**IT PROJECT**

**Electronic Health Record Improvement Project**

**Borth MD, Inc.**

**456 bidwell street**

**Folsom, CA 95324**

**19 November 2014**

Joseph Cawood Portion of the Group Project

Feasibility Analysis and Business Case

Background and Objectives

Existing Clinical Environment

* The practice contains the required staff available to implement the solution.
* The provider office must generate a staffing plan for training, implementation, and post go-live support in coordination with proposed timeline.

Existing Financial Environment

* Medical director to request payment schedule and timeline.
* Capital approved for implementation
  + Capital spending will be closely monitored by medical director upon completion of deliverables.
  + The practice is expected to incur licensing, hardware, and consultant costs as part of the implementation process.
* Benefits will be realized post-implementation to include automated charge capture, revenue intent, and data analytics

Existing Administrative Environment

* The practice has management buy-in to adopt a new solution.
* Administration to sponsor the project, and influence entity staff for a successful implementation.
  + The appointment of one physician, Mid-level provider, and Nurse.

Existing Technology Environment

* The entity currently uses an antiquated electronic medical record (EMR) that fails to meet practice requirements. The practice is further at risk by not meeting Meaningful Use measures, with the potential for reduced reimbursement.
* The practice maintains all server and database infrastructure onsite.

Problems and Solutions

* The existing EMR fails to accurately capture billing data for accurate claim submittal.
  + The proposed solution is anticipated to provide enhanced charge capture functionality.
* The EMR does fails to meet mandates acted by the Department of Health and Human Services.
  + The proposed solution must be a certified EHR technology.
  + Maintain the functionality to collect, analyze, and export measures of meaningful use (and their objectives).
* EHR does not meet HIPAA 256 bit encryption: Encrypt old EHR by updating system, or get new system
* EHR cannot interface with new billing system: get new system, find a way to interface

Project Objectives

* The project aligns with the mission and goals of the practice in standardizing treatment, payment, and operations.
* The solution will be compliant, up-to-date, comprehensible, and enhance all processes that lead to quality patient care.

Options

Acquire Commercial Off-The-Shelf Solution

* The solution will integrate with existing applications utilizing a HL7 interface.
* The solution will be packaged with 7/24/365 support.
* Updates and enhancements will be provided at no addition cost to the practice.
  + Included with licensing and maintenance agreement.

Options Analysis

Comparison of Options by Support for High-level User Requirements

* The acquisition of a new solution will be beneficial in meeting all the requirements set forth by the practice. In addition to taking the necessary measures to monitor capital spending.

Comparison of Options by Support for Project Objectives

* Project objectives support the migration to a new system.
* The project objective is to meet regulatory compliance, integrate data, and improve patient safety.

Comparison of Options by Support for Estimated Cost/Benefit

* Sufficient evidence exists to support to the transition to a new solution with long-term financial benefits.

Analysis of Options by Estimated Investment Performance

* Based on previous analysis, it is anticipated to take in excess of six months to realize a return on investment for the proposed solution.

Comparison of Options by Potential Risk

* There is a risk for loss of revenue if the acquired solution does not perform as advertised.
* It is anticipated that the solution will require ongoing maintenance to sustain operations.
* There is a moderate risk that the implementation will fail based on user rejection, budget constraints, and/or inadequate project management.
* The potential for penalties for non-compliance.
* The potential for an impact on care delivered.
  + Increased wait times and missing patient data

Recommendation Option

* It has been determined that under the current conditions, the project will move forward as described.
  + The cost/benefits out way the risk for failure.

Recommended Option Impact

Impact on Existing Clinical Environment

* Impact on clinical workflow is a negligible, and requires minimal training and education to prepare staff.

Impact of Existing Financial Environment

* The financial impact is moderate due to continual licensing and maintenance costs associated with the purchase of the solution.
* Financial constraints may hinder the practice is a loan is required for the acquisition of the new solution. It is the decision of the medical director to avoid loan procurement and use capital for the purchase.

Impact on Existing Administrative Environment

* The solution is anticipated to reduce clinical documentation errors, maximize revenue capture, and enhance administration reporting for the entire practice.
* The propose process will adversely affect regular duties for all staff.

