Developing health data warehouse is complex and time consuming but is also essential to deliver quality health services. This paper depicts prospects and complexities of health data warehousing and mining and illustrate a data-warehousing model suitable for integrating data from different health care sources to discover effective knowledge. Cubillas et. al. proposed a model for improvement in appointment scheduling in health care centers [22].

According to Directorate General of Health Services (DGHS) under the Ministry of Health and Family Welfare (MoHFW): Total number of government hospitals under DGHS is 592 and government hospitals of secondary and tertiary levels under DGHS is 125[28], [29].

In computing, a data warehouse (DW or DWH), also known as an enterprise data warehouse (EDW), is a system used for reporting and data analysis, and is considered a core component of business intelligence. DWs are central repositories of integrated data from one or more disparate sources. They store current and historical data in one single place that are used for creating analytical reports for workers throughout the enterprise.

This thesis presents a study about a data warehouse architecture model for the Ministry of Health (MoH) in Mozambique. The study combines two areas: health care and information systems areas. It was conducted using two research methodologies: system development and case study of the Ministry of Health. The model aims at integrating data from different sources in the Ministry of Health. The fieldwork was carried out in the southern area of Mozambique, in the Ministry of Health in Maputo province and in two districts of Gaza province: Manjacaze and Chibuto. The choice of these sites for the fieldwork was based on the implementation of the District Health Information System project. This research is a contribution to the current process of data and information integration in the Ministry of Health. Integration of information and data warehouse (DW) technology are tools that offer resources to obtain managerial information needed to establish control over management process. Data warehousing aims at providing, managing and exploiting a set of integrated data for decision support within an organization.

The research methods applied to this study include interviews, observations, questionnaires, document analysis and analysis of existing systems. During the development of the model I applied part of the data warehouse life cycle. Taking into account the system development phases, I covered the first three phases of the data warehouse life cycle, in order to document the existing legacy systems, to create a model of data warehouse and to clean the data. As a result, I present a data warehouse architecture model for the Ministry of Health. The proposed model integrates different heterogeneous systems and provides integrated information for health workers (administrative personnel and managers).

The empirical findings proved that for the data warehouse project the Ministry of Health will need to put more effort on the data quality control, because the quality of data influence the decision-making process.