TECHNICAL BRIEF

MAINTAINING AND IMPROVING QUALITY OF CARE WITHIN HIV CLINICAL SERVICES

JULY 2019

HIV TREATMENT

World Health Organization

WHO/CDS/HIV/19.17

Suggested citation. Maintaining and improving quality of care within HIV clinical services. Geneva, Switzerland: World Health Organization; 2019 (WHO/CDS/HIV/19.17). Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

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Printed in Switzerland.

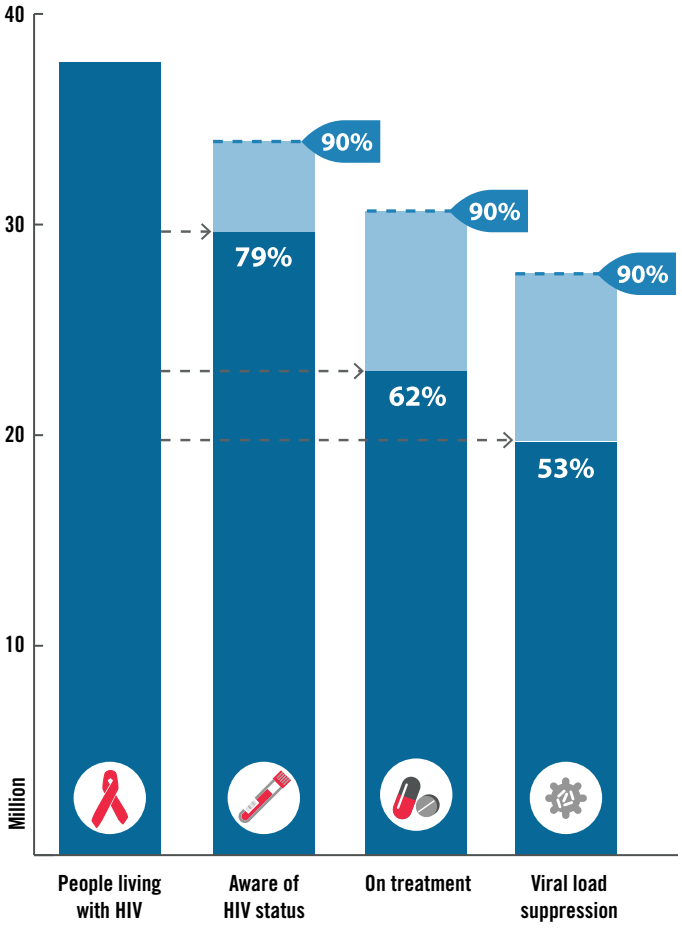
Objective

The objective of this brief is to consolidate WHO guidance to support the implementation of high-quality HIV services through approaches to policy, strategy and service delivery, to suggest considerations for selecting measures of high-quality services and to provide case examples of quality management in HIV services in low- and middle-income countries.

Audience

Policy-makers and HIV programme managers at all levels in low- and middle-income countries; health-care providers; donors; implementers; people living with HIV; and civil society representatives.

HIV testing and care continuum (2018)



Source: UNAIDS/WHO estimates

BACKGROUND

> In September 2015, the United Nations General Assembly set an ambitious goal of achieving universal health coverage by 2030 (Sustainable Development Goals target 3.8, ensuring that health services are "of sufficient quality to be effective") and to end AIDS as a public health threat by 2030 (target 3.3).

Although significant progress has been made towards ending AIDS as a public health threat, with 23.3 of the 37.9 million (62%) people living with HIV receiving antiretroviral therapy (ART) by the end of 2018, many gaps in service access and quality remain. These span the care cascade from primary prevention interventions such as pre-exposure prophylaxis (PrEP), HIV testing, ART access and initiation, retention and adherence access to viral load testing and comprehensive chronic care. Since just over half of people living with HIV (53%) have suppressed viral loads, many risk transmitting HIV to uninfected people. Finally, equity and human rights gaps remain: key populations are underserved, experience persistent stigma and discrimination and are subject to criminalization, violence and other human rights abuses (2).

To address these gaps and reach global targets, HIV programmes must establish and maintain systems for ensuring a high level of quality in service delivery, within the framework of universal health coverage and supported by national quality policies and strategies. Three seminal 2018 publications (1,3,4) have highlighted the implications of inadequate quality. Between 5.7 and 8.4 million deaths are attributed to poor-quality care each year in low- and middle-income countries, accounting for up to 15% of overall deaths in these countries (3).

Quality of care is defined as "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" (1) and needs to be assured within HIV programmes to achieve global goals, realize the 90–90–90 targets and reduce HIV mortality and incidence.

WHO TECHNICAL PRODUCTS ON DELIVERING HIGH-QUALITY HIV SERVICES

In 2018, WHO issued a handbook to support low and middle-income countries in developing national quality policies and strategies in the context of universal health coverage (5) and has published a report with the OECD and World Bank (1) "Delivering quality health services: A global imperative for universal health coverage" that includes a quality call to action (Fig. 1).

Within HIV guidelines, WHO has issued recommendations on quality standards (5), quality HIV testing (6) and improving the quality of HIV clinical services (7).

This technical brief aims to (1) consolidate recent WHO guidance on quality within HIV programmes; (2) highlight national efforts to strengthen the quality of HIV services, including integration with broader national initiatives on quality; and (3) discuss future considerations for improving quality of HIV services and the sustainability of these efforts.

