



Hospital Management Information System

(Qualitative Study at the Batara Guru Belopa Regional General Hospital, Luwu Regency)

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Abstract

Information systems are an important factor for improving services as well as data savings for hospitals. Computerized service information systems are the right solution to solve problems. This research aims to determine the application of the Hospital Management Information System at Luwu District Hospital in improving service quality. The hospital management information system at Batara Guru Belopa Hospital includes three activities, namely input, process and output, which in its implementation is influenced by driving and inhibiting factors. The results of this research reveal that the RL 1, RL 2a, RL 2b reporting mechanisms created are incomplete and not in accordance with the Ministry of Health's regulations which should consist of RL 1, RL 2a, RL 2b, RL 3, RL 4, RL 5 and RL 6, So there are still obstacles in data processing, both manually and with computerized systems. The conclusion is that the resulting Management Information System does not support the reporting produced as feedback on the evaluation of the implementation of the programs being run.

Keywords: Management Information System, Input, Process, Output

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1. Introduction

With the existence of a computer-based information system that can assist in the medical service transaction process, avoid documents being easily damaged, retrieval of documents and medical information in them can be accessed easily and quickly and save resources in producing information quickly and on time for every level of service management. medical. With a hospital management information system, medical personnel do not need to think about patients' financial capabilities and do not differentiate between services to patients, because medical personnel will be given the same incentives for the same actions, and it does not depend on who the medical services are provided to. This pattern has been proven to be able to positively influence the performance of medical personnel which will ultimately improve the overall quality of hospital services. Apart from that, it can also maintain good and correct medical practice standards, be a very effective coordination tool, consistent control function, and increase revenue.

This research is in line with the results of research by Sari, Sanjaya and Meliala (2016) on "Evaluation of Hospital Management Information Systems (SIMRS) using the Hot-Fit Framework method (Sari, 2016)", where the results of mis-fit between technologies were obtained which had an impact on the perception of less benefits. for users. Also looking at the inhibiting factors, among others, SIMRS does not meet needs, the perception that using manual recording is easier and faster, and the perception that using SIMRS increases workload, and SIMRS output is considered not relevant to user needs.

Hospital management information systems in order to improve the quality of health services, where hospitals form organizations and work procedures for hospital information systems that can run hospital management information system programs based on the use of computers that use networks (Local Area Network/LAN). Installations that run the hospital management information system module, namely outpatient (poly), emergency department, radiology installation,





pharmacy installation, physiotherapy, laboratory installation, and medical records section.

The obstacles faced in implementing the Batara Guru Belopa hospital management information system are the Human Resources (HR) component in the form of psychological barriers. These obstacles can come from all levels, from the board of directors to the implementing parties, for example the board of directors is afraid of carrying out a relatively large investigation without certainty. The economic concept of health information has not been formulated clearly, where managers do not understand the need for hospital management information systems, unfamiliarity with information technology, difficulties in dealing with cultural and behavioral changes with the implementation of hospital management information systems, and a lack of mutual understanding between clinicians, managers and hospital management information system manager.

In its implementation at RSUD. Batara Guru Belopa is not running optimally due to problems in each installation, for example a lack of operator staff, operator negligence in the medical records section, so that there are still cases of duplicate data information, and service to patients is still slow. In this hospital the average Bed Occupation Rate (BOR) is 60%, so that if access to this information is implemented well and the service system can be improved, then patient satisfaction with the hospital can be maintained at least, so that the service system will automatically be of high quality.

Based on the background above, the author is interested in conducting research at the Batara Guru Belopa Hospital to find out how the implementation and obstacles in implementing the management information system are, because by providing maximum service to the community, improving the implementation of the hospital management information system which is still not running optimally, and services that can be improved, then automatically patient satisfaction with this hospital will also increase.





2. Research Methods

The research design used is qualitative descriptive. Exploring hospital management information systems from the concepts of data management processes, human resources and information utilization. To obtain facts that have high credibility regarding these matters, deep observation techniques, interviews and document review were used as research instruments to obtain the required data and information. The informants in this study are those who know about the implementation of hospital information systems in depth, namely: in the medical records section, consisting of: patient status search officers, patient reception officers, status printer officers, and reporting officers. In the outpatient clinic, in the medical support department, Kabid. planning and evaluation and one of the staff, as well as the management information system officer at the Batara Guru Belopa hospital.

