

EFFICIENCY OF USE MS. 2016 ACCESS TO SORT ACTIVE AND INACTIVE DOCUMENTS

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Abstrak

The medical record document sorting system is now developed using information technology. One of the software that can be utilized in the process of selecting medical record documents is Microsoft Access 2016. In the medical record unit, Dinoyo Public Health Center still uses manual recording especially for the retention of active and inactive medical record documents. Therefore, the authors took the initiative to make a medical record application based on Ms. Access 2016. To that end, this study was conducted to see the efficiency of the application of this medical record application at Dinoyo Public Health Center. This type of research is a qualitative research with a descriptive approach, because author's want to describe the application of Ms. based medical record applications, Access 2016. The instruments used were observation sheets, closed questionnaires, and brief interview guidelines. In addition, author tabulated simple statistical data to sharpen research results. Based on the results of the study, there was enhance in efficiency in the performance of officers in sorting active and inactive medical records documents. This increase shows that the use of the medical record application can improve the efficiency of sorting active and inactive medical record documents at Dinoyo Public Health Center.

Keywords: Medical Records, Outpatient Unit, Inpatient, Microsoft Access 2016

INTRODUCTION

Public Health Center is a very important basic health service facility in Indonesia. Public Health Center is a strategic unit in supporting the realization of changes in public health status towards the improvement of optimal health status. To realize the optimal degree of health, there should be an effort to develop a basic health service system that can meet the needs of the community as

consumers of these basic health services (Indrawan, 2016).

Public Health Center, as the first and foremost health service unit in the health service system, must undertake mandatory health efforts (basic six) and several selected health efforts that are adjusted to the conditions, needs, demands, capabilities, and innovations as well as local government policies. Public Health Center in carrying out comprehensive and integrated health efforts to improve, prevent, cure and recover, along

with the necessary supporting efforts. The availability of resources both in terms of quality and quantity greatly affects health services (Gantini & Griffin, 2018).

The implementation of medical records is still not perfect, medical records are still considered unnecessary by some health services even though the quality of medical records is a reflection of good or bad health services. Medical record is one of the data that can be used in proving malpractice cases in court. The medical record is also one of the documentations of the patient's condition and the contents of the medical record are medical secrets that must be kept confidential by every health worker (Griffiths et al., 2014).

The purpose of making medical records is to obtain data from patients regarding their medical history, past and present, as well as the treatment given to patients to improve health services. Information about the patient's identity, diagnosis, history, examination history, and treatment history must be kept confidential by doctors, dentists, certain health workers, management officers, and leaders of health service facilities. The head of the health facility is responsible for loss, damage, forgery and or use by persons or entities that are not entitled to medical records (Deniger et al., 2015).

From the results of observations made by the author's in Dinoyo Public Health Center in Malang, there are some problems that often occur, namely because there is no printed tracer paper on the filing rack there may be an obstacle in searching for medical records of patients. This is one of the factors causing the occurrence of medical record documents missing because there is no clue of medical record documents out on the tracer. Therefore, to support patient services, we need a technology that is more modern and more functional.

In the Dinoyo Public Health Center application, there is still no data available between DRM data for active and non-active patients. then the author's want to develop an existing application Only by adding data on active and non-active DRM information on the health center application, to make it easier in retention time. An active medical record file is a medical record file which is still in use for the service of the patient

concerned. Non-active medical record file is a medical record file that is no longer used for the service of the patient concerned for the period registered in the JRA table (Archive retention schedule)

Public Health Center can also make a retention schedule policy (the activity of separating between medical records documents that are still active and non-active) for the needs of the Public Health Center. To realize our expectations in this study, the authoress's used an application based on Microsoft Access 2016 for the development of Public Health Center applications.

Microsoft Access 2016 is a relational computer database application program and is used to handle the creation, manipulation of data and also as a database for basic web applications. One of the advantages of Microsoft Access from the programmer's perspective is its compatibility with the Structured Query Language (SQL) programming language (Moon, 2009). The importance of these systems can be used in health centers or hospitals, related to the progress of health services. The authors are interested in analyzing the system in Malang City Dinoyo Public Health Center. And take the initiative to develop the application that already exists.

