND POSITIVE RECEPTION

The webinar attracted diverse participants from across Asia, Africa, Latin America, and the Caribbean, including prescribers, pharmacists, nurses, AMS committee members, hospital managers, ministry of health officials, educators, and digital health teams (Figure 4).

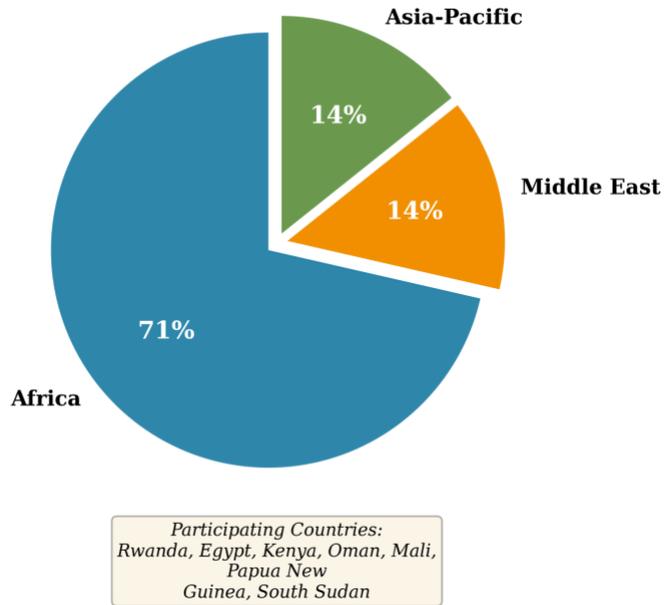


Figure 4. Geographic Reach of GUIDE Framework Webinar

Post-webinar survey results demonstrated strong support for the framework. Participants from Rwanda, Egypt, Kenya, Oman, Mali, Papua New Guinea, and South Sudan provided valuable feedback. Key findings included:

- 87 percent of respondents found the five-step model "clear" or "very clear"
- 87 percent rated the framework as "relevant" or "highly relevant" to their local AMS context
- 100 percent of respondents found GUIDE "useful" or "very useful" as a clinical decision-support tool
- 87 percent indicated they would "yes" or "possibly" endorse GUIDE as a standard AMS tool for their institution or country
- 100 percent of respondents supported incorporating GUIDE into training programmes and continuing professional development

