

Project Plan for Waverly Family Health EHR Implementation

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HCIN 542

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March 1, 2021

Document Control

Document Information

	Information
Document Id	Electronic Medical Record Management System
Document Owner	Timothy Kwong
Issue Date	01/26/2021
Last Saved Date	03/01/2021
File Name	HCI 542_Project_Plan_TimothyKwongv6

Document History

Version	Issue Date	Changes
[1.0]	01/26/2021	Planning Basis (1), Appendix Project Charter
[2.0]	02/02/2021	Milestones, Appendix
[3.0]	02/08/2021	Quality Test Plan, Appendix B
[4.0]	02/15/2021	Stakeholder Analysis, Appendix E
[5.0]	02/22/2021	Go-Live Checklist
[6.0]	03/01/2021	Project Closure Document

Document Approvals

Role	Name	Signature	Date
Project Sponsor	Barbara Berkovich		3/1/2021
Project Manager	Timothy Kwong		3/1/2021

Table of Contents

1	PLANNING BASIS	3
1.1	SCOPE	3
1.2	MILESTONES	3
1.3	PHASES	3
1.4	ACTIVITIES	4
1.5	TASKS	4
1.6	EFFORT	4
1.7	RESOURCES	6
2	PROJECT PLAN	6
2.1	SCHEDULE(GANTT CHART)	6
2.2	DEPENDENCIES	8
2.3	ASSUMPTIONS	8
2.4	CONSTRAINTS	8
3	QUALITY AND TEST PLAN	9
4	GO LIVE PLANNING	9
5	PROJECT CLOSURE REPORT	10
	APPENDIX A – PROJECT CHARTER	11
	APPENDIX B – WORK BREAKDOWN STRUCTURE	12
	APPENDIX C – FMEA RISK REDUCTION	12
	APPENDIX D – TEST PLAN	14
	APPENDIX E – STAKEHOLDER ANALYSIS	18
	APPENDIX F – GO LIVE CHECKLIST	20
	APPENDIX G – PROJECT CLOSURE DOCUMENT	21

1 Planning Basis

1.1 Scope

Project planning for Waverly Family Health services implementation of new web-based EHR system into clinic to manage patient information and care.

[Project Charter Detail - Appendix A](#)

Work Break Down Structure Module #3

1.2 Milestones

Milestone	Description	Delivery Date
Charter Approval	The Business Case has been documented and was approved by the Project Sponsor.	03/31/21
Work Break Down Structure(WBS)	WBS approved	05/07/21
Project Quality and Testing Plan Approved	Staff training completed and updated prior to "Go Live"	08/31/21

[WBS Detail – Appendix B](#)

1.3 Phases

A *phase* is “a set of activities which will be undertaken to deliver a substantial portion of the overall project”. Examples include:

- Project Initiation
- Project Planning
- Project Execution
- Project Closure.

List and describe the major project phases within the following table.

Phase	Description	Sequence
Project Initiation	Defining the project by developing a Project Charter as well as recruiting the project team.	Phase # 1

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1.4 Activities

An *activity* is “a set of tasks which are required to be undertaken to complete the project.” Examples include:

- Develop Quality Plan
- Formulate Supplier Contracts
- Perform Project Closure.

List and describe the major project activities within the following table.

Phase	Activity	Description	Sequence
Project Planning	Develop Quality Plan	Produce a document describing Quality Assurance and Quality Control and process review activities to be undertaken.	After the Project Plan but before the formulation of supplier contracts

1.5 Tasks

A ‘*task*’ is simply an item of work to be completed within the project. List all tasks required to undertake each activity, within the following table:

Phase	Activity	Task	Sequence
Project Planning	Develop Quality Plan	Identify Quality Targets Identify Quality Assurance Techniques Identify Quality Control Techniques Document Quality Plan	1 st 2 nd 3 rd 4 th
Implementation	Staff training		
	EHR Testing		

1.6 Effort

For each task listed above, quantify the likely ‘effort’ required to complete the task.

