POLICY BRIEF 5

Extending the Data Quality Improvement up to Resetting the Baseline

Introduction

Data quality and Information use are the many limitations of the health system. The government of Ethiopia and implementing partners have been exerting efforts to resolve the challenge. The Health Extension Program, a platform for implementing community health programs, affects data quality issues across different programs in the health sector. The National Assessment of the Ethiopian Health Extension Program evaluated the data quality (accuracy and consistency) of CHIS. The implications of the gaps identified in this assessment were crosschecked against the findings of other assessments/evaluations. This policy brief highlights the main gaps and the recommended policy and implementation strategies.

Methods

The evidences for this policy brief are drawn from the National Assessment of the Health Extension Program. In the assessment, data quality was checked on selected indicators which focus on maternal & child health and community engagement topics. Both qualitative and quantitative methods were employed. These indicators were assessed in 343 health posts. In addition, evidences from literatures and policy documents were used.

Key findings

Data quality is a great challenge in HEP implementation. The assessment, more specifically, showed that:

- All selected maternal and child health indicators (except skilled delivery) were over-reported (the recounted number is less than the reported number).
- Accuracy level, as measured by result verification factor, in the majority (53 – 63%) of health posts is within the acceptable range, a significant number (nearly a third) of health posts over-reported the respective indicator.
- Consistency was also checked by taking a random sample record from the tally sheet with health cards or available data sources. Less than 50% of cases were available in the data source. This means that a service was recorded on the tally sheet but not in the cards and registers, indicating a possibility of over-reporting (Figure 1).

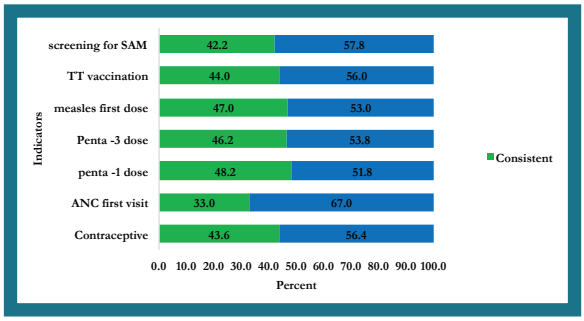

Figure 1. Record or data consistency between tally sheet and health cards or registers, by indicator

- Although there is a narrowing gap between the findings of the national surveys (representing the more acceptable results) and the routine HMIS reports in recent years, there is still a remarkable difference between these results.
- As the routine reports are being used as baselines, to set targets, the health facilities and districts have targets that are much higher than the survey findings. This is considered as one of the drivers for over-reporting.

The following are possible reasons for low data accuracy. As per this study:

- Perception of HEWs towards:
  - ✓ HEWs believe that report preparation is time-consuming;
  - ✓ HEWs believe that the report contains redundant reportable data elements or that the format asks for documentation of irrelevant activities;
- Gaps-related to capacity and workload of HEWs:
  - ✓ HEWs are not adequately trained on the CHIS tools, hold a related belief that the report forms are complex, and/or have difficulty understanding the English language;
  - ✓ HEWs are unable to update records due to a shortage of recording and reporting tools, including cards, and the failure of supervisory units to provide reporting formats to HPs in a timely manner;
  - ✓ The reportedly high workload of HEWs affects the quality of both their record-keeping and the services they provide;
- Gaps-related to standardization of CHIS:
  - ✓ The HC and WorHOs demand additional data because CHIS is not considered sufficiently comprehensive;
  - ✓ Use of non-standardized forms by HEWs and their inability to compile data using a standard register;
  - ✓ Failure to record all of the activities performed, while doing;

- Supervisors have an inadequate level of supervision, a lack of commitment, and/ or limited knowledge of CHIS and provide irregular and untimely feedback;
- The supervising units sometimes produce false reports, forcing HEWs to produce false reports to fill the gap.
- Having ambitious targets which base on already inflated baselines;
- Over-reporting is rewarded without enough scrutiny;

Implications

Due to the infancy of electronic Community Health Information System (eCHIS) implementation, the implication of the application in heavy lifting of the routine jobs of HEWs concerning issue tracking, data collection, report preparation, and result dissemination is not visible.

HEWs often get overburdened by persistent and urgent parallel reports from different program areas. This sense of urgency leads less attention to the quality of data and even cooking the data without any source.

Having such low-quality data across all indicators implies a problem in the design and implementation of the overall HEP monitoring system. This predominantly affects the practice of data use for improvement through creating mistrust towards the health information system. The issue of data quality also comprises program implementation gaps and wrong managerial and strategic decisions. The ultimate impact of poor-quality data is it compromises the quality of service. In general, the assessment has contributed to a better understanding of the low level of data accuracy and consistency at the health post level.

Similar studies in LMIC have shown similar results. Implementing a holistic approach of data collection, verification, and dissemination scheme that allows the usability of the data at the community level is critical.

Setting practical goals is difficult because of the wrongly inflated baseline. As a result, over-reporting tends to become a culture whereby HEWs and others are encouraged to do so.

Recommendations

In order to solve the aforementioned problems related to data quality, the following interventions should get priority and get implemented:

- ✓ Promotion, and then implementation, of resetting the baseline of health indicators. The achievements from the national surveys (eg. National HEP assessment, EDHS, SARA, etc) should be adapted to each context and used as baselines.
- ✓ Data quality should be incentivized through recognitions, parallel to the recognitions the health sector is giving for achievements on selected indicators.
- ✓ Setting a maturity model and implementing millstones in the HEP information systems development and deployment process. This should target digitization of the information system.
- ✓ Strengthen the routine data quality assurance mechanism, with the involvement of the community. Quality improvement methods and tools such as community-based data quality verifications (CBDV) should be implemented at HP and community levels to improve data use for improvement
- ✓ The capacity of HEWs and PHCU level workforce should be strengthened on data quality assurance and information use.
- ✓ Give due emphasis to the interoperability of health information systems at Health post, PHCU and Woreda health administration unit in order to leverage real-time data, information exchange and provision of feedback on data quality and service on timely basis.