EpiMetrics, Inc.

Harmonization of the Digital Hospital Indicator Reporting System

EXECUTIVE SUMMARY

Abstract

The Online Hospital Statistical Report (OHSR) are annual hospital reports submitted by the hospital to the Department of Health-Health Facility Services and Regulatory Bureau DOH-HFSRB to measure hospital performance and quality, and are necessary for licensing and policy making. Despite having the OHSR, health facilities must comply with multiple reports required by government agencies because of the differences in indicator definitions and redundant forms. This makes it difficult for hospitals to submit reports on time and the results often affect the efficiency and quality of the data.

To address these issues, this study aimed to review and harmonize hospital indicators to streamline the OHSR using adapted business process improvement methods. Focus group discussions and key informant interviews were done to document the data requirements of the relevant bureaus. Rapid review was done to identify the recommended indicators and standards of hospital performance evaluation based on literature worldwide. The information gathered from the interview was mapped and compared with the recommended indicators from the rapid review. Indicators were screened using redundancy analysis with an aim to compare and assess conflicting definitions and overlaps among the indicators found in the OHSR, in other hospital-based forms submitted to DOH, and those recommended by the rapid review.

After harmonization, from a pool of about 600 indicators, the set was reduced to 47 good quality, authoritative indicators validated and approved by the relevant DOH bureaus and piloted for feasibility in three DOH retained hospitals. Each indicator was organized and classified using the WHO results chain framework; Input & processes, output, outcome and impact.

This research is subject to several limitations. Consultations with bureau representatives were difficult due to the scheduling availability, and pilot testing at hospitals was limited due to time constraints. Despite these, the information gathered was enough to provide a minimum basic data set for the OHSRS. To further improve the system, the DOH-HFSRB should continue to review the harmonization of each DOH unit's data requirements and actively harmonize the information systems to improve the quality of hospital data. This will help the DOH-HFSRB to better manage the Online Hospital Statistical Report System which is vital for health licensing and for developing new policy to achieve a more responsive healthcare system.

Executive Summary

A. Introduction

A unified health information system is essential to improve the quality of healthcare in our country. To achieve this, the study aimed to help the DOH-HFSRB to harmonize the OHSR and the indicators required by the governmental health agencies. As the second phase of the initial performance assessment of the online hospital statistical reporting analysis, the study aims to consolidate the hospital statistical report form to help the DOH to better monitor and improve the OHSRS.

B. Methods

Adapted business process mapping was used to identify the different submission schedules and requirements to design a streamlined work plan. To achieve this, Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) with DOH program managers and PhilHealth managers were done. The information gathered from the consultation was documented, mapped and was assessed using redundancy analysis. This was done by comparing and eliminating duplicate indicators among the documents from the bureaus, PhilHealth Monthly Mandatory Hospital Report (MMHR), OHSR and indicators from rapid review. Rapid review was conducted to find standard and recommended hospital reporting indicators worldwide. Finally, hospital feedback was also done to assess the feasibility of the proposed indicators and to also learn how hospital data is collected and analyzed.

C. Results and Discussion

Upon analyzing the indicators and information gathered from both the Department of Health and PhilHealth, it was found that bureaus have overlapping indicators because they have different data requirements. Epidemiology Bureau (EB), Human Health Resource Development Bureau (HHRDB) and PhilHealth have their own management system and prefer to use their own system rather than integrate their data into the OHSR.

After gathering all the data from the interviews the pool of 600 indicators from the rapid review, OHSR and other hospital forms from the DOH units went through thorough levels of screening and redundancy analysis and was reduced to 54 authoritative and good quality indicators approved and validated by the relevant DOH bureaus. These indicators were piloted for feasibility in three DOH retained hospitals in Metro Manila. Based on the assessment, twenty three of the proposed indicators were readily accepted and five indicators were removed from the proposed list. As a result, the final list was reduced to 47 recommended indicators for the revised OHSR.

By decreasing and streamlining the hospital indicators to be collected, it was aimed that hospitals will be able to collect and submit data more easily and accurately. While this is still true, other factors also affect submission of data requirements. One is manual computation and encoding of data due to different databases, which is prone to error compared to automated computation on a standard system. Another is delays due to lack of standard EMR in preparing hospital reports, the limitations of iHOMIS and the lack of experienced ICD 10 coders. These problems cause delays in the process of submission of hospital reports and affect the quality of hospital reports. To be able to achieve good quality of data DOH-HFSRB should regularly monitor and review the OHSR submitted by the health facilities and develop a country-focused management framework designed to address the problems in health system performance.

D. Conclusions

With the goal of aiding in streamlining the process for hospital reports, the project study was able to harmonize the indicators and created a minimum basic data with an aim to produce relevant information that will guide decision makers in creating new policies and standards.

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