# INFORMATION AND COMMUNICATION (ICTs) USE FOR EFFECTIVE RECORDS MANAGEMENT IN HEALTH MINISTRY DELTA AND EDO STATE.

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#### **Abstract**

The study investigated information and communication (ICTs) use for effective records management in Health Ministry in Delta State and Edo State. The descriptive survey research design was employed for the study. The total population of the study is 116 staff of health miniseries in Delta and Edo States. The total enumeration sampling techniques was used for the study since the population size was manageable. The instrument use for the study. The data obtained from the administration of the questionnaire were analysed using descriptive and inferential statistical. The finding of the study reveals the types of ICT in health ministry this includes; internet, world-wide web, CD-ROM, laptop and desktop computers. The finding also reveal that the extent of usage of information and communication techniques for managing the various records in the health ministry is low, due to the challenges it faced which include; improper management of paper work, inadequate ICT skills, lack of awareness, network failure etc. Recommendation include among other that health works and ministries in general should endeavour to embrace and apply ICT for records management; funding should be made readily available by government or through internally generated revenue to train staff and purchase state of the art ICT facilities including maintenance for achieving an ineffective and efficient records management process.

Keywords: Information, communication technologies, record management and health

## Introduction

The health department is that part of government that focuses on issues related to the general health of the citizenry (Michael, 2011). In otherwords, it is that ministry which is concern with the formulation and implementation policies related to health. It's specialized on different department of health care and such department includes the family health department, which is concerned with reproduction creating awareness on maternal neonatal and child health. It is of note, the health ministry is on important ministry among ministries, therefore, their records needs to be organized in such a

way that it will readily available when needed.

Record-keeping has become one of the building blocks for good standard of information delivery in our societies; hence, making records available is of paramount importance for information retrieval and dissemination. represents proof of existence and can be used to recreate or prove a state of existence, regardless of medium characteristics, because they are either created or received by an organization in pursuance of or in compliance with legal obligations, or in the transaction of business (Kenneth, 2015) the International Council of Archives (ICA, 2005) defined

record as information produced or received in the initiation. Conduct or completion of an institutional or individual activity and it comprises content, context and structure sufficient to provide evidence of the activity. Record management therefore, is the management of information resources in a manner that make information easily accessible, protected, stored and correctly disposed when necessary (National Archives and Record Service of South Africa, 2009). The use of ICT for health records management will create new and more effective service delivery which might likely increase the capacity and rapid, safe, effective provide affordable health care services. Electronic health information system (HIS) can help minimize time spent in recording data (Sheker and Otto, 2012). The position of Sheker and Otto is supported by Ojo (2012) that electronic health record will give doctors, patients and other health care providers quick and easy access to patient's medical records facilities. Furthermore, the effect of ICT managing health ministry records will be substantial, due to most of its interaction with information. These effect will make impact upon the health information management role. Therefore, the ability to use the ICT facilities by health workers their capacity to skills and effectively using the ICT facilities will stand as a factor in determining their patterns of information usage.

The level of managing ICT- Health based system's records does not only influence the user's acceptance of the system, but may greatly influence the diagnosis and treatment processes in health care centres. Other constraints to effectively make use of ICT for records management is as a result of inadequate provision of infrastructure and insufficient ICTs; its knowledge therefore limits the services of health Ministry workers.

#### **Objectives of the Study**

The objective of this study is to investigate the usage of ICT for record management in the Ministries of Health in Delta and Edo States, Nigeria. The specific objectives are to:

- Determine the ICT used for effective records management in health Ministry in Delta and Edo States;
- ii. Establish the extent of ICT usage in managing records.
- iii. Determine the types of records that is managed.
- iv. Examine the challenges faced towards the use of ICTs for effective records management.

## **Research Questions**

The study was guided by the following research questions:

- i. What are the ICTs used for effective records management in health ministry?
- ii. To what extent are the ICTs used in records management in health ministry?
- iii. What kinds of records are managed in health ministry?
- iv. What are the challenges faced in using ICT for records management?

#### **Hypothesis**

The following hypothesis was raised to guide the study

1. There is no significant relationship between the usage of ICT and records management in health ministry both in Delta and Edo State.

#### **Literature Review**

The advent of ICTs has transferred the way many organisations create, store, disseminate and use records and information. Mutula (2006) defined ICTs as instruments that smooth the progress of communication, processing and spread of information by electronic means.

The consequence of e-government has been the increase in the volume of electronic records being created in organisations (Nengomasha, 2009).