Task	Effort
------	--------

Identify Quality Targets	<i>no. days</i>
Identify Quality Assurance Techniques	<i>no. days</i>
Identify Quality Control Techniques	<i>no. days</i>
Document Quality Plan	<i>no. days</i>

1.7 Resources

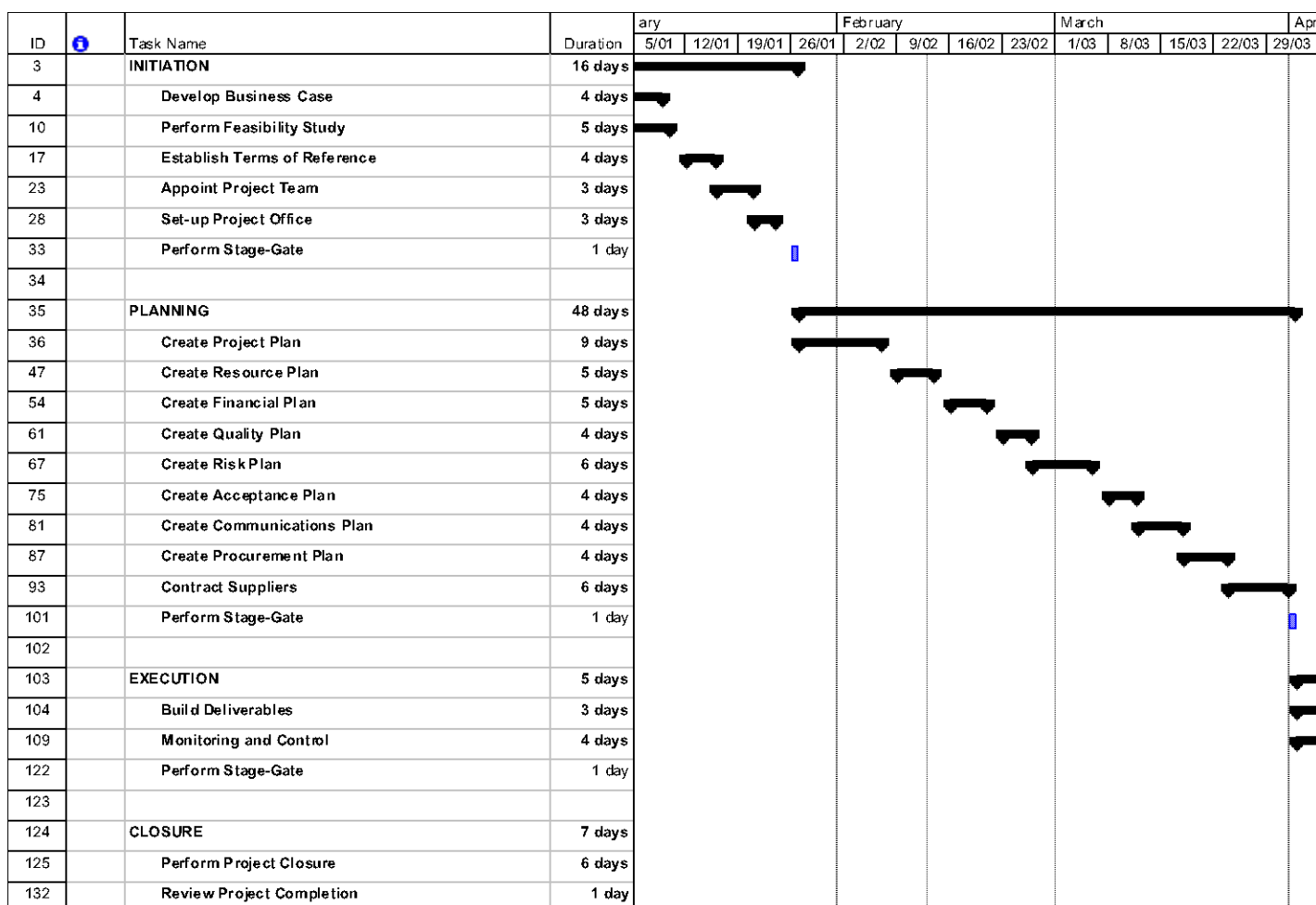
For each task identified, list the resources allocated to complete the task.

Task	Resource
Identify Quality Targets Staff Training EHR testing	<i>name</i> <i>name</i> <i>name</i> <i>name</i>

2 Project Plan

2.1 Schedule(Gantt chart)

Provide a summarized schedule for each of the phases and activities within the project you have identify using the supplied Gantt chart template. The Gantt chart



will provide a time sequence for all your phases and important activities.

Note: Refer to the Appendix for a detailed project schedule.

2.2 Dependencies

'Dependencies' are logical relationships between phases, activities or tasks which influence the way that the project must be undertaken. Dependencies may be either internal to the project (e.g. between project activities) or external to the project (e.g. a dependency between a project activity and a business activity). An example of a dependency for this project is: Staff training on the new EHR can't occur until the responsible person for carrying out the training (project trainer) has been trained on the new EHR.

