**Project Milestone 2 - Summer 2020**

**Project Charter**

**Scope Statement**

**2205 MSA 6600 6E1 502W LEC 43109**

**EHR implementation of a web portal with a database at**

**Catskill Family Practice**

**Project Manager (BSTC)**

**Venkata Sai Suneeth Ravilla**

**Summer 2020**

**Bowling Green State University, Ohio**

**Project title:** EHR implementation at Catskill Family Practice

**Project Start Date:** July 1st, 2020  **Projected Finish Date:** June 30th, 2021

**Budget Information:** The estimated initial investment of the project is $3,500,000 and this amount is allocated for 4 different categories. Approximately $500,000 for hardware installation and related infrastructure which is required for the setup of hardware required for EHR, there will be an initial cost for employee training costing $500,000 and to develop the required software the labor costs $2,000,000 for software development. The remaining $500,000 will be used for Contingency reserves.

**Project Manager:** Suneeth Ravilla, (414)414-1444, r.suneeth@bstc.com

**Project Objectives:** The objective of this project is to implement electronic health records (EHR) to manage the patient record in Catskill Family Practice (CPF). This project requires additional features to publish CPF health facility available through the web portal and to store the patient records in the backend database which can be accessed by CPF personnel and patients.

**Success Criteria:** Upon successful completion of the project, it gives CPF to retain their patient count and also by advancing with the latest technology. This project will also help the nursing staff in accessing the valuable tools that are essential for their professional career. Increase in the patient count will directly lead to an increment in the salary of professionals and staff. This project should be completed on time with the required additional implementation and should be able to meet the expectations within the estimated cost.

**Approach:**

* The Project manager should oversee the project in each and every step, he plays a key role in identifying any issues noticed and keep the project in track for completing in the estimated time. Project Manager needs to allocate required resources for the tasks to be accomplished and will also ensure that the needs of the project sponsor are being addressed and that the project meets all parameters that were agreed upon in the scope of this project.
* Programmer analyst will develop a software program and build MS SQL server database with the related information provided by nursing staff such as identifying patient records and demographics, managing how many problems does the patients come with and what all medications available in the health center and gathering notes and clinical documents provided by internal and external if any. The staff will also help in gathering current care plans, guidelines, and protocols, then coming up with patient-specific care plans with the information provided.
* Build a web-based interface which can be accessed by patients and staff with limited access to the database in CPF. This task should be handled by User interaction Designer and the primary role is to maximize the potential of the human-computer interaction so the user can easily navigate and understand the software's functionality. UID will receive additional inputs from BSA and CPF employee for better interaction of interface for physicians, nurses, administrative staff, and patients.
* Business system analyst will act as a liaison officer between the physicians, nurses, and administrative staff at CPF and EHR development team. Working closely with CPF, understanding their requirements and collecting information from CPF personnel. This information is more related to information technology what the staff is expecting from technical to functional details which need to be accessed from software developed.
* Monitor CPF staff closely and allocate a proper schedule for the physician, nurse, and administrative staff on a part-time for 10 hours/week. They will play a key role in providing end-user perspective feedback.

**Roles and Responsibilities:**

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| --- | --- | --- | --- |
| **Name and Signature** | **Role** | **Position** | **Contact information** |
| Dr. Sharath Sasidharan  *Dr. Sharath Sasidharan* | Project Champion | VP of BSTC | s.sasidaran@bstc.com |
| Dr. Rip Van Winkle  *Dr. Rip Van Winkle* | Project Sponser | CPF Director | r.winkle@cpf.com |
| Suneeth Ravilla  *Suneeth Ravilla* | Project Manager | Project Manager | r.suneeth@bstc.com |
| Cauthon, Pitt, Cuomo  *Cauthon, Pitt, Cuomo* | Business System Analysts | VP of IT | p.cauthon@bstc.com |
| Leakey, Morris, Fitzgerald  *Leakey, Morris, Fitzgerald* | Programmer Analysts | Senior Analyst | m.leakey@bstc.com |
| Walden  *Walden* | User Interaction Designer | Senior Programmer | walden@bstc.com |
| Koehler, Andrews, Harris  *Koehler, Andrews, Harris* | CPF Employees | Physician, Nurse, Staff | a.koehler@bstc.com |

**Comments:** CPF employees have devoted 10 hours per week but it cannot be utilized always as sometimes they might have an additional workload, they may not able to spend that much time on the project.

