

RHIS Curriculum Module 3; Session 2: RHIS Data Management Standards
 MEASURE Evaluation, 2016

RHIS Data Management Standards		Cumulative Data				
Code	Data Management Standard	Already present, no action needed	Needs some strengthening	Needs a lot of strengthening	Not present, needs to be developed	No answer/ Not Applicable
1. Management and Governance						
1.1 Policies & Planning						
Legal and Regulatory						
1.1.1	There is up-to-date legislation and detailed regulations for facility-based information, including private health facilities (if no, proceed to 1.1.5)	25%	50%	25%	0%	0%
1.1.2	Health information legislation and regulations clearly articulate roles and responsibilities at all levels	75%	0%	25%	0%	0%
1.1.3	Health information legislation and regulations clearly identify and articulate decision-making authority	50%	0%	50%	0%	0%
1.1.4	Legislation or policy includes mechanisms to ensure privacy and confidentiality of personal information	50%	25%	0%	0%	25%
Planning						
1.1.5	There is a comprehensive, costed 5-year plan, with clear roles and responsibilities, and involving all stakeholders.	75%	0%	0%	25%	0%
1.1.6	The routine health information plan is integrated with (e.g. responds to the information needs of) the overall health sector strategic plan.	75%	0%	25%	0%	0%
Oversight & Coordination						
1.1.7	Country health programs, development partners, and donors support harmonization and alignment around country facility-based information system strategies.	25%	0%	25%	50%	0%
1.1.8	Governance councils or oversight committees are established to provide independent, objective assessment of data availability and quality (e.g. a technical working group for RHIS)	25%	50%	0%	25%	0%
Guidelines & Policies						
1.1.9	Appropriate guidance is available on data collection, reporting, analysis, dissemination and use of data appropriate for the different levels of the health system	50%	0%	50%	0%	0%
1.2 Management						
Standard Operating Procedures						
1.2.1	Standard operating procedures have been written that define roles and responsibilities for data compilation, reporting, data analysis, dissemination and use.	50%	50%	0%	0%	0%
Leadership						
1.2.2	There is a demonstrated commitment to high performing routine health information system from senior management specific to different levels of the health system.	0%	50%	50%	0%	0%
Feedback						
1.2.3	Feedback is systematically provided to all sub-reporting units on the quality of their reporting (i.e., accuracy, completeness and timeliness)	0%	0%	100%	0%	0%
1.2.4	Feedback is systematically provided to all sub-reporting units on the use of data for decision-making	0%	0%	75%	25%	0%
Supervision						
1.2.5	There are guidelines for supportive supervision for RHIS, including standardized supervisory checklists.	75%	0%	25%	0%	0%
1.2.6	Findings from supportive supervisory visits are reviewed and acted upon to correct insufficiencies in the RHIS.	50%	50%	0%	0%	0%
1.2.7	Standardized supervision reports are completed to track results and monitor trends.	25%	25%	25%	25%	0%
1.2.8	A schedule of regular supervisory visits is implemented.	25%	50%	25%	0%	0%
1.2.9	RHIS performance (i.e. data quality and use of data for decision making) is assessed when performing supervisory visits to health facilities	75%	0%	25%	0%	0%
Assessments and Use of Assessments						