There are four types of dependencies:

1. Finish-to-start (*the item this activity depends on must finish before this activity can start*)
2. Finish-to-finish (*the item this activity depends on must finish before this activity can finish*)
3. Start-to-start (*the item this activity depends on must start before this activity can start*)
4. Start-to-finish (*the item this activity depends on must start before this activity can finish*).

List any key project dependencies identified by completing the following table:

Activity	Depends on	Dependency Type
Set-up Project Office	Appoint Project Team	Finish-to-start
Planning	Team set up, stakeholder buy in	Finish-to-start
System Go-Live	Project completion	Start-to-finish

In the example given above, the activity "Appoint Project Team" must finish before activity "Set-up Project Office" can start.

2.3 Assumptions

List any planning assumptions made. For example:

It is assumed that:

- The project will not change in scope
- The resources identified will be available upon request
- Approved funding will be available upon request.

2.4 Constraints

List any planning constraints identified. For example:

- The project must operate within the funding and resource allocations approved
- The project team must deliver the EHR implementation and "Go Live" on the agreed upon date with no requirement for additional hardware

- Staff must complete the project within normal working hours to avoid unbudgeted overtime expenses.

3 Quality and Test Plan

Module# 4, 5 and 6

Utilizing the supplied template create a quality plan for the project and a brief testing plan for the implementation of your Electronic Health Record. Testing software, hardware and the two integrated is critical prior to any “Go live”. Think carefully about how you want to test your systems. The supplied Document titled: Electronic Health Record(EHR) system Testing Plan. Using the supplied template titled components to Test; identify specific areas of testing as the plan provides a general description. For example, indicate you will be testing specific EHR functions such as 3 or more of the following:

- a. Ability to document a patient encounter
- b. Ability to retrieve prior clinical records created by the system
- c. Ability to ordered and retrieve diagnostic testing through the HER system
- d. Ability to order scheduled medications through the HER system

Quality Test Plan

Attached in the appendix is the quality test plan of the implementation of the EHR system and making sure that it is running smoothly prior to launch. We will be running unit and functional testing, system testing, integrated testing as well as performance and stress testing. This ensures that we are covering all corners to minimize potential system failures before it goes live and is fully implemented. It will cover a period of about three months to make sure that everything is in line with the new system that will be implemented.

[Appendix D – Test Plan](#)

Quality Plan

Using a failure mode effects analysis (FMEA) plan we look at the potential systemic failures that could occur in the use of the system and how to look for those issues before hand. We want to be able to minimize those issues and know how to handle them if they do happen to occur. No system is perfect so this analysis outlines what we are looking for and what we expect to happen with the implementation and use of the new EHR system as well as the hardware associated with it. Attached to the appendix is our FMEA of this new system.

[Appendix C – FMEA](#)

Key Stakeholder Analysis

Identifying key stakeholders was identified in project scope development. Here we analyze those key stakeholders and their influence on the project for the EHR implementation to help us know who we should focus attention on for the greatest success for project development.

[Key Stakeholder Analysis – Appendix E](#)

4 Go Live Planning

A go-live checklist is developed for the weeks upcoming to the projects final implementation stages and setting the ground to make sure everything is in line to make sure testing runs smoothly for live operation of the new EHR. All staff and stakeholders involved will be part of the decisions being made to bring the project to life and ensure all issues present are addressed and that the project can run as smoothly as possible with the weeks leading up to as well as the day of launch.

[Go-Live Checklist – Appendix F](#)

5 Project Closure Report

Documentation of project closure report. This goes over what the project entailed and what areas were addressed as well as future issues that will be dealt with over the life of the system that was implemented as a result of this project. Addresses issues that have arisen over the course of development and use of the system. Areas that need to be looked at as the project gets more use.

[Project Closure Document – Appendix G](#)

Appendix A – Project Charter

Waverly Family Health EHR Implementation

Project Charter

A. General Information

Project Sponsor:	<u>Dr. Barbara Berkovich</u>
Project Manager:	<u>Timothy Kwong</u>
Prepared by:	<u>Timothy Kwong</u>
Date:	<u>January 25, 2021</u>

B. Purpose

To implement the transfer of patient records to an online-based electronic health record (EHR) system called Practice Fusion. To improve flow of patient information as well as patient care at Waverly Family Health services to allow clinicians as well as patients to have better access to their healthcare.

C. Constraints and Assumptions

There has been an allocation of \$20,000 for this EHR implementation project. About half of budget alone will be used for EHR subscription cost, the rest will be allocated towards staff education as well as resources needed to fully implement transition to EHR system. The clinic wants to use its own staff for the implementation of the software and transfer of patient data. Training will need to be done for EHR use as well as how to handle patient data and ensure no information in loss in the implementation process. With no prior training in implementation and use of this EHR for a majority of staff it will take time to ensure that all staff is appropriately trained, and assignments are given to each staff members ability as well as scope of practice.

