



**I4I Broad Top Area Medical Center
Delivery Document #2
11/19/21**

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Table of Contents

Executive Summary	3
Section 1	4
Organization Background	4
Organization Chart	4
Section 2	5
Project Definition	5
Project Objectives	6
Project Constraints	7
Project Scope Statement	8
Risk Evaluation	9
Design Specifications, Components of Existing and Proposed System	10
System Diagrams	11
SWOT Analysis	11
Requirements Summary	11
Section 3	12
Results Attained & Future Steps	12
Section 4	13
Planning Summary	13
Plan Details	14
Major Milestone List	15
Work Breakdown Structure	16
Critical Path Analysis	16
Gantt Chart	16
Appendices PPT files	17

Executive Summary

The Broad Top Area Medical Center (BTAMC), a Federally Qualified Health Center (FQHC), is a community-based and patient-directed organization that provides comprehensive primary health care and preventative care services. BTAMC services Huntingdon county and surrounding regions with several locations. To better serve their community and expand their client base, they want to strengthen their organization's support for Chronic Care Management (CCM). Federal standards exist for CCM implementation, care, and billing practices that were considered while strengthening this support.

BTAMC engaged the Innovations for Industry program to help investigate and plan for a comprehensive CCM implementation. This I4I student team stewarded the project to create and finalize two deliverables: a [Requirements Document](#) and a [Solutions Document](#). The team conducted all the research necessary to identify CCM requirements and other associated considerations on behalf of BTAMC. These were documented in the [Requirements Document](#). The team also researched potential solutions that satisfied those requirements and came to a conclusion on potential system solutions for BTAMC's CCM implementation. These were documented in the [Solutions Document](#).

The I4I student team successfully supplied BTAMC with these two deliverables and completed the project to their satisfaction. The next steps for BTAMC include selecting a CCM software to pursue and implementing that software. Implementation of the software itself is a process that would be supported by the chosen vendor's IT support teams. Future I4I teams likely do not have a role to play in assisting BTAMC, since the next steps for BTAMC are more focused on producing medical content for care plans and learning how to use the software as opposed to having a technical focus that needs aided by a theoretical I4I team.

Section 1

Organization Background

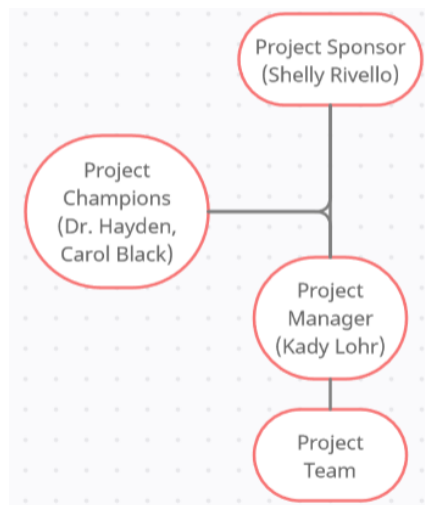
The Broad Top Area Medical Center (BTAMC), a Federally Qualified Health Center (FQHC), is a community-based and patient-directed organization that provides comprehensive primary health care and preventative care services. BTAMC services Huntingdon county and surrounding regions. It is their mission to “*provide access to affordable high quality healthcare without discrimination.*” Their website can be found at this link:

<http://www.broadtopmedical.com/>.

BTAMC has a variety of team members that will be involved with the CCM project at different points. Their names and roles are:

- Dr. John Roth, CEO
- Dr. James Hayden, CMO
- Carol Black, RN, CQO
- Shelly Rivello, LCSW, COO, **Project Sponsor**
- Terry Heath, Executive Assistant/IT Coordinator
- Kelly Maffia, LCSW, Director of MH/BH

Organization Chart



Section 2

Project Definition

- Identify the federal requirements needed to adopt a CCM (Chronic Care Management) system at BTAMC
- Identify potential software solutions to enable BTAMC to implement a CCM system
- Requirements and solutions identified by the team should enable BTAMC to:
 - Use a database to find qualified patients for the CCM program.
 - Use that list of qualified patients to have BTAMC staff to get patient consent to enter CCM program
 - Implement proper Medicare Codes for patient care
 - Implement proper Medicare billing codes
 - Coordinate physicians and medical staff working with each patient so that their patient care is under one portal and is only billed by one medical practice
 - Follow patient in portal
 - Remove patient from CCM when necessary such as upon death

Project Objectives

Our objective is to document the requirements necessary for a Chronic Care Management (CCM) system in a Requirements Document. We will work with these requirements to identify a CCM system for BTAMC. Since BTAMC does not have a CCM system, it makes it harder to find information of patients in need of help efficiently. Our job is to assist BTAMC, a Federal Qualified Health Center (FQHC) in strengthening their organization support for CCM system by identifying the CCM solution. The final results would fall into two deliverables, a requirement document and a solution document.

Project Constraints

This project will include becoming familiar with a new field and its vocabulary, and becoming familiar with a variety of softwares to verify if they meet the requirements of the project. Constraints include a single semester deadline, a variety of locations, and consideration governmental regulations.

Project Scope Statement

Project Title: Broad Top Area Medical Center Chronic Care Management

Date: 9/29/2021

Project Characteristics and Requirements:

This project will provide a series of recommended solutions for BTAMC to implement CCM. This will require the project team to analyze BTAMC in order to come up with the requirements for the project and additionally, to analyze the market for a software product(s) that will meet those requirements.

Product User Acceptance Criteria:

This project will be successful if it accurately identifies the requirements for BTAMC, and the suggested software sufficiently meets said requirements. The project client will give Bill and Marlene an A recommendation at the end of the semester upon project completion as further indication of success.

Summary of Project Deliverables

Project management-related deliverables: business case, charter, scope statement, WBS, schedule, status reports, final project presentation, final project report, lessons-learned report, and any other documents required to manage the project.

Product-related deliverables: Requirements document, Solutions document

Risk Evaluation

Risks

- Client does not like proposed solution
- Covid
- Requirements are not accurate, thus recommended solution has fatal flaws

Biggest risk - Requirements are not accurately identified

Risk Elaboration:

- If the requirements are not accurately identified, the solutions for the problem will have potentially fatal flaws
 - If we miss a federal requirement and BTAMC gets audited, they would be in trouble and lose revenue

Contingency Plan

- Thoroughly examine and re-examine the requirements
- Have clients look at and approve the documents
 - Existing software solutions likely already fall under the specified government framework, so much of this risk comes from implementation after the I4I team leaves

Design Specifications, Components of Existing and Proposed System

A certified CCM system is needed that supports Chronic Care Management services. Additionally, the system should include a patient portal where current patients can log into to view information about their care plan. Moving to a completely new system is unwise due to high costs.

The existing Electronic Health Record (EHR) system (Medent) has poor support for CCM, which is why we need to add functionality to it, or use new software compatible with it. Our proposed solution would be to add new capabilities to Medent to avoid conflicts with other software.

The new system should provide its users with the following functionalities related with the patients:

- Problem list
- Expected outcome and prognosis
- Measurable treatment goals
- Symptom management
- Planned interventions and identification of the individuals responsible for each intervention
- Medication management
- Community/social services ordered
- A description of how services of agencies and specialists outside the practice are directed/coordinated
- Schedule for periodic review and, when applicable, revision of the care plan

System Diagrams

SWOT Analysis

Strengths

- Local care for patients
- Only FQHC in the area according to HRSA
- Several locations

Weaknesses

- Lack of direct FQHC competition does not create pressing urge to be better
- Small business, will be hard to compete with large business
- Lots of legal criteria to meet

Opportunities

- Chronic Care Management

Threats

- JC Blair Hospital and other Healthcare provide

Requirements Summary

In order for this to be declared a successful project, the following deliverables must be completed to the satisfaction of the Broad Top Area Medical Center project sponsors and the Innovation for Industry professors:

1. Requirements Document that accurately lists the requirements for BTAMC's potential CCM system solution.
2. Solutions Document that accurately identifies and explains potential CCM system solutions.

Section 3

Results Attained

Our team provided BTAMC with the best viable options for their CCM system. We compiled the requirements in the [Requirements Document](#), researched about the potential vendors, and scheduled demos with them. After our research we provided our clients with a detailed solution on potential vendors they could choose from in the [Solutions Document](#). We suggested them our top 3 options from the list of vendors:

- Medent: is their current EHR system with built-in CCM. It was the best solution for them due to no additional fees, limited risks with integrating a new vendor, and their familiarity with the software.
- Phamily: was a highly-appealing and ideal choice for BTAMC. Their software has a good user-interface, aesthetically pleasing design. Most importantly, their SMS and AI-integrated feature allows them to reach more patients. The disadvantage of using Phamily was their added cost and potential inability to integrate with Medent.
- Timedoc Health: is our final option. It satisfies all the requirements. They have worked with FQHCs before, and have tried integrating with Medent. The disadvantage of using Timedoc Health would be their cost as well.

Deliverable 1: [Requirements Document](#) (click to view)

Deliverable 2: [Solutions Document](#) (click to view)

Future Steps

The future steps that BTAMC will need to take includes choosing the best solution according to their needs from the list provided in the solutions document and implementing it. The implementation of the chosen software will be done by the chosen vendor's IT support team. Since the future plans of BTAMC are less technical in nature, it is unlikely that a new I4I team will aid them in the future since it does not have a technical focus that needs aided by a theoretical I4I team.

Transition Plan

11/17/21

Project Name: Broad Top Area Medical Center Chronic Care Management

Introduction

The goal of this project was to provide BTAMC with a recommendation of what software they should use in order to successfully implement chronic care management into their practice. Requirements, both from the federal government and BTAMC were considered and described in a requirements document, and solutions based off of those requirements have been provided in the solutions document.

Assumptions

We did not have the exact amount of cost funds that BTMAC had going into this project. We had to keep in mind the cost of the CCM software as BTMAC might not have been able to afford it. Just taking the cost aspect in consideration and assuming that they would most likely want a CCM software solution that is affordable.

Organization

The Broad Top team which worked with us will continue to lead the project on the Broad Top side.

Work Required

The I4I team has provided a series of recommendations for the Broad Top team to implement CCM. The Broad Top team still must:

- Pick one of the proposed solutions
- Work with the solution provider to help plan and implement CCM

Schedule

BTMAC discretion

Section 4

Revised Planning Summary

Management Review Process: We met biweekly or more with Shelly Rivello and other members of BTAMC team to review progress and ask questions on the project.

Progress Measurement Review: Progress is measured based upon adherence to the Milestones set forth. To some degree, it will ultimately be more subjectively measured by the opinions of BTAMC team in how they believe how well we progressed with the project. The main indicators of progress would be the completion of deliverables on time.

Plan Details

Researching

- We began by researching BTAMC and gathering information on the work required from us. We had a meeting with the medical center representatives, where we discussed various needs.
- We researched multiple documents to find requirements for implementing Chronic Care Management services. This includes (but is not limited to) technical and functional requirements.
- The goal was to find an alternative software that could be used alongside Medent software, which is an Electronic Health Record (EHR).

Planning

- Planning was an interactive process throughout the duration of this project, however, the determination of milestones and goals was made during the first few weeks of the semester (see milestone list).

Writing

- We wrote a Requirements Document as a group, finding and summarizing different sources of information.
- We wrote a Solutions Document as a group, ranking and detailing different possible CCM software solutions.

Finalizing

- We finalized this project by submitting the Final Deliverables for BTAMC to review and utilize in future implementation of CCM software.

