Executive summary

The DETECT project invites diagnostic technology developers to share their solutions for combating antimicrobial resistance (AMR). We are mapping the landscape of available rapid diagnostic tools to see how current technologies can best inform patient treatment, support hospital infection control, and strengthen global surveillance. Apart from finding rapid technologies, we are actively looking to discover early-stage prototypes and future breakthroughs in AMR diagnostics.

The open call aims to directly address the critical need to accelerate diagnostic turnaround times and ultimately improve patient clinical outcomes. The technologies submitted should directly address the management of severe, life-threatening clinical syndromes, such as bloodstream infections (BSI), hospital-acquired and ventilator-associated pneumonia (HAP/VAP).

We are specifically seeking diagnostics that target the most pressing bacterial and fungal threats as designated by the World Health Organisation (WHO) priority lists. The technology should be capable of detecting bacterial such as carbapenem-resistant *Acinetobacter baumanii*, carbapenem-resistant *Enterobacterales*, and carbapenem-resistant *Pseudomonas aeruginosa.*

We welcome submissions that align with DETECT's Target Product Profiles (TPP). We are primarily interested in two distinct tracks of diagnostic platforms:

- Instrumented multiplex systems (e.g., mPCR): These devices utilise self-contained, disposable cartridges that can simultaneously identify multiple bacterial pathogens alongside their respective resistant genes or phenotypic susceptibility profiles from a single sample
- Near-patient/Point-of-Care (POCT) devices: Technologies engineered for primary care clinic use. This includes characteristics such as visually read diagnostic strips (such as lateral flow assays) to highly portable, fully automated digital systems.

For both categories, platforms that can test directly from primary clinical specimens such as whole blood, plasma, serum, or lower respiratory tract samples with minimal to no manual sample preparation will be preferred.

This open call acts as a preliminary, capability-based screening. A Technical Evaluation Committee (TEC) within the DETECT project will exclusively review the technical specifications and data you provide in your submitted Expression of Interest (EOI) form and supporting documents. We will benchmark your platform's capabilities against the minimal and optimal requirements defined in our TPP.

Objectives and evaluation criteria

The goal of this open call is to shortlist standout diagnostic platforms. Shortlisted platforms may be contacted to deliver a pitch. To ensure the selected technologies address the clinical urgencies of AMR, the TEC will score all submissions based on how well their stated capabilities fulfil the following criteria:

1. **Improve clinical decision-making in severe infections (bloodstream infections and hospital-acquired/ventilator-associated pneumonia).** Technologies will be judged on their ability to detect pathogens based on WHO bacterial priority list, and the time-to-result to effectively guide rapid clinical decision making. Preference will be given to those that can:
    a. detect Gram-negative bacteria such as Enterobacterales, Pseudomonas, Acinetobacter
    b. along with their resistance determinants such as carbapenemases or ESBL genes, or phenotypic antimicrobial susceptibility testing (AST)
    c. in < 90 minutes or optimally <60 minutes for multiplex platforms or in < 60 minutes or optimally < 30 minutes for POCT platforms.

2. **Ensure usability with minimal training.** We aim to minimise the delays of traditional culturing and ensure tests are practical for their intended users. Technologies will be prioritised if they require minimal sample pre-processing and provide user-independent result interpretation. Furthermore, technologies that can be operated with minimal training will have priority.

3. **Sustained adoption in low-resource settings.** Technologies will be evaluated based on their ability to function reliably outside laboratory-controlled settings. Technologies will be evaluated favorably if they require no cold chain for transportation and offer a long shelf life (minimally 12 months, optimally 18 months). Technologies operable on minimal power or run on battery/uninterrupted power supply for at least 24 hours is highly desired. Technologies that rely on multiple-source reagent suppliers or simple international procurement pathways will be evaluated favourably, given the reduced risk of stock-out and programme discontinuation.

4. **Affordability, supply chain resilience and scalability.** Technologies must be affordable with the estimated cost per test ideally priced at ≤ $ 20 USD (per 100,000 tests per year; optimally ≤ $ 15 USD). Priority will be given to technologies that demonstrate a plausible pathway to affordability at programme scale, including through local manufacturing, or regional distribution partnerships.

5. **Team capacity.** Developers who demonstrate the organisational capacity and commitment to work collaboratively toward market access in LMIC settings will be preferred. This includes manufacturing readiness, a defined regulatory pathway, and a track record or credible plan for distribution in low-resource environments.

Timeline

The expected timeline for this initiative is as follows:

1. EOI open for submission (**06 Jul 2026**; ~6 weeks)
2. DETECT Technical Evaluation Committee review (~1 month)
3. Invitation for presentation (~1 month; tiebreakers)
4. Selection notification (Expected late Oct/Early Nov 2026)

How To Apply

To respond to this open call, please submit information about your organisation and your platform via the DETECT RDT Open Call Expression of Interest form.

Submission instructions:

- **Complete the form:** Fill out the required fields, ensuring you specify your company/organisation name and primary contact details and the specific technical characteristics of your platform
- **Submit separately for multiple tests**: If you are proposing multiple diagnostic tests or platforms, please complete and submit a separate form for each test
- **Upload supporting documents**: Along with the submission form, please attach the following relevant materials to support your application in the dropbox link provided in the form:
    - Target Product Profile or equivalent product development profile
    - Overview of the clinical workflow, including an actual or mock-up visual of the product.
    - Instructions for use (IFU)
    - Product specification / operational requirements sheet
    - Performance reports(s) (e.g. analytical, clinical, validation studies)
    - Regulatory documents or certification(s)
    - Company profile and supporting documentation (e.g. company profile, organisational structure, regulatory and quality functions)
    - Any other relevant supporting material can also be attached
- **Provide additional context**: Comment is available for each section. Please include any further information that might be important or useful to share with us.

Deadline for submission: 16th August 2026

For any questions, please send in your inquiries at:

DETECT – Feedback & Enquiry Form - https://linktr.ee/DETECT_Advanceid