Medical Record contains understanding, both written and recorded about: identity, history, physical examination, laboratory, diagnosis of all services and medical actions provided to patients and good care that is integrated, outpatient, and who get emergency services (Fatimah Haniyah , 2009). In the explanation of Article 46 paragraph (1) of the Medical Practice Law, which is requested by a medical record that contains records of the patient's identity, examination, treatment, actions and other services that have been provided to the patient.

According to the Minister of Health Regulation No. 749a / Menkes / Per / XII / 1989 medical records are responsible for medical records containing records and documents about patient identity, examination, treatment, actions and treatments provided to patients in the field of health services that are updated.

The purpose of medical services is to support the achievement of administration in order to improve health in hospitals. Without the support of a good and accurate medical record management system, there will not be an orderly administration of an approved hospital, while the administration is one of the determining factors in-hospital services.

There are 2 (two) Medical Record Document Storage Systems, namely Centralized and Decentralized.

- a. Centralized, Outpatient Medical Records (polyclinic visits) and Inpatient Medical Records are stored in a single Medical Record Document.
- b. Decentralization, In Medical Record Document storage system where there is a separation between the Outpatient Medical Record Documents and Inpatient Medical Record Documents.

Filing room is a place to store medical record documents for outpatients, inpatients and is one part of the medical record unit responsible for storing and returning medical record documents. Shelves for storing good medical records must be protected from physical, chemical, biological damage, such as mice, termites, and others. It also must be protected from direct sunlight, leakage due to rain and others. The main task of the filing section is (Latapí et al., 2021):

- a. Keep medical record documents with certain methods by the hospital or Public Health Center policy.
- b. Retrieve medical record documents for various purposes.
- c. Retention of medical record documents by the provisions established by the health service facility and Separate storage of inactive medical record documents with active medical record documents. Assist in assessing the use of medical records. Keep records of medical records preserved.
- d. Assist in the implementation of the destruction of forms.

The Medical Record Document Alignment System is divided into 3, namely Alphabetical, Alphanumerical and Numerical (numbering). The system that is often used in the Medical Record Document Alignment is a Numerical Alignment system. This system is divided into 3 (Li et al., 2021):

- a. Direct Number System (straight numerical filing system). It the storage of Medical Record Documents in sequence in accordance with the serial number of the Medical Record. For example, 220910, 220911, 220912, and so on.
- b. End Number System (terminal digit Filing system). It is a system that uses numbers with 6 numbers grouped into three. The first number consists of two groups of numbers and is located at the far right, the second number consists of two groups of numbers that are located in the middle, and the third number consists of two numbers that are located at the far left. In storage with the final

number system there are 100 first digit groups namely 00 to 99. in storing, the officer must look at the first number and bring the Medical Record to the storage rack area for the first number group concerned. In this first number group, the Medical Record is adjusted according to the order of the location of the second number, then the medical record is stored in sequence according to the third group of numbers, so that in each group the number stored in the third number group is always different.

- c. Middle Number System. In the middle number storage system, Medical Records are sorted by pairs of numbers. The middle number is the first number, the leftmost number is the second number, and the rightmost number is the third number.

Microsoft Access (Microsoft Office Access) is a relational computer database application program intended for home and small to medium-sized companies, which is used to handle data creation and manipulation and is also used as a database for basic web applications. This application is a member of several Microsoft Office applications, besides of course Microsoft Word, Microsoft Excel, and Microsoft PowerPoint (Winarno & Isnaini, 2019; Adamik & Nowicki, 2019).

Microsoft access is a database-making application, easily and concisely correlating tables, queries, forms, reports, macros and switchboards (Burke et al., 2015). Based on the above understanding, Microsoft Access is a relational computer database application program that can relate tables, queries, forms, reports, macros, and switchboards easily and briefly for home and small and medium-sized companies.

Microsoft Access can use data stored in Microsoft Access format, Microsoft Jet Database Engine, Microsoft SQL Server, Oracle Database, or all database containers that support the Operation Database Connectivity (ODBC) standard, which is an open standard for connectivity between database machines. Access also supports object-oriented programming techniques, but cannot be classified into object-oriented programming tools (Burianova & Paulik, 2014). Microsoft Access is used mostly by small and medium businesses, but the use of Access is not recommended, given that there is a Microsoft SQL Server that has a higher ability (Heudorf et al., 2012).

Microsoft Access allows relatively rapid development because all database tables, queries, forms, and reports are stored in their database files (*.MDB). To create a Query, Access uses Query Design Grid, a

graphical program that allows its users to make queries without having to know the SQL programming language. The programming language available in Access is Microsoft Visual Basic for Applications (VBA), as is the case in some Microsoft Office applications (Cha & Park, 2011).

