Reaching the UNAIDS 90-90-90 treatment targets will require a massive expansion of HIV diagnostic services to ascertain HIV status and monitor the viral load of those initiated on and continuing ART.

The current scenario for HIV diagnostics does not meet the immense needs of the world’s 36.7 million people living with HIV (PLHIV). Exclusive reliance on conventional diagnostic technologies means that many clients do not have access to same-day test results, and instead wait days, weeks or sometimes months while their specimens and results are transported to and from centralized laboratories. These long turn-around times often result in high rates of client loss to follow up and delayed care and treatment decisions for both children and adults.

A key strategy to meet the testing and diagnostic needs of PLHIV is the scale up of innovative testing, while strengthening existing laboratory systems. One such approach is strategic deployment of Point of Care (POC) testing, which will expand access to diagnostics and enable clients to receive test results during the same visit. A combined approach, maximizing the potential impact of all available tools, is key to enable meeting targets of treatment for all.

WHAT IS POINT OF CARE TESTING?

POC testing refers to testing that takes place during a client visit, with results provided during the same visit. ‘Near Point of Care’ also refers to testing on-site and rapid results, higher level facility. POC and near POC devices are easy-to-use products that do not require complex specimen preparation, constant electricity, refrigeration, sophisticated laboratory infrastructure, or highly skilled human resources (see Table below for additional benefits and challenges).

Although conventional, laboratory-based technologies have formed the backbone of national testing programs for many years, their ability to expand access has been hampered by systems challenges, which include unreliable sample transportation networks, sample integrity issues, instrument failures, and laboratory network workflows. Optimizing the balance between conventional laboratory network and POC testing in a country can strategically increase access to testing and diagnostics, and ultimately improve health outcomes.

As of July 2016, there are two WHO Prequalified devices on the market for Infant Virologic Testing and EID (Alere™ q and Cepheid GeneXpert®) and two devices for CD4 (Alere™ Pima and BD FACS®Presto™). The UNITAID HIV/AIDS Diagnostics Technology Landscape provides a comprehensive biannual update on the status of new diagnostic technologies.
SCOPE OF THE KEY CONSIDERATIONS DOCUMENT

The forthcoming Key Considerations for Introducing Point of Care Diagnostic Technologies in National Laboratory Programmes provides necessary information to guide discussions at national and subnational levels. It will introduce topics to consider during national policy and strategy planning, regulation, procurement and supply chain management, quality assurance and data management, and program implementation. The document focuses on POC HIV diagnostics and monitoring for: virologic testing for EID, CD4 staging and monitoring, and (VL) testing for treatment monitoring.

The Key Considerations document provides background on HIV POC testing and its potential contribution to meeting the 90-90-90 treatment targets, outlines the steps for introducing HIV POC technologies (see Figure below), and includes links to tools and resources.

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1 UNAIDS, 2016
2 http://www.who.int/diagnostics_laboratory/evaluations/PQ_list/en/
3 http://www.unitaid.eu/en/resources/publications/technical-reports#hiv

For additional information, visit: http://www.childrenandaids.org/partnership/point-of-care
Join the POC community of practice: https://knowledge-gateway.org/hiv_poc

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