D. Project Scope Statement

Project is regarding the Implementation of an online based EHR system, Practice Fusion. Transfer of existing patient record system into new EHR. The projected time frame to completion is set for six months with an initial budget of \$20,000.

E. Resource Requirements

Hardware has already been purchased and in use in the clinic, hardware specifications meet the minimum requirements to run the Practice Fusion. We have five known providers that will need access to the EHR system, Dr. Waverly, Dr. Jones, Mrs. Johnson, Mrs. Jones as well as Mrs. Wright. At \$149 per provider a month and an annual commitment required it will come to \$8,940 annually for new EHR access. Remaining budget can be allocated to provide extra labor and resources required to transfer patient data and provide for project manager as well as additional personnel and time needed for their team.

F. Risks

One of the biggest issues that the organization may encounter is the initial budget limit as projected costs are mostly unknown at this time. Subscription cost of the EHR system is known and set, however the potential impact of the transition period where less patients may be potentially seen. Time taken away from staff that need to be trained on the new EHR as well as training from the ground up for staff completely new to the EHR implementation process. Time is what will be the costliest factor and cannot be set in stone until the project is underway. Another projected major issue will be hardware that may not be able to run the new software or having hardware malfunction and limiting use of web-based software. Relating to hardware there could be technical issues that will arise from having an exclusively web-based platform, if the host Practice Fusion has issues so does the entire health record system as well. Having the staff to do the implementation of the new EHR can also carry risks for the project as well as most staff have no prior in implementation of EHR systems, this can hinder the timeline and cost more money in the long run.

G. Success Metrics: Criteria for Evaluating Project Success and Milestones

Within the first month the clinic will be organizing which stakeholders will be responsible for aspects of the project at hand. Understanding what is needed from each individual involved with the project and what is expected of them. Making sure that all hardware issues are resolved and that the correct equipment is being used for the EHR system that is to be used. In the next three to four months transition of patient data onto Practice Fusion will be implemented and will use the largest portion of implementation of the project.

