CONSOLIDATED HIV STRATEGIC INFORMATION GUIDELINES

DRIVING IMPACT THROUGH PROGRAMME MONITORING AND MANAGEMENT

EXECUTIVE SUMMARY

APRIL 2020
EXECUTIVE SUMMARY

In the health sector response to the HIV epidemic, collection, analysis and use of data are crucial at every level, from patient care and monitoring through programme management and national programme monitoring to global monitoring. This strategic information answers the questions: “How are patients doing?” “How is the programme performing?” and “How can we do better?” Without these answers, the response to the HIV epidemic would be wandering in the dark.

Objectives. These guidelines – an update to the World Health Organization’s 2015 publication Consolidated strategic information guidelines – present a set of essential aggregate indicators and guidance on choosing, collecting and systematically analysing strategic information to manage and monitor the national health sector response to HIV.

Specifically, for programme management, these guidelines seek to strengthen programmes’ ability to identify and close gaps in service access, coverage and quality across the HIV services cascade, from primary prevention to knowing one’s HIV status to viral suppression.

For programme monitoring, these guidelines seek to optimize and align national reporting used to assess countries’ progress toward the 2030 95–95–95 HIV Fast Track goals – 95% of HIV-positive people knowing their status; 95% of people who know their HIV-positive status on treatment; and 95% of those on treatment virally suppressed – and towards Sustainable Development Goal 3.3, which calls for ending the HIV epidemic, as indicated by reduced incidence.

Audience. This guide is intended primarily to serve the needs of HIV programme staff in countries and their partners engaged in the collection, analysis and use of HIV-related strategic information at all levels of the health sector, including the health facility. These updated strategic information guidelines address issues relevant both to countries using aggregate electronic data systems and to countries entering data into individual-level information systems, such as electronic medical records.

Why collect and use strategic information?

- Strategic information provides the critical evidence that programme directors and line managers need to make informed decisions that improve programmes at all levels.

- Documenting outputs, outcomes and impact is crucial to the focus and sustainability of programmes.

- The availability of information is central to the accountability and transparency of decision-making by policy-makers.
The recommended indicators

The priority indicator set and guidance recommended here reflect the current state of the changing HIV epidemic, including programme innovations and investments deemed necessary for an effective response. These guidelines have been updated to reflect updates in WHO’s HIV guidance since 2015, updates that encompass pre-exposure prophylaxis (PrEP), prevention for adolescent girls and young women, HIV testing, antiretroviral treatment (ART), viral load (VL), tuberculosis/HIV and elimination of mother-to-child transmission.

The recommended indicators fall into four sets:

- **National core indicators** – a set of 15 indicators essential for tracking progress against national targets. The national core indicators gauge critical aspects of coverage and quality and highlight international strategic, programmatic and clinical imperatives. These 15 indicators are widely applicable across different country contexts and are recommended for all countries.

- **National priority indicators (the Top 40)** – a set of 40 indicators (the 15 national core indicators plus an additional 25 indicators) that in real time provide programme managers the information and evidence needed to improve services and, at the same time, are feasible to collect. The Top 40 indicators are those most relevant to effective programme management in keeping with national strategy and clinical guidelines anchored in WHO technical guidelines.

- **Differentiated use** – In addition, these guidelines recommend a set of indicators of high utility for certain countries. Such countries are differentiated by specific epidemiologic characteristics – in particular, a high burden of co-morbidities of HIV and tuberculosis or hepatitis B and C; certain programme investments – in particular, voluntary medical male circumcision (VMMC) in countries with high HIV prevalence and low male circumcision prevalence; or special programme gaps – in particular, a need to increase injection safety or blood safety.

- **Impact and burden** – a set of modelled indicators, complementary to the programme-based Top 40, that quantify changes in the epidemic and monitor the effectiveness of the response. This set of indicators is considered an essential component of data reviews in all countries. It includes HIV incidence, which is the Sustainable Development Goal indicator for HIV.

