Team 1

CIS 280

20 MAR 21

Final Project

**Introduction**

Throughout this course, we have learned many key concepts that helped with creating and gathering tools for our project on the implementation of ADT Alert and Transfer Systems throughout healthcare communities. Many healthcare communities which consist of at least one hospital and a primary care practice, have switched to a more technical approach when managing patients and how they are transferred throughout the community. As well as how the providers communicate and update patient needs, personal and demographic information. The purpose of this project is to reduce the amount of avoidable emergency room (ER) visits, hospitalizations and readmission of patients. The goal is to improve the flow of information between providers to address the healthcare needs of a patient being transitioned throughout different medical facilities. This project will result in the overall improvement of quality care.

**Feasibility and Preliminary Investigations**

The first concept that was vital to our learning and understanding of systems analysis and design is determining the feasibility aspects of the project. Feasibility is the operational, technical, economic and schedule factors. All of those things help to determine if the proposed system in our case ADT Alert and Transfer system will be effective once implemented. The most important for our project is the technical feasibility because our system relies solely on technology. When determining the priority of each, the technical and feasibility will be top on the list. Also, planning an effective preliminary investigation was also important in our learning because it is the meeting point of all individuals involved in the project from key personnel to the projected everyday users. There are six steps to planning a preliminary investigation: Understanding the Problem or Opportunity, Defining the Project Scope and Constraints, Fact-Finding, Analyzing Usability Costs and Benefits, Evaluating the Feasibility, and Presenting results to managing personnel.

**Data Flow Diagrams**

Secondly, data flow diagrams are important to our project because they exhibit how the system stores, processes and transform data. In our case, the data to be transferred is patient treatment and medical information.

Some forms of data flow diagram used throughout the course:

* Use Case Diagrams
* Sequence Diagrams

**Financial Analysis**

Lastly, financial analysis was a concept that we found to be vital to our learning and understanding when implementing our project. Present value analysis, return on investments, and payback analysis were areas that we ran into trouble with and would like to know more about or get more practice with. The financial portion of the project is one of the most important aspects because it determines if the project is worth the cost and how much revenue it will save or bring in in the long run. The costs are but not limited to the system design, software, startup, etc. One key concept or take away was the Cost Benefit Analysis.

Cost-Benefit Analysis in 6 Steps:

1. Evaluate the Information System Requirements
2. Identify Potential Vendors or Outsourcing Options
3. Evaluate the Alternatives
4. Perform Cost Benefit Analysis
5. Prepare a Recommendation
6. Implement the Solution

PRESENTATION VIDEO LINK

https://screencast-o-matic.com/watch/crerfpVVhUe