Impact on IT

* Support services staff will be required to provide 24/7/365 support. A downtime support structure will be developed to meet the needs of the end-user. Secondary support will fall to super-users established at the time of implementation.

Recommended Acquisition and Implementation Plan

Acquisition Plan

* Obtain request for proposal
* Initiate contractual agreement
* Initiate systems analysis
* Initiate education and training
* Initiate integration and testing
* Implement solution
* Initiate post-support structure

Implementation Plan

* By contractual agreement the vendor will provide integration testing for all software interfaces that will transmit data between systems. Testing will include but is not limited to HL7 interfaces, COLD feeds, and information exchanges. The vendor agrees to load legacy data as a service. In order to transfer data the vendor will develop an extract, transfer, and load job for the database. The vendor agrees to provide validation testing upon the customer completing of all build requirements. Upon completion of validation testing, the customer will develop test scripts to validate that the software is work as designed.
* Post-implementation: The vendor agrees to test all support changes, code upgrades, customer enhancements prior to implementing in production. Please note that testing will not reveal all issues, and should be used to identify errors that can affect treatment, payment, and operations.

Project Management

* Identified project manager and Borth MD, Inc. office manager.

 Project Responsibilities

* Complete project objectives.
* Comply with federal and state regulatory standards.
* Implement solution, and provide support and maintenance.

 Project Management Processes

* The solution will require an interface to receive/send data from the electronic health record (EHR). At this time a team lead has not been appointed to field project concerns.

Project Charter

**Executive Summary**

**Project Title**: Electronic Health Record Improvement Project

**Description**: Borth MD, Inc. seeks to remove their existing electronic health record application from use; and implementing an identified solution that maintains a diverse amount of features.

**Benefits**: Enhanced patient access to care, and greater surgical volume

**Scope**: Implement a user-friendly electronic health record hosted by means of an application service provider.

**Estimated Duration**: 4 months

**Budget**: $$$

**High Level Risks**: Data from the existing electronic health record may not extract, transfer, and load to the proposed system. This risk may divert resources and alter the negotiated timeline for implementation.

**Project Leadership**:

|  |  |
| --- | --- |
| Role | Name |
| Initiative Owner | Kristen Robeson |
| Champion | Brian Chang |
| IT Project Sponsor | Joseph Cawood |

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# PROJECT DESCRIPTION

* Borth MD, Inc. seeks to remove their existing electronic health record application from use; and implementing an identified solution that maintains a diverse amount of features.

# OBJECTIVE

## Business Driver

* Borth MD, Inc. believes that by using a more advanced technology, patients will receive a higher quality of care. A more user-friendly environment will allow the physicians and patients to communicate on open and clearer level which will result and better patient care.

## Proposed Solution

* Implementation of Cerner Ambulatory Practice Management solution at the proposed office.

## Clinical Benefits

* Enhanced provider/patient access to care documentation

## Business Benefits

* Clinical benefits for this project will generate increased effectiveness of providing medical care, and facilitate new services previously not provided.

## Return on Investment (ROI)

* Not provided

## Strategic Plan Alignment

* **Business Intelligence -** Provide critical data / information for realizing AH strategies – real time, actionable, single source of truth

## Project Category

* **Grow the Business**: “Grow the Business” projects are initiatives that increase the ability to provide medical care, increase value, increase revenues, or reduce expenses. This project is anticipated to increase the ability to provide medical care and increase revenues.

## Is this project related to other projects?

* No

# SCOPE STATEMENT

## In scope

The scope of this project includes all design, development, coding, licensing, and hosting of the new electronic health record.

The vendor will host and complete all training that is required to successfully implement the new system.

The following criteria:

* Visually and aesthetically agreeable, and user-friendly environment.
* Migration of current application data over to the new system.
* All software and licensing are inclusive to this project.
* The system must be compatible with all current terminologies, classifications, and coding systems.
* Plan and perform a complete testing process on system to ensure functionality.
* Hosting of the system should include, but is not be limited to generating reports for;

* + Productivity
  + Any Meaningful Use required reports
  + OIG required reports
  + HIPAA required reports

## Out of scope

No objectives have been specified at the time of contract.

# HIGH-LEVEL SCHEDULE

## Estimated Duration: 6 months.

## Major Milestones

|  |  |
| --- | --- |
| **Milestone** | **Planned Date** |
| Sign Contract | January 4, 2015 |
| Obtain vendor consultants | February 20, 2015 |
| Implement software | March 30, 2015 |

# RESOURCES

## Financial Budget

Five year cost estimate is as follows (Figures in $K, no inflation)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Category** | **2014** | **2015** | **2016** | **2017** | **2018** | **Total** |
| Licensing | $$$ | $$$ | $$$ | $$$ | $$$ | $$$ |
| Support & Interface Fee | $$$ | $$$ | $$$ | $$$ | $$$ | $$$ |
| Vendor Consultant Fee | $$$ |  |  |  |  | $$$ |
| **Total** |  |  |  |  |  |  |

## Funding Source

* Capital funding from Borth MD, Inc.

## Staff Allocation

Estimated staff hours allocated to the project, per role

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Role** | **2014** | **2015** | **2016** | **2017** | **2018** | **Total** |
| Vendor Team | 0 | 1000 | 200 | 150 | 50 | 1400 |
| Education | 0 | 150 | 0 | 0 | 0 | 150 |
| Project Management | 250 | 800 | 0 | 0 | 0 | 1050 |
| **Total** | **250** | **1950** | **200** | **150** | **50** | **2600** |

# RISKS

Data from the existing electronic health record may not extract, transfer, and load to the proposed system. This risk may divert resources and alter the negotiated timeline for implementation.

# PROJECT APPROACH

## Infrastructure Approach

* No additional infrastructure required

## Security Approach

* Standard vendor approach

## Privacy (HIPAA) Approach

* Standard vendor approach

## Integration Approach

* See scope section

## Business Continuity Approach

* Standard vendor approach

## Support Center Approach

* Vendor will develop a support matrix

## Education Approach

* The standard models for education include
  + Train-the-trainer
  + End-user training
  + Post-implementation upgrade education

## Ongoing Operational Support Model

* Support Center to vendor
* Secondary support by super-users

# CHARTER REVIEW AND APPROVAL

The signatures of the people below document acceptance and approval of the formal Project Charter.

Project Management Team Date

Champion Date

IT Project Sponsor Date

Initiative Owner Date

**Kristen Robeson’s Portion of the Group Project**

Doctor Mark Borth: Owner and General physician at Borth MD, Inc.

Millie Heartwick: Office Manager, makes most of the decisions for the office

Kelsey Borth: The office nurse, Doctor Borth’s daughter

Jessica Wood: Office secretary works part time to try fill in for the office manager

Doctor Jun Atiga: General physician who has specialized in Pediatrics

Chelsea Hardesty: Physician Assistant, works full time

Contessa Johnson: Physician Assistant, works part time

Taylor Todd: Physician Assistant, works part time

Bonny Hilton: Medical Assistant, hired by Doctor Jun Atiga and Doctor Mark Borth and works for both of them.

Shelley Robertson: Medical Assistant, hired by Chelsea Hardesty only works when she is in the office.

Joy Patrickson: Medical Assistant, hired by Contessa Johnson only works when she is in the Office

Honor Smith: Medical Assistant, hired by Taylor Todd only works when she is in the office

EHR Implementation Roster

Borth MD, Inc. Representatives

|  |  |  |
| --- | --- | --- |
| Name | Date | Meeting Number |
|  |  |  |
|  |  |  |
|  |  |  |

EHR Vender Representative

|  |  |  |
| --- | --- | --- |
| Name | Date | Meeting Number |
|  |  |  |
|  |  |  |
|  |  |  |

System Change Request Form

|  |  |
| --- | --- |
| Customer Details |  |
| Full Name |  |
| Login ID |  |
| Location |  |
| Phone Number |  |
| Incident Type |  |
| Assigned Group |  |
| Assigned Analyst |  |

Details:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Summary:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |
| --- | --- |
| Date Completed | Signature |
|  |  |

**Brian Chang Portion of the Group Project**

Closeout Report: Borth MD, Inc.