METHOD

In this study, the authors used qualitative research. Qualitative research is an approach that is also called an investigative approach because authors usually collect data by face to face and interact with people in the study (Creswell, 2012). Qualitative research can also be intended as a type of research whose findings are not obtained through statistical procedures or other forms of calculation (Notoadmodjo, 2005). Even so, the data collected from qualitative research make it possible to be analyzed through a calculation.

The study was conducted at the Dinoyo Public Health Center in Malang, especially on the computer system. This research is focused on: the development of a medical record application system, in order to create the requirements of officers regarding medical record information to support fast and accurate service and objective and systematic reports.

In this paper, the author's uses the ADSI method, ADSI is FAST (Framework for Applications of System Technology) defines the stages to identify and evaluate problems, opportunities, obstacles that occur, and the needs that are expected so that improvements can be proposed improvement. The stages in FAST are based on the problems and opportunities faced with the expected improvements from the developed system.

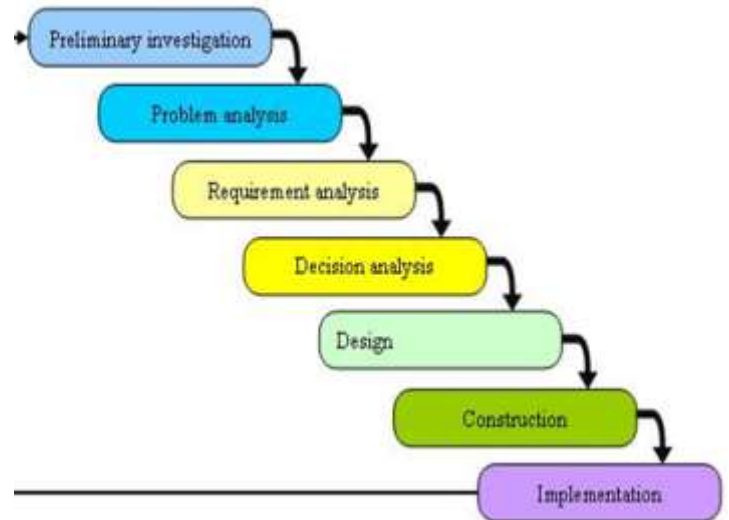


Figure. 1 Flowchart of System Development Using the FAST Method

FAST itself is closely related to system analysis and design through PIECES (Performance, Information, Economics, Control, Efficiency, and Service). PIECES help the FAST method at the problem analysis and system requirements stage, including:

- Performance (performance), an increase in the performance of the new system so that it becomes more effective measured by the amount of work that can be done at a certain time (throughput) and response time.
- Information (information), an increase in the quality of information presented.
- Economics (economy), an increase in the benefits or benefits or a decrease in costs incurred.
- Control (control), an increase in control to detect and correct errors and fraud that will occur.
- Efficiency (efficiency), an increase in operating efficiency.
- Service (service), an increase in services provided by the system

RESULT & DISCUSSION

The medical record unit of Public Health Center Dinoyo, still uses manual recording especially in retention of medical record documents.

Therefore, the author's's took the initiative to create a medical access application based on Microsoft Access 2016. In order to facilitate the officers in finding medical records documents Active and Non-Active, and the creation of services quickly and accurately. Format design: Patient data, doctor data, ICD 10 data, medical record data and retention in the medical record unit using Microsoft Access 2016-based application.

NO. LUT	Diagnosis	Kode ICD
1	Abnormalitas gan	R32.4
2	Abnitas dan kerusakan retina	H32
3	Abnitas Retina / Cornea	H32.2
4	Abortus uterini	O3A.0
5	Abortus infektus	O68.0

Figure 4. ICD 10 Table

Table ICD 10 is used to simplify the coding process of diagnosing a patient's disease. Table ICD 10 consists of data: Diagnosis, ICD Code.

