**CHAPTER ONE**

**INTRODUCTIO**N

**Introduction**

Health care systems continue to struggle to provide access to cost-effective quality care. The dramatic changes in health care reflected by increasing patients with multiple chronic diseases, health care workforce shortages, mandates to decrease costs, and infusion of technology make it necessary for nurse practitioners to embrace tele-medication. The use of tele-medication technology presents new opportunities for addressing these challenges by increasing patient access to care and decreasing costs, while improving desired care outcomes.

Tele-Medication forms a component of telehealth, which focuses on the delivery of nursing care, guidance and counselling, nursing practice in the health care of patients through the use of telecommunications technologies. Telenursing includes all contact that is made between the medical staff, including doctors, nurses and allied health professionals and the patients by the use of telephone, radio, television, video, internet and intranet. For instance, a telephone call between a nurse and a patient or between a doctor and patient which is in the benefit of offering health care to the patient. This area of nursing has the capability to change the way care is accorded to outpatients regardless of their location or degree of distance from the primary health care Centre.

Tele-medication can be defined as a means of providing care using the telecommunication devices or medium to care for individuals or specific patient populations, such as groups of people in a remote area. It focuses on coordination and delivery of care.

This thesis explores the fallen short of health care system in its ability to translate knowledge into practice and apply new technology safely and appropriately. This has resulted in the quality problems affecting the system. The Aniniwah Medical Centre system is no exception to the above phenomenon as evidenced by the on-going pilot projects to improve quality of the health system in our country

Over the past years, the methodology used to improve quality of health care has to involve Information Technology which plays a large and fundamental role in management, distribution and keeping of health information. Consequently, access to health information is expected to increase the quality and continuity of Care.

I believe that quality of Tele-medication documentation at Aniniwah Medical Centre would greatly improve as a result of the implementation of an Information Technology.

**Background and History**

Aniniwah Medical Center was established by Dr.Kofi Akohene Mensah who serves as the Chief Executive Officer. The founder named the organization after his late mother called” Aniniway”.

The hospital was incorporated as a limited liability company under the companies’ code 1963(ACT 179) on the 15th of December 2004. Aniniwah Medical Center was established in 1992 as Emen-Kumasi in the Ashanti Region of Ghana. Aniniwah Medical Center has seasoned Board members who have the overall responsibility for the management of the hospital. The Health Centre has several department, some of the department are Out Patient Department(OPD),Medical Laboratory, Dispensary, Emergency Unity, Maternity Unity, Paediatric Unity, Medical and Surgical Unit.

**Problem Statement**

The purpose of developing this system is to solve the problem of increasing shortages of nurses, reducing the distances and save travel time, and to keep the patients out of hospital. More over a greater degree of job satisfaction has been registered among telenurses.

**AIMS AND OBJECTIVES**

To reduce the rate at which patient die before getting access to a health sector by creating a platform for access to a medical doctor or nurse.

To save time and resource by creating an interface where patient can easily login to get access to his or her doctor instead of going to and the hospital.

To improve hospital reliability

To make searching for a parent record easier and fast by creating a database where information can be easily saved and retrieved.

**Scope and limitation of the Research Work**

The scope of this project include the following:

**Documentation:** the system will automatically manage and process patient’s treatment and result.

**Computation:** The system will compute patient’s results.

**Proposed Chapter Outline**

The proposed chapter outline is organized into different chapters and each chapter gives a precise aspect of the project.

**Chapter 1**

The chapter one, we look at the introduction of the Tele-medication as well as the process in the manual system .Also figure out some of the problems/challenges with the existing system, objectives and some benefits of the proposed system as well as listing out tools and techniques to be used in developing the proposed application.

**Chapter 2**

This presentation of the recent situation, literature review and the requirements of the intended system.

**Chapter 3**

The chapter 3 gives a vivid detail on the data that will be collected, procedures used in the software development and last but not the least the software methodology.it also describe the architecture of the Tele-medication system. It gives a dissimilar viewpoints of the intendant system and the technology to be used in the development of the system.

**Chapter 4**

The chapter highlights on the software product and the reasons for using certain software methodologies, language and tools in the development of the system. This goes on to explain the system requirement, the design and the implementation procedure. The software functionalities and non-functionalities requirements of the system are also explained under this chapter and the description of the different design patterns used in the system which helps in achieving the non-functional requirements of the system.

**Chapter 5**

This chapter gives a vivid detail on the system architecture, user interface and the database design. The system architecture explains the functions across system a module which identifies the overall structure of the system, the principal components (sub-systems, modules), their relationships and how they are distributed. The database design deals with the structures and how the project are to be represented in a database and the user interface describe the characteristics of each interface between the application and its users which includes screen formats/organization, report layout, menu structures, error and other message or function keys.

**Chapter 6**

This chapter summarizes the whole project(Tele-Medicine)