Data Flow Options and Data Management Processes for Monitoring Systems that monitor Medical and non-Medical HIV Services

A: Routine Monitoring Data about non-Medical HIV Services

A: Data flow options

There are different options for the flow of monitoring data about non-medical HIV services:

- Some countries have opted for a centralized model where HIV implementers submit data directly to their umbrella organizations or head offices, who then report directly to the NACA M&E unit.

Figure 1: Example of centralized data flow

- In other countries, the data flow is decentralized where all sectors (public sector, private sector and civil society) report to the sub-national level (i.e. LGAs), where data are collated (per sector) before sent to the national level.

Figure 2: Example of decentralized data flow – LGAs
Yet, other countries have adopted a hybrid model, where civil society and the private sector report to the sub national level, whilst the public sector reports directly to the NACA M&E unit.

Figure 3: Example of hybrid data flow
Selection criteria for appropriate data flow model: The main criteria for selecting the appropriate data flow for the country is to ensure that it follows the government data flow and that it does not create a parallel data management and reporting system. Wherever possible, the data flow should also make use of existing staff – especially at the sub national levels.

A2: Data management for routine HIV programme monitoring data in the community

Because routine data are generated continuously and reported periodically, it needs to be managed. Management of routine HIV data can be defined as “the development and execution of architectures, policies, practices and procedures that properly manage the full lifecycle of all routine data relating to HIV.”

A data management and reporting system includes six key processes, which repeat at each level of the system (ie, service delivery point, sub-national, and national levels):

- Source
- Collection
- Collation
- Analysis
- Reporting
- Use

Data about community-based HIV services will be collected by all implementers of HIV services in the community (i.e. not at health facilities). These implementers will summarise some of the data
about the HIV services that they have delivered in a given time period onto a programme monitoring form. They will make a copy of the programme monitoring form for their own records, and submit the original as required in a particular country. In some countries the report is submitted to both the region/district where they implemented the HIV services on which they are reporting, and to the umbrella organization for the sector to which they belong to (there is one umbrella organization for NGOs, one for faith based organizations, one for associations or groups of persons living with HIV, one for the private sector and then each public sector ministry has its own coordination structure at the national, head office level).

Once implementers of non-medical HIV services have collected data about their HIV services, tallied it over a three-month period and submitted it to the regions and umbrella organizations, the programme monitoring forms themselves and the data on them need to be processed.

Data processing entails the following steps: recording programme monitoring forms received, capturing data from programme monitoring forms onto the database, performing data checks, analyse programme monitoring data, submit programme monitoring data, and dissemination and use programme monitoring data.

There are three main nodes where programme monitoring forms and data will be managed: at the district office, regional offices, at the umbrella organizations and at the NACA M&E unit depending on existing structures in various countries. A node refers to a specific geographic location where programme monitoring forms and data will be managed; at each node, one or more individual may be responsible for different data management functions at the node. The table below indicates which node is responsible for which data management activity:

<table>
<thead>
<tr>
<th>Data Management Process</th>
<th>LGA Offices</th>
<th>Umbrella Organisations</th>
<th>NACA</th>
<th>Government agencies mandated to monitor developments in the country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receive and actively collect programme monitoring forms</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Capturing programme monitoring data and archiving programme monitoring forms</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Quality control of programme monitoring data</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Analysis of programme monitoring data</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Submission of programme monitoring data</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programme monitoring data dissemination and use</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

The table above illustrates that all three nodes have responsibilities in terms of managing programme monitoring data, and that all nodes are responsible for almost all data management functions. The programme monitoring management guidelines [link to anchor 8B.2.8] (a)
describe, for each node, their data management functions and (b) provides a reporting format for each node to report on their own activities directly to the NACA M&E unit.

B: Routine Monitoring Data about Medical HIV Services

B1: Data Flow options for monitoring data about medical HIV services

For NACAs to produce comprehensive information products, data on medical and non-medical HIV activities are needed. Three data flow models exist here too:

- Data on medical HIV services are collected as part of the national health management information system (HMIS). In this option, data for flow HIV service data from health facilities will follow the same pattern as that of the rest of the HMIS or HIS in the country. Typically, this involves some summary data being submitted on a reporting tool to the district or regional hospital, who then collate and submit to the national level.

- Data on medical HIV services are collected using vertical, parallel processes: where data flow from health facilities where HIV services are provided to a central HIV M&E unit within MOH.

- In some countries, a hybrid system exists – some HIV program data from health facilities are collected through the HMIS, and other data are collected through separate registers (i.e. a vertical or parallel data collection system).

These systems, although in existence for longer than an HIV Programme Monitoring system for non-medical HIV monitoring data, requires significant support as well.

One of the main challenges in health sector routine data, is the unwillingness of overworked clinicians and nurses (who mostly work in an understaffed environment) to record data – mainly due to time constraints. Countries that have employed data clerks for the health sector to be responsible for all data collection at health facilities, have started to relieve the problem in some countries. Often, these data clerks are funded by development partners and brought it specifically to support HIV data collection. As they also get involved in supporting data recording and reporting of other health services, it is an example of where HIV has supported and strengthened the health sector as a whole. New technology – such as the use of cell phones for data reporting – might also in future help to remove the burden and challenges associated with health sector reporting (of all routine data, not only HIV).

B2: Data management for routine HIV programme monitoring data from health facilities

The MOH structures are responsible for managing all routine data generated at health facilities, as per their HMIS management structures. Staff shortages have led to constraints in implementing the HMIS fully in all countries. In some countries, a moratorium has been placed on data collection from any health facility except to through the HMIS to reduce the reporting burden on health facilities.