**Preliminary Scope Statement (Version 1)**

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| **Project Title: EHR implementation at Catskill Family Practice**  **Date: 06/10/2020 Prepared by:** **Suneeth Ravilla** |
| **Project Justification:**  Catskill Family Practice was one of the leading family practitioners in the community by providing different services in terms of health care and had taken care of any emergency issues. But they have still relied on paper-based charts and the patient records, details are updated in electronic form of spreadsheets. The main reason is that the enrolment of the new patient has reduced, and the existing patients are approaching newer healthcare facilities. The physicians including nurses at CPF had indicated that their medical health care is in lacking technology compared with their competitors and pointed out that they were missing valuable tools that can help their professional career. CPF can improve their incoming patient rate by introducing latest technology called an EHR software which has more advantages in terms of tracking patient needs to a systematic database. With the use of latest technology implementation, CPF will be able to retain incoming patients and provide better service to the patients. It also helps CPF professionals in advancing with the latest technology. When comes to financial parameters in implementing this project, the total initial budget of the project costs $3,500,000. Upon calculating the returns on the investment, it is observed that for every $100 spent on this project we would expect $137 in return with benefit/ profit of $37. The net present value calculation is $1,878,020, this total amount is the profit by implementing this project. Performing payback analysis on this project, it takes less than 3.5 years to reach the breakeven point and left with 1.5 more years for profit returns.  Advantages:   * Accessing the patient information from a computer with the implementation will give better results in managing the patient details and information about their previous health condition * Using database help in retrieving useful information within seconds which helps in reducing the time by fetching old records and issues. * Implementing the latest technology and features will attract patients in the community which can be promising to the health care to provide the best features available. * Updating new facility information in their web portal will help patients who can check the available features from their house itself. |
| **Product Characteristics and Requirements:**  The outcome of this project will have a successful implementation of EHR software, developing web-based interface and backend database using MS SQL Server. Detailed requirement is given below in points,   * The developed software should be able to manage patients records and demographics. These records need to be user friendly and it makes the CPF personnel to track the patient proactively. * It should also have managing features like problem lists – types of problem patients are visiting the health center, medication lists – what type of medications does the CPF provide which need to be updated timely as some medications might not always be available, Patient history – Details of a patient visiting the health center which is needed if any patient is required to consult a physician after a certain period and to send them reminders, Clinical documents and notes – able to manage the key information provided by the physician. * Web portal should contain present care plans, guidelines, and protocols provided by CPF and also able to update them if needed. It should also contain patient-specific care plans such as suggesting the best plan for the patient for treatment which can reduce the cost of treatment and also by generating and recording patient-specific instructions.   Business functionalities of the product will be a great asset in updating the patient records and organizing the information. With this system, CPF will be able to generate reports which can help in providing accomplishments of personnel. Using this will benefit CPF in reducing time while fetching records and also to manage, track patients timely when required which helps staff to focus on other tasks provided. With the help of the database, physicians can easily track information rather than provided by their staff. |
| **Product User Acceptance Criteria**  As part of the EHR implementation, it should have an additional software features like web portal and database. Completing this project in one year and making it available in CPF is considered one of the successful task. The technical performance should meet the expectations with all the given functionalities which are key in the development of EHR. On successful usage of this implementation will help CPF in retaining their patient count by attracting patients from a community college within a year. |
| **Project Exclusions**  External software developers are not required until if the software development activities do not meet the estimated timelines.  It is acceptable if CPF personnel failed to contribute a total of 10 hours per week as they might have an additional workload with the high number of patients coming in than normal in a week.  Additional software development is not implemented apart from the requirements given in the business case. |
| **Summary of Project Deliverables**  **Project management-related deliverables:**   * Identified key problems by Project Manager while developing the software. * Preliminary planning and work divisions among different teams and tasks. * Estimating the budget of the project. * Proposal for additional features while developing the software. * Timely feedback report by CPF personnel. * Major timelines and milestones in the project. * The business case for justification of the project. * Successful implementation of suggestions provided by CPF personnel.   **Product-related deliverables:**  Delivering the web-based portal which has relevant details about Catskill Practice Family process with detailed information and aspects as requested by personnel which has an additional feature of access to the database. Creating a database to store the patient records and manage the details provided with custom features implemented by BSCF by timely feedback provided by CPF personnel. The project is estimated to complete within one year and all the requested implementation and development should be part of this deliverables. There are two major product-related deliverables, one related to the web-based interface and another one is MS SQL Server database  While developing web-based portal information provided by CPF personnel, code for updating the site when new features available, site access information with encryption, design document of web portal, interlink map for better understanding of the site for future development.  Back-end database also plays a key role in the deliverables. It has many key features to be given in detailed for future use. The relationship between the tables, the base map of how the tables are linked to each other. Documents of tables which gives information about details in each table. Backend code of SQL statements which are used to store the data. Key information about SQL queries if the staff would like to retrieve particular information based on the feature. Successful implementation of SQL server will result in the generated database. |