1. **INTRODUCTION**

**1.1 Overview of the Current State of Technology**

In this technology driven world, automated systems are the solution to provide ease in our day to day lives. This is why there is an innovation integrating technology into health to provide high quality health information services, which has already been answered with the help of Hospital management system. But man has always been wanting a better innovation.

But the problem is some of the hospitals are still relying on traditional file management which not only requires a lot of space but also requires high maintenance to keep the records safe.

The researcher’s proposed HMS and existing HMS doesn’t really have a comparison, it can both manage hospital employees, allow viewing and storing of patient’s medical record, manage and monitor Doctors appointments and schedules, monitoring of available beds/ wards, and Stocks and Inventory of available medicines.

Through the use of the proposed HMS, the user of the system won’t be having a hard time viewing the record when it is needed.

**1.2 Background of the Study**

Healthcare especially in the developed world is characterized by rapidly increasing use of information technology in patient care, increasing documentation, coding and billing, and management. Rise of health information technology worldwide is increasing the efficiency of healthservice delivery, reducing medical errors, improving quality of care and providing better information for patients and physicians.

Hospital management system in Guiguinto Polymedic Hospital gives the ability to optimize and digitize all the processes within the Hospital, which will help to improve customer service, reduce process costs, streamline the search of medical records, bills, patients, doctors, etc.; thus, having a database of each module implemented.

A hospital management system (HMS) is an integrated software that handles different directions of clinic workflows. It manages the smooth healthcare performance along with administrative, medical, legal and financial control. That is a cornerstone for the successful operation of the healthcare facility. The overall goal of the system is to obtain, manage, and use information to improve health care and medical services, performance, governance and management and support processes.

**1.3 Statement of the Research Problem**

The study aims to develop a Hospital Management System that can access the records of the patient for Guguinto Polymedic Hospital.

The study aims to answer the following questions:

1. How the following topics be developed into a Hospital Management System?

1.1 Registration Process of SRS (Software Requirements Specification)

1.2 Check Out of SRS

1.3 Report Generation of SRS

1.4 Database of SRS

2. What are the methods to ensure the security of the system?

2.1 How will this method ensure the security?

2.2 Who will benefit the security of the system?

3. How will the system affect the way the hospital operates?

4. What are the variables that may affect the system?

5. What is the level of acceptability of the system to be developed based on the following criteria:

4.1 Security

4.2 Readability

4.3 Usability

4.4 Maintainability

4.4 Performance

4.5 User-friendliness

**1.4 Project Objectives**

**1.4.1 General Objectives**

This project aims to develop a software that can efficiently manage the hospital processes which incorporates the monitoring of patients, medicines, doctors, services and room information.

**1.4.2 Specific Objectives**

1.4.2.1 To provide the function of checking for available beds in the entire hospital.

1.4.2.2 To provide the function of adding/deleting doctors, and ward boys/girls.

1.4.2.1 To develop a software that can assure the accuracy in the process of monitoring and managing the data of patients and their room information.

1.4.2.2 To develop an instrument that can manage the doctor’s appointment within the hospital efficiently to monitor if there are cases of overlaying.

1.4.2.3 To develop a tool for real-time viewing and searching of hospital information needed that also incorporates the management of medicines, services and quantity of available rooms.

1.4.2.4 To develop a software that can conduct efficient processing of payments, issuance of receipts and discharging a patient.

1.4.2.5 To develop a software that can provide sufficient security for the user’s confidential information.

1.4.2.6 To develop a Hospital Management System that is capable in terms of the following criteria:

a. Usability

b. Age-appropriateness

c. User-friendliness

d. Readability

e. Interactivity

**1.5 Significance of the Project**

The study is significant to the staffs since they would be able to register, update, delete, and search information within the system. It is very beneficial to the hospital since it could improve their management through connecting all their existing computers in one system. In general, the study was important to the hospital and patients for it could serve as an applicable tool to maintain the productivity and quality of service in the hospital.

The Hospital Management System for Bulacan Polymedic Hospital is expected to be of help to the following stakeholders:

**STUDENTS.**  This study would promote the interest of the students in learning the process of systems inside certified hospitals. As the rapid changes and adaptability to the environment of hospitals, Students could as well update old systems into innovative ones and apply it into their ideas or prototype as this study would also reinforce the students’ learning experience with computer system.

**HEALTH WORKERS.** This would aid the health workers by providing them an additional means of security to legal documents and systematically correct procedure a developing hospital needs. By keeping track of records and initial procedures up to the last, a functioning system could make their jobs easier and efficient.

**THE MANAGEMENT**. This would make the hospital more competitive by using this innovative system that can help them manage the hospital more effectively and reliable. It would also increase the speed of service to make way for people with critical conditions who needs more focus.

**FUTURE RESEARCHERS**. This would provide data and information which might be of help to other researchers who wish to dwell an in-depth study on this same field. It may also contribute to an existing research with a sole purpose of innovation and ideas that may help the community and fields involved.

**THE COMMUNITY.** In this time of pandemic, People or patients requires constant access to medical facilities. Therefore, this study guides them to a better understanding to the whole process through legitimate procedures and help them not to get scammed, specially in this time where people takes advantage of the situation. This system may also help accommodate the people in need, and thus, increases that people who gets recovered fast.

The study is important to the hospital patients since they could have medical information

without experiencing delays and incorrect information. If they wanted to access their medical

history, they would not be going through a difficult process. The hospital especially the

pharmacy and billing department would not go through a lot of paper reports when it comes

to payments and accounting records. The use of paper would still be there but it could be

reduced so that excessive paper loads would not be a problem.

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**1.6 Scope and Limitations of the Project**

Hospital management graduates can enter this career from all of the levels, from middle level management to the top level of the business, as a demanding position, and so the scope is expanded. As healthcare management is strongly cared for after direct medical services are given to patients, professionals have a strong opportunity to expand their careers.

The Hospital Incident Command System (HICS) was set up with the aim of risk management, response and recovery. With regard to the key role of hospitals in the medical management of incidents, the current study aims to examine the advantages, challenges and disadvantages of the use of HICS in hospitals.

Experiences therefore suggest that there are some system restrictions, such as failure to evaluate the strength and magnitude of hospital weaknesses, failure to follow emergency management requirements in the design, construction and equipment of hospitals, and the absence of a system assessment model.

With regard to the role of health in the management of disasters, advanced international disaster management methods are needed. Using precise evaluation models, it seems appropriate to examine hospital preparedness in pre-crisis conditions on the basis of components such as command, communications, security, security, action plan creation, improvements in staff attitudes through successful organizational training and exercise, and to develop the required maneuvers.