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1.2.10	There are regular, formal performance assessments (e.g. PRISM - levels of data quality, data use, and management capacity) of the facility-based information system linked to the strategic planning cycle	0%	0%	75%	25%	0%
Master Facility List						
1.2.11	There is a comprehensive, singular, master list of health facilities, with unique facility identifier and service domain, that includes the private sector and special facilities (military etc.)	75%	25%	0%	0%	0%
1.2.12	There is a formal mechanism to update and keep current the master facility list (e.g. a census of all facilities is conducted every 5 years).	75%	25%	0%	0%	0%
1.3 Human Resources						
Workforce Planning						
1.3.1	Staffing positions and respective knowledge, skills, and competencies have been identified, disaggregated by level (community, facility, district, etc.).	75%	25%	0%	0%	0%
1.3.2	There is a workforce development plan that includes national standards (and standardized job descriptions) for the required positions and functions; establishes career paths for information system positions; and identifies professional development opportunities.	50%	0%	25%	0%	25%
1.3.3	A workforce assessment has been carried out to map existing cadres to the required job positions and to identify gaps in positions and capacities.	50%	0%	0%	25%	25%
1.3.4	There is a costed workforce training plan that covers both pre-service and in-service training.	25%	0%	25%	25%	25%
Standards and Coordination						
1.3.5	A standardized training curriculum is being implemented.	67%	0%	0%	33%	0%
1.3.6	There is coordination of training institutions to ensure that they include health facility information system modules in their programs and are supported to implement the standardized training curricula.	33%	0%	67%	0%	0%
1.3.7	A training database is maintained with information on training (such as who was trained in what domain/skill set, where, and when) to help identify the training needs of institutions and individuals by geographical sub-unit within the country.	0%	0%	33%	67%	0%
2. Data and Decision Support Needs						
2.1 Data Needs						
Core Indicators						
2.1.1	There is national and partner agreement on a balanced and limited set of facility-based indicators with standard definitions and appropriate disaggregations (e.g. age, sex, administrative area).	75%	25%	0%	0%	0%
2.1.2	Baselines for key indicators are defined at national and subnational levels and Indicator targets are clearly articulated and feasible based on health system capacities and improvement plans.	100%	0%	0%	0%	0%
2.1.3	The national data and metadata dictionary is aligned with global standards and includes definitions, data sources, data collection methods, reporting frequency, dissemination methods and use.	25%	50%	0%	25%	0%
Facility-Based Data on Mortality and Causes of Death						
2.1.4	There is a national committee and strategic plan for improving hospital mortality data that includes an agreed national minimal set of mortality data to be collected by all hospitals and health facilities	25%	0%	25%	25%	25%
2.1.5	The strategic plan for improving hospital mortality data uses global standards and definitions and describes reporting and feedback structures and dissemination mechanisms.	25%	0%	25%	25%	25%
2.1.6	There are regular reviews of the policies and procedures for collecting and consolidating cause of death data from hospitals and other health care facilities	25%	0%	25%	25%	25%
2.1.7	Strategies are in place to improve medical records and other sources of information on deaths such as ward registries, hospital discharge registries.	75%	0%	0%	0%	25%
2.1.8	The International form of the death certificate is used in all facilities for the medical certification of death.	50%	0%	0%	25%	25%

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2.1.9	Certifying physicians have the knowledge and skills needed to accurately complete the ICD international form of the death certificate and are aware of the importance of correct cause-of-death certification.	50%	0%	0%	25%	25%
2.1.10	The quality of hospital cause-of-death certification is regularly assessed using a medical records review. The findings are used to put in place corrective actions.	0%	0%	25%	50%	25%
2.1.11	The ICD most recent revision is used for coding causes of death.	50%	0%	0%	25%	25%
2.1.12	Statistical clerks and health information officers have the training and reference materials needed to code deaths and disabilities according to the ICD.	50%	0%	0%	25%	25%
2.1.13	Systems for the automated coding of causes of death are progressively used to the maximum extent possible.	0%	0%	25%	50%	25%
2.1.14	There are regular audits of coding as part of quality assurance procedures.	25%	0%	25%	25%	25%
2.1.15	There is an annual/biennial report on hospital mortality, with tables and charts on key indicators including distribution of causes of death by sex and age and case fatality rates for major causes of death.	0%	25%	25%	25%	25%
2.1.16	Hospital-based mortality statistics are used to identify avoidable deaths and deficiencies in the quality of care.	0%	25%	0%	50%	25%
2.1.17	Hospital mortality data are used to trigger audits and confidential enquiries of adverse outcomes, such as maternal and perinatal deaths.	25%	0%	50%	0%	25%
Community-Based Service Data						
2.1.18	Community-based information needs are defined according to a community needs strategy.	50%	25%	0%	0%	25%
2.1.19	A minimum set of community-based indicators (with standard definitions, and appropriate disaggregations and frequency of collection) have been developed to monitor the implementation of community-based interventions	25%	0%	25%	25%	25%
2.1.20	Standard data collection tools have been developed to facilitate the collection of data from community-based interventions	50%	0%	25%	0%	25%
2.1.21	Community based interventions and data are appropriately linked to health facilities to facilitate management, oversight and reporting.	25%	0%	25%	25%	25%
2.1.22	Assessments are conducted to map community-based programs (public and private) to understand coverage, and information gaps/opportunities at the community level	25%	25%	0%	25%	25%
Surveillance						
2.1.23	The country has adequate capacity to diagnose and record cases of notifiable diseases	50%	25%	25%	0%	0%
2.1.24	The country has adequate capacity to report timely and complete data for notifiable diseases.	25%	50%	25%	0%	0%
2.1.25	The country has adequate capacity to analyze and act upon the data for outbreak response and planning of public health interventions.	25%	25%	50%	0%	0%
2.1.26	There are adequate human resources and laboratory capacity for surveillance and response to notifiable diseases.	0%	25%	75%	0%	0%
2.1.27	Early warning functions include regular updating of responsibilities for notification and investigation of immediately reportable diseases and events, all with standardized case definitions	50%	50%	0%	0%	0%
2.1.28	Epidemic preparedness and response plans are in place with district procedures, rapid response teams and contingency stocks of drugs, vaccines, reagents and supplies	25%	25%	50%	0%	0%
2.1.29	There are mechanisms in place for effective risk communication during a public health emergency	25%	25%	50%	0%	0%
2.2 Standards and System Design						
Standards & Data Architecture						
2.2.1	International or national classifications are used for categorizing aggregated data (ICD, facilities, human resources, essential drugs)	50%	25%	25%	0%	0%
2.2.2	Indicators are harmonized with donors and implementing partners.	25%	25%	50%	0%	0%
2.2.3	There is an integrated common data repository (e.g. data warehouse) for all facility-based data that can grow and adapt to changes and new requirements .	100%	0%	0%	0%	0%