Fig. 1. The call to action

Box 6.1 **High-level actions by key constituencies for quality in health care**

All governments should:

- have a national quality policy and strategy;
- demonstrate accountability for delivering a safe high-quality service;
- ensure that reforms driven by the goal of universal health coverage build quality into the foundation of their care systems;
- ensure that health systems have an infrastructure of information and information technology capable of measuring and reporting the quality of care;
- close the gap between actual and achievable performance in quality;
- strengthen the partnerships between health providers and health users that drive quality in care;
- establish and sustain a health professional workforce with the capacity and capability to meet the demands and needs of the population for high-quality care;
- purchase, fund and commission based on the principle of value;
- finance quality improvement research.

All health systems should:

- implement evidence-based interventions that demonstrate improvement;
- benchmark against similar systems that are delivering best performance;
- ensure that all people with chronic disease are enabled to minimize its impact on the quality of their lives;
- promote the culture systems and practices that will reduce harm to patients;
- build resilience to enable prevention, detection and response to health security threats through focused attention on quality;
- put in place the infrastructure for learning;
- provide technical assistance and knowledge management for improvement.

All citizens and patients should:

- be empowered to actively engage in care to optimize their health status;
- play a leading role in the design of new models of care to meet the needs of the local community;

Box 1. How does WHO define quality health services?

Quality health services must be:

- effective: providing evidence-based health-care services to those who need them;
- safe: avoiding harm to people for whom the care is intended; and
- people-centred: providing care that responds to individual preferences, needs and values.

In addition, to realize the benefits of quality health care, health services must be:

- timely: reducing waiting times and sometimes harmful delays for both those who receive and give care;
- equitable: providing care that does not vary in quality on account of age, sex, gender, race, ethnicity, geographical location, religion, socioeconomic status or linguistic or political affiliation;
- integrated: providing care that is coordinated across levels and providers and makes available the full range of health services throughout the life-course; and
- efficient: maximizing the benefit of available resources and avoiding waste.

Source: Why quality universal health coverage? (8).

WHAT DO QUALITY HIV SERVICES LOOK LIKE?

> Quality HIV services include the reliable delivery of clinical care across diverse community and facility settings that are integrated with other services such as maternal, newborn and child health services (9) at the national, subnational, district and facility levels and are people-centred.

Delivery of quality services depends on all the building blocks of health systems, including optimized management, funding, human resources for health, information systems and procurement of high-quality drugs, laboratory supplies and commodities.

In accordance with the 2016 WHO consolidated HIV treatment guidelines (7), quality HIV services should:

- provide people-centred care;
- offer safe, acceptable and appropriate clinical and non-clinical services; and
- promote the efficient and effective use of resources (5).

In additional, HIV services should focus attention on:

- positive user experiences and attention to the patient voice (10);
- measuring and reducing stigma and discrimination, especially in the health system (11); and
- promoting and sustaining a culture of quality in the programmes and organizations delivering services (12).

QUALITY MANAGEMENT: DEFINING TERMS

Countries, programmes and organizations use a wide variety of terms related to systems and processes related to the quality of care. The overview of terms presented here introduces key concepts rather than universally agreed definitions. Indeed, in the reality of country programmes related to quality and HIV, many terms presented here are used interchangeably or interpreted differently. Efforts to address quality should not be hindered by differences in models, approaches or language, and stakeholders should attempt to create a shared understanding of the activities required to improve quality across a system or programme.

Box 2. Quality management: defining terms

Quality management refers to all activities of the overall management function that determine quality policies, objectives and responsibilities and that implement them by such means as quality planning, quality assurance and quality improvement.

- **Quality planning** includes overall quality objectives, priority indicators, governance, organizational structure, selection of health service personnel, allocation of resources, monitoring and evaluation and design and oversight of quality improvement and assurance initiatives.
- **Quality assurance**, in the context of delivery of health services, refers to a range of activities related to systematic assessment and monitoring, intended to ensure that services are fulfilling stated requirements for quality. These include measuring performance against standards; performing external evaluation (such as accreditation); Site Improvement Through Monitoring System visits at sites of the United States President's Emergency Plan for AIDS Relief (PEPFAR); quality assurance checklists for HIV rapid tests; and supportive supervision.
- **Quality improvement** is a specific method designed to continually improve performance as part of a routine process, generally applied by health facility teams within a national quality improvement programme, designed to test changes in programme services, continually measure the effects of these changes and use data to address gaps to improve clinical performance and health outcomes over time.

Sources: Handbook for national quality policy and strategy: a practical approach for developing policy and strategy to improve quality of care (13) and Juran & Godfrey (14).

There are numerous definitions of quality-related terms globally in various settings; these were selected in consultation with experts from the HIVResNet Working Group on Prevention of HIV Drug Resistance and Quality of Care.