Organization of the guidelines

These guidelines consist of three parts:

**Part 1, Strategic information: a consolidated framework**, provides the overall rationale for the use of strategic information for monitoring and managing the health sector response to the HIV epidemic and positions this guidance in the context of the global strategy for ending AIDS.

**Part 2, Strong SI systems for effective decision-making**, focuses on selecting and prioritizing country-specific indicator sets. This section lays out the rationale for the selection of the national core and national priority indicator sets and then offers considerations for adjusting the recommended sets to suit country contexts. Finally, this section outlines key components of a strong strategic information system built around the priority indicators.
Part 3, Recommended indicators: national core and priority, gives specific information about each of the recommended indicators. It organizes the Top 40 indicators into the following programme areas:

- reducing new infections (prevention)
- knowing status and linkage to treatment
- treatment and viral load (VL) suppression
- reducing mortality from TB/HIV
- preventing vertical transmission
- reducing co-morbidity with sexually transmitted infections
- zero discrimination
- special population groups – key populations, paediatric and adolescent, adolescent girls and young women
- differentiated use
- burden and impact.

Each of these sections includes a brief description of critical measurement issues influencing the selection of indicators for that programme area, a table presenting short indicator definitions and alignment with other global indicator guidelines, with references to published materials that provide additional details for operationalizing the collection and use of the indicator data. The programme area sections are followed by reference sheets detailing the calculation, data sources and measurement approaches for each indicator.

Choosing national indicators

WHO encourages national programmes to visualize their trajectory towards key response goals and to be forward-thinking and ambitious both in selecting indicators and in investing in the health information system needed to provide critical data. Doing so will equip programmes with the data that they need now and in the future to care for patients as well as to guide and tailor their programmes.

What’s new in this guideline?

- An updated set of recommended indicators, with a differentiated approach for countries to prioritize and select indicators.
- The recommended indicators reflect updates in HIV technical guidelines and optimized alignment with changes in major global M&E frameworks since 2015.
- 40 priority national indicators (including 15 core indicators) to strengthen programme data use, with guidance on regular data reviews to identify gaps in the HIV services cascade.
- Improved digital content, with an accelerator kit, which helps to ensure that WHO’s technical recommendations are accurately reflected in countries’ digital data systems.
Criteria for selecting national indicators include:

- **Breadth**: Indicators reflect each step in the HIV services cascade, including prevention, and the extent and equity of services across geographic areas and population groups. Data are disaggregated by gender, age and location and, importantly, to assess services and impacts for key populations and other priority populations that are crucial to meeting national and global goals.

- **Depth**: Indicators speak to all three data use cases at country level: individual patient care and monitoring, programme management and programme monitoring (see figure).

- **Salience**: Indicators address priority programme areas, the largest investments of the national strategy and budget, and current critical service delivery issues.

- **Parsimony**: While coverage is complete, it is accomplished with the minimum number of indicators necessary. Fewer than 40 indicators may be enough. A focus on a few indicators with appropriate disaggregations can be powerful.

- **Feasibility**: Systems and personnel are capable of – and supported for – collecting, reporting, analysing and interpreting the data. An important determination of feasibility is the capacity of the health information system. For example, individual-level data in an electronic system are preferable for multiple reasons: better data quality, greater ease of disaggregation and more flexibility for subgroup analysis, and they can be used to monitor patient care across time and service locations. However, individual-level data systems require greater human resources and infrastructure for data entry and management.

- **Balance of sources**: The indicator set emphasizes routine programme data while balancing needs for survey-based data to fully address availability, representativeness and feasibility of data collection.

