DEVELOPING AN INFORMATION SYSTEM FOR ANALYSIS OF MORBIDITY AND MORTALITY STATISTICS FOR A GOVERNMENT HOSPITAL

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Information Systems are popular in most of the industries to acquire, store, process and disseminate information in order to obtain competitive strategic advantage in business today. Information systems can also be applied in state sector to improve efficiency of the systems which process bulks of information and to arrive at better conclusions to develop long term policies for the national development.

Ministry of Healthcare and Nutrition is one important sector, which develop policies based on information gathered from the national hospitals available island wide. Indoor Morbidity and Mortality Report plays a major role in this aspect. As the current process is totally manual, inefficient, time consuming approach, decisions are taken with lack of important information and with outdated information. These information not been used at the hospital level decision making either.

This report presents a decision support information system for a government hospital for analysis of Morbidity and Mortality, Outdoor and Clinic Statistics along with decision supportive report generation at the hospital level. The application provides facilities to handle patient, disease, investigation and clinical records for the identification of patients and disease relations. It is also capable of producing a series of charts, graphs and reports for the visualization of disease, patient and investigation analysis based on parameters such as age groups, gender, seasons and mortality etc. Further this application can be used in government hospitals to produce monthly, quarterly and annually IMMR for the preparation of annual health bulletin.

The system consists of role based accessibility, authentication and security, user friendly interfaces with input validation, storage and backup facilities to provide maximum efficiency for the hard working hospital staff.

Unit testing, integration testing, systems testing along with user acceptance testing results proves the accuracy, efficiency, relevancy and validity of the system developed.