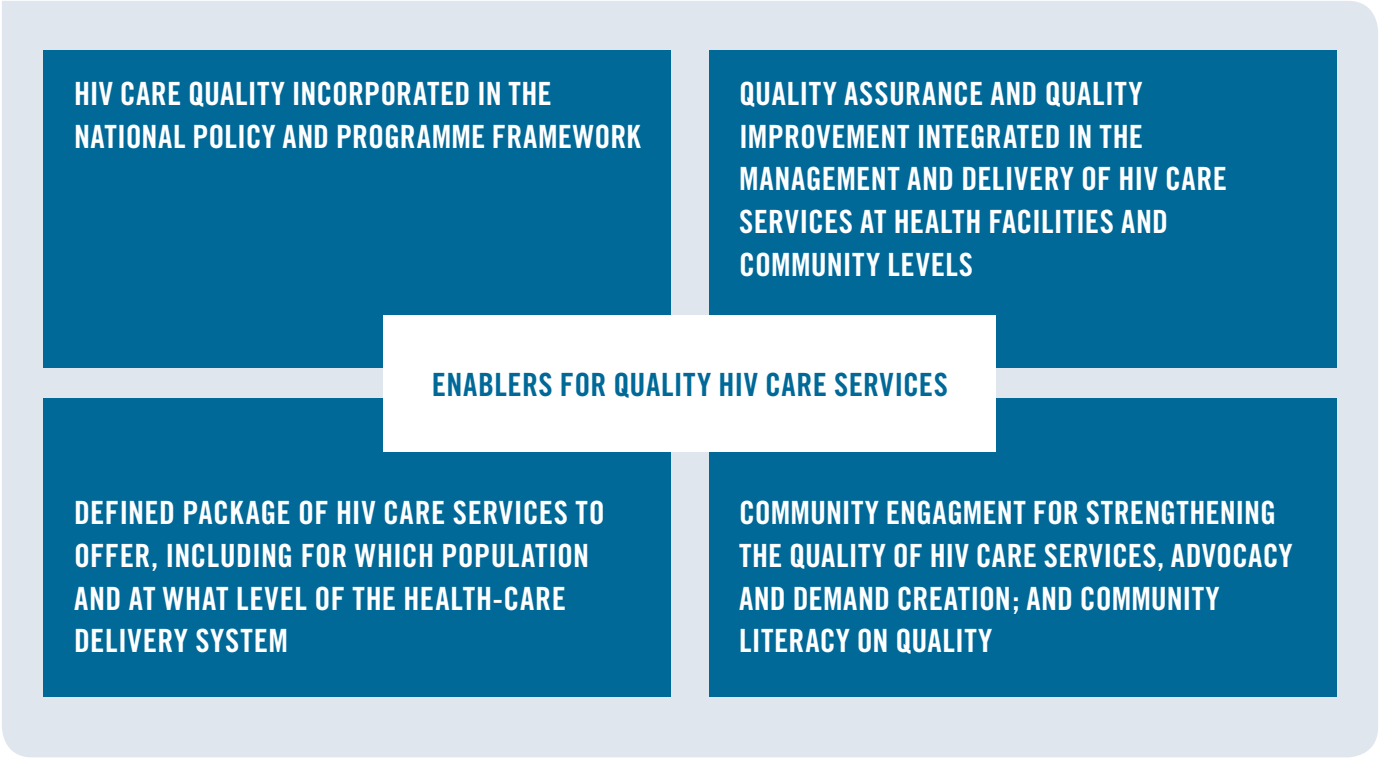
National HIV programmes should ensure quality management (1,3,4,13,15) through necessary structures, functions and processes to support the delivery of quality HIV services.

QUALITY PLANNING: HOW SHOULD NATIONAL PROGRAMMES ENSURE QUALITY HIV SERVICES?

1 INCORPORATE QUALITY CONCEPTS INTO THE NATIONAL HIV POLICY, STRATEGIC PLAN, STRATEGIC INFORMATION FRAMEWORK AND OPERATIONAL AND SERVICE DELIVERY PLANS.

Quality of services should be assured at all health system levels, from national programme management to service delivery, within monitoring systems and as part of a continual process to improve health and clinical outcomes (Fig. 2) (7).