### Health data use cases

- **Accountability towards global/UN commitments, SDGs**
- **National strategic plans and accountability towards multi-year goals and targets**
- **Routine cascade data reviews for programme improvement – from national to facility level – including aggregate and individual-level/case surveillance data**
- **Person-centred patient care/management, including patient monitoring**
- **Quantity of data needed**

---

Global monitoring

National Priority (Top 40)

National Core (Top 15)

Programme monitoring

Programme management

Patient care and patient monitoring

---

4 Consolidated HIV strategic information guidelines: driving impact through programme monitoring and management
Analysing and using strategic information

Monitoring the services cascade. The critical outputs and outcomes of the health sector response to the HIV epidemic can be visualized as a cascade of services, anchored by the 95–95–95 targets for 2030. In a graph of the cascade, the measures of service coverage are shown as sequential bars representing coverage for each service area in the order, from left to right, that a patient would move through them: HIV prevention, HIV diagnosis, ART, and VL monitoring and suppression. The cascade format indicates programme performance at each step, while the decreases between adjacent bars indicate the quality of patient follow-up, coordination between service areas and, ultimately, service access. The figure below shows a services cascade that achieves the 95–95–95 goals.

Prevention, testing and treatment cascade of HIV services achieving the 95–95–95 goals

AGYW = adolescent girls and young women; ART = antiretroviral treatment; KP = key population; PrEP = pre-exposure prophylaxis; VMMC = voluntary medical male circumcision

These guidelines aim to strengthen the analysis and use of data at each stage of the cascade. Cascade analysis forms the core of the strategic information framework used by these guidelines because it guides managers through an assessment of performance across a set of related core services to identify where the biggest gaps occur at all levels of the health system. Once gaps are identified, targeted responses can improve linkages between points of care, retention of patients and critical outcomes such as viral suppression.
Regular data review. Routine reviews of routinely collected data form the foundation of effective programme management. Successful national programmes make such routine reviews a core function of programme managers at every level, from individual facilities to the national level. Such reviews focus on the HIV services cascade; gaps identified here reflect programme performance issues that managers can act on in a timely manner.

In addition to routinely reviewing the core cascade data, countries should periodically employ data triangulation methods to compare and integrate data from a different source or sources, such as special surveys or qualitative information from service providers and clients, to corroborate the interpretation of the core cascade analysis.

Disaggregation. A core aspect of cascade analysis — of both aggregate and individual-level data — is the disaggregation of indicators by specific geographic and sociodemographic subpopulations and important patient subgroups. This type of analysis enables managers to address issues of both programme performance and equity in terms of access and service quality. Routine assessment of equity across groups in service delivery and quality is fundamental to honouring the commitment of the HIV response to equity. In terms of improving programme performance, the fastest way to achieve overall programme targets lies in identifying and closing the gaps of the most underserved groups. Disaggregated analysis enables identification of these underserved groups, as defined by age, gender, geographic characteristics and priority population.

The usual disaggregations include geography (for example, region/province, district/county, facility), age group, gender (male/female/transgender), priority populations (for example, key populations and adolescent girls and young women) and important groups that require differentiated patient management or services (for example, pregnant women and TB/HIV patients).

Enhanced digital content. In the past WHO has provided recommended indicators only in PDF format. This has limited the direct utility of the SI guidelines for some critical end-users at country level, such as business analysts and software development teams that are ultimately responsible for ensuring that national clinical and strategic information guidelines (adapted from WHO guidelines) are accurately reflected in digital information systems. For the first time WHO will provide a digital accelerator kit (DAK) with an expanded array of human-readable contents aimed at the needs of these essential end-users. The DAK includes the following components: core (individual-level) data dictionary (including FHIR/HL7, ICD, SNOWMED, etc.), indicator (aggregate) mapping, business process mapping, decision logic, user personas and narratives. The DAK will also be used in the future to develop computable (machine-readable) guidelines.
For more information, contact:

World Health Organization
Department of HIV/AIDS
20, avenue Appia
1211 Geneva 27
Switzerland

Email: hiv-aids@who.int

www.who.int/hiv

ISBN 978-92-4-000456-6