

TECHNICAL UPDATE

CONSIDERATIONS FOR  
**DEVELOPING A  
MONITORING AND  
EVALUATION FRAMEWORK  
FOR VIRAL LOAD TESTING**

APRIL 2019

COLLECTING AND USING DATA FOR SCALE-UP AND OUTCOMES



**World Health  
Organization**

Considerations for developing a monitoring and evaluation framework for viral load testing

WHO/CDS/HIV/19.5

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# CONTENTS

<b>Acknowledgements</b> .....	3
<b>Abbreviations</b> .....	4
<b>Executive summary</b> .....	5
<b>Introduction</b> .....	6
<b>1. Assessing and strengthening viral load and monitoring and evaluation systems</b> .....	8
<b>2. Indicators for scale-up or viral load testing and programme outcomes</b> .....	15
<b>3. Service quality assessments and evaluation of viral load testing</b> .....	21
<b>References</b> .....	23
<b>Annex 1. Logic model for routine viral load testing</b> .....	24
<b>Annex 2. Monitoring and evaluation systems for viral load testing assessment and checklist tool</b> .....	25
<b>Annex 3. Examples of key monitoring and evaluation tools for viral load monitoring</b> .....	29
<b>Annex 4. Example template for national monitoring and evaluation plan for viral load scale-up and implementation</b> .....	35
<b>Annex 5. Core programme indicators for viral load testing scale-up and implementation</b> .....	37
<b>Annex 6. PEPFAR evaluation standards of practice</b> .....	47
<b>Annex 7. Differences between types of evaluation and operations research</b> .....	48

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# ABBREVIATIONS

<b>DHIS2</b>	District Health Information System
<b>MER</b>	PEPFAR Monitoring, Evaluation and Reporting
<b>PEPFAR</b>	United States President's Emergency Plan for AIDS Relief
<b>UNAIDS</b>	Joint United Nations Programme on HIV/AIDS

# EXECUTIVE SUMMARY

The WHO consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection recommend viral load as the preferred monitoring approach to detect and confirm the failure of antiretroviral therapy. As countries invest in scaling up of routine viral load testing, measuring the impact of and progress towards achieving the UNAIDS target that 90% of people receiving antiretroviral therapy have suppressed viral loads by 2020 (as part of the 90–90–90 targets) is critical. This publication presents key considerations and examples of tools (provided in the annexes) to assist countries in developing a national viral load monitoring and evaluation plan.

Section 1 describes the process of assessing monitoring and evaluation data systems and tools and understanding how data flow to and from facilities, sample transport networks and laboratories. Stakeholders from laboratories, HIV care and treatment and monitoring and evaluation need to review and update systems and tools to adequately capture and use data at the site and at the district and national levels of their programme. Section 2 outlines a set of indicators that monitoring and evaluation systems are encouraged to collect in order to measure key programme and patient outcomes along the viral load testing cascade.

Section 2 also includes a discussion on how to monitor people whose viral loads are not suppressed and suggests tools for longitudinally following cohorts of non-suppressed people. Annex 3 includes examples of data collection tools that country programmes can adapt for their setting, and Annex 5 includes a menu of possible indicators that can be integrated into an monitoring and evaluation framework or plan for viral load testing. Section 3 provides methods for evaluating viral load implementation plans and examples of evaluation questions.

To reach the third 90 of the 90–90–90 targets, country programmes must delve into their data and understand how they represent the quality of viral load testing services. These considerations hopefully provide practical tools and examples for how to measure and document outcomes as countries scale-up routine viral load monitoring. Careful planning and consideration of all areas covered in this publication will inform the development of a monitoring and evaluation system that accurately tracks and reports national rates of viral load coverage and suppression.

# INTRODUCTION

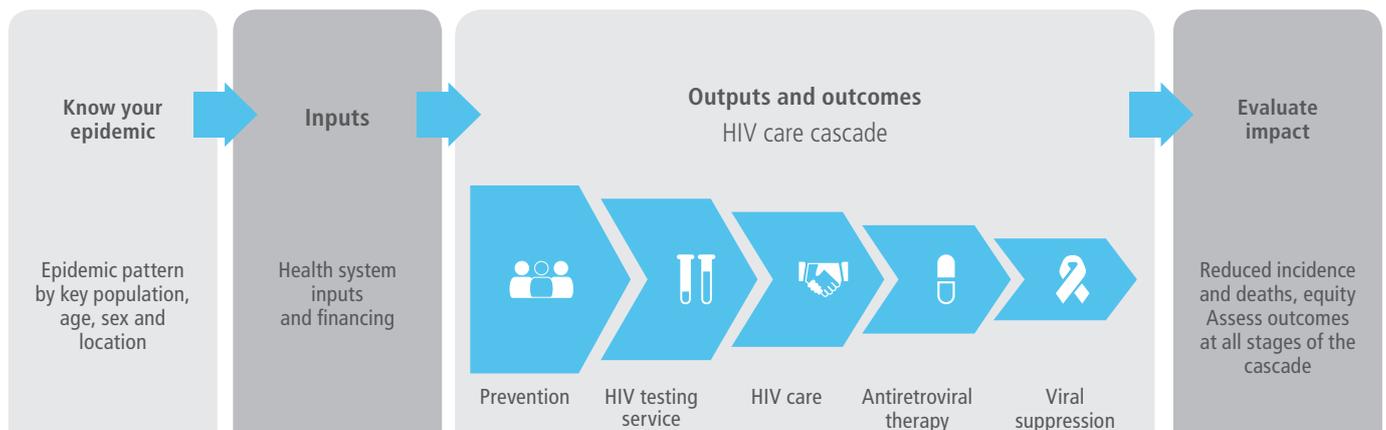
Monitoring the continuum of the HIV response is critical for ensuring high quality of care and optimal clinical outcomes for people living with HIV. The recent scale-up of routine viral load monitoring has played an integral role in tracking both the individual response to antiretroviral therapy and performance towards achieving programmatic goals.

Viral load testing encompasses more than conducting the test within the laboratory; it requires functioning sample referral networks, data systems, processes driven by health-care providers and quality control and improvement mechanisms to handle specimen collection and transport, data management and analysis and accurate and timely interpretation of results by clinical staff. As countries scale up viral load testing and track suppression of viral loads among people living with HIV receiving antiretroviral therapy, monitoring and evaluation plans are needed to measure the success of programme implementation and

clinical outcomes. Using routine viral load monitoring and evaluation data and systems for viral load testing requires coordination, collaboration and communication between (1) laboratory, clinical, and monitoring and evaluation staff, (2) data systems at facilities, laboratories and above-site levels and (3) data capture and monitoring and evaluation tools. Strong monitoring and evaluation plans also require clarity on data flow, data elements and indicators for viral load monitoring. Using viral load data is essential for patient-level and programme-level decision-making and should be emphasized in monitoring and evaluation plans.

WHO published the consolidated strategic information guidelines for HIV in the health sector in 2015 (1) and consolidated guidelines on person-centred HIV patient monitoring and case surveillance guidelines in 2017 (2). These highlight the importance of monitoring the HIV cascade at the programme and individual levels to track

**Fig. 1. Global indicators for the monitoring and evaluation of the health sector response to HIV**



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