Assessment of Information Technology Literacy Skills and Training Needs of Health Records Management Professional in Federal Medical Center Owo

CHAPTER ONE

INTRODUCTION

1.1   Background Information

In the 21st century, quality information is a significant element in decision-making. There is a massive power in using technology to produce and communicate valuable and reliable information to increase the delivery of health services in all parts of the world. An efficient health care system is essential for developing any country. However, access to quality health care varies across countries, socioeconomic groups, and individuals. Access to health care is determined by different social and economic factors and the health policies and plans concerning the geographic location (Reinartz, 2004).

In some countries, health care planning is a shared responsibility among market participants, whereas, in others, planning is a core responsibility of the government or other coordinating bodies. With the government's commitment and effort to support technology advancement, most functions should be digital in this technological age to have efficient and proper work plans. The introduction of electronic systems will promote remote data collection and monitoring, communication of any disease and epidemic outbreak tracking, education, awareness, and diagnostic and treatment support. In addition, quality customer service delivery in the healthcare industry has a substantial economic impact on the long-term goal. It comprises the use of newer and more effective technology that helps in saving time and provision of functional, efficient, effective and quality health services (Tam, 2005).

Electronic Health Records (EHR) management systems are currently receiving considerable attention for sharing patient information, improving processes and optimizing patient outcomes in developing countries (Johnson, 2010). In the past few years, technology has taken up a more significant role in healthcare delivery as the true reflection of the introduction of Information Communication Technologies (ICT) into the global health care system. As a result, many private and public-funded health facilities commit massive resources to develop an EHR management system globally.

There is significant interest globally in the potential of EHR management systems to cut down the cost of healthcare and improve significantly the quality of services provided in various health facilities

(Holroyd-Leduc, Lorenzetti, Straus, Sykes, & Quan, 2011). Deutsch et al. in 2010 cited EHR programs as a perceived opportunity for improving the health sector. On the other hand, these programs are complex and costly, especially in the developing world, where

health care expenditure is the patient's sole responsibility. In 2010, Deutsch and colleagues further evaluated EHR programs in five advanced nations (England, Germany, Canada,Denmark, and Australia). They established five critical areas for effective implementation: acceptance and change management, demonstration of benefits and funding, project management, health policy-related goals, and implementation strategy (Deutsch, Duftschmid,& Dorda, 2010).

In the developed part of the world, EHR implementation has been encouraged by government inducement schemes to serve as a motivation for performance in various facilities. An example is the Health Information Technology for Economic and Clinical Health Act of 2009 in the United States. Health care providers have received some support for the costs of information technology (IT) systems in compensation for increasing their systems (Jha, 2010). However, the situation is different in the developing world, where similar facilities struggle with limited resources, insufficient data collection systems, the lack of incentives to collect health information, and inadequately trained personnel for effective system implementation (Muinga,et al., 2018).

In recent years, the implementation of EHR management systems has been recognized in Sub-Saharan Africa because of the belief that these systems can improve health care quality through reliable and available patient information irrespective of the facility the patient is receiving health care service. Thus, effective EHR management systems play a crucial role in reducing medical errors by providing point-of-care information to support decision-making by alerting a doctor to drug interactions through an electronic prescription platform (Bates, et al., 2001). Therefore, this study seeks to assess the key factors influencing the implementation of EHR management systems in Nigeria.

1.2 Statement of the Problem

The introduction of health information technology as a comprehensive shift from the manual system may provoke antipathy in a paper-based system like Nigeria's, according to the technology acceptance model (TAM) principle which '…posits that perceived usefulness and perceived ease of use determine an individual's intention to use a system with intention to use serving as a mediator of actual system use (Appalachian State University 2013). New technologies such as personal computers are complex and an element of uncertainty exists in the minds

of decisionmakers with respect to their successful adoption.

Thorough evaluation is therefore required in order to ascertain their safety and effectiveness (Ammenwerth et al. 2012). People form attitudes and intentions toward trying to learn to use the new technology prior to initiating efforts directed at using them. These may first be measured by perceived usefulness (PU); that is, the degree to which health information professionals believe that using IT would enhance their practice.

Secondly, it may be measured by perceived ease-of-use (PEOU); that is, the degree to which they believe IT use in their practice would be free from difficulty. In any case, the process by which the application of IT in managing health information in the Nigerian health- care system is communicated and handed down to professionals should be such that users would find it worthwhile. This exemplifies the concept of diffusion of innovation theory (Rogers 2003). Implementation of health IT in developing nations such as Nigeria requires the willingness of players in the healthcare industry, since the computer in itself cannot function without a human actor. This further strengthens the be a direct predictor of the intention to use technology, which in turn would predict the actual usage of the technology. However, Turner et al. (2010) observed that the two TAM variables (PEOU and PU) are less likely to be correlated with actual usage, and has warned that care should be taken in using TAM outside the context in which it has been validated.

An understanding of systems theory and computer technology is critical to survival in the information age. As such, health information professionals who play leadership roles in designing health informa- tion systems require an open attitude and creative thinking in addition to their existing knowledge of health records contents, data sources and systems analysis techniques (Hersh 2009). Studies on IT use among Nigerian healthcare and information

professionals revealed that there was a deficiency of IT skills (Illyasu et al. 2005), inadequate numbers of skilled professionals (Bello et al. 2004), lack of technical capacity (Igbon & Akobo 2007), restricted use but the desire for knowledge (Makodo & Katuu 2004; Trivedi & Joshi 2008), a quest for formal training in IT, and flexibility (Komolafe-Opadeji 2009; Ward et al. 2008). Dorup (2004) reported that 90% of those he surveyed used email regularly and 80% used Internet facilities, while 3-7 % would prefer not to use computers in their training. Unfortunately, freely available digital information resources are under-utilized by health information professionals and health students (Ajuwon & Rhine 2008; Ajuwon 2003).

1.3 Objectives of the Study

1. To determine the IT knowledge of health information management professionals in the health facilities.
2. To determine the utilization and perception of health information management professionals in the health facilities towards electronic health records.
3. To determine the training needs of health information management professionals on electronic health records management in the health facilities.

1.4 Research Questions
1. What is the IT knowledge of health information management professionals in the health facilities?
2. What is the level of utilization and perception of health information management professionals in the health facilities towards electronic health records?
3. What are the training needs of health information management professionals on electronic health records management in the health facilities?

1.5 Significance of the Study
Information on the quality of delivered service, available medical resources, and the problems encountered is vitally in monitoring the progress of the delivery of health services and planning future action. In this epoch of technological advancement, a few ways have been introduced to

improve data collection, e.g., EHR management systems. However, an adequately organized health information system is an indispensable tool needed to provide summative, relevant and timely information to ensure quality service is offered. Mwangi (2013) underscored those large institutions and hospitals had implemented the EHR management systems in large percentages.

Therefore, the ministry of health will be able to collect and analyse more data from the grassroots level on the health status in the country and plan for a better future and quality provision of health.

1.6 Scope of the Study

The scope of the study is on mission hospitals in Owo, Ondo state of the Republic of Nigeria. These were considered due to ease of accessibility and also taking into consideration the time limit for this research because of the Covid-19 pandemic. The study targeted respondents fromtwo (2) registered mission hospitals in the study area. Also, no other research of this kind has been done in the region. The study was delimited to analyse the impact of key factors influencing the implementation of EHR management systems in the study area, critically examining the technological, organizational, and environmental factors influencing the implementation of EHR management systems.

GET THE COMPLETE CHAPTERS 1 TO 5