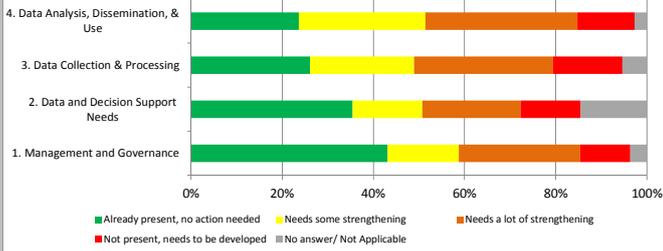
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2.2.4	The facility-based information system is interoperable with other systems at all levels	0%	0%	75%	0%	25%
2.2.5	There is adequate and well documented facility-based meta-data available to facilitate interoperability of electronic information systems.	25%	25%	25%	0%	25%
System Design						
2.2.6	The design of the health facility and community information systems included input from end users and other key stakeholders at all levels.	50%	25%	25%	0%	0%
2.2.7	Data producers and users are brought together periodically to discuss ways of making routine data more relevant to policy makers and planners and to enhance understanding of routine health statistical findings.	50%	50%	0%	0%	0%
3. Data Collection & Processing						
3.1 Collection and Management of Individual Client Data						
Standard Forms						
3.1.1	Data collection systems for client data (e.g. clinical episodes) are standardized across all implementing partners and donors	25%	75%	0%	0%	0%
Training						
3.1.2	Personnel (clinicians and other staff) have been trained in the collection of the client data, and for the input of the data into the computer database (where applicable).	50%	50%	0%	0%	0%
Guidelines						
3.1.3	Printed guidelines are available at all health facilities (and in applicable community-based programs) to assist with client level data collection	100%	0%	0%	0%	0%
Data Storage						
3.1.4	Health data (paper or electronic) are stored appropriately and according to national policies.	0%	25%	75%	0%	0%
Reproduction						
3.1.5	There is a schedule/plan for update, reproduction, and distribution of data collection tools	25%	50%	25%	0%	0%
3.2. Collection, management and reporting of aggregated facility data						
Data Flow						
3.2.1	The data flow pattern (i.e. data flow from client encounter forms -> summary tools [e.g. a register or tally sheet] -> periodic aggregate reporting form) is clearly defined and understood by staff.	75%	25%	0%	0%	0%
Guidelines						
3.2.2	There are printed guidelines available at all health facilities (and in applicable community-based programs) to assist with data compilation and reporting	75%	0%	25%	0%	0%
Training						
3.2.3	Relevant staff at health facilities (and in applicable community-based programs) have received training on data compilation and reporting	50%	25%	25%	0%	0%
Data Disaggregation						
3.2.4	Data disaggregations by key stratifiers (age, sex, geography) are maintained during compilation and transfer in order to permit equity analysis.	25%	25%	50%	0%	0%
Data Transfer						
3.2.5	Data transfer to the next level occurs in a timely way, making use of innovation and IT where appropriate and available	25%	25%	50%	0%	0%
3.3 Data Quality Assurance						
Planning						
3.3.1	There is a data quality assurance plan that is shared with health programs, other government ministries, donors and other stakeholders to guide activities aimed at improving data quality.	0%	0%	25%	50%	25%
Standards						
3.3.2	Routine health data quality assurance standards are defined and enforced, including completeness, timeliness, accuracy, integrity, and consistency over time	25%	0%	25%	25%	25%
Roles and Responsibilities						

