GFF Innovation Workshop

Rwanda Integrated Child Development (ICD) Dashboard

https://icdmis.ncda.gov.rw/mis

June 16th, 2023
Experiences during early childhood mark the development of the brain, abilities, skills, attitudes, emotions and behaviors.

Government of Rwanda is committed to promoting ECD policies and investment aimed at programs related to ECD, including nutrition, health, hygiene, early stimulation and early learning.

The ICD Dashboard supports regular monitoring of priority indicators from the Results Framework of the NCDA Operational Plan implemented at multisectoral level (GFF Investment Case for Rwanda).
Challenges being addressed

• **Fragmented information systems;** reports generated by connecting to individual databases at ministry level – Health, Education (ECD), Social protection, Child Protection, Civil registration, Food Safety, etc.

• Important **data were not collected** (ECD services for children below 3 yrs and children 3-6 yrs attending Home based ECD centers).

• **Innovative tools were emerging, creating new opportunities as well as the need for alignment and harmonization** (Child scorecard, CHW home visitation for children below 3 yrs, ECD Scorecard, DPEM Scorecard, ECD Center Monthly Reporting Tool, etc)

• **Information systems across Rwanda social cluster institutions:**

  - HMIS/ Community (MoH)
  - HMIS/ Facility (MoH)
  - EMIS (Mineduc)
  - Soc prot (LODA)
  - Census & DHS DB (NISR)
  - FBF Tracker (MoH)
  - CRVS (NIDA)

  **NECDP**
  - Multisectoral coordination
  - No MIS
  - Specific data needs
  - Limited tech capacity
The ICD Dashboard aims at creating a **Data Hub**, consolidating data on **MCH**, **Nutrition**, **ECD**, **WASH**, **Food Security**, **Child Protection**, **Social Protection** and **Nutrition Financing**, from different information systems to enable easy access to data and to provide tailored data analytics and visualizations for decision-makers.

**Project Scope**

- Data Hub
- MCH
- Nutrition
- ECD
- WASH
- Food Security
- Child Protection
- Social Protection
- Nutrition Financing
**Expected Outcomes**

- **Improved Data Access**
  - Access to data on priority, multi-sectoral indicators of holistic child development through a single Data Hub
  - Provide an overview of top-line indicators on a timely basis

- **Improved Data Analytics & Visualization**
  - Create data analytics and visualizations tailored/customized to data user needs
  - Provide Performance Scorecards that enable tracking of key initiatives and progress of district performance
  - Show linkages between programmatic data and nutrition budget and expenditure data

- **Improved Data Use & Data Quality**
  - Enable decision-makers at national and subnational levels to actively use the Dashboard to inform their decision-making.
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Stakeholders involved in the ICD Dashboard Project

- Social cluster ministries and agencies
- Rwanda Information Society Agency
- World Bank and GFF
- Key Development Partners

**Selection and design process**

- Stakeholder consultation
- NCDA Operational Plan Results Framework Indicator source mapping
- Assessment of the existing data systems
- Project Phasing as per NECDP (currently NCDA) data needs and indicator availability
GFF role in this project

- GFF value-add was in providing catalytic support and promoting alignment in collaboration with other partners (e.g. UNICEF, JICA, USAID)
- Promoting harmonization and interoperability of information systems and tools
- Leveraging WB Projects to reinforce and connect with complementary areas of engagement relating to MCH and nutrition, including through the SPRP Project (Stunting Prevention and Reduction Project) and COVID-19 Emergency Project
- Emphasizing rapid availability of data to inform decision-making, closely aligned with decision-makers’ needs.
Current Status of the ICD Dashboard: Architecture

Data Sources:
- HMIS
- SISCOM
- ECD DB
- LODA MIS
- Educ MIS
- CRVS, Census, DHS

Integration:
- Web API (HMIS & SISCOM)

Data Extractor & Converter:
- Excel to CSV Format (ECD, Educ, LODA, CRVS, Census, DHS, MCH Week)

Processing & Analytics:
- Data Aggregation
- Data Elements
- Data import
- Users Mgt
- Indicators

Analytics Outputs:
- Reports
- Charts
- Maps
- Data Tables

Visualizers:
- Dashboards
  - Nutrition & MCH
  - ECD
  - Performance Scorecard
  - SP

Advanced Output:
- Public Landing Page
- Power BI
- ArcGIS/QGIS
The ICD Dashboard is currently serving as a multisectoral data hub:

- Over 100 priority indicators from the Results Framework of the NCDA Operational Plan
- Dashboards tailored to specific user needs for both technical and leadership teams
- System is interoperable/integrated with HMIS
- Displays data trends at both national and subnational levels

**A screenshot of the programs areas covered in the ICD Dashboard:**
• Performance Scorecard with traffic lights that flag performance for district-level Imihigo performance contracts indicators
• Child Scorecard, a tool that tracks 22 interventions for children under 2 years of age.
• Equipped with WHO Data Quality Tool to flag data outliers.
• District levels users access the ICD Dashboard to inform their routine program monitoring and annual planning

A screenshot of the Performance Scorecard from ICD Dashboard:
The Dashboard has enabled a stronger, sustained focus on national priorities by leadership of the NCDA and related ministries through regular tracking of Key Performance Indicators.

Awareness of these national priorities and current trends in the data has been progressively improving due to timely access to the data analytics and visualizations generated by the ICD Dashboard.

Use of data has become routine within the NCDA – Technical, M&E team, Senior Management and the NCDA Steering Committee meet monthly to discuss data trends using analytics and visualizations generated from the ICD Dashboard.
The Outcomes (2)

- Decision makers and technical teams are able to identify implementation gaps by tracking key performance indicators.
- Dashboard users are now tailoring their own analytics and visualizations for routine use.
- Data quality has improved through regular review and follow-up on data quality concerns.
- A joint MoH, RBC and NCDA Data Use Platform to be established to sustain momentum and reinforce a strong culture of data use.
A screenshot of the user-tailored dashboards from the ICD Dashboard
A screenshot of the Public Landing Page
Lessons learned

• Multisectoral level information systems requires extensive stakeholder engagement, which can be time-consuming but fosters buy-in and sustainability

• Strong leadership endorsement is critical in creating momentum and promoting shared commitment across sectors

• Careful phasing of the project development and roll-out enables incorporation of user feedback

• Thorough identification of systems requirements from the start saves time in the long-run

• Development of a Data Use Strategy enables a strong understanding of user needs and identification of activities to incentivize and reinforce routine data use at all levels.
Next phase

- Further tailoring the Dashboard according to user feedback
- Incorporating additional Performance Scorecards to track key national plans
- Incorporating data on nutrition budget and expenditures
- Strengthening interoperability and ongoing alignment and harmonization with emerging tools
- Rolling out a strong campaign of data use promotion at national and sub-nation levels.
Thank you