DHIS2 EVOLUTION (TIMELINESS, QUALITY, AND COMPLETION) IN NIGERIA TO MONITOR CHILD HEALTH QUALITY OF CARE

USAID Integrated Health Project (IHP) Nigeria
Chidinma Uzoama, Tosin Akingbemisilu

BACKGROUND
• IHP works in Bauchi, Kebbi, Sokoto, Ebonyi States and Federal Capital Territories of Nigeria.
• The DHIS2 system is extensively used in Nigeria to document and enhance quality and coverage of health outcomes. Over the last decade, primary and community health services in Nigeria have begun routinely tracking service provision. Timeliness of reporting, completion rates, and data quality have evolved over time. The USAID Integrated Health Program (IHP) starting in 2019 has helped rollout the National Health Management Information System (NHMIS) across Bauchi, Kebbi, Sokoto, Ebonyi, and FCT.

METHODOLOGY
• To track and address health outcomes, IHP sought to reliably improve data timeliness, accuracy, reliability, and completeness across 1,391 primary healthcare facilities, private healthcare facilities, and general hospitals. Through production, distribution, mentoring, and data quality reviews, IHP strengthened healthcare worker capacity to use DHIS2 tools to track and manage quality of care and for the most common childhood illnesses.
• Significant time, commitment is necessary for accurate NHMIS systems. Providers must commit to learning, using, and reviewing system operations. Trainings, data validation and quality assurance exercises, routine monitoring and mentoring, and advocacy efforts improved DHIS2 data quality and timeliness.
• A stratified random sampling of facilities in the five States was conducted quarterly to assess the dimensions of data quality reported including validity / accuracy, consistency/reliability and availability/completeness. IHP conducted analysis of the DHIS2 data to compare FY21(Oct - Dec 2020) to FY22 Q4 (Jul - Sep 2022).

RESULTS
• Across five states, between FY21/Quarter 1 (October-December 2020) to FY22/Quarter 4 (July – September 2022) the percentage of timely DHIS2 reporting improved from 64 percent to 94 percent, accuracy improved from 54 percent to 81 percent, reliability increased from 50 percent to 88 percent, and completeness improved from 66 percent to 93 percent, although this varied by state. Data Source: District Health Information System (DHIS) Service delivery data and Primary Healthcare Data Quality Assurance/Improvement (DQA/QI) Checklist.

DATA QUALITY ASSESSMENT SCORES

<table>
<thead>
<tr>
<th>Validity / Accuracy</th>
<th>Reliability / Consistency</th>
<th>Availability / Completeness</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY21 Q1: 54%</td>
<td>FY21 Q4: 81%</td>
<td>FY21 Q1: 50%</td>
</tr>
<tr>
<td>FY22 Q4: 88%</td>
<td></td>
<td>FY22 Q4: 66%</td>
</tr>
<tr>
<td>100%</td>
<td>100%</td>
<td>93%</td>
</tr>
</tbody>
</table>

TIMELINESS OF REPORTING

CONCLUSION
• The DHIS2 system is a sustainable mechanism for monitoring healthcare provision and informs data-driven performance management. This contributed to improved accountability of child health quality of care.