HIT, Its Framework, Its Usage, And Benefits Of Its Implementation

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Introduction

Health is the basis of life and is crucial to every individual. As humans have progressed through the centuries, health standards and ways of handling health have also changed. Information Technology is a key operating feature in every field today, and health is also included. Health Information Technology refers to the system where health is monitored, and the track record of each patient is held in the system. This report sheds light on HIT, its framework, its usage, and the benefits of its implementation.

Literature Review

The Electronic Medical Records (EMR) system is utilized to record every one of the points of interest and the treatment of every patient in the hospital (McAlearney et al. 2014). This EMR is vital to know the health history of every patient and what sorts of medication the patient is to be prescribed. It also records the type of disorder and much more. This information will be secured in every office that is associated with the hospital (Majore et al. 2014).

Electronic record management systems are a type of system that is required in today's management. Facility management is the system that has been connected with hospital management (Weiskopf & Weng, 2013). Hospital management has been separated into a few stages, which are registration, ward, blood donation center, drug store, EMR or electronic restorative report, radiology, ICU, and staff management (Kern et al. 2014). In the ward stage, there are a couple of sub-stages, which are surgery, pediatric, orthopedic, and much more (Nguyen, Bellucci & Nguyen, 2014). The utilization of the electronic system in the hospital is still new and not extremely well known. Examples of systems that exist in portions of the hospital stages include the lab data system from the lab division, a drug store inventory system in the drug store room and a financial report system in the registration part (McAlearney et al. 2014).

Implementation of Health Information Technology (HIT)

To implement the developed HIT, I will make sure of the following specifications:

- I will apply the system in a step-wise and modular format.
- Before implementation of each module, the staff will be trained and oriented to make sure that they understand the system well.
- The maintenance and management team will ensure that any issues are handled on time and with proper efficiency.

Needs Assessment

The needs of this evaluation surround HIT, where the aim is to assess the domain, scope, and working efficiency of this idea; identify optimizations that can be performed in the form of solutions to particular problems that HIT implementation consists of; and, lastly, discover the benefits it can provide to end users and health institutions.

Research Questions

This report encapsulates and aims to answer the following research questions:

1. How is Information Technology beneficial for Healthcare and Nursing?
2. Does it provide better results? If yes, how?
3. Does it increase the efficiency of working and outcomes for the patients?
4. How does it address the shortcomings of general record-keeping in Healthcare?
5. How can HIT improve itself?

Hypothesis

The implementation of HIT in generic terms will eradicate the shortcomings of general medical record keeping. For example, if a patient is moving from one region to another and is also diagnosed with a disease, the reports relating to that person might not be available to other healthcare personnel or, if available, might be formulated in a way that causes issues while assessing the patient's treatment history. The implementation of HIT, on the other hand, can resolve this issue by providing a standard way of record keeping.

Outside Research

Research that has already been performed by other researchers in the field provides a solid basis for constituting the baseline of the research topic. The purpose of using outside research is to provide supportive arguments that the chosen HIT implementation will benefit the end user and will eradicate a variety of issues in normal operating scenarios in healthcare.

Research Methods

For HIT implementation assessment purposes, we can use both qualitative and quantitative approaches. The quantitative approach provides us with the figures that determine the inconsistencies in usual operating scenarios while outlining how beneficial HIT is in the accuracy of data. The qualitative aspect, on the other hand, is more related to reliability and shows the benefits of long-term record keeping, where it can stay reliable in a system. Thus, both are followed by this assessment.

Research Method Justification

The purpose of the implementation of HIT is to increase system efficiency and address the problem of manual record inconsistencies, which can be monitored by comparing the computerized record and manual record. The figures or record keeping in both can be controlled using it, therefore requiring quantitative analysis. Qualitative analysis also encourages the comparison between the two while focusing on analyzing if the system is reliable enough to benefit the end user. Thus, both are equally important.

Measurement Methods

The method of measurement is to compare record-keeping in manual and computerized forms using HIT. The figures point toward some cases of inconsistency, the number of times records were unreliable, and the overhead and time required for each record in manual and HIT systems.

Measurement Method Justification

The measurement method followed is based on actual monitoring done on records, thus providing real-time and real-scenario results. The measurements represent the outcome of both systems compared to one another and, therefore, provide the results crucial to research.

Data Collection

Considering the research methodology and objective of the study, the recommended data collection tools will include surveys, interviews, and questionnaires. This will help in gathering qualitative data, suggestions, and recommendations that can be used for the specification of the system under development.

Data Collection Benefits

A collection of data makes the process of performing the comparison easy and provides weight to the research, making it supportive of the usage of figures. The data collection from a qualitative perspective also comes with the benefit of showing the system's accuracy and reliability factors.

Data Analysis

The rationale for data analysis in any research is to provide the data by which the arguments could be devised. The analysis is conducted based on the following rules:

- Select the factor that is to be monitored. For example, in this HIT implementation, it could be the time taken to take out a patient's record.
- After choosing the factor, the quantitative analysis is to be conducted on both systems, i.e., the time taken to find a record in HIT and the old system. The figures represent the comparison between the two.
- The qualitative analysis will include a factor like a feature in a system concerning reliability. How to monitor it? It can be done by comparing the results from both options.

Conclusion

The implementation of HIT is, without a doubt, advantageous over the old manual system because of the number of features and benefits that come with Information Technology and its usage. Even though it provides benefits over the manual system, HIT can still be further optimized to become more productive, for example, by expanding the system so that the data for patients is accessible globally.

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