According to Medicine Net (2016); Stedman's Medical Dictionary (2016); Kate (2004); Roth (2014); Judson, Karen, Harrison and Carlene (2010), Brotherton (2015); and Brodnik Melanie, McCain and Mary (2009), some of the general records that are tagged important in the health ministry or sector includes but not limited to, medical history, surgical history, obstetric history, medications and medical allergies family history etc.

Employees need guidelines to manage all the information resources on their desktops, in their files and in the computer systems with which they interact. They also try to determine which of those information resources are records and how much of that information is

subject to open records laws. Kemoni and Wamukoya (2000) stated that effective records management system provide information required for the proper functioning of organisations. On the otherhand, poor records management can be risky to organisations. Djorka and Conneen (1998)summarized consequences of poor records management follows; "an institution paperwork is poorly managed, the flow of record through the lifecycle is retarded, chaotic or non-existence. Records and the information they contain are difficult to and costly duplication retrieve paperwork is a frequent occurrence. The net effect of poor management is a decrease in the efficiency of the institution and an inflation of its operating costs".

## Research Methodology

The study adopted the descriptive research design and the population of the study is 116, health ministry staff from both Delta and Edo State health ministry. Delta state health ministry has a total of sixty-four (64) staff while Edo state has fifty two (52). The total enumeration sampling technique was used for the study since the population is small and manageable (Baxter and Babbie, (2004). The instrument used in collecting data is a structured questionnaire.

This data obtained from the study were analysed using descriptive and inferential statistics. The Pearson's Product Moment Correlation Coefficient (PPMC) was used to test the hypothesis.

#### **Data Analysis and Discussion**

**Research Question One:** What are the ICTs used for records management in health ministry?

Table 1: ICTS used for Record Management in Health Ministry

S/N	ICTs	Frequency	Mean
1	Internet	113	3.01
2	World Wide Web	112	2.87
3	CD-ROM	112	2.50
4	Laptop	113	3.09
5	Desktop computers	111	3.08
6	Electronic books	112	2.23
7	News group	113	1.83
8	telnet	113	1.83
	Aggregate Mean		2.55
	Criterion Mean		2.50

Table 1 shows that the aggregate mean of 2.55 is greater than the criterion mean of 2.50, it can be concluded that information

and communication technologies are used in the health ministry of Delta and Edo State.

**Research Question Two:** To what extent are the ICTs used in records management in health ministry.

Table 2: Extent of ICT usage in Records Management in Health Ministry

S/N	Extent	Freq	VHE	HE	LE	VLE	Mean
1	ICT has and is helping health ministry	113	20	24	50	19	2.40
2	Curb the level of information explosion	112	15	24	48	25	2.26
3	Achieve set goals and objectives timely	110	14	18	52	26	2.18
4	Progress with regards to effective strategies on	113	14	17	57	25	2.18
	records management with the use of ICT						
5	Increased collaboration and information sharing	113	11	14	57	31	2.04
6	Enhancing public operation	113	18	14	58	23	2.24
7	Prompted government and business entities,	112	15	19	51	27	2.20
	across the world to take advantage of ICTs						
8	Improved access to services	113	16	17	54	26	2.20
9	Inter-relationship among states.	113	13	14	49	37	2.03
	Aggregate Mean	·					2.19
	Criterion Mean						2.50

Table 2: reveals that aggregated mean of 2.19 is lesser than the criterion mean of 2.50. It can be concluded that the extent of usage of Information and Communication

technologies for record management in the health Ministry of Delta and Edo States under study is low.

**Research Question Three:** what types of records are managed in health ministries?

**Table 3:** Types of Record managed in health Ministry

S/N	Types of Records	Frequency	Mean
1	Medical history records	113	3.05
2	Surgical history records	113	3.07
3	Obstetric history records	113	2.76
4	Medications and medical allergies records	112	2.82
5	Family history records	112	2.91
6	Social history records	113	2.63`
7	Habits records	113	2.15
8	Immunization history records	111	3.02
9	Growth chart and developmental records	113	2.68
	Aggregate mean		2.78
	Criterion mean		2.50

Table 3 shows that the aggregated mean of 2.78 is greater than the criterion mean of 2.50, it can be concluded that different

types of medical related records are being managed in the health ministry of Delta and Edo State.