Fig. 2. Enablers of quality HIV services



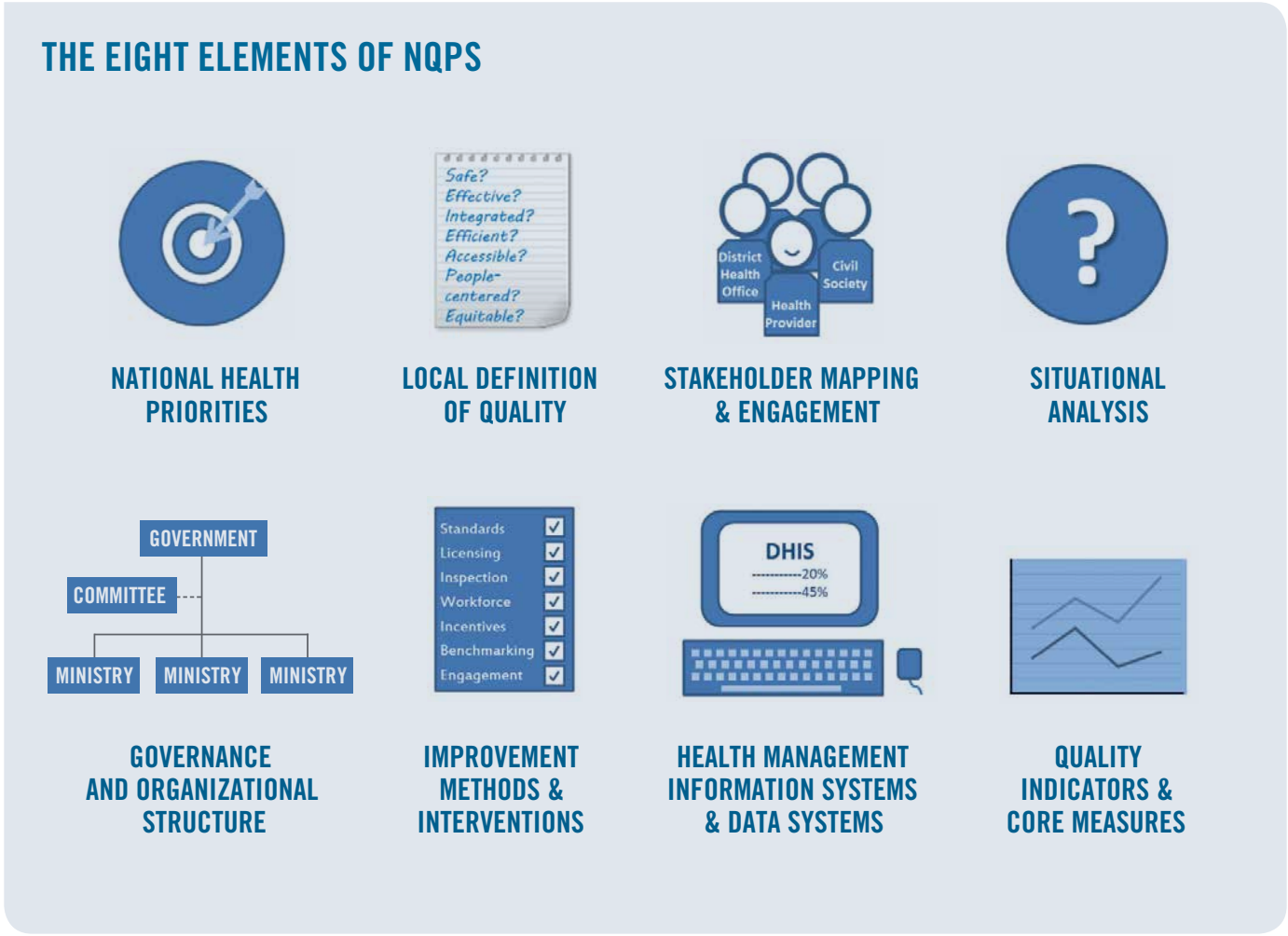
Source: Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach – second edition (7).

2 ENSURE THAT THESE ELEMENTS ARE SUPPORTED BY A CLEARLY ARTICULATED NATIONAL DIRECTION ON QUALITY, AS DESCRIBED BY THE WHO HANDBOOK FOR NATIONAL QUALITY POLICY AND STRATEGY (13)

A national quality policy and strategy represents an organized effort by a country to promote and plan for improving the quality of care across the health system and can support leadership and ownership of quality HIV efforts by national health authorities, ensuring integration with both broader national health planning and other disease- or population-specific programmes.

The national quality policies and strategies handbook outlines a non-prescriptive approach to developing policies and strategies to support high-quality health programmes and services. This includes focusing on eight interdependent elements that can help countries to set their national direction on quality of care (Fig. 3).

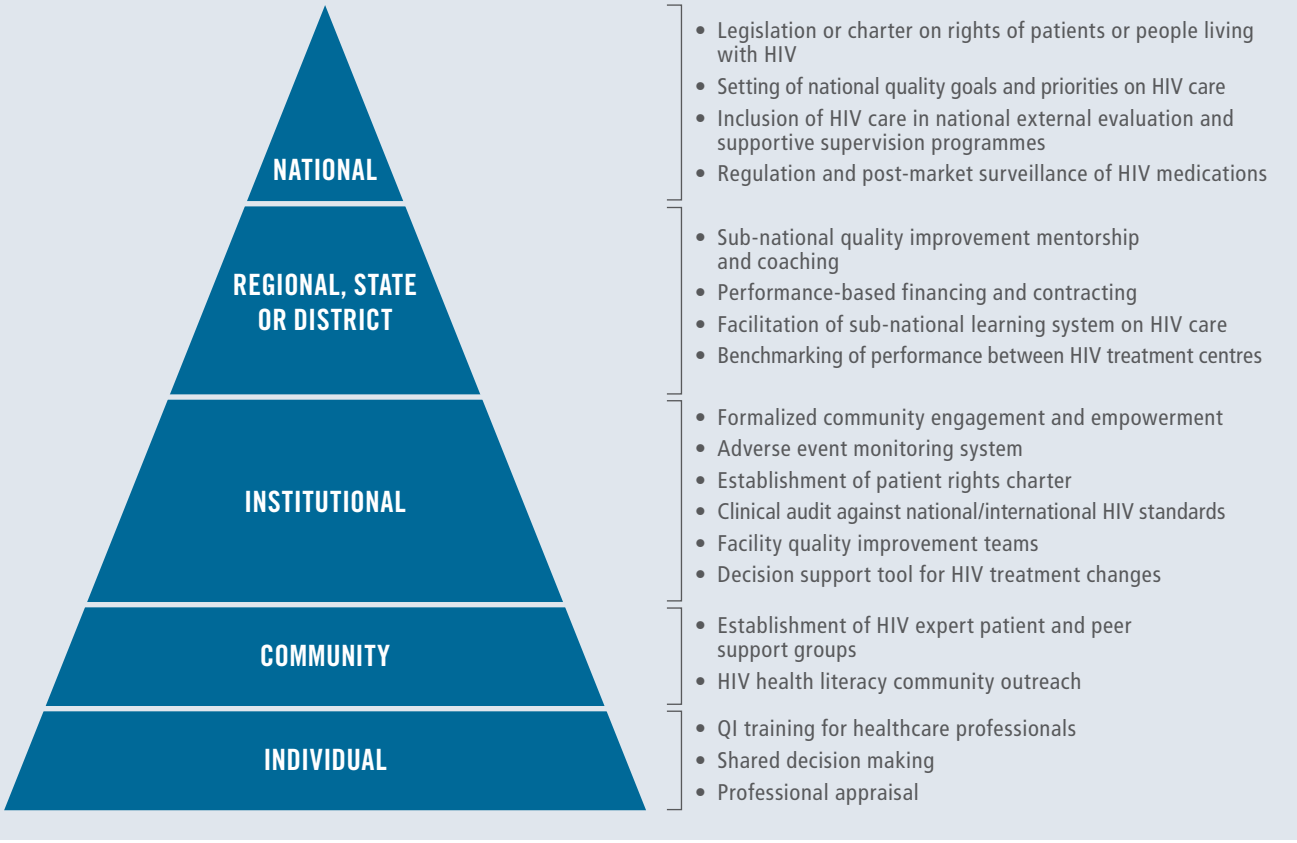
Fig. 3. Eight core elements to produce a national quality policy and strategy



