# PATIENT RECORDS MANAGEMENT INFORMATION SYSTEM (CASE STUDY: WINNER MEDICAL CENTER (WMC)

BY

IN NAGONGERA TOWN COUNCIL)

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A PROJECT REPORT SUBMITTED TO THE FACULTY OF SCIENCE AND EDUCATION FOR THE STUDY LEADING TO A PARTIAL FULFILLMENT OF THE REQUIREMENTS TO A WARD

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JAN, 2023.

## **DECLARATION**

I, ICARIT JOHN do hereby declare that this dissertation is a result of my own individual effort
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## SUPERVISORS' APPROVAL

This study project, Patient Records Management Information System has been done und	er my
supervision as the university supervisor and submitted with my approval.	
Sign	
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#### **DEDICATION**

I thank the almighty God who has successfully enabled me to complete the entire course with the dissertation. In special, I dedicate this project to my entire family members especially my parents Mr. Okwi George William and Mrs. Amongin Rose for their entire efforts, my supervisor Dr. Nakasi Rose, my uncle Ariko John and finally to my fellow colleagues who have tried their level best to bring me up to this far morally and this has been the source of courage and inspiration throughout this school life. This work is a manifestation of your prayers and hard work, may the almighty God provide you all with more of life as a special gift.

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#### LIST OF ACRONYMS

WMC Winner Medical Clinic

IS Information System

PRMIS Patient Records Management Information System

MIS Management Information System

GUI Graphical User Interface

CAD Computer Aided Design

IT Information Technology

ICT Information and Communication Technology

NCB National Computer Board

RAD Rapid Application Development

SDLC System Development Life Cycle

DFDs Data Flow Diagrams

E RD Entity Relationship Diagram

UML User-Modeling Language

HTML Hyper-Text Mark Language

PHP Hyper-Text Preprocessor

CSS Cascading Style Sheet

MYSQL MY-Structured Query Language

RDMS Relational Database Management System

#### **ABSTRACT**

This is a computerized PRMIS project study that was carried out at WMC in Nagongera town council, Tororo district. Its main objective is to enable faster and more efficient storage, retrieval and updating of medical records. It also makes sharing of information within the departments and other doctors easier thus managing patients' health complications. To come up with the system, data was collected through interviewing the executive director of WMC, health workers and patients as well as observation and focus group discussion. The data collected was analyzed and then used to design and implement the system using RAD model approach.

The system was developed using the Unifying Modeling Languages with frontend and back-end interfaces with a database system. The developing software tools included PHP, HTML, JavaScript, Visual Studio, Xampp together with MYSQL. The database stores records of patients and other health related information. The system also enables doctor and other system users to update, edit, delete, view, share prescriptions to patients' inquiries at any time.

## **CHAPTER ONE: INTRODUCTION**

#### 1.1 Background of the Study

In the beginning, there were only hand-written charts, books, files which were time consuming and tedious in most hospitals and clinics. Illegible hand-written charts not only took lot of time to undertaking and interpret but also to more serious problems such as errors in diagnosis, treatment and billing. (Lahar, 2009).

Today, Patient Records Management Information Systems are widely used in hospitals, nursing facilities, healthcare, clinics, laboratory facilities, treatment centers and physicians. Patients Records Management Information System refers to an on-going process of managing patients records in a media neutral basis in accordance with approved policies, procedures, and schedules (Mgbechi, 2013).

Advents of computers, lead to many ways to store vast amount of information without requiring huge physical space. They also offered the convenience where several people can access the same information concurrently and from different locations. In keeping up with the complexity of managing the patient's health-related information, the healthcare facilities started computerizing these records electronically.

Patient Records Management Information System comprises of a set of a comprehensive database used to store and access patients' healthcare information. The Patient Records Management Information System replaced the manual paper medical records as the primary source of information for health purposes including clinical, legal and administrative requirements. Patient Records Management Information System is supported by a network of systems that captures, stores, processes, communicates, secures and presents information from multiple disparate locations as per requirement. The system facilitates the interaction among specialists or initial attending doctors, patient, attendance of long-term care and business administration such as risk management and billing. Patient Records Management Information System allows medical personnel to look at charts and histories of patients without having to

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