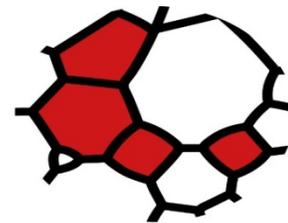


Situational Assessment of Case-based Surveillance in Kenya

KEY TAKE-AWAY MESSAGES FROM SWOT ANALYSIS

11TH FEBRUARY, 2016



MeSH Consortium
Measurement & Surveillance
of HIV Epidemics

Kenya SWOT Scope

Follow-on to the case-based surveillance pilot which was recently completed and is currently being evaluated

- Used active reporting by surveillance officers in Siaya and Kisumu
- Found to be human-resource intensive

Based on discussions with NASCOP, SWOT focus is on identifying sustainable methods with less human resource requirements

- Provider reporting
- Laboratory reporting
- EMR reporting



SWOT Visits

- 3 regional labs (KEMRI P3, NHRL, Kisian)
- 3 EMR implementers (Palladium, I-TECH, ICAP)
- LIMS implementer (CHAI)
- 8 facilities (Mbagathi, EDARP, FACES, Kisumu County Hospital, Yala, Marenyo, Opapla, Manyuanda)



Lab Reporting Findings (VL/EID)

- VL is being done 6 months after start ART and then annually
- Seven regional labs perform VL/EID, all with a LIMS
- CHAI developed LIMS for 6 (name excluded), NHRL developed own LIMS (names)
- NASCOP has a national electronic system for VL/EID with all 7 labs reporting
- Standard forms are not being utilized for specimen testing
- Results are being emailed to facilities insecurely



Lab Reporting Findings (VL/EID)

- Reagent stock out seems to occur often leading to back-log
- Turn around time for VL varies, 3 days to 5+ months
- No policies on lab management, LIMS, nor national system



Lab Reporting Findings (CD4)

- CD4s done for baseline when care is started and then every 6 months until they start ART
- Smaller facilities send specimens to larger facility, system of specimen transporters seem to work well
- Reagent shortage
- Calibration of lab machines performed annually
- Not on a LIMS, although results are entered into EMRs



Diagnosis (HTC) Findings

- Every place utilizes HTC register, which has some identifiers
- Many facilities the new diagnoses are small enough to have a counselor complete a case report form
- EMR implementers have mentioned creating a module for HTC data
- EDARP registers everyone in their EMR, before testing
- Transfer form doesn't have a place for the date of diagnosis



EMR Reporting Findings

- 4 accepted EMRs (OpenMRS, IQCare, CPAD, FundSoft)
- OpenMRS is a web-based system, when internet down or slow, data can't be entered
- FundSoft is usually at larger facilities which offer services in addition to HIV which need a billing component
- Data back-ups vary between EMRs and facilities
- Policies have not been updated, state paper-files have to be maintained even if EMR is point of care entry
- Most EMR facilities have all of the historical data entered



EMR Reporting Findings Continued

- Data logic seems to be in place although accuracy and completeness checks are not systematic
- For point of care entry, providers seemed to be pleased
- All 67 facilities which have CPAD have data stored at ICAP, could pull data directly from ICAP for CBS
- KEMRI developed OEC as interoperability system for EMRs
- Not interoperable with LIMS



Central Data Warehouse

- Developed by Palladium
- Obtains EMR data quarterly to perform M&E cohort analysis (doesn't look at data quality)
- No policies in place
- Doesn't include name, try to match on CCC#
- Mentioned could create a separate datamart module for CBS with identifiers
- Data are collected manually at facilities except for ICAP facilities



Provider Reporting Findings

- HTC counselors could likely report new diagnoses
- Providers stated would be difficult to report cases on care or ART due to lack of time, they recommended a data records clerk perform it
- Prefer reporting from EMR (when available)



Other Findings

- I-TECH is working to include IPRS as a national ID, module would link to IPRS system
- Connectivity and power outages an issue for systems
- Interoperability needed between EMR, regional lab, facility lab (if LIMS), pharmacy (ADT), and billing system
- ART dispensing (ADT) is electronic system which data captures those on ART (includes name?)



Other Findings Continued

- KEMRI previously piloted a master patient index system in Siaya county



Key take away messages for CBS Guidelines

- MOH need to implement and sustain the surveillance system
- Build basic systems before expanding
- Create a system with multiple approaches to fit national and regional infrastructure (electricity, connectivity, etc)
- Utilize exiting data systems, which need
 - Policies/guidance in place
 - Standard forms and ensure utilization
 - Data quality assurance in place
- Have a unique identifier in place for entire population



Key take away messages for CBS Guidelines

- Lab reporting is feasible when LIMS exist
- EMR reporting is feasible when the system is simple (not resource intensive)
- Electronic systems need to be evaluated and shown to be complete



Thanks

- Brian Rice, Deputy Director of MeSH Consortium, London School of Hygiene and Tropical Medicine, brian.rice@lshtm.ac.uk
- Sandy Schwarcz, Co-Chair MeSH CBS Workgroup, University of California-San Francisco, sandy.schwarcz@ucsf.edu
- Richelle Harklerode, MeSH CBS Workgroup Program Manager, University of California-San Francisco, richelle.harklerode@ucsf.edu