Source: Handbook for national quality policy and strategy: a practical approach for developing policy and strategy to improve quality of care (13).

Fig. 4 highlights quality HIV services and efforts at all levels of the health-care system and illustrates how quality can be embedded at all government and jurisdictional levels.

Fig. 4. Adapted HIV quality interventions pyramid



Quality assurance: monitoring service delivery standards

Quality assurance is a common term in many sectors and has different meanings in different contexts. In relation to delivery of health services, quality assurance generally refers to a range of activities related to systematic assessment and monitoring, intended to provide assurance that services are fulfilling the stated requirements for quality.

National quality assurance systems comprise organizations and processes, usually external to health-care providers, aimed at defining, monitoring and improving the quality of care. These may include standard-setting bodies, guideline producers, professional registration and licensing bodies, external evaluation organizations and programmes and provider licensing and regulatory bodies. HIV programmes should consider what mechanisms can be used to set appropriate standards, effectively monitor the quality of the services provided and build accountability into the management of the programme, aligning when possible with broader health system approaches to assurance. The 2017 WHO consolidated guidelines on person-centred HIV patient monitoring and case surveillance (16) describe patient-level services and indicators across the prevention, care and treatment cascade focusing on both patient care and management and programme monitoring and management (case surveillance data) use cases. These are anchored to WHO clinical guidelines and may provide a useful starting-point for identifying HIV-specific considerations to be integrated within quality assurance tools and systems. The 2015 WHO consolidated guidelines on HIV testing services (17) provide guidance on quality assurance of HIV testing, and the WHO tool to set and monitor targets for HIV prevention, diagnosis, treatment and care for key populations (18) includes quality-related indicators and checklists.

Quality improvement: monitoring performance measures and using data for action

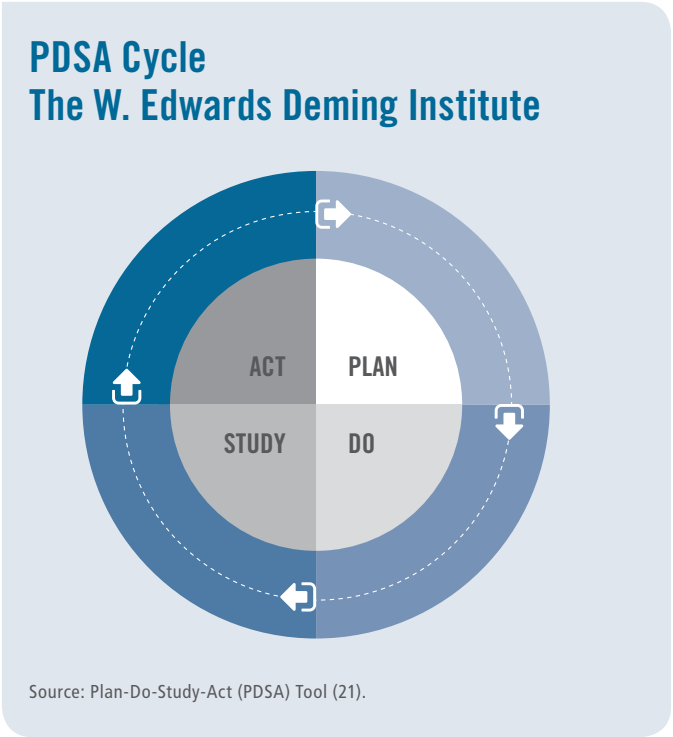
> Quality improvement is a systematic approach to improve quality by measuring performance using standardized indicators, selecting quality challenges, exploring their root causes, designing and implementing contextually appropriate solutions and assessing their impact using rapid, iterative tests of change (19).

HIV programmes should consider how to institutionalize culture and capacity for improvement across all levels

This requires quality data collection, reporting and use of indicators. Interoperable information systems help to measure the quality of services, fill gaps in existing knowledge and communicate to end-users, such as district health management teams and facility-level quality committees. Many HIV programmes already use quality improvement methods selected based on local capacity, resources and availability of relevant tools and experience. Regardless of preferences about which model to use, HIV programmes should consider how to institutionalize culture and capacity for improvement across all levels.

