

Consensus Guidance for Rapid Diagnostic Test Use in Antimicrobial Stewardship



Rapid diagnostic tests (RDTs) are capable of fast and accurate infectious disease organism identification, and are an increasingly important component of antimicrobial stewardship (AMS) programs. However, although use of RDTs is encouraged in international guidelines, they have been underutilized in AMS programs in Asia Pacific due to a lack of supportive local data and guidelines, inadequate infrastructure, and cost issues.

An expert group of infectious diseases clinicians, clinical microbiologists, and a clinical pharmacist therefore developed consensus statements on the implementation of RDTs within AMS activities for Asia Pacific.

The group performed an initial PubMed search to identify literature on different diagnostic methods applied to AMS from 1 January 2015 to 26 February 2020. A second search identified all literature published up to 14 May 2021 on diagnostic methods in AMS in Asia Pacific.

The group used a modified Delphi consensus approach^{*} to develop 10 statements that provide guidance on what constitutes an RDT, optimal deployment, measuring effectiveness, and overcoming key challenges. A consensus was met at > 75% agreement among the group.

The underlying evidence quality and recommendation strength was evaluated using the Grading of Recommendation Assessment, Development and Evaluation (GRADE) system. The statements aim to fill a gap in clinical practice and policy development for implementation of RDT within AMS activities for Asia Pacific.

* iterative process, consisting of a series of rounds of voting, with the aim of collecting expert-based judgements and using them to develop consensus statements. In this case, if a consensus was not reached, statements were revised and voted on via email to achieve a final consensus.



"The speed and trajectory of the development of RDT is likely to vary widely across the region, but irrespective of this variation, the consensus statements can provide guiding principles," concluded Anucha Apisarnthanarak, MD, Infectious Diseases Division, Thammasat University Hospital, Pathum Thani, Thailand and colleagues.

"We strongly advocate the collection of local data across a range of metrics," they added. "This remains a key priority if the full benefits of RDT in AMS are to be realized."

REFERENCE

Apisarnthanarak A, Kim HB, Moore LSP, et al. Utility and applicability of rapid diagnostic testing in antimicrobial stewardship in Asia Pacific: A Delphi consensus. *Clin Infect Dis.* 2021;ciab910. doi:10.1093/cid/ciab910

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