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3.3.3	Roles and responsibilities for data quality are assigned at each level, including verification of data, summarizing data quality issues, and developing and implementing improvements strategies.	25%	0%	25%	25%	25%
Training						
3.3.4	Training and capacity development for data quality assurance are provided at facility, district and national levels using standard methods.	0%	25%	0%	50%	25%
Assessments						
3.3.5	Systematic and comprehensive assessments of facility data quality are conducted regularly in advance of health sector planning, including analysis of completeness, timeliness, accuracy, and consistency over time (e.g. Data Quality Review) and which result in published reports describing data quality issues and plans to address them.	0%	50%	25%	25%	0%
Data Quality Checks						
3.3.6	Data management staff conducts regular checks of accuracy and completeness of data prior to submitting reports to the next level (using automated electronic checks where appropriate).	25%	0%	75%	0%	0%
Links to Health Sector Planning						
3.3.7	Data quality assurance is linked to the health sector planning cycle in the country so that information on data quality is available prior to the use of data for planning.	0%	0%	50%	50%	0%
Collaboration						
3.3.8	There is collaboration between the MoH, government agencies (e.g. national statistics office) and other national stakeholders (e.g. donors, universities, etc.) on data quality assurance so that assessments are conducted with an element of independence (i.e. no conflict of interest).	0%	25%	0%	50%	25%
3.4 Information and Communication Technology (ICT)						
ICT Framework						
3.4.1	There is an overall framework and plan for ICT, including equipment, its acquisition and use, for the RHIS at all levels.	25%	0%	75%	0%	0%
ICT Use						
3.4.2	Electronic methods are used for data quality checking prior to data transfer	0%	0%	50%	50%	0%
3.4.3	Data collection utilizes eHealth and mHealth solutions where appropriate, especially for remote and isolated areas.	0%	25%	75%	0%	0%
3.4.4	Routine micro-data are made available (i.e. a subset of data from RHIS selected according to specific criteria) to researchers and analysts from other government agencies, donors and the private sector (with appropriate safeguards for confidentiality, e.g. stripping the dataset of identifiers).	25%	50%	0%	25%	0%
Training						
3.4.5	Personnel have received appropriate training, using a standardized training curriculum, in the use of ICT at all levels.	25%	50%	25%	0%	0%
4. Data Analysis, Dissemination, & Use						
4.1 Data Analysis						
Data Analysis						
4.1.1	There are collaborative mechanisms established with local research and academic institutions to conduct analytical reviews of facility data on a periodic basis.	25%	0%	25%	50%	0%
Data Cleaning						
4.1.2	General principles for analysis of facility data are defined (e.g. as SOPs), including how to deal with incompleteness, inconsistency, implausibility, estimation of denominators, imputation of missing values, and data reconciliation across data sources.	25%	0%	25%	50%	0%
Performance & Progress Reports						
4.1.3	Health planners and development partners use the results of the analysis of facility data to produce analytical reports of progress and performance for the health sector review.	50%	25%	0%	0%	25%
Analysis Tools						