Quality improvement involves the combined efforts of a variety of stakeholders to make changes that will lead to better programmes and systems and ultimately improve health outcomes (Fig. 4). There are diverse quality improvement models, including the model for improvement (20), Six Sigma, lean, total quality management and others. Many of these use the plan-do-study-act cycle method, which is used to continually improve health system performance (Fig. 5).

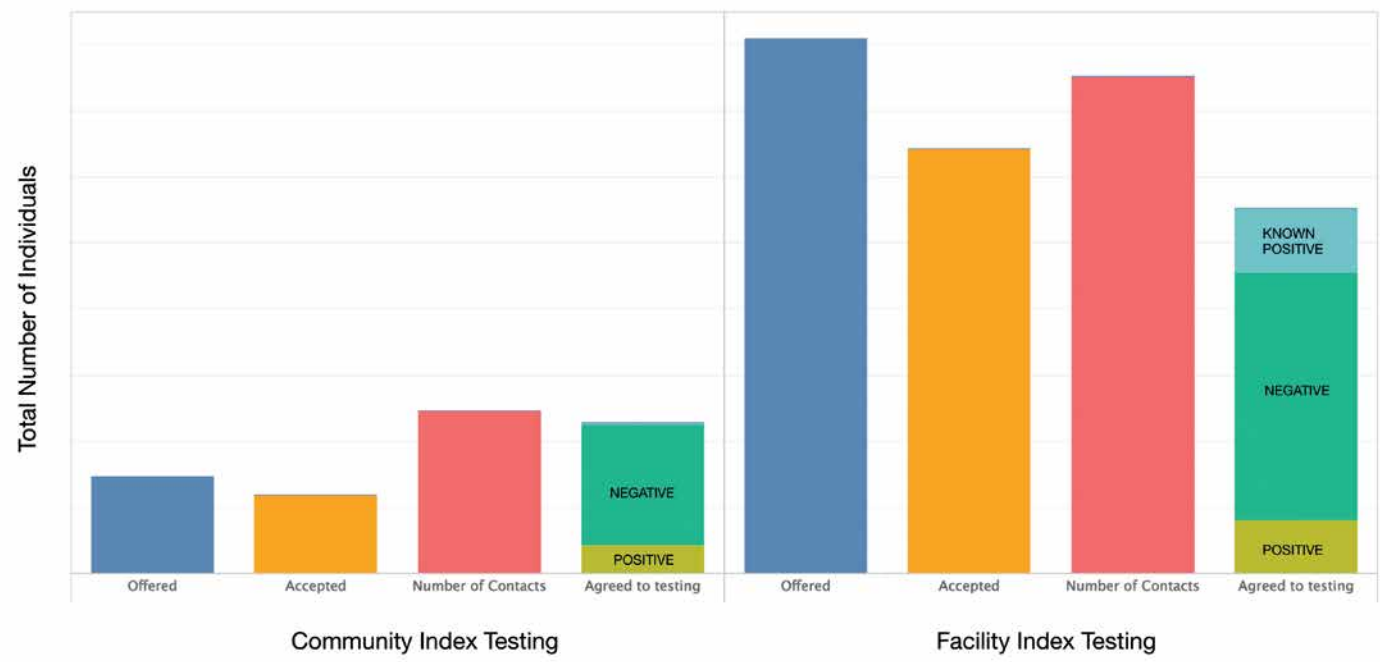
Fig. 5. The plan-do-study-act cycle



Source: Plan-Do-Study-Act (PDSA) Tool (21).

The specific set of indicators of the quality of services selected by a country depends on several factors and many sources. The 2015 WHO consolidated strategic information guidelines for HIV in the health sector (22) present a framework based on the 90–90–90 targets and include prevention, care and treatment indicators recommended for routine reporting from the service delivery (facility or community) level to the central level, with a subset designated for global reporting. Whenever possible, it is important to ensure that approaches for measuring the quality of HIV services are integrated with national quality measurement systems and include disaggregated analysis by sex, age and specific key populations, such as pregnant women, men who have sex with men, people who inject drugs, female sex workers or people living with HIV who have tuberculosis (TB). These and other indicators can be used through cascade analysis to identify programme bottlenecks and frame a set of linked indicators to assess and improve performance (Fig. 6).

Fig. 6. Cascade analysis for HIV testing services and index testing



Source: Katz et al. (23).

> The monitoring and improvement subgroup of the HIVResNet Working Group on Prevention of HIV Drug Resistance and Quality of Care gave priority to including patient experience indicators in national quality improvement frameworks.

In addition, the 2018 The Lancet Global Health Commission on High-Quality Health Systems in the SDG Era report (4) has recently highlighted positive user experience as a key component of quality health services proposing illustrative indicators. Patient-reported experience indicators (24) such as avoidance of health care among key populations because of stigma and discrimination are of key importance.

The WHO standards on maternal and newborn care (12) include standards reflecting communication and dignity (standards 4 and 5) that can be considered for HIV programmes. Further efforts (4) are required to capture such dimensions of the quality of services as compassion and patient experience, and WHO is working on standardizing associated methodological approaches. Finally, indicators reflecting the engagement of communities and demand-side factors are also important. These might include the satisfaction with clinical services of the recipients of care but also addresses community perceptions and values around what constitutes quality health care, which may vary in different settings and cultures.