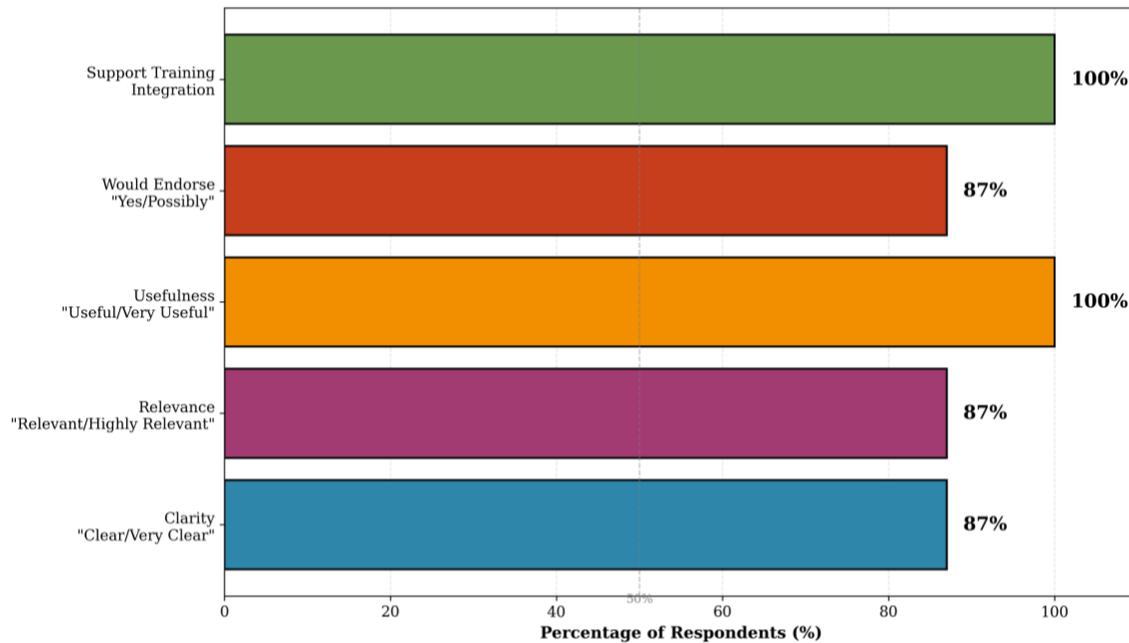


Figure 4. GUIDE Framework Webinar Survey Results

When asked which step would have the greatest impact, 75percent of respondents indicated that all five steps were equally important, reflecting the integrated nature of the framework. Participants highlighted the framework's strengths as being "well detailed and feasible," enhancing "patient safety and care," and providing a "consistent, easy to follow" approach focused on "rational use of antibiotics."

IMPLEMENTATION CONSIDERATIONS

Survey responses also identified practical implementation challenges, including limited resources, workforce capacity constraints, and the need for diagnostic infrastructure. However, participants recognized key enablers for successful adoption, including training and education, policy integration, and digital health solutions.

One participant from Kenya commented: "I have learnt a lot from the session and gained more insight into this big global issue of AMR." Another from South Sudan noted the framework would "enhance AMS in hospital-based setting," while participants emphasized the importance of "keep reviewing with the current trends developing daily."

POLICY IMPLICATIONS FOR DEVELOPING COUNTRIES

The GUIDE Framework offers several pathways for policy integration in South Centre member states:

First, the framework can be incorporated into National Action Plans on AMR, providing a standardized approach to antimicrobial stewardship implementation across different healthcare facilities and sectors. This supports the consistent application of stewardship principles while allowing adaptation to local contexts.

Second, GUIDE provides a structure for strengthening diagnostic stewardship by emphasizing evidence gathering and appropriate testing before antibiotic initiation. This aligns with calls for increased investment in laboratory capacity in developing countries.

Third, the framework's emphasis on documentation and structured review creates opportunities for meaningful audit and surveillance activities, generating data that can inform national AMR monitoring systems and feed into global initiatives like the WHO GLASS programme.

Fourth, the tool's integration of the WHO AWaRe classification supports countries in monitoring and optimizing their antibiotic consumption patterns, a key indicator in global AMR action plans.

TIMING WITH WORLD AMR AWARENESS WEEK

The launch of the GUIDE Framework coincides with World AMR Awareness Week (November 18-24, 2024), under the theme "Educate. Advocate. Act now." This alignment reinforces the message that antimicrobial resistance demands immediate, coordinated action across all levels of the health system.

The framework embodies this year's call to action by providing healthcare professionals with practical education on evidence-based prescribing, advocating for systematic stewardship approaches, and offering tools that enable immediate implementation in clinical settings.

NEXT STEPS AND AVAILABILITY

The GUIDE Framework policy brief is now available on the South Centre website, along with the webinar recording, presentation slides, and supporting materials. The South Centre welcomes feedback from member states and partners on how the framework can be adapted and implemented in diverse settings.

Dr. Elshenawy emphasized the collaborative approach needed for success: "We need to make like a complimentary action. We need to raise this recommendation and raise this framework for the policy maker to help them to take the proper decision and also on the other hand we need to educate our resources, our manpower to help them to be able... this will be able to provide like decision support tool to the health professional to help them to take the aware or the proper decision."

The South Centre continues to support developing countries in strengthening their capacity to address antimicrobial resistance through policy research, technical assistance, and tools like the GUIDE Framework that translate global commitments into practical action at the country level.

CONCLUSION

Antimicrobial resistance does not respect borders, and its solutions require global cooperation grounded in local action. The GUIDE Framework represents a practical contribution to the global effort to preserve antibiotic effectiveness, designed specifically with the needs and constraints of developing countries in mind.

As one webinar participant eloquently summarized, the framework's key strength lies in "the focus on rational use of antibiotics by ensuring antibiotics are prescribed, dispensed and consumed appropriately." In an era where no new classes of antibiotics are being discovered, such rational use is not merely good practice—it is essential for global health security.

Author Information

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Resources

The GUIDE Framework policy brief, webinar recording, and related materials are available at: <https://www.southcentre.int/sc-guide-framework-for-evidence-based-antibiotic-prescribing-november-2025/>.

For more information, contact: South Centre