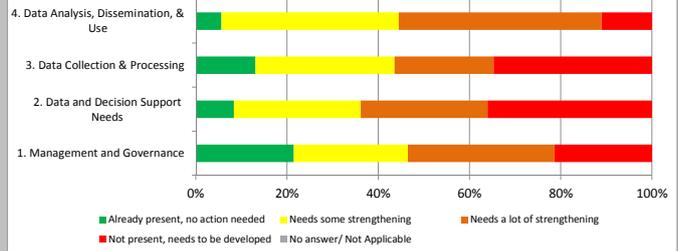
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4.1.4	Tools used for data analysis, such as summary tables, graphs, GIS, pivot table, decision support systems, etc., are appropriate for the level.	25%	50%	0%	25%	0%
Data Sources						
4.1.5	The information system uses appropriate data from a variety of sources, e.g. census data, vital event registers, population surveys, etc. to calculate key indicators.	50%	25%	0%	0%	25%
Training						
4.1.6	Appropriate staff (i.e. Facility and community information system managers, program managers, facility in-charge, etc.) has received training in data analysis.	0%	25%	50%	25%	0%
4.2 Information Dissemination						
Information Products						
4.2.1	A report of health facility statistics is produced annually.	0%	75%	25%	0%	0%
4.2.2	Periodic data summaries (e.g. bulletins) are produced and distributed to key stakeholders, describing key findings and interpretations.	0%	50%	25%	25%	0%
4.2.3	Dashboards and summary charts are used to convey information to diverse target audiences in ways that are meaningful to policy makers, the media, and the general public.	25%	0%	75%	0%	0%
Strategies						
4.2.4	There is a comprehensive data dissemination strategy relevant to each level of the health system, with key products defined.	0%	25%	75%	0%	0%
Collaboration						
4.2.5	There is collaboration and data sharing between MOH, local institutions (e.g. national statistics offices) global partners, media and civil society.	50%	50%	0%	0%	0%
4.3 Data Demand and Use						
Information Culture						
4.3.1	A culture of information use is promoted by policy leaders and decision-makers and reflected in the use of facility & community-based data in planning, monitoring and evaluation reports.	0%	25%	50%	25%	0%
Data Demand						
4.3.2	There is demand for information by donors, policy makers, planners, program managers, etc.	100%	0%	0%	0%	0%
Data Use						
4.3.3	Clinical practitioners use clinical data routinely to monitor patient care and outcomes.	0%	25%	75%	0%	0%
4.3.4	Facility managers use data to improve infrastructure, equipment and human resources.	0%	0%	75%	25%	0%
4.3.5	Local level decision-makers and community members use facility and community-based information to develop responsive and appropriate service delivery strategies and community-based interventions.	75%	0%	25%	0%	0%
4.3.6	Facility and community-based data are used in health sector planning (e.g. health sector reviews)	0%	75%	25%	0%	0%
4.3.7	The managers of routine health information reporting at all levels have sufficient autonomy to define their own interventions and data needs (e.g. instituting a local outreach effort to improve coverage - and collecting data to monitor effectiveness of the intervention).	0%	50%	50%	0%	0%

Distribution of Responses by Category and Level of the Health System: Overall

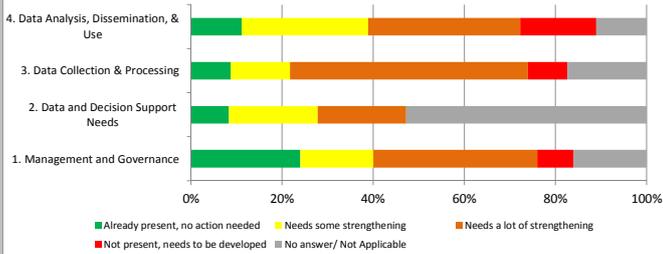
Distribution of Responses by Category: Overall



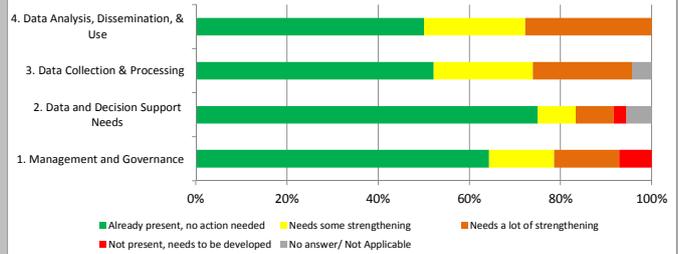
Distribution of Responses by Category: National



Distribution of Responses by Category: Subnational Other



Distribution of Responses by Category: Subnational District



Distribution of Responses by Category: Service Delivery Point