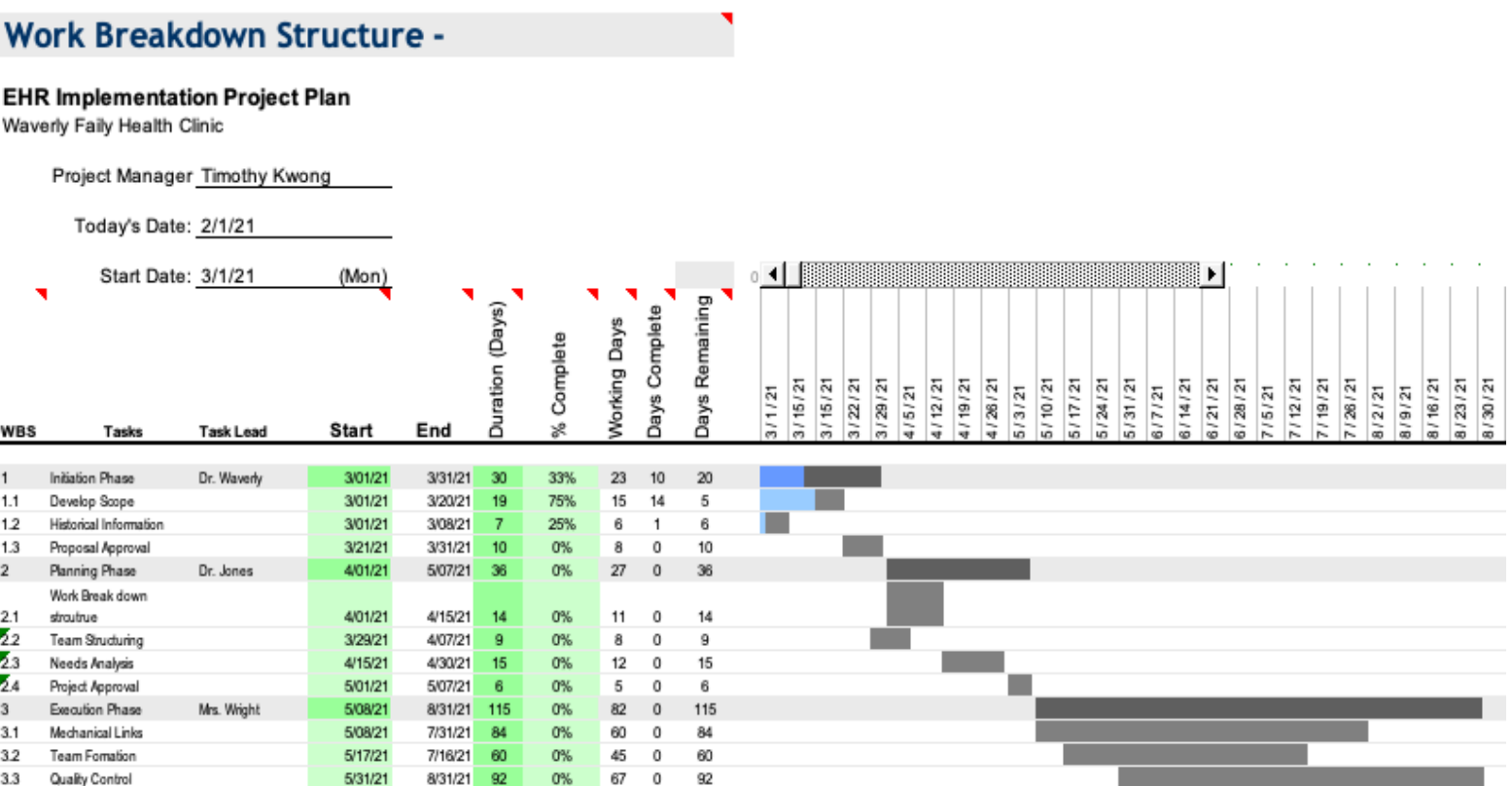
F. Key Stake Holders

Dr. Waverly: clinic owner and medical director, Dr. Jones: physician and clinic partner, Mrs. Jones: clinic director. Clinical director Mrs. Jones will oversee implementation process as the individual involved with clinical work decisions. Dr. Waverly as the medical director is heavily involved as well to determine the necessary components are addressed in the EHR system and that staff are meeting standards needed. Dr. Jones as the partner will also assist with decision making processes. These are the decision-making personnel and determined to be key stake holders with all other staff operating as project team members

F. Executive Summary

Waverly Family Health services knows the importance of having optimal patient and data flow in its practice to increase reliability and accountability of its services. It is proceeding with an implementation plan of using a web-based electronic health record to help bring its clinic to propel its practice to the forefront of the industry by having the most up to date information available at their fingertips as well as the patients that they care for. Having a growing practice in the modern age calls for seamless flow of information to be able to provide the best care possible for the individuals that they care for.

Appendix B – Work Breakdown Structure



Appendix C – FMEA Risk Reduction

Test	Components	Date	Responsibility	Accepted
Unit & Functional Testing	Each major function performs as specified in user manual.	6/5/21	Mrs. Wright	
	Design changes/customizations are present & work as requested. Document all changes for reference.	6/5/21	Mrs. Wright	
	Screens appear as expected (content and placement of fields, codes, drop down menus, and messages).	6/10/21	Mrs. Wright	
	No spelling errors or color changes. Readable icons.	6/10/21	Mrs. Wright	
	Appropriate representation of content can be printed if necessary for legal purposes.	6/30/21	Mrs. Wright	
	Entries that have been corrected and their corrections are both displayed accurately.	6/30/21	Mrs. Wright	
	Fields edits (e.g., valid values, options, defaults) function as expected.	6/30/21	Mrs. Wright	
	Alerts and clinical decision support provides appropriate reminders and prompts. Use scripts to test various scenarios.	6/30/21	Mrs. Wright	
System Testing	Workflows send and/or receive data properly between systems (e.g., between EHR and pharmacy or billing, PMS messages and EHR). Use scripts to test various scenarios.	7/3//21	Mr. Lawrence	
	Interfaces between applications move data correctly and completely. Test both sending and receiving when interfaces are bi-directional.	7/10/21	Mr. Lawrence	
	Connectivity with external organizations is accurate and complete as authorized (e.g., portal access to/from hospital/clinic, continuity of care record to referrals, personal health records for patients, disease management to/from health plan).	7/31/21	Mr. Lawrence	
	System access is appropriate per assigned privileges. Test attempts to gain access when not authorized.	7/20/21	Mr. Lawrence	
	Data are processed accurately, in graphs, tables, claims, client summaries, reports, etc.	7/31/21	Mr. Lawrence	
	Data correctly populate registries, reporting warehouses, etc.	7/31/21	Ms. Smith	
	Integrated Testing (simulates live environment)	Ensure all system components that share data or depend on other components work together properly.	8/4/21	Ms. Smith
Ensure that workflows reflect actual new processes and workflows.		8/6/21	Ms. Smith	
Ensure that usage is defined in and follows policies and procedures. Reinforce training as applicable.		8/10/21	Ms. Smith	
Ensure that help desk, support personnel, and other aids function properly.		8/15/21	Ms. Smith	