Operationalizing national quality policies and strategies within HIV programmes

In many countries, HIV programmes already have well-established quality management processes, offering (1) an opportunity for integration with efforts in national quality policies and strategies, (2) opportunities for HIV programmes to be the pathfinder for national quality policies and strategies (bringing experience, lessons and foundation for initially rolling out the strategy) and (3) entry points for strengthening the national system for quality of care.

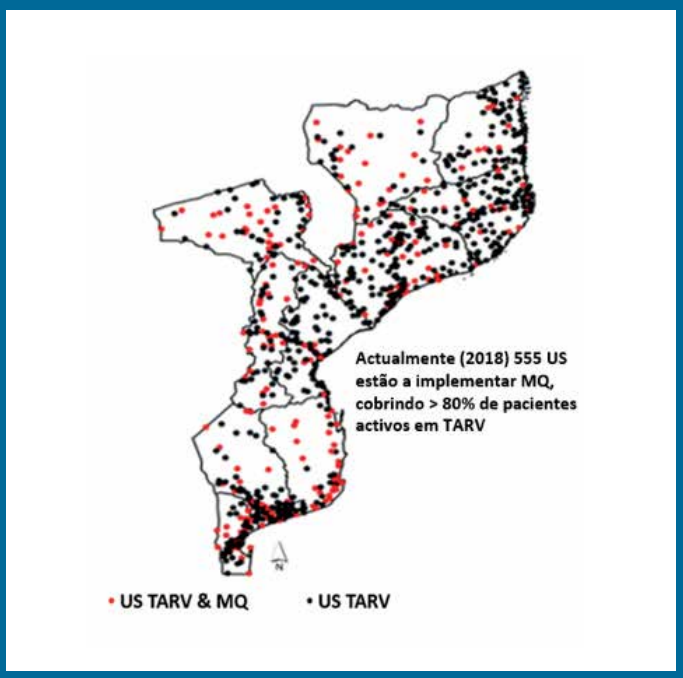
COUNTRY EXAMPLE
MOZAMBIQUE

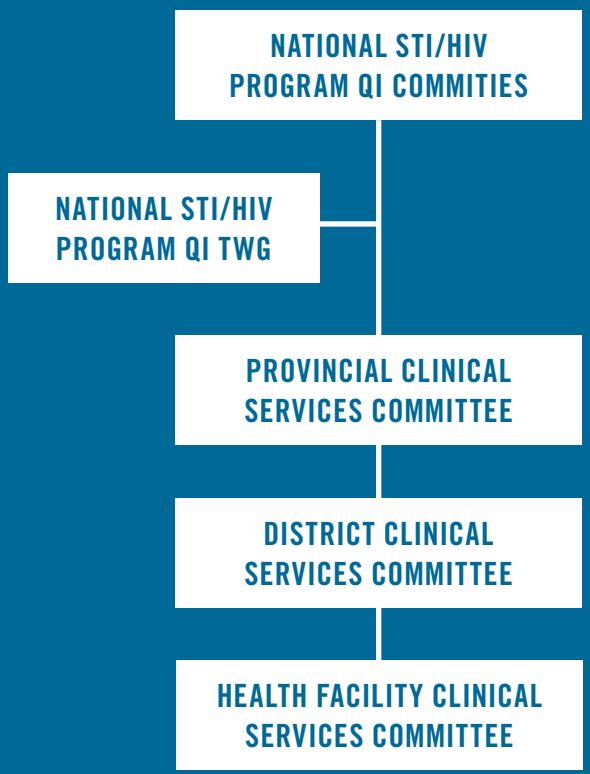
The national HIV quality management programme in Mozambique has been in operation since 2016.

@MoH Mozambique

Starting with 313 health units, quality management is implemented in 556 facilities (38% coverage), offering treatment to 82% of the people currently receiving ART. In 2019, more than 600 health facilities will be implementing quality management efforts. The approach uses the model of improvement, which includes plan-do-study-act cycles of eight-month learning and implementation cycles (25), with a mid-term evaluation at the fourth month. Fifteen categories of indicators are evaluated, and each health unit gives priority to five (three chosen by the health facility and two at the national level) for developing related action plans.
In the most recent cycle (2018), in the national priority categories there were improvements of 9 percentage points for early infant diagnosis (79% to 88%) and 5 percentage points (51% to 56%) for early retention. Of note, the implementation of quality management in Mozambique is now managed at the health facility level; however, implementation partners continue to support some logistical needs (such as transport for support teams or reproducing materials), whereas regional and district governance is directed by a broader national quality policies and strategies (Fig. 7).

Fig. 7. National quality management





Source: Ministry of Health, Mozambique.

