

The Urgency Of Digitalizing Hospital Administration To Improve Patient Care

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Abstract.

Health information technology is used for various purposes in health care facilities. Benefits for health care providers include improving the quality of data and information, improve service quality, reduce data redundancies, reducing clinical errors, and accelerating access to patient data. The method of this study is a scoping literature review using international and national publications through various databases in terms of research articles, report, and working papers using keywords hospital and digital. The type of research used in this study is descriptive research with a qualitative approach.. SIMRS implementation can improve hospital efficiency in terms of process or service flow. This encourages reduced hospital operating costs, improve hospital performance, improve the ability of human resources in the hospital, and develop hospital organizations towards the ability of human resources in the hospital, as well as developing the hospital organization in a better direction.

Keywords: *Digitalizing, hospital, care and administration.*

I. INTRODUCTION

The changing way of life of people who are more aware of direct interaction makes hospitals need to improve by innovating when providing health services to the public. So now, hospitals need to improve themselves to answer the demands of the times and a society that continues to move fast in the digital era. That is why hospitals need to carry out digital transformation in the health sector so that services for patients are optimized [1]. In addition to the above, the strategic plan of the Ministry of Health of the Republic of Indonesia has also stipulated that one of the plans to achieve strategic goals through the objectives of the Health Services Program and National Health Insurance (JKN) at the Directorate General of Health Services is to increase access to quality basic and referral health services for the community with one of the achievement indicators being 100% of hospitals implementing integrated Electronic Medical Records (RME) by 2024. There are several aspects of digital transformation that hospitals can adopt. For example, cloud computing, tele-biometry, robotics, telemedicine, internet of things (IoT), blockchain, artificial intelligence (AI), big data analytics.

Before all of the above is done, first of all the most important thing is to change the form of medical record documentation to digital, and this is what is called EMR (Electronic Medical Record) because this is where data can be generated. Health information technology is used for various purposes in health care facilities. Technology technology is useful for improving quality of health services for both patients and providers. Benefits for health care providers include improving the quality of data and information, improve service quality, reduce data redundancies, reducing clinical errors, and accelerating access to patient data [2] One of the implementations of digital health in health care facilities is the use of a hospital management information system (SIMRS). information system (SIMRS). SIMRS is used to support service management patient service management and health information management in the hospital. SIMRS can be in the form of laboratory information system, pharmacy information system, radiology information system, electronic medical records, electronic prescribing, clinical decision support system, telemedicine, and so on [3]. This study will discuss how the theoretical description and pragmatic description of the use of information technology in hospitals. Hospital management information systems will theoretically be described based on the theories put forward by experts, or researchers who have done it first.

II. METHODS

The method of this study is a scoping literature review using international and national publications through various databases in terms of research articles, report, and working papers using keywords hospital and digital. The type of research used in this study is descriptive research with a qualitative approach. The data taken, identified in the following order: (1) data collection (2) data sorting (3) data analysis (4) conclusion making. As for data analysis, there is a predetermined sequence in accordance with the empirical steps taken, namely as follows: (1) Examination of data (2) suspected data findings, (3) Data confirmation (4) Diagnosis, (5) Action

III. RESULT AND DISCUSSION

The development of computer-based hospital information systems will form digital hospital which can be understood by referring to the definition of a digital company where almost all business processes and relationships with customers, suppliers, partners and internal parties, as well as the management of company assets which include and internal parties of the company, as well as the management of company assets which include intellectual property, key competencies, finance and human resources (HR) is done digitally[4]. Information Systems are the basic infrastructure for forming a digital hospital, because a hospital can be categorized as a digital hospital (administratively managerial), if hospital can be categorized as a digital hospital (administratively managerial), when four main SIs have been managed digitally, namely: Supply Chain Management Systems, Customer Relationship Management Systems, Enterprise Systems and Knowledge Management Systems.[5].

The establishment of Information System is of course not just automating old procedures, but organizing and updating and even creating new and better data flows. procedures, but organizing and updating and even creating new data flows that are more efficient, establishing new data processing procedures that are precise, systematic and efficient. efficient, establish new data processing procedures that are precise, systematic and simple, determine informative and standardized presentation models, as well as simple, determine an informative and standardized presentation model, and distribute information effectively. distribute information effectively [6].

