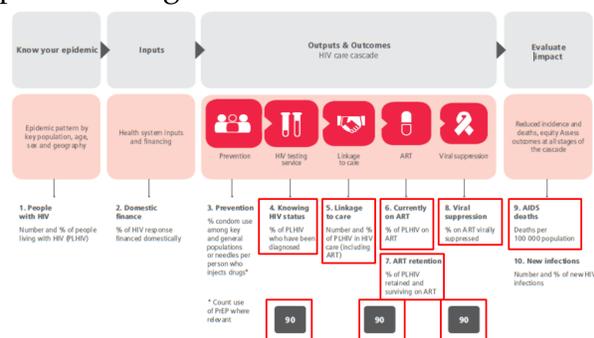


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Introduction

- In 2015, WHO released guidelines recommending ten global indicators to collect information along the HIV care and treatment cascade to track epidemic and response, and measure progress towards 90-90-90 targets (see diagram).¹
- As six of the ten indicators utilize data originating from patient diagnosis, testing and medical records, WHO recommends case-based surveillance (CBS) systems be developed. Few high-burden countries have CBS.



- CBS involves individual-level data being collected longitudinally to measure progress towards epidemic control. This is a distinctive characteristic of CBS systems.

Methods

- To identify systems that are context appropriate, feasible, scalable, and sustainable to implement CBS, we conducted Strengths, Weaknesses, Opportunities, and Threat (SWOT) analyses in Tanzania, South Africa and Kenya.
- Protocol / tool developed by a team of surveillance experts within the MeSH Consortium. The protocol was informed by existing CDC, WHO and National Alliance of State and Territorial AIDS Directors (NASTAD) resources.²⁻⁴
- The protocol has been designed to be a modifiable comprehensive tool consisting of:
 - desk review of country specific surveillance materials
 - questionnaire to interview surveillance stakeholders
 - site visit checklist to observe data collection, collation and flow at national and sub-national levels
- Utilization of the protocol / tool occurred in two ways:
 - in its entirety for a comprehensive analysis of current patient management record / surveillance systems
 - modular to conduct a focused analysis of specific functionality of current surveillance systems

Results

The protocol has been applied with success in Tanzania, South Africa and Kenya, the table below provides a summary of these activities.

Country	Use of Protocol	Timeframe	Scope of Assessment
Tanzania	In its entirety	August - September 2015 Site visit September 7th - 18th	To evaluate the feasibility and acceptability of CBS and to make recommendations for developing a secure, high-quality and timely HIV CBS system
South Africa	Modular approach	November - December 2015 Site visit Nov 30th - Dec 4th	To assess how a specific system (TIER.Net) ⁵ and National Health Laboratory Service ⁶ data could be used for CBS
Kenya	Modular approach	January - February 2016 Site visit February 1st - 11th	To explore the potential for reporting from electronic medical records (EMRs), laboratories, and providers (clinical and HIV testing counsellors)

In all three countries individual level data are collected and entered into MOH registers at facilities and, for persons in care, into individual patient records. Current reporting of these data from facilities to MOH is done in aggregate. Our assessments highlighted significant problems with data quality, unstable power sources and internet access which adversely impact electronic and networked systems.



Conclusions

- We have successfully developed a protocol for the situational assessment of HIV case based reporting that may be applied in its entirety or modular; **the protocol is available for download at <http://mesh.lshtm.ac.uk/reports-tools/>**
- The SWOT protocol can be used to assist in determining a country's readiness and strategy to develop CBS, as recommended by the WHO; the protocol has also been applied in Haiti
- The findings from the situational analyses conducted to date support the development of CBS to systematically capture routinely collected health data to describe and monitor the epidemic for program planning and evaluation and, ultimately, disease control
- The assessments revealed substantial interest in, and support for, CBS as a way to more effectively monitor the epidemic with the recognition that CBS requires additional resource

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