

Abstract

Background: Focus on the health care quality is on the rise. Sri Lankan health sector under guidance of Directorate of Health Care and Safety is moving towards improving quality. Quality data is needed to measure and assess health care quality. Data collection and information generation can be achieved through an information system. At the moment this is an inefficient process. Electronic information system can provide timely and quality information, but the system development is associated with high costs. Nevertheless, District Health Information Software version 2 is a free and open source platform that can be customized to build an information system. Purpose of this study was to develop electronic data collection platform for Directorate of Health Care and Safety to collect quality related data.

Methods: This study was conducted as an action research. Stakeholder requirements were identified, and data dictionary was developed. District Health Information Software platform customization was carried out according to the requirements. Project management principals were used during development of the software. Piloting was done using 2017 data. Some improvements were done based on the user feedback.

Results: Initial assessment showed potential to improve data quality. Based on requirements a functional Electronic Health Care Quality & Safety Assessment System was developed which can collect aggregate and analyse data and generate reports. The system can be scaled up to accommodate all the data needs of the Directorate of Health Care and Safety. Users were satisfied with the interface but requested further training.

Conclusion: This study emphasizes the potential of District Health Information Software version 2 to be used as Electronic Health Care Quality & Safety Assessment System. This study also shows that developing a data dictionary is an important initial step during designing phase of an information system.