Test	Components	Date	Responsibility	Accepted
	Ensure that EHR works with all forms of human-computer interface devices and modalities being used (e.g., tablets, PDAs, voice recognition, and speech commands as applicable).	8/31/21	Mr. Lawrence	
	Attempt to break the system by testing mission critical and high risk functions, such as situations requiring exception logic (e.g., overrides to clinical decision support), handoffs from one process to another, and when you may have a series of events over a period of time (e.g., assessments performed at designated intervals).	8/10/21	Mr. Lawrence	
Performance & Stress Testing	Measure response times for key transactions or interactions with the system, and assure they are within acceptable limits, which may be defined in the contract.	8/19/21	Mrs. Wright	
	Simulate an extremely high volume of activity on the system such as would exceed anticipated peak loads of system usage.	8/25/21	Ms. Wright	
	Measure the time it takes to generate reports and data dumps, and the impact on system performance.	8/31/21	Mr. Lawrence	

Appendix D – Test Plan

Exhibit 1: Table of Components to be Tested

FMEA

Step #1

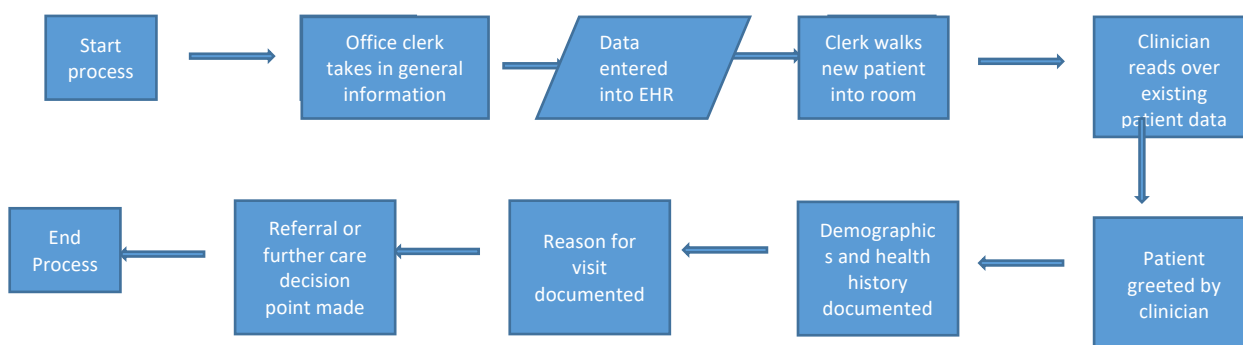
Analysis of hardware implementation of workstation in room number 1

Step #2

Team will comprise of Mrs. Wright team lead and previous EHR install experience, Mr. Lawrence with his IT experience, as well as Ms. Smith the MA

Step #3

Flow map initial interview of patient



Step #4

System could fail in a few ways such as faulty peripherals (ethernet, wifi), power outage bringing access to whole web-based EHR to a halt. Actual computer tower failure, motherboard failure, user access credentials not correct, users not being trained correctly.

Step #5

During your analysis you may identify steps in a process that may not add value to the process. This is an opportunity for you to redesign the process or eliminate the steps. Take each step in your process and use the following questions to determine potential for failure

In section #5 use these questions to drive your analysis:

- What could happen should this failure occur? (outcome)
- How serious would the outcome be? (severity)
- How often is this failure likely to occur? (probability)

Determine the outcomes of failure. Describe what could go wrong and map that flow. The next step is then to determine how serious the outcomes is. Use the following rating scale to indicate the level of severity:

Rating	Outcome Category	Description
5	Catastrophic	System Hardware Crash
4	Major	Power Failure
3	Moderate	Internet outage
2	Minor	Peripherals failure
1	Near Miss	Peripherals not attached, user not trained, incorrect data entry

Failure Probability rating scale

Rating	Outcome Category	Definition (the following are examples you need to define your own)
5	Very High probability: failure is most inevitable	1 failure in 10 attempts
4	High: repeated failures	1 failure in 70 attempts
3	Moderate: occasional failures	1 failure in 1,000 attempts
2	Low: relatively few failures	1 failure in 10,000 attempts
1	Remote: failure is unlikely	< 1 failure in 500,000 attempts

Step #6

Your final step is to design and implement changes to reduce or prevent problems. Identify the processes that have high ratings and a high probability of failure and create a brief plan for each one you identify.