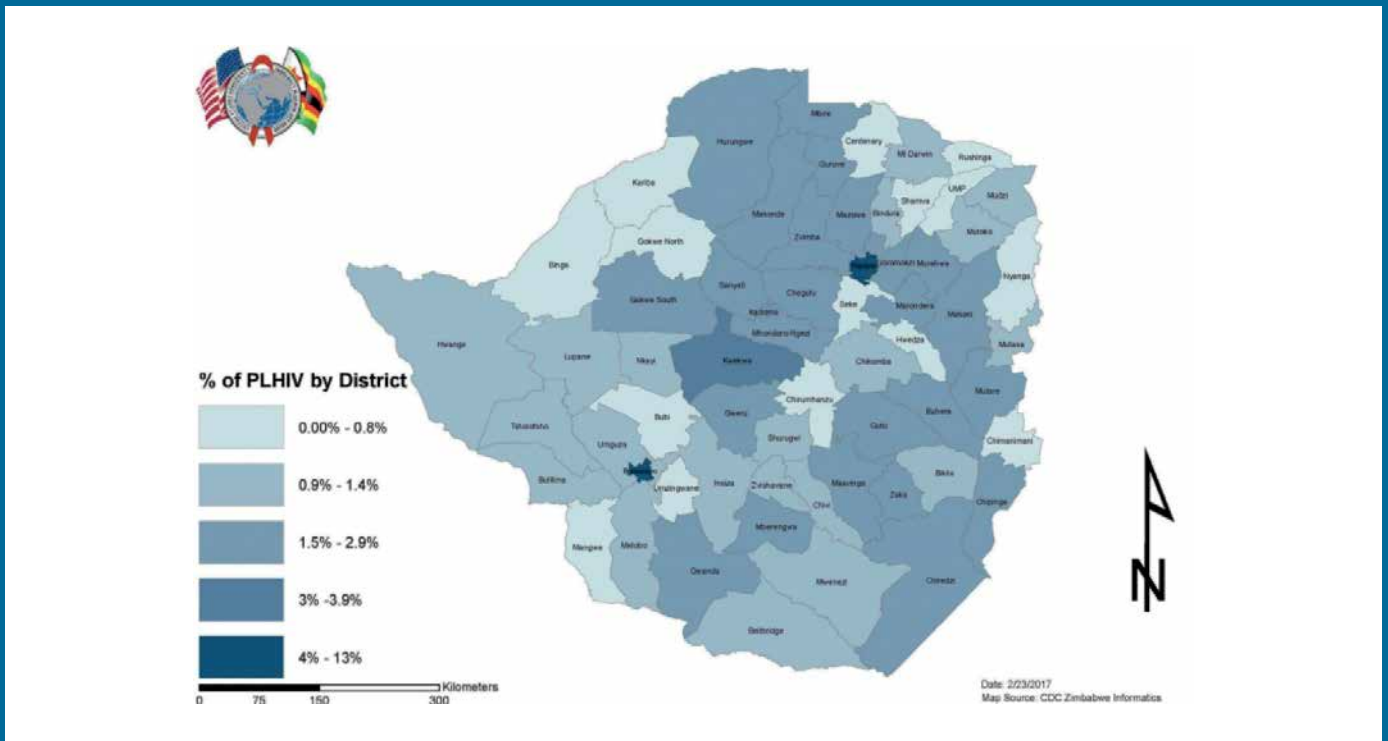
COUNTRY EXAMPLE ZIMBABWE

The Zimbabwe national quality management programme for HIV began in early 2013, with 10 pilot sites implementing a quality improvement programme for ART and services for preventing the mother-to-child transmission of HIV, with cycles of measurement using national measures to drive site-level improvement projects. Subsequently, the programme has grown to include TB and HIV, differentiated service delivery, voluntary male medical circumcision and laboratory services.

Coverage has grown from the initial 10 to more than 200 sites implementing a systematic quality management programme via quality management guidelines developed with assistance from UCSF HEALTHQUAL and PEPFAR (Fig. 8).

In 2016, Zimbabwe then moved to focusing on more rigid quality management and formal improvement methods, including rapid plan-do-study-act cycles and launching efforts in quality improvement peer learning and knowledge exchange. For example, the ART4ALL Collaborative saw improved same-day ART uptake from 54% in February 2017 to 77% in August 2018 as well as six-month viral load coverage of people newly initiating ART increasing from 16% to over 40% during the same period. In 2019, the country selected viral load as the new focus area for a new collaborative targeting effort to improve annual coverage, reduce turnaround time or sample rejection rates and improve the management of clients with high initial viral load. This implementation approach enabled funding and technical partners, facility teams, management and experts to meet and collaborate on focus areas (selected through consensus) at the national and subnational levels.

Fig. 8. ART4ALL implementing sites



Sources: Ministry of Health, Zimbabwe, CDC Zimbabwe Informatics and Bobby Khabo.

CONCLUSIONS: SUSTAINABILITY AND QUALITY CALL TO ACTION

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HIV programmes need to implement and sustain quality management systems, especially in the context of wider universal health coverage and national quality policy and strategy efforts to reduce morbidity and mortality due to HIV and go beyond the 90-90-90 targets to reach 95-95-95, Sustainable Development Goals and end AIDS as a public health threat by 2030.

Existing quality improvement efforts have been shown to positively affect clinical outcomes but will require commitment of resources from health ministries to be maintained. Evidence on the sustainability and cost–effectiveness of quality assurance and quality improvement efforts (as with many global health initiatives) and the expansion of proven interventions to large populations is very limited and often non-existent. Nevertheless, existing practical efforts to introduce a culture of quality awareness can be strengthened, as demonstrated by numerous country examples.

Addressing these requires planning, involvement of health ministries and stakeholders, communities and recipients of care and partnerships with local organizations and donor agencies. Organizational cultures need to be changed as well as local systems and infrastructure, including information systems that collect routine programme data that are both accessible and of high quality and effective engagement with recipients of care and communities. With the current momentum towards quality health services and the quality call to action (26), it is time for a quality revolution and scaling up quality management efforts within HIV programmes. This is especially important in the context of universal health coverage and the planned United Nations High-level Meeting on Universal Health Coverage in September 2019, which will include a key call for "building high-quality health systems that people and communities trust", including for people living with HIV.

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