

## SUMMARY

### **Database Management System on Inpatient Care of Prambon Public Health Center (PHC) in Sidoarjo Regency**

Public Health Center (PHC) in performing its functions needs to own available data and information used for decision-making, both to improve services in PHC, and to make decision at the district level. PHC service performance is required to keep records and reports for generating information fast and accurately. Hence, data and the appropriate process are required. Until recently, Prambon PHC still applies conventional way for its databases. This rises some problems for input, process and output activities. Therefore, on the recording and reporting of inpatient care, database management systems on inpatient care is created in order to obtain precise, fast, and valid data. Inpatient care in PHC is a personal health service by staying at the inpatient care unit as the health center facilities. Database management system consists of the database which is a set of related data groups and organized. Its goal is to provide the interface in processing data for more user friendly. Database management system consists of the input, process, and output. The input provides what is required by the user, and the process collects data, and followed by the authority division for each health care worker.

The study was conducted with a qualitative approach with action design research that aims to develop practical knowledge in achieving the goal. The research was conducted at Prambon PHC in June. The object of research is the inpatient records and reports with informants and research subjects as subjects for testing the results.

In establishing the database management system, there were three stages, namely identifying the recording and reporting of activities for the ongoing inpatients, identifying data and information required which consists of the input, output and process. The second stage was designing DBMS composed of conceptual and physical design using WEB based applications with MySQL. Afterwards, the physical database was made, and then the test was conducted to assess the results of the DBMS proposed.

Description of recording and reporting the inputs was the types, data sources, human resources as well as means and methods used. The process was comprised of collecting and processing data, analysing and interpreting data, and also dissemination of information. Problems from recording and reporting were the absence of registered patients with inpatients so as to avoid repetition on patients' ID. This would result in inaccurate data causing the inappropriate process for calculating the number of diseases. Thus, the information was inaccurate, in addition to the use of conventional database preventing from quick and valid information.

Identifying the needs of users towards the database management system was the integrated registered patients with inpatients and their ID. This allowed to obtain accurate, fast and valid information. Designing the database application was conducted by first designing the user view, and a conceptual schema, namely data

normalizing, creating a data flow diagram, ERD, data dictionary, and designing the physical database. By using WEB-based applications with MySCL, the database management system was designed and created and then conducted with the test to determine the barriers for health personnels in applying the database application on inpatients.

The conclusion is that the database management system is an activity for inpatient recording and reporting consisting of inputs, processes and outputs. The inputs required that are found in the inpatient service are integrated registered patients with inpatient services and their ID. The inpatient database is in the form of a WEB-based application with PHP and MySQL which is able to generate output in the form of information needed by inpatient care workers.