For your quality plan you will want to create tracking metrics for each of the process change. This will help you determine if the process is corrected and how it is functioning with the given system.

To complete your activity utilize the following template and fill in the areas as indicated. This final document is what you will turn in at the end of this module and become part of your quality plan in your project plan.

FMEA Template

This template can be used to document the completed FMEA including follow-up actions and measures. Revise this template as necessary to meet your needs. Review the Guidance for Failure Mode and Effects before using this template.

Process analyzed: _____

Team leader: _____

Team members:

Name	Position	Name	Position

Describe your process steps (flowchart): As per the suggested guidance, you might use sticky notes on separate papers.

Identify what could go wrong during each step of the process. You might use sticky-notes indicating what could go wrong for each step. Line these up beneath each process step.

For each item identified that could go wrong, rate each for the seriousness of this outcome (severity) and how often the mistake is likely to occur (probability) (per the suggested guidance and your rating scale preferences). Indicate these ratings on the sticky notes that identify what could go wrong.

Review your ratings and decide on your process failures identified as high priority for corrective actions. List the process failures you will focus on in the table below.

Describe your corrective actions for process failures identified as high priority: Before determining your corrective actions for process failures, consider whether you should conduct a systematic analysis to determine the root cause of each failure chosen for action. If necessary, use techniques such as the five whys, flowcharting, or the fishbone diagram to assist in identifying the root causes. Additional tools are available that guide the use of each of these techniques. It is helpful to keep any of these analyses with your PIP documentation for future reference. In the table below, describe each root cause for each process failure, and then enter your specific actions to reduce or eliminate the failure, your completion timeframe, and the responsible individual or group.

Process Failure	Root Cause of Process Failure	Specific Actions to Reduce or Eliminate the Failure	Completion Time Frame	Responsible Individual/Group

Measures of Success

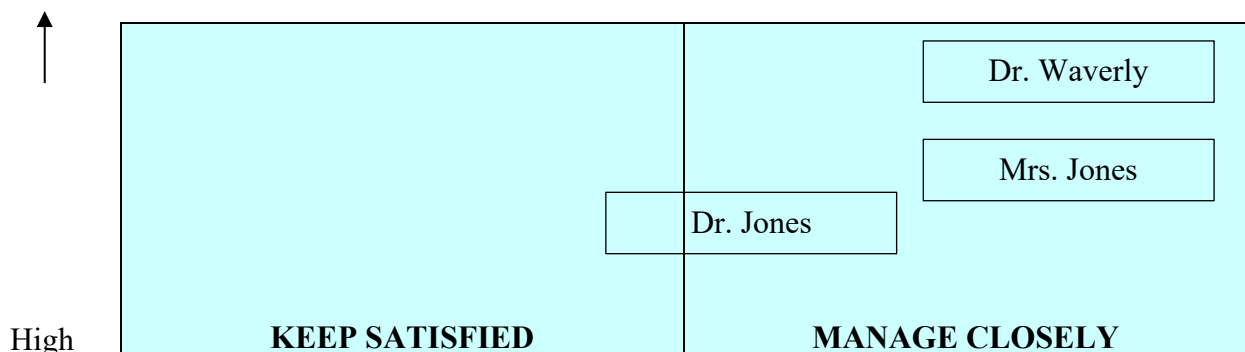
Corrective Action	Measure(s) of Success (How we will know if this action is successful) (Consider measures of how often the failure is still occurring after process changes and the incidence of adverse events related to the failure)	Reporting Schedule and Individual or Group Responsible for Reviewing Results