Final Major Milestones List

11/17/2021

Project Name: Broad Top Area Medical Center Chronic Care Management Project

Milestones	Initial Estimated Completion
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Draft of Requirements Doc sent for review	10/13/21
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Finalized Requirements Doc sent for approval	10/20/21
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Solutions search begins	10/27/21
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Solutions demos attended	11/10/21
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Finalized Solutions Doc submitted	11/17/21
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Project complete	11/19/21
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Each of the milestones were completed on time following the initial estimated completion. The milestone was adjusted to fit the current milestones.

Work Breakdown Structure

1.0 Research CCM to build base understanding of medical field and terminology

2.0 Create Requirements Doc

2.1 Meet with client

2.2 Research Federal CCM Standards

2.2.1 Integration

2.2.2 Tech Requirements

2.2.3 Billing

2.3 Identify client's needs to reach federal standards

3.0 Create Solutions Doc

3.1 Research software solutions

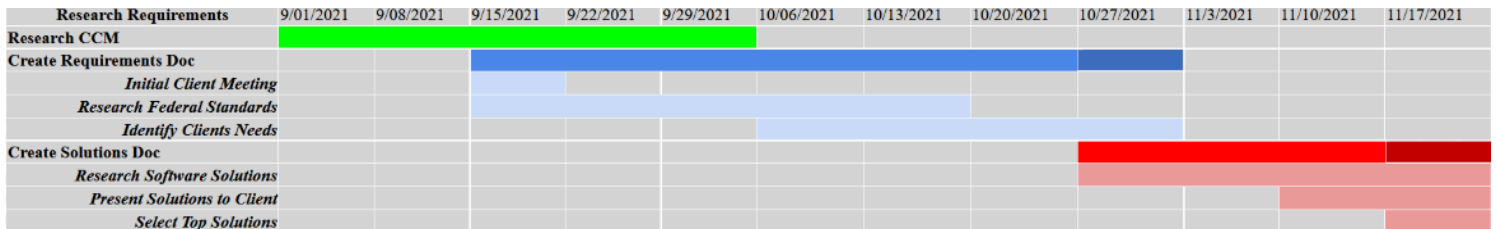
3.2 Present client with valid options

3.3 Select top solutions

Critical Path Analysis



Gantt Chart



Lessons-Learned Report

11/17/21

Project Name: Broad Top Area Medical Center Chronic Care Management

Project Sponsor: Shelly Rivello, Dr. Hayden

Project Manager: Kady Lohr

Project Dates: 8/26/21 -11/19/21

1. Did the project meet scope, time, and cost goals?

The project was completed on time, top three solutions were provided with detailed description.

2. What was the success criteria listed in the project scope statement?

This project will be successful if it accurately identifies the requirements for BTAMC, and the suggested software sufficiently meets said requirements. The project client will give Bill and Marlene an A recommendation at the end of the semester upon project completion as further indication of success.

3. Reflect on whether or not you met the project success criteria.

Our team successfully identified the requirements provided by BTAMC. All of the provided solutions satisfy FQHC requirements and are compatible with the existing EHR software, Medent.

4. What were the main lessons your team learned from this project?

As a team, we learned that communication among one another is important. This includes communicating with the clients as well and following-up with them consistently. We also learned that not everything replied back to email is true. An example is being told they implemented before then saying they haven't. We learned that a thorough checkup is good to validate the sources and information that is obtained.

5. Describe one example of what went right on this project.

Despite the occasional lack of communication with the BTAMC team, the I4I team was organized enough to finish the project successfully.

6. Describe one example of what went wrong on this project.

Inconsistent communication from our client. Despite the emails sent out to summarize each week's progress and schedule meetings, we rarely received information about whether those meetings would not be attended, finding out last-minute via text or a reminder email that they couldn't make it. Overall it was just hard to get information from them without sending a second email.

7. What will you do differently on the next project based on your experience working on this project?

Something as a team that we would do differently is communicating better amongst ourselves as well.

Appendices PPT files

[BTAMC I4I Presentation 1 - Google Slides](#)

[Requirements Document - Google Docs](#)

[Solutions Document - Google Docs](#)