**Research Question Four:** What are the challenges faced in using ICT for records management in the Ministries?

**Table 4:** Challenges of the usage of ICT for records management in government Ministries

S/N	Challenges	Freq	Mean
1	Paper work is poorly managed	113	3.15
2	Inadequate ICT skills	113	3.19
3	Lack of awareness	113	2.95
4	Network problem	111	2.95
5	Tendency of network spam	113	2.89
6	Insufficient funds	113	2.74
7	Constant power failure	113	2.85
8	Lack of ICT facilities materials/gadgets	111	3.01
9	Lack of monitoring and maintenance of ICT related	113	3.02
10	Government limited focus on ICT	113	3.07
11	No established framework on ICT needs	113	3.03
	Aggregate mean		2.98
_	Criterion mean		2.50

Table 4 show that the aggregate mean is greater than the criterion mean of 2.50, it can be concluded that there exist different

challenges in the use of ICT for records management in the health Ministry of Delta and Edo States.

#### **Hypothesis**

The following hypothesis was raised to guide the study.

1. There is no significant relationship between the usage of ICT and records management in health ministry both in Delta and Edo State.

Table 5: relationship between the use of ICT and Records Management in Health Ministries.

		Use of ICT	Records Management
Use of ICT	Pearson Correlation	1	.30
	Sig. (2 tailed)		.002
	N	108	108
Records management	Pearson Correlation	.301**	1
	Sig-(2-tailed)	.002	
	N	108	.108

Table 5 shows that the Pearson's Product Moment Correlation Coefficient9r) is significant at 0.02 level which is lesser than the significant level of 0.05 upon which the hypothesis was tested. This finding indicates that there is positive relationship between the usage of ICT and records management in the ministry of health in Delta and Edo States.

#### **Discussion of the Finding**

The first findings revealed some of the ICT's used for managing records in health Ministry which includes the internet, worldwide web, CD-ROM, laptop and desktop computers. In light of these ICTs Navas-Sabater, Dymond and Junutumon (2002) supported the findings that ICTs help in promoting productivity gains, efficiency and growth and thus improve public service delivery. In otherword ICT appliances support proper management of records in health ministry which aid the timely delivery of information (Rodriguez and Wilson, 2000) supported this fact that only few years ago there was no way to send free message through to the phone, but now people uses social network for free communication e.g. viber, Skype, Facebook and it also save time and money for petrol as people can go shopping from home through online shopping. Similarly, the findings revealed that health ministry have made very little progress with regards

to putting in place the guideline, facilities strategies for proper records management. Another finding shows that health ministry has made very little progress with regard to putting in place and guidelines strategies management of records. Reid (2005) posits that before the 1990s, the management of records using ICT was not well addressed and those computers were only use as "facilitative tools to hasten the creation of documents" and these will create surprise about the fact that government still give little or no concern about the usage of ICT for proper records management in health ministry.

Furthermore, the findings revealed the various types of records created in health ministry, it cut across medical, surgical history, obstetric history, medications and medical allergies, family social, immunization and growth chart and developmental records. Muhealth care (2016) stated that this records necessary for both health staff, patient, family and the society in general because they includes information about individual life style, physical being, treatment results, allergies and every other risk factor which are important or detrimental to a patient wellbeing.

However, the finding identify some factors militating against the use of ICT

for records management in health ministry and they are, but not limited to improper management of paper work, inadequate staff skill which result from lack of awareness, network problem, tendency of network life spam, insufficient fund, constant power failure, lack of ICT facilities and proper framework and government limited focus on ICT in general as a pivotal force for proper service delivery. This was supported by Djorka and Conneen (1998) that ministry where paperwork is poorly managed, the flow of records is retorted, chaotic, or nonexisted and as such, the net effect of poor management is a decrease in the efficiency of the ministry and an inflation of its operating costs.

#### Conclusion

The study concluded that the types of ICT in health ministry includes: internet, World Wide Web, CD-ROM, laptop and desktop computers. The extent of usage of information and communication technologies for managing the various records in the health ministry is low, due to the various challenges its faced and these includes: improper management of paperwork, inadequate ICT skills, lack of awareness, network problem, tendency of network spam, insufficient funds, constant power failure, lack of ICT facilities, lack of monitoring and maintenance of ICT related material.

#### Recommendations

In line with findings of this study, the following recommendation were made:

1. Health workers and ministries in general should endeavour to embrace and apply ICT for records management

- by developing and updating their skills in terms of records management in general.
- 2. Government should constantly provide seminars and other ICT related programmes in order to create an enabling environment for staff to develop and update their ICT awareness and this will help ministry in carrying out their day to day activities.
- 3. Health Ministry and government ministries in general should know that ICT have come to stay and should be improve daily. Therefore, improved services delivery will help curb some of the challenges in the usage of ICT for proper records management.
- 4. Funding should be made readily available by government or through internally generated revenue to train staff and purchase state of the art ICT facilities including maintenance for achieving an effective and efficient records management process.

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