NEPAL MINISTRY OF HEALTH AND POPULATION
Data and Digital Priorities: Addressing Equity
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BACKGROUND

Nepal has implemented Sustainable Development Goals (SDGs) and Universal Health Coverage (UHC) programs through Nepal Health Sector Strategy and National Development Plans. National Planning Commission and the Ministry of Health have developed a results framework of health-related SDG indicators including SDG-3 and nutrition related indicators of SDG-2. Baselines and targets have been set with milestones for each of the indicators. This exercise showed the remarkable data gap to monitor Health SDGs in many areas and relying on estimates from multiple sources, particularly in the area of mortality rates and prevalence of diseases.

Out of 59 indicators; 54 health and 5 nutrition related are aimed to measure through population based periodic surveys, civil registration system, routine health information systems, national health accounts and some other sources. Nepal Demographic Health Surveys and Nepal Multiple Indicator Cluster Surveys measure 18 indicators while routine health information systems and CRVS relate to 32 indicators and 15 indicators respectively.
Currently, both routine and population-based data sources and country estimates serve to measure the progress.

- **Routine administrative sources**: Facility-based Health Management Information System (HMIS) service reporting and Civil Registration and Vital Statistics (CRVS)
- **Population-based sources**: Population Census, Demographic and Health Surveys, Living Standard Surveys, Multiple Indicator Cluster Surveys, Annual household surveys, STEPS, NCD prevalence survey and mental health survey
- **Estimates**: Country specific burden of disease based on Global Burden of Disease estimates, WHO global health estimates, MMEIG estimates, UN IGME estimates on child mortality, National Health Accounts

**Data Gaps for Equity**

Periodic surveys are relied much for the measurement of health service access, utilization and health situations. Facility based service data provides estimates for maternal and child health related indicators but estimations at the population level always has denominator issues. CRVS is not matured yet to provide reliable mortality statistics with cause of deaths. In some cases, no specific source is mentioned. Currently, country data is not adequate to support the estimation of burden of disease. Routine information system provides current data for decision making and able to provide at sub-national levels but there is a big space for improvement in terms of coverage, quality and disaggregation. SDGs localization needs all indicators to be available at local levels to monitor the equity. Improving routine health information systems and continuity of the population-based surveys are urgent need for SDGs and UHC monitoring.

**Major Issues:**

- Hospital service records occupy a large share of available mortality and morbidity data. Currently, the coverage and quality of hospital information system need improvement in many areas; complete service recording, compliance to standards, quality assurance, use of technology and data use
- Investment, capacity and stakeholder commitment is needed towards development and use of Electronic Health Records (EHRs) and Electronic Medical Records (EMRs). Sporadic and siloed development causing compromise to standards and interoperability basics.
- Coverage and timeliness of registration of events and absence of cause of death is prevailing in the CRVS.
- Inadequate functional coordination among all levels to harmonize and facilitate the information management system is realized. SCORE and Current RHIS assessment 2020 have showed governance and data use components are weaker.
Past efforts and Updates

- ICD training is supported by WHO since 1998 in Nepal. BP Koirala Institute of Medical Sciences (BPKISH) has been collaborated as Resource Centre for ICD and mortality data.
- Technical Working Group and Task Force are formed for CRVS co-ordination at the MoHP. CRVS strategy 2019 is prepared by Ministry of Home Affairs supported by the MoHP and WHO. Online data management for CRVS is under expansion.
- eHealth strategy and roadmap are developed and under implementation.
- SDG localization is initiated by the Government of Nepal allowing opportunity for disaggregated data collection and analysis.
- Nepal is affiliated to Health Data Collaborative (HDC) that will support to reach regional and global communities for better health data.
- Integrated Health Information Management Systems Roadmap is drafted for 2021-2030

Priority actions for health data improvement under National Action Plan

There are many actions identified in the NHSS 2015-2020, National Health Policy, IHIMS roadmap 2021-30 (draft), National Development Plan, CRVS strategy 2019 and HIS annual programs. To align all these efforts and plans, there are urgent actions identified to build the foundation for better health data for SDGs and UHC.

National Health Policy has expressed commitment on development of integrated health information system making systems modern, quality full and technology friendly. Further, commits eRecording of client records maintaining security. Policy also provisioned strengthening monitoring and evaluation of the health program through appropriate mechanism.

15th Plan of Government of Nepal has set strategy as increase the use of data in the monitoring, evaluation and reviews by making health information systems managed, integrated and technology friendly and fulfil the data demands.

Nepal Health Sector Strategy has also mentioned in the result framework to develop the practice of information collection and use. To achieve: developing common platform among MoHP and stakeholders is proposed. Further action set is initiate the eRecording and eReporting from the health facilities is provisioned.

In the circumstances of policy documents, current priority actions are set.
Priority Actions

• RHIS strengthening for SDG & UHC data reporting with enhanced focused interventions for Hospital Information System improvement in digital environment: standardization (ICD), medical certification of cause of death (MCCD), OPD service recording in prioritized federal level 22 hospitals;

• Learning centers establishment and capacity strengthening on RHIS (ICD, MCCD, DHIS, EHR, EMR etc.) in collaboration with academia, targeting capacity building of both public and private sectors

• Strengthening HIS and M&E coordination mechanism at provincial levels

KEY DOCUMENTS
**KEY INTERVENTIONS AND PARTNER MAPPING MATRIX**

**PRIORITY ACTION 1**

**OBJECTIVE:** RHIS STRENGTHENING FOR SDG & UHC DATA REPORTING WITH ENHANCE FOCUSED INTERVENTIONS FOR HOSPITAL INFORMATION SYSTEM IMPROVEMENT IN DIGITAL ENVIRONMENT; STANDARDIZATION (ICD), MEDICAL CERTIFICATION OF CAUSE OF DEATH (MCCD), OPD SERVICE RECORDING IN PRIORITIZED FEDERAL LEVEL 22 HOSPITALS

**OUTCOME:** HOSPITAL REPORTING SYSTEM STRENGTHENING INTERVENTIONS WILL SUPPORT THE DATA AVAILABILITY FOR POPULATION SUB-GROUPS, MORBIDITY AND MORTALITY STATISTIC AND DISAGGREGATED DATA. IT WILL ALSO PROVIDE EQUITY RELATED INFORMATION THAT COULD ASSIST EVIDENCE-BASED PLANNING, DECISION-MAKING, AND SDGS PROGRESS MONITORING. RECORDING IMPROVES THE QUALITY AND CONTINUUM OF CARES IN THE HOSPITALS.

<table>
<thead>
<tr>
<th>Proposed Activities</th>
<th>Duration</th>
<th>Key Deliverables</th>
<th>Implementer</th>
<th>Stakeholders (TA/FA)</th>
<th>Estimated Budget (USD)</th>
<th>Existing Support</th>
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<tbody>
<tr>
<td>Readiness assessment of hospitals for ICD, MCCD and EMR</td>
<td>4 months</td>
<td>Identify key interventions needs for further improvement</td>
<td>MoHP</td>
<td>DoNIDCR, GIZ, WHO, UNICEF...</td>
<td>40,000-60,000</td>
<td></td>
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<tr>
<td>Support Software development and capacity building for the implementation of EHR, EMR, MCCD</td>
<td>18 months</td>
<td>Software available for personal health records and hospital service management</td>
<td>MoHP</td>
<td>DoNIDCR, GIZ, WHO, UNICEF...</td>
<td>125,000-150,000</td>
<td>EHR and EMR being piloted in two hospitals through NGO</td>
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**PRIORITY ACTION 2**

**OBJECTIVE:** LEARNING CENTERS ESTABLISHMENT AND CAPACITY STRENGTHENING ON RHIS (ICD, MCCD, DHIS, EHR, EMR ETC.) IN COLLABORATION WITH ACADEMIA, TARGETING CAPACITY BUILDING OF BOTH PUBLIC AND PRIVATE SECTORS

**OUTCOME:** ESTABLISH AND OPERATE LEARNING CENTERS FOR ICD, MCCD, EHR, EMR AND DHIS TO FACILITATE CONTINUOUS CAPACITY DEVELOPMENT IN BOTH PUBLIC AND PRIVATE SECTOR AND ALIGN THE EFFORTS ON CAPACITY BUILDING IN CORE AREAS OF HIS.

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<tr>
<td>Capacity building and logistics support to establish and operate learning centers in each seven provinces</td>
<td>18 months</td>
<td>Learning Centers are established at the Provincial levels</td>
<td>MoHP</td>
<td>Academic Institutions, WHO, EDPs</td>
<td>70,000-110,000</td>
<td>WHO has supports BPKIHS for ICD</td>
</tr>
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**PRIORITY ACTION 3**

**OBJECTIVE:** STRENGTHENING HIS AND M&E COORDINATION MECHANISM AT PROVINCIAL LEVELS

**OUTCOME:** STRENGTHENING HIS AND M&E COORDINATION MECHANISM AT PROVINCIAL LEVELS WILL REINFORCE THE PRACTICE OF DATA-DRIVEN PLANNING AND DECISION-MAKING FOR EQUITABLE ACTIONS.

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<tr>
<td>Integrated information sharing and data visualization mechanism for M and E in the provinces</td>
<td>18 months</td>
<td>Evidence-based planning adopted and improving equitable service delivery</td>
<td>MoHP, MoSD</td>
<td>WHO, EDPs</td>
<td>40,000-60,000</td>
<td>UNICEF supported initiation at the local levels</td>
</tr>
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Investing for Equity measurement

Nepal has developed its National Health Sector Strategy for reaching the unreached with aims to reduce health and nutrition inequities and contributing towards UHC and the Health-related SDGs. Currently, Nepal Demographic Health Survey and Multiple Indicator Cluster Survey are the only data sets referred for conducting equity analysis. These surveys provide the data disaggregated by selected equity stratifiers, including age, sex, literacy, geography, location (urban/rural), wealth quintile and other dimensions. However, the country has realized that health equity and access programs are less effective due to the limited availability of disaggregated data to monitor the access and utilization of health services at sub-national levels in terms of geography, socio-economic status, caste and ethnicity from the HMIS or other routine data sources.

Conclusion

In its national policies, strategies, acts and regulations, Nepal has already identified the need of strengthening CRVS and HIS. Under these circumstances, coordinated and strategic investment via the Data Accelerator focusing on Hospital reporting system, capacity building on HIS related skills and M&E coordination at the sub-national levels would provide country vital health statistic and equity related information. Strengthening monitoring mechanism at all levels support evidence-based planning, decision-making and monitoring SDGs along with equity perspective.

In addition, the proposed program will support collaborating in-country stakeholders to surge their investment in GAP Data Accelerator interventions to gain high impact on equitable services and health SDG institutionalization in Nepal.
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