The Role Of SIMRS

SIMRS is used by users to support various tasks and daily work. Users feel that the existing system helps to perform tasks and daily work. Hospital data management is actually quite large and complex, both medical data and administrative data owned by the hospital. patients and administrative data owned by the hospital so that if managed conventionally without the help of SIMRS, it will result in the following problems without the help of SIMRS will result in the following:

- a. Data Redundancy, recording of the same medical data can occur repeatedly, thus cause duplication of data and this results in an increase in data storage capacity. Services become slow because the process of retrieving data is slow due to the large number of files.
- b. Unintegrated Data, the storage and management of data that is not integrated causes data to be un synchronised, information on causes data to be out of sync, information in each section has different assumptions according to the needs of each unit. different assumptions according to the needs of each unit / installation.
- c. Out of date Information, because the preparation of information must be recapitulated manually, the presentation of information is late and less reliable.
- d. Human Error, the weakness of humans is fatigue, rigour and saturation, this results in frequent errors in the process of recording and processing data. This results in frequent errors in the process of recording and processing data that are done manually, especially if the amount of data recorded or processed is very large. Un synchronized data entry for the same patient or item will of course complicate data processing and often result in material losses. It will complicate data processing and often result in material losses for the hospital.

The use of SIMRS is based on user's profession, so that each user may use different information system. The following is overview of various information systems that exist in hospital. SIMRS is a

technology-based system that can process all information in the hospital. Hospital. In general, SIMRS is designed to integrate information related to financial, administrative, and service facilities. financial processes, administration, and service facilities. SIMRS is very important to be implemented in the Hospital industry because it can improve the efficiency of health services for patients, improve the productivity and performance of health workers, increase productivity and performance of health workers, improve data accuracy, minimized medical errors, and improve patient satisfaction [7]. Hospital Management Information System is a comprehensive and integrated system and has its own design which is used to manage all system that is integrated and has its own design which is used for the management of all aspects of the hospital, from aspects of the hospital, ranging from clinical needs, service facilities, finance, and administration [8].

The Four Major Information System Elements

a. Supply Chain Management Systems. This System Information serves to digitalized the Supply Chain Management Systems, so that the relationship between the hospital and its suppliers can be optimized. Activities planning, ordering and upply of raw materials, drugs and medical equipment can be coordinated well and efficiently. In terms of this supply chain, hospitals need to manage the flow of information with suppliers, in particular to ensure the availability of medical materials and equipment. This SI is expected to create efficiency in inventory management.

b. Enterprize System. This System of Information serves to computerise the Enterprise Systems, in this case the hospital system, so as to coordinate the key internal processes of the hospital, integrate data from the main internal processes of the hospital, integrating data from all units, such as front office, inpatient services, outpatient services, polyclinics, pharmacy, laboratory, finance, HR, investment and inventory. Computerization integrated computerization of each existing unit allows the manager to the objective condition of the hospital both as a whole and per unit through managerial reports that are unit through managerial reports that can be compiled at any time quickly and accurately, so that managers can make managerial reports that can be compiled at any time quickly and accurately, so that managers can make the right decisions and carry out quality control of services and supplies.

c. Customer Relationship Management Systems. This System Information functions to digitalise Customer Relationship Management Systems, so that it can integrate and maintain relationships between hospitals and patients, health service users and other related parties. Hospitals need to continuously build and maintain relationships with all parties involved, in order to create a sense of security and comfort for parties who parties who use medical services and carry out good cooperation in terms of fulfilment of hospital needs, development of medical services and provision of infrastructure.

d. Knowledge Management Systems. This SI serves to computerise Knowledge Management Systems, thereby supporting the recording, storage and dissemination of recording, storage and dissemination of knowledge and expertise. This system not only processes transaction data to produce information in the form of managerial reports, but also generates new knowledge. information in the form of managerial reports, but produces new knowledge. Managers can explore data warehouses to find data mining that provides new knowledge in the form of a description of patterns or that provides new knowledge in the form of a pattern or correlation of health service users in the hospital. health service users in the hospital they manage or patterns that occur in each unit.

IV. CONCLUSION

SIMRS implementation can improve hospital efficiency in terms of process or service flow. This encourages reduced hospital operating costs, improve hospital performance, improve the ability of human resources in the hospital, and develop hospital organizations towards the ability of human resources in the hospital, as well as developing the hospital organization in a better direction. for the better. However, the implementation of SIMRS is not free from obstacles and constraints. For this reason, hospital management should pay attention to these obstacles and constraints to be evaluated and take steps to overcome them. be evaluated and take steps to overcome them.

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