NO. LUT	Status	Nama	Nik	No. Rekam Medis	Alamat	Rtg	Rwk	Kota	Kepala Keluarga	Tanggal Lahir	Jenis Kelamin	Status
1	Pasien Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
2	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
3	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
4	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
5	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
6	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
7	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
8	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
9	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
10	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000

Figure 5. Medical Record Table

In this medical record, the table contains the history of patients from the initial patient treatment to the end of treatment. The medical record table consists of data: ID, Patient Status, Nik, Medical Record No., Queue, Region Code, Region, Patient Name, Gender, Date of Birth, Age (Month, Day, Year), Occupation, Education, Religion, Address, Rt / Rwk, City, Head of Family, Guarantor, No BPJS, Type of Service, Poly Purposes, Telephone No, Visit Date, Visiting Hours, ICD, Diagnosis, Therapy, Anamnesa, Doctor.

The problems we face in making programs are: after determining the display design, we also have difficulty in making the code, because each button that we make has its respective functions such as: connect the display link from form A to form B, display automatic visit times, automatically display active document information, print automatic status according to patient ID, create a

NO. LUT	Status	Nama	Nik	No. Rekam Medis	Alamat	Rtg	Rwk	Kota	Kepala Keluarga	Tanggal Lahir	Jenis Kelamin	Status
1	Pasien Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
2	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
3	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
4	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
5	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
6	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
7	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
8	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
9	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000
10	Lansia	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000	00000

Figure. 2 Patient Table Patients

The patient table contains data of patients who visited Public Health Center Dinoyo Malang. The patient table consists of data: ID, Patient Status, Nik, Medical Record No., Queue, Region Code, Region, Patient Name, Gender, Date of Birth, Age (Month, Day, Year), Occupation, Education, Religion, Address, Rt / Rwk, City, Head of family, Phone Number.

Kode_dokter	Nama_dokter	Spesialis	Alamat	Telepon
00001 and surname	multa	j cardi	0837423233	
00002 Yita	gigi	j anak	0837827277	
(New)				

Figure. 3 Doctor's Table

The Doctor table contains the data of Doctors who work in Public Health Center Dinoyo, Malang. The Doctor Table consists of data: Doctor's Code, Doctor's Name, Specialist, Address, Telephone.

login script according to the user ID. There are some difficulties that we face in making scripts outside the button such as: making automatic searches of patient history according to the patient's identity, combining/synchronizing Table A to Table B and making reports according to patient IDs. After inserting scripts on the button or outside the button, there are also some that must be considered in installing an application on a user's computer for example: the programmer must know the minimum specifications in (windows) for the Ms.access 2016 application so that it can be installed on a computer and can run as desired.

The issue of corporate social responsibility (CSR) has been around for a long time in developed countries. In Indonesia, this issue has only recently received intense attention from various groups (companies, government, academics, and NGOs/NGOs). The government's response to the importance of CSR can be seen, for example, from the issuance of Government Policy through the Ministerial Decree. BUMN Number: Kep-236/MBU/2003, which requires all BUMN to set aside a portion of their profits for community empowerment, known as the Partnership Program and Community Development Program (PKBL), whose implementation was followed up by the Circular Letter of the Minister of BUMN, SE No. 433/MBU/2003 which is the implementation guide of the aforementioned Decree of the Minister of SOEs (Badaruddin, 2008). Likewise, with the issuance of Law No. 40 of 2007 concerning Limited Liability Companies which contains articles on corporate social responsibility.

Corporate Social Responsibility is defined as the company's responsibility to stakeholders to act ethically, minimize negative impacts and maximize positive impacts covering economic, social and environmental aspects (triple bottom line). This has shifted the philanthropic concept (sheer generosity) into the concept of community empowerment. This change was confirmed by the results of the Earth Summit in Brazil in 1992 which stated that the concept of sustainable development by taking into account the triple bottom line must be carried out (Wibisono 2007).

Based on observations we have made during the Survey at Dinoyo Community Health

Center, we found several problems with the unavailability of printed tracer paper on outpatient or inpatient filing shelves. So, it becomes an obstacle when searching for a patient's medical record. This is one of the factors causing the occurrence of medical record documents tucked. Finally, we took the initiative to integrate Tracer printing in the Application for patient registration.

CONCLUSION

The medical record unit of Public Health Center Dinoyo, it still uses manual recording especially when retention of medical record documents. Therefore, the author's'ss took the initiative to create a medical access application based on Microsoft Access 2016. In order to facilitate the officers in finding medical records documents Active and Non-Active, and the creation of services quickly and accurately. Format design: patient data, doctor data, ICD 10 data, medical record data and retention in the medical record unit using Microsoft Access 2016-based application.

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