Data collection was carried out through direct interviews with informants using interview guides and participatory observation in the field. Data management was carried out manually by grouping interview results and research objectives and then content analysis was carried out, then interpreted and presented in narrative form.

❖ Discussion

Human resources are inherent human potential whose existence in a person includes physical and non-physical potential. Physical potential is the physical ability accumulated in an officer, while non-physical potential is the ability of an officer accumulated from background knowledge, intelligence, justice, skills and human relations.

The results of this research show the emic concept which states that the number and qualifications of SIRS management staff should be increased and human resource development needs to be carried out. This emic concept is in line with ethical data which shows that one of the competencies of medical





recorders & service personnel is being able to collect data, manage data to prepare service efficiency at health service facilities, present information and carry out simple statistical analysis for management purposes, with a minimum educational qualification Diploma Three (DIII) (RI Minister of Health Decree Number: 377/Menkes/SK/III/2007 concerning Professional Standards for Medical Recorders & Health Information). This is because the available personnel have undergone training that supports their ability to carry out their work.

In the process of entering data or registering patients, the registration unit uses computer terminals that are connected to each other and are supported by network devices using a Local Area Network (LAN). The function of LAN itself is very important for the work of each person or unit within the Batara Guru Belopa hospital, apart from being able to use data together it also saves costs and time. Apart from that, the input sub system itself is important for data entry, so that from here further data processing can be continued. By collecting data electronically via an online network, the incoming data will be easy to process and control and become more applicable, where later the data in the patient registration data input will be processed and stored in a data base.

In the process of inputting patient data in the hospital management information system network, it is created in the form of statistics in the form of tables that must be filled in and in the form of a form with a predetermined column format and adjusted to the needs of each activity. Having a predetermined format will make it easier for the registration unit (patient registration) to enter patient data, thus speeding up the service process which is then sent both manually and online to the central computer (server), in this case the medical records unit.

Hospital data management is actually quite large and complex, both patient medical data and administrative data owned by the hospital so that if managed conventionally without the help of a hospital management information





system it will result in the following things: (a). Data Redundancy, recording the same medical data can occur repeatedly, causing data duplication and this results in an increase in data storage capacity. Service becomes slow because the data retrieval process is slow due to the large pile of files; (b). Unintegrated data, storage and management of data that is not integrated causes data to be out of sync, information in each part has different assumptions according to the needs of each unit/installation; (c). Out of date information, because when preparing the information it has to be recapitulated manually, the presentation of the information becomes late and the truth is less reliable; (d). Human Error, human weakness is fatigue, thoroughness and boredom, this results in frequent errors occurring in the process of recording and processing data.

In the data storage process, administrative data in the medical records unit is in the form of archives or documents and also in the form of files stored on the computer, where the data contains the patient's medical history. Then in data storage, every patient data recording that is made will be stored in each computer's database according to its function, namely the data or document storage function and the data function from which a report will then be created. This means that the officer who fills in this will be responsible if there are errors in writing or filling in the data processing process.

If the hospital management information system is successful and has a positive impact on the organization, the information system must first have an impact on individuals. In order to have an impact on individuals, user satisfaction must be achieved, in addition to the fact that the system has begun to be used routinely operationally. One of the benchmarks for system quality is: data accuracy, data up-to-date, integration of systems, and system sophistication, while one of the benchmarks for good information quality is accuracy, relevance, timely, relevant, understandable and readable. The results of this research show the emic concept which states that the output produced is only RL 1, RL 2 a and RL 2b reports. The form of information produced in the data





output of this health service information system is monthly, trimonthly, six-monthly and annual Routine Report Data, which aims to measure the quality of health service delivery according to applicable standards, so that in turn relevant applications can be sought according to the results. presentation and output from the Hospital Information System.

3. Conclusion

It is still felt that the availability of Human Resources personnel is lacking, which has an impact on final data processing officers who do not comply with the Ministry of Health format, so it is very necessary that before data processing is carried out, data corrections must be made first, either manually or computerized, so that sometimes incomplete or incomplete files are still found. suitable. The reports produced are in accordance with the provisions of the Ministry of Health (RL 1, RL 2a, RL 2b, RL 3, RL 4, RL 5 and RL 6) but only 3 (three) types are made (RL 1, RL 2a, RL 2b) , so that the Batara Guru Belopa Regional Hospital Management Information System is not running as optimally as it should.

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