1. Project Summary
   1. Project History and Purpose

Borth MD, Inc. completed the initiation as of February 20th, 2015. The purpose of this project was to implement a complete and fully functioning EHR system that provides an update to workflow for physicians and a patient portal that would comply with Meaningful Use. Borth MD, Inc. sought out an EHR vendor that would utilize web-based technology to create this EHR system that would allow the hospital organization to comply with HIPPA guidelines and have a fully electronic environment.

* 1. Project Objectives and Achievement Status

The project objectives were to create a virtual environment for the hospital in which the EHR system must be visually and aesthetically appealing for the end user. Functionality was also a key objective in which the end user must be able to easily navigate the system. The physicians also requested that their old EHR content be transferred over to the new EHR system. Current technologies such as laptops, tablets, and smart phones must be able to use this EHR system with ease as many physicians and staff use these devices. Lastly, testing must be thorough and upon implementation, the EHR system must be free of any glitches or defects.

Please see attached Deliverable Certificate for the achievement status of the project.

2. Lessons Learned

2.1 What Worked Well

- Vendor and IT staff were able to create an aesthetically pleasing virtual environment. End users were satisfied with the navigability and ease of use

- Training materials were provided and EHR vendor sponsored training sessions

- EHR compatibility with current technologies was easily integrated

2.2 What Could Improve

- Testing could have been improved through more end-user trials

- IT staff had a lack of responsiveness for support throughout the project

- Progress was not monitored close enough by project management team

3. Project Metrics

3.1 Scope Performance Summary

- EHR vendor delivered the completed EHR system

- System was fully functional, allowed for training and testing

- System was aesthetically appealing

- Made compatible for all devices

- licensing software and requirements were included

- reports were available to run for various functions as requested by the physicians and staff

3.2 Schedule Performance Summary

- 9 out of 10 schedule deadlines met

- missed the testing schedule deadline

- Project completed by March 30, 2015 deadline

3.4 Project Cost Performance Summary

|  |
| --- |
| **BORTH MD, Inc.**  **DELIVERABLE COMPLETION CERTIFICATE** |

**Purpose:** This document is to ensure that the requirements and expectations of the deliverable are met, approved and accepted. EHR Vendor and Borth MD, Inc. must review this document and sign before project can be completed.

|  |  |  |  |
| --- | --- | --- | --- |
| Project Identification | | | |
| Date of Deliverable Submitted | Project Name | | Project Number |
| 11/15/14 | Borth MD, Inc. EHR Implementation | |  |
| Program Manager | | Project Manager | |
| Joseph Cawood | | Kristen Robeson | |
| Completed by | | | |
| Brian Chang | | | |

|  |
| --- |
| Key Deliverables |
| * Fully functioning EHR system that is visually and aesthetically pleasing * Ease of access and familiar navigation capabilities * Migrate current EHR content to new system * Training materials provided and staff fully trained on new EHR system * Testing completed and EHR running without any issues * EHR system capable of running various reports as mentioned in the RFP * All software and licensing turned in and verified |

|  |
| --- |
| Signature indicates that the named deliverable(s), in the opinion of the signer:   * Meets the Negotiation Contract terms * Has no significant unresolved issues * Meets the acceptance criteria * Is ready for release and payment according to Contract terms |

|  |  |  |  |
| --- | --- | --- | --- |
| Conditional Acceptance | | | |
| The parties Borth MD Inc and EHR Vendor agree that the RFP and Contract Negotiations have been reviewed prior to the start of the project. EHR Vendor can conclude and agree that all deliverables have been addressed, reviewed, and completed. Any issues or changes that need to be done based on said deliverables may be listed below: | | | |
| Changes Required | Description | Issues | Description |
|  |  |  |  |

|  |  |
| --- | --- |
| Accepted By | |
| Project Manager |  |
| Program Manager |  |
| Program Sponsor |  |
| Customer/Client |  |