DATA MANAGEMENT AND ANALYSIS THROUGH DHIS2 PLATFORM - PROCESSES AND ISSUES: NIGERIAN EXPERIENCE

By
Dr. Emmanuel Meribole
Director M&E, Federal Ministry of Health
Nigeria
Background

• Nigeria’s health system involves a large network of actors, state, local and federal including government agencies, non-governmental organisations, and international development partners.

• Due to the desire of the various actors to have their health information needs met, the country’s huge Health Information System (HIS) has been fragmented along the various disease programme lines, thereby making centralised reporting system dysfunctional and resulting in several challenges, including dearth of credible routine health data.
Guiding Instruments

• In 2013, Govt in collaboration with other actors decided to apply best practices for managing routine health data. The 56th NCH resolved to have a NHMIS and one instance for reporting routine health data-DHIS 2.

• NHMIS Policy-2014
• NHMIS Standard Operating Procedure-2014
• NHAct 2014

• Both policy documents made the DPRS of FMoH responsible for coordinating the process of maintaining a structured and integrated system of collecting, aggregating, reporting and managing routine health data at different organisational levels in Nigeria – from community-level as well as from public and private health facilities.
DHIS 2 platform

• The National Health Information System provides information on Health service delivery and health system that supports it in a timely and reliable manner.
• It also serves as a backbone for monitoring results achieved from implementation of health plans and interventions.
• The Mechanism for this is through data collection and analysis using the DHIS platform.
• DHIS 2 has an online desktop link and a mobile version that can be used on a phone.
RHIS: Integrated data management system

- Routine HMIS Formats / Monthly Report
- Minimum Data Set
- Data Quality Assurance (DQA)
- Quality control / Validation rules
- Aggregation
- Analysis
- Data Quality Review (DQR)
- Graph
- Maps
- Reports
- Self-Assessment
- Monitoring
- Evaluation
- Decisions
- Planning

National List of Health Indicators

- RMNCAH
- Nutrition
- Diseases Programs
- Surveillance
- Immunisation Data
- Priority Programs

FEEDBACK
STANDARD REPORTING AND DATA MANAGEMENT TIMELINES

1st of the Month
Service Delivery with Data Documentation on Facility Registers and Tally Sheets

30th/31st of the Month
Submission of Monthly Summaries to LGA Team

7th of the New Month
Data Entry of Monthly Summaries into the DHIS2

15th of the New Month
Deadline for LGA level M&E Meetings

25th of the New Month
Deadline for Timely Reporting to the DHIS2

30th/31st of New Month
Quarterly RDQA Visits to Facilities when applicable

Data Profiling and Routine Data Quality Checks on the DHIS2 at LGA, State and Federal Levels with Feedback to lower levels
Approaches

- At the National Level, there is a Technical Task Team on DHIS which meets after 15th of every month to analyse data.
- Each state and LGA has a team of monitoring and evaluation (M&E) specialists drawn from the various disease and health programme areas to form Integrated Health Data Management Team (IHDMT), responsible for the process of monitoring, ensuring supportive supervisions and data quality management in collaboration with implementing partners working at sub-national levels.
- How this works is a function of funding, cooperation of Ips and leadership.
Change Management Procedure

- Monthly data validation and re-validation exercise and Routine data quality assessments (RDQA) as well as data quality checks in the DHIS would sometimes unearth incorrect tallies between the registers and monthly summary forms and questionable data. These errors, once noticed, need to be corrected on site (at the health facility).

- The changes are entered into the facility data update/change documentation register by the M&E focal person and signed off by the originator before filing the MSF. The new MSF should be filed side by side the previous one.

- The M&E focal person submits the new MSF to the LGA IHDMT member supporting that facility.
**Figure 5: Format for Facility data update/change documentation register**

<table>
<thead>
<tr>
<th>Date (dd/mm/yyyy)</th>
<th>Period under review (mm/yyyy)</th>
<th>Data Element/Description</th>
<th>Exact Reason for the change</th>
<th>Program Area</th>
<th>Value before Change</th>
<th>Value after Change</th>
<th>Documenting Officer (Full Name)</th>
<th>Designation of Officer</th>
<th>Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/01/2012</td>
<td>12/2011</td>
<td>Number of Pregnant women who were counseled, tested and received their test results</td>
<td>Pregnant women tested in Labour ward were not added to the accomplishment</td>
<td>PMTCT</td>
<td>210</td>
<td>224</td>
<td>Adesola James Okedotun</td>
<td>Senior Medical Records Officer/Site M&amp;E Officer</td>
<td>Adesola</td>
</tr>
</tbody>
</table>
Data Locking

• The data locking feature is a functionality that allows the closure of the database to changes on the data entry screen after a certain period of time.

• Data will be locked on the database for a period beyond three (3) dataset periods, which means data editing (entry, deletion, or correction) will not be possible for the period beyond 3 months with reference to the current reporting month.
Data Processing and Publishing

• While the bulk of the responsibility of ensuring data quality lies at lower levels of data administration (health facility, LGA and state), FMoH will also ensure that appropriate quality checks are applied to the aggregated data generated from health facilities and service delivery points.

• The data on the national DHIS2 instance is available on the public domain.

• Standard reporting templates tailored to national indicators are used to populate periodic information.

• These templates will include dashboards, pivot tables, charts, maps and standard reports.
Critical gaps and challenges in data management

- Timeliness and completeness of reporting by facilities
- Mismatches of data between the key points of data collection through the various management levels (facilities LGA), programs and the national.
- Data Infrastructure – computers etc
- Insufficient funds- markedly limited government budget funds for HMIS lead to over reliance on donor project resources often associated with piece-meal initiatives.
- Human resource for implementation remains inadequate at all levels of the structure.
- The continuous inadequacy (numbers) of HMIS tools
Critical gaps and challenges in data management

• The HMIS remains manual in most facilities, which affects quality, timeliness and completeness of reports
• Multiple data collection tools in the field
• Inadequate coordination
• The low level of prioritization of the HMIS at all levels and the inadequate utilization of data is cause for concern.
• Weak linkages between the various data producers leading to inadequate sharing of information.
Recommendations for improving data management

• Improved funding and ownership
• Improved coordination and data governance
• There should be regular training and updating of skills for health workers.
• Availability of HMIS tools must be improved.
• Efforts must be made to establish mechanisms of data sharing by all producers.
• Use of data should be enhanced through provision of timely analysis and effective dissemination.
• Improve timeliness, completeness and quality of facility generated data.
• Use of ICT should be enhanced.
THANK YOU,
GOD BLESS