AMR Global Health Academy Brief

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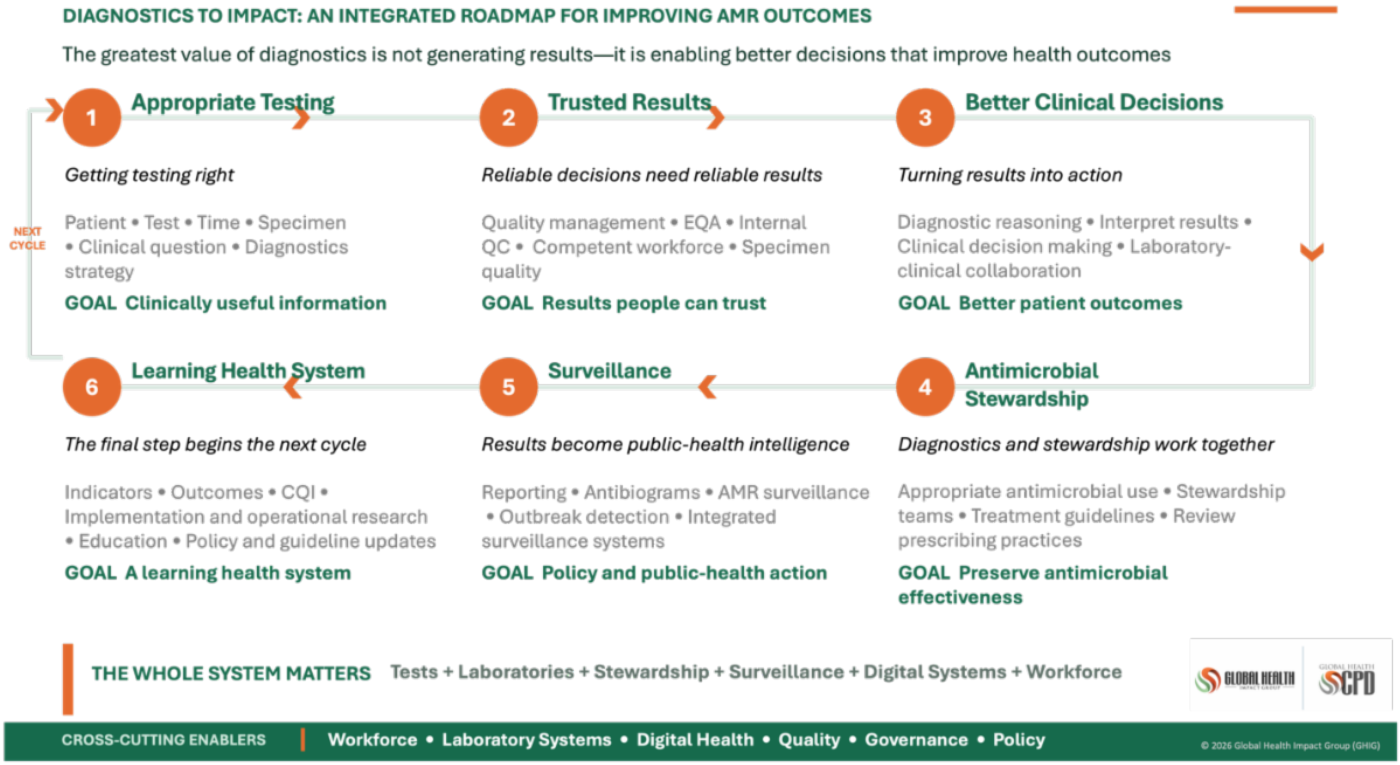
From Better Decisions to Better Outcomes: An AMR Roadmap from Diagnostics to Impact

Diagnostic tests have the potential to improve patient care - but only when they inform better clinical decisions, support appropriate antimicrobial use, and contribute to stronger surveillance. Realizing the value of diagnostics requires an integrated health system in which each step builds on the one before it.

The ***AMR Global Health Academy's*** ***Diagnostics to Impact*** **roadmap** illustrates how diagnostic information moves through the health system from appropriate testing and trusted laboratory results to clinical decision-making, antimicrobial stewardship, surveillance, and continuous learning. Each stage strengthens the next, creating a cycle that improves patient care while generating evidence that supports public health action.

Importantly, these stages are not independent activities. Workforce, laboratory systems, digital health, quality management, governance, and policy support every step. When these components function together, diagnostics become more than a testing service, they become a driver of better health system performance.

Practice Insight: An Integrated Roadmap for AMR



1. Appropriate Testing

The diagnostic journey begins before a specimen is collected. Selecting the right test for the right patient, at the right time and in the right setting, ensures that testing answers the right clinical or public health question. Appropriate testing reduces unnecessary investigations, supports efficient use of resources, and generates information that can guide patient management.

2. Trusted Results

Diagnostic information is valuable only if it can be trusted. Quality management systems, competent laboratory staff, quality assurance, and effective specimen referral systems ensure that results are accurate, timely, and reliable. Without confidence in the result, clinicians cannot have confidence in the decisions that follow.

3. Better Clinical Decisions

Test results should change care. Diagnostic information supports clinical reasoning, guides appropriate empiric therapy, confirms or excludes infection, and enables escalation or de-escalation of antimicrobial treatment. Better decisions improve patient outcomes while reducing unnecessary antimicrobial use.

4. Antimicrobial Stewardship

Diagnostic stewardship and antimicrobial stewardship are complementary. Reliable diagnostic information enables more targeted prescribing, supports adherence to treatment guidelines, and strengthens stewardship activities such as audit and feedback. Together, they help preserve the effectiveness of antimicrobial medicines.

5. Surveillance

Every diagnostic result has value beyond the individual patient. When aggregated, laboratory data contribute to antibiograms, AMR surveillance, outbreak detection, and national reporting systems. Surveillance transforms individual diagnostic results into better clinical action and population-level intelligence that inform policy, preparedness, and resource allocation.

6. Learning Health System

The roadmap does not end with surveillance. Monitoring performance, evaluating implementation, and continuously improving policy, practice, and education create a learning health system in which lessons from one cycle inform better testing, better decisions, and better outcomes in the next.

The Whole System Matters

Every step in the *Diagnostics to Impact* roadmap contributes to better patient outcomes and stronger health systems. The greatest value of diagnostics is enabling better decisions at every level of the health system.

Academy In Action

The AMR Global Health Academy's structured learning pathways are designed to strengthen competencies across each stage of the *Diagnostics to Impact* roadmap. Through Academy courses, Decision Points, case-based learning, and practical resources, learners develop the knowledge and skills needed to translate diagnostics into better health outcomes.

Explore the AMR Global Health Academy's **learning pathways**.

Looking Ahead

The launch of ***AMR in Practice: Decision Points*** represents the next phase of the Academy's educational approach. Each case-based vignette explores a critical decision point within the ***Diagnostics to Impact*** **roadmap**, helping healthcare professionals apply the principles of diagnostic stewardship, clinical decision-making, and antimicrobial stewardship in real-world practice.

Key Takeaway

From diagnostics to impact, every step matters. The value of diagnostics is realized when the

system functions as one continuous pathway, translating better decisions into better health outcomes.

AMR Global Health Academy

Practical learning. Real-world decisions. A global workforce equipped to act.

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