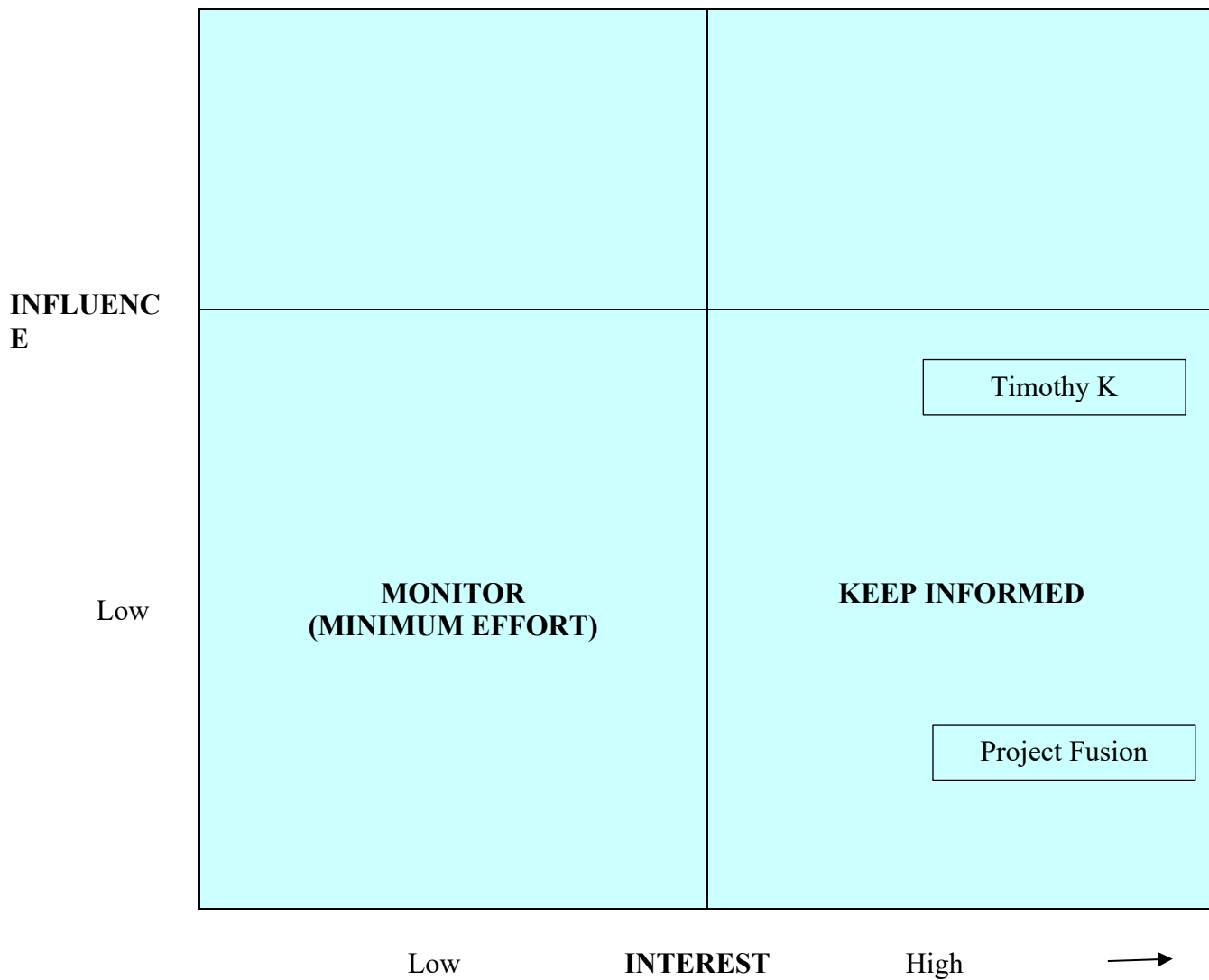
Signature of FMEA leader/facilitator _____ Date _____

Appendix E – Stakeholder Analysis

Table 1: Stakeholder Perspectives					
Stakeholder	Position	Influence	Interest in Project	Goals	Objections to Project
Dr. Jones	Clinical Partner and physician	9	High	All EHR needs are addressed from clinical perspective	EHR system may not be sufficient to fully meet needs of clinic
Mrs. Jones	Clinic Director	10	High	Manage teams to stay on task and within timeframe	That project may not have enough resources to complete on time
Dr. Waverly	Owner and Medical Director	10	High	All staff concerns are addressed, and communication is with rest of team with project	Cost may be too high to successfully implement project
Practice Fusion	Vendor	2	High	Communicate with Project manager and clinical director in all aspects to project implementation	None, wants clinic to use their program
Timothy K	Project Manager	2	High	Communicate and coordinate project implementation, set timeline and deadline for all parts of project	Not enough staff to manage project efficiently

Influence / Interest Grid





Appendix F – Go Live Checklist

Weeks before Implementation

- Pre-plan day for go-live, clinic will have dedicate day and schedule no patients in clinic so full resources can be dedicated to go-live day
- Plan meeting with one week with staff, then another day with all physicians to be able to address needs and questions
- Communicate with outside vendors of pending transition
- Verify date of go-live with EHR vendor
- Make sure all workstations have latest firmware and software updates
- Plan dates of staff and physician training of new EHR and clinic specifics
- Data transfer of patient information is in process

Week before Go-Live

- Verify all workstations have proper hardware installed: power, data cabling, