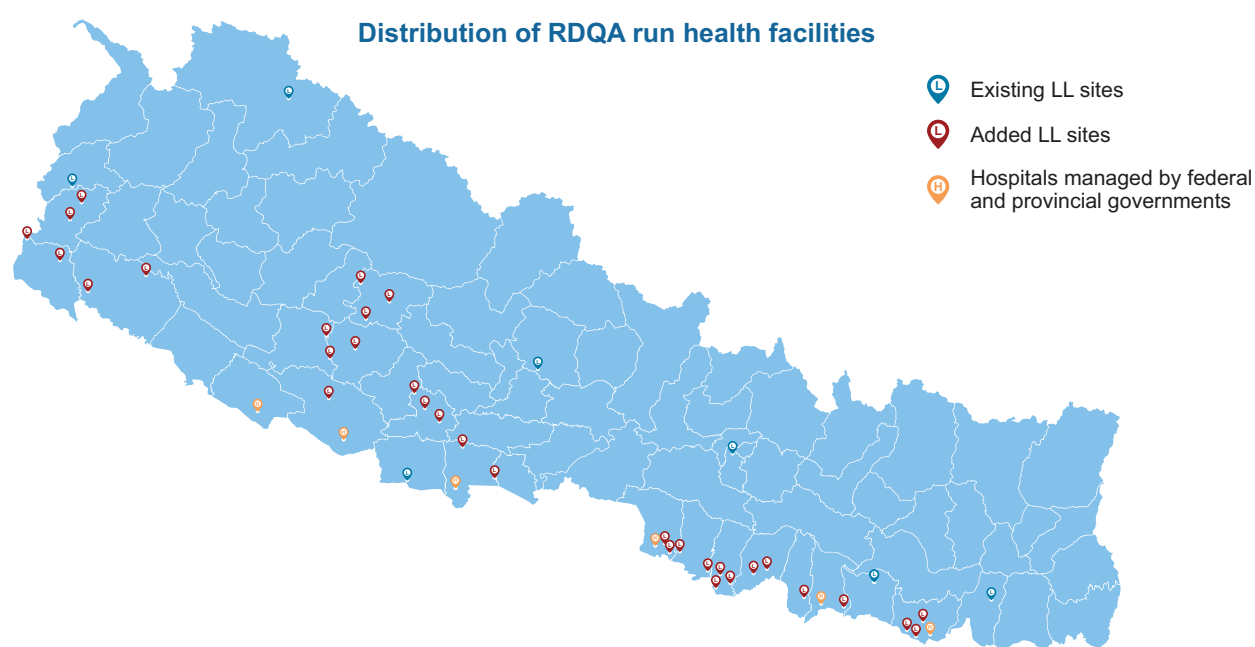


Learnings from the rollout of the RDQA in Nepal

Introduction

The Government of Nepal's Ministry of Health and Population (MoHP) is committed to providing quality health services to all citizens. The quality of the data reported from health facilities (HFs) is important to ensure improvement in their service quality. The government has taken multiple policy steps and made decisions such as the 15th Five Year Plan (2019/20 to 2024/25), which envisages making the health information system systematic and integrated, and encourages data

use in decision making. Similarly, in July 2019, the Cabinet directed all three tiers of government—local, provincial, and federal—to make arrangements for an accurate, complete, and timely reporting of data from HFs. This brief details the Routine Data Quality Assessment (RDQA) conducted by the HFs based in all three government tiers, some of which are part of the Learning Lab (LL) sites. The LL sites are part of the Learning Lab approach that was envisaged to support the



selected local governments in strengthening their health systems for improved delivery of quality basic health services in the federal context. The objective of implementing the LL approach is to make local health systems more resilient in order to deliver quality services that leave no one behind. This brief is therefore based on the analysis of the evidence from three federal-level hospitals, three provincial-level hospitals, and 39 LL sites (seven existing and 32 added LL sites).

The RDQA tool operates with a few actions that are instrumental in improving the quality of the data reported

by facilities:

1. Verifying the quality of the data
2. Assessing the system that produces the data
3. Developing action plans to improve both

It is important to understand that the RDQA has two main components: it facilitates the assessment of the quality of the selected indicator data (data verification) and the strength of the overall data management and reporting system (system assessment).

Verification factor

The verification factor of the RDQA tool helps to assess if service delivery sites (health facilities) at different levels have been collecting, consolidating, and reporting data to measure the selected indicator(s) accurately and on time, and to crosscheck the reported results with other data sources. For crosschecking, the data reported for selected indicators were verified against the recording

registers/forms; register vs tally sheet; register vs monthly monitoring sheet; tally vs monthly monitoring sheet; and register vs client tracking (optional). The purpose of the crosscheck was to examine the consistency of the reported data; the process was carried out by validating the primary data source against a secondary data source (other than the client registers/forms used for verification

purposes) for the same reporting period. In the data verification domain, a 90-110% score on all

indicators selected for verification was considered the benchmark for accuracy.

Systems assessment domain

The systems assessment part consisted of the quantitative assessment of the relative strengths and weaknesses of the different functional areas of the M&E system. The goal of this domain was to identify potential threats to data quality posed by the system's design and execution. Five functional areas (components) of the M&E system were assessed. For each component, a set of items individually scored as 0 (N/A), 1 (No – Not at all), 2 (Partly), and 3 (Yes - Completely) was used for the assessment.

The five components of the system assessment domain included:

- M&E structure, functions, and capabilities (7 items)
- Indicator definitions and reporting guidelines (4 items)
- Data collection reporting forms and tools (6 items)
- Data management processes (8 items)
- Use of data for decision making (7 items)

In the system assessment domain, a score between 2.5-3.0 was considered the benchmark .

Onsite coaching and mentoring

Officials from the federal MoHP, the Provincial Health Directorate (PHD) at the Ministry of Social Development (MoSD), health sections at the municipal level, and the Nepal Health Sector Support Programme visited the respective HFs to provide orientations on the RDQA. The facilities were

informed beforehand, and a one-day orientation meeting was held for the staff. The health facility staff then conducted the RDQA with support and guidance from MoHP officials. This was followed by interpretation of data and preparation of action plans, as well as debriefing sessions.

Key findings

Verification factor

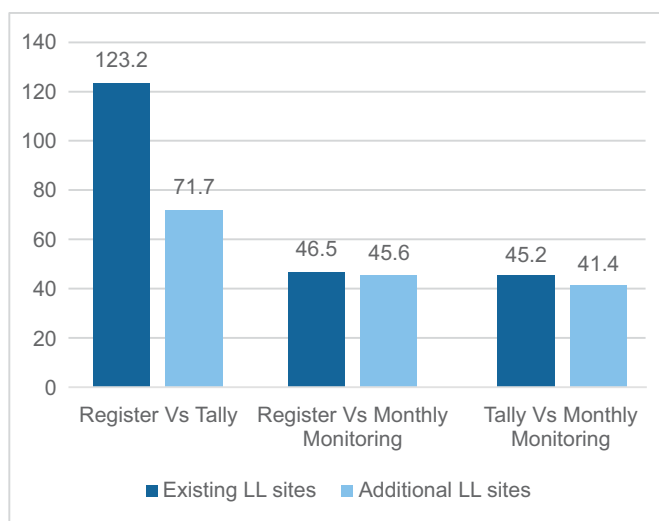


Figure 1: Data verification score of existing and additional LL sites

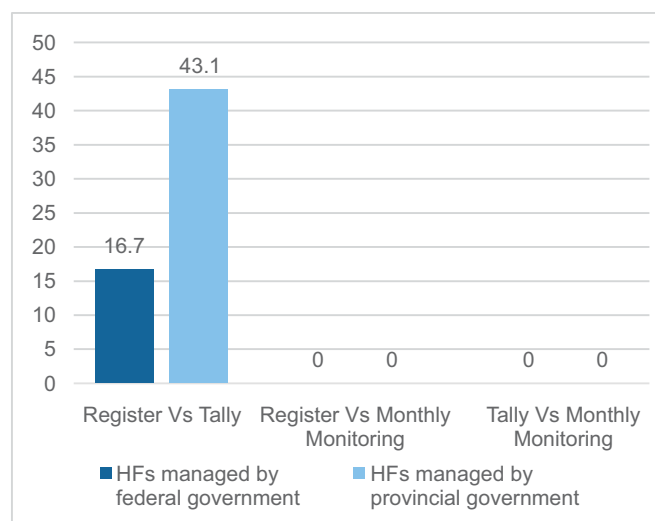


Figure 2: Data verification scores of hospitals managed by federal and provincial governments

The figure 1 shows that none of the HFs at existing and added LL sites met the benchmark in terms of verification factors for register vs. tally, register vs monthly monitoring sheet, and tally vs monthly monitoring sheet. The benchmark set for acceptable data quality was >90%<110%. However, register vs tally had an over reporting with a score of 123%, while it fell below the benchmark for the two other crosschecks.

This result showed improvement (not presented here) in the data management system of the HFs in existing LL sites. However, more work needs to be done to ensure that they are accurately reported in the government system in HFs based in existing and additional LL sites .

Furthermore, HFs run by local bodies were found to have a better score than those managed by the provincial or federal

governments (see figure 1 & figure 2), although none met the data quality benchmark. The figure 2 shows that the score for HFs is 43 and 17 for the provincial and federal facilities respectively.

The scores for register vs monthly monitoring sheet and tally vs monthly monitoring sheet were not available for federal and provincial HFs because they either did not keep monthly monitoring sheets or they were unavailable.

The satisfactory performance of local level-managed HFs, including health posts and primary hospitals, could be attributed to their low caseloads. Additionally, the failure to maintain monthly monitoring sheets and tally sheets, except for a few indicators, all contributed to the low scores of HFs managed by the federal and provincial government.

System assessment

The figure 3 shows that the HFs have a satisfactory score (an average of 2.5) in 80% (four of five) of the domains. The only domain in which HFs fare averagely is use of data for decision making.

Similarly, figure 4 shows the baseline score of HFs in the newly added LL sites. Only two components—data management processes and data collection and reporting forms and tools—have satisfactory scores while the other components fall behind. The weakest is use of

data for decision making.

For the new LL sites, the scores from existing LL sites serve as the improvement benchmark and target, which are likely to be met a few years after the implementation of the programme. The satisfactory score in the system assessment of the existing LL sites is evidence of the work that the MoHP and its partners have been carrying out over the years to improve the health system, including quality of data.

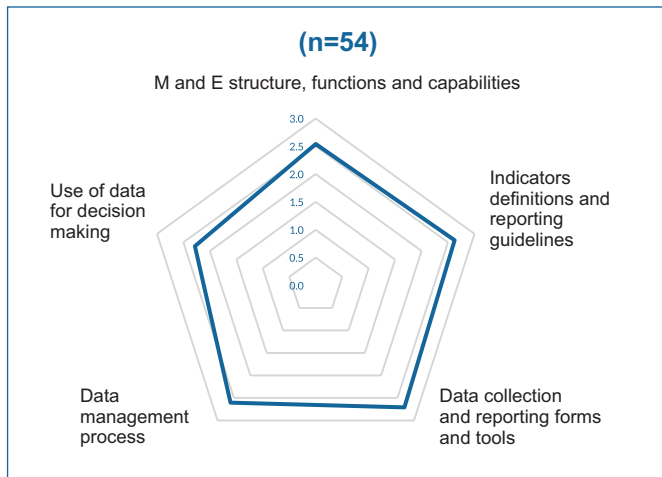


Figure 3: System Assessment Score-Existing LL sites HFs

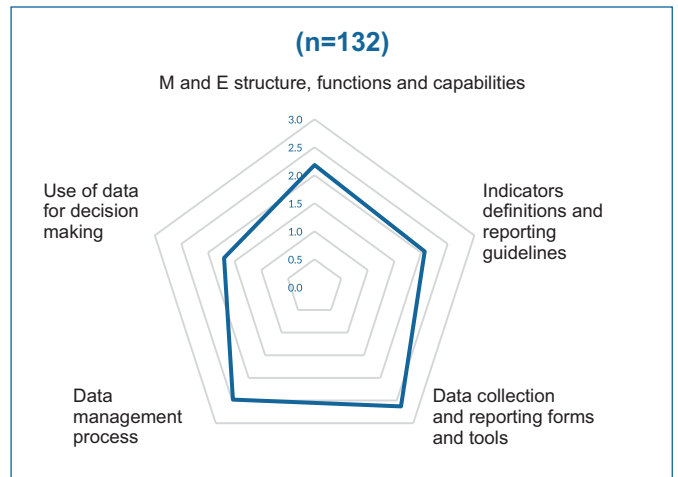


Figure 4: Baseline Score of newly added LL sites HFs

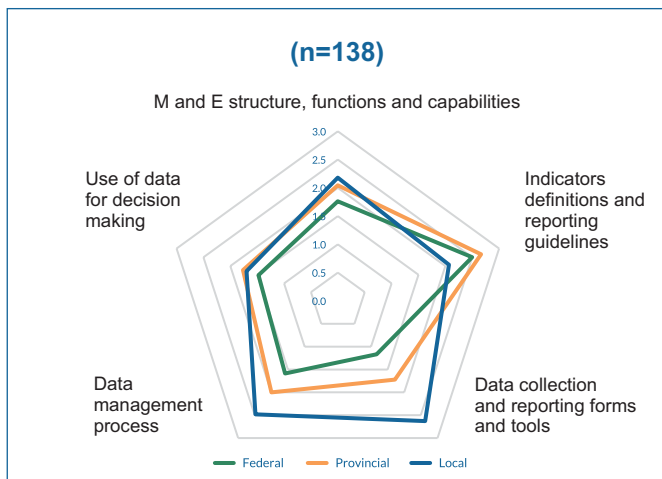


Figure 5: Baseline score comparison of HFs managed by different level

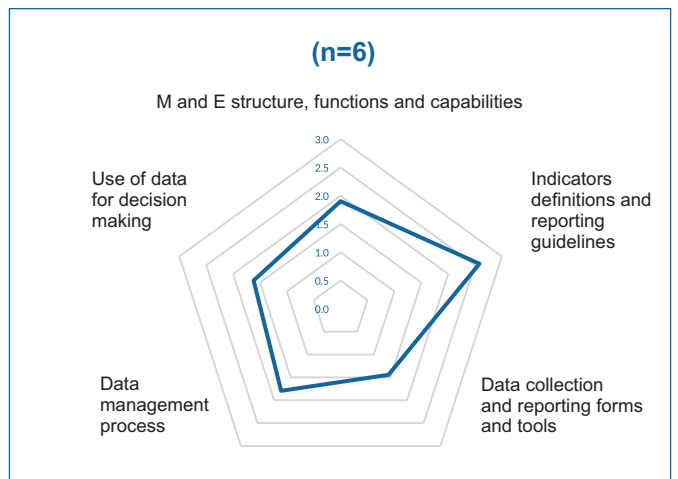


Figure 6: Baseline Score of Hospitals

Among the HFs managed by the three tiers of government (figure 5), it is evident that those managed by the local level are strong in two components: data management processes, and data collection reporting forms and tools. On the other hand, the provincial and federal managed HFs are better in indicator definitions and reporting guidelines. The use of data for decision making component was found to be below the set benchmark in all HFs, regardless of management.

The figure 6 shows that the hospitals have a satisfactory score (an average of 2.5) in indicator definitions and reporting guidelines. This means they have access to the

updated HMIS reporting guidelines, as well as other relevant guidelines and treatment protocols. It can be observed that the hospitals fared averagely in two sub-domains: M&E structure, functions, and capabilities; and data management processes. The hospitals have a weak system in the rest of the components.

The local level-managed HFs have a higher score in the data collection reporting forms and tools component. The reason behind this is that some indicators were relevant in their context, but irrelevant for hospitals. For instance, the hospitals had no connection to FCHV reports or report collections from village clinics.

Issues/challenges

1. A major challenge in the effective implementation of the RDQA was the absence of Internet access in health facilities, especially in those managed by the local levels. In such cases, the MS-Excel®-based RDQA was used instead of the web-based tool. Low digital literacy, unfamiliarity with computers, and the lack of email addresses were other issues that affected the implementation of the web-based RDQA especially in the HFs managed by the local level.
2. Among the local level, there was confusion regarding the HMIS reporting forms and tools—it was unclear whether they would be supplied by the PHD/MoSD or the federal Ministry of Health and Population, or whether they would have to be printed by the local authorities themselves. This dilemma led to health workers not recording or verifying the forms, which are crucial to maintain data quality.
3. The health facilities had at least one staff member that was trained on HMIS usage. However, a single person could not work effectively without support from others—help was required for verifying and reviewing reported case and aggregated numbers. In addition, the health facilities did not have guidelines and booklets on HMIS usage.
4. The problem of having staff that had not been trained, or had received little training on HMIS or overall data management, was seen when the RDQA results had to be interpreted. The persons involved in conducting the RDQA were confused regarding the interpretation of the assessment domains. The failure to provide onsite interpretation support made the health workers unenthusiastic about proceeding with the development of action plans or repeating the assessment.
5. The use of data remained dismally low in all the HFs. This was partly because of the lack of knowledge regarding public health analytics and the absence of trained staff to visualize data, which resulted in them being unable to explain to others the ways to inform decisions based on this data.
6. Another key issue was the lack of monitoring and feedback from higher authorities, particularly for new LL sites. Periodic monitoring visits would ensure the accountability of both senior officials and HF officials. For instance, in existing LL sites that had periodic monitoring visits and regular feedback, the quality of data remained sound.

Ways forward

1. The federal MoHP should develop a RDQA that will not require an Internet connection. Furthermore, trainings and refresher trainings on RDQA use should be conducted, and prerequisites, such as email IDs to share credentials, should be given more focus.
2. Clarity should be developed on the supply of HMIS reporting forms. If the federal or provincial authorities are inefficient in their supply, authority should be given to print them locally, and the necessary budgets should be immediately earmarked.
3. Health facilities should strengthen and prioritize human resources in their medical record units. In addition, focal and co-focal persons should be in place to deal with HMIS reporting and public health analytics. All health staff should be able to access, with proper authorization, the data and use it to improve their performance and quality of services. To begin with, ward in-charges can undergo training and the programme can be expanded gradually. Display boards can also be set up for the public as well as those interested in the analytics of the hospital. This should be made part of the Annual Work Plan and Budget.
4. The federal MoHP and its partners should immediately develop resource materials and pocketbooks with more contextual graphics explaining the purpose of the RDQA and its interpretation. More importantly, it should focus on the advantages of producing quality data.
5. Periodic monitoring visits and feedback mechanisms should be developed by the PHD/MoSD or the federal MoHP to ensure the quality of data reported by health facilities.



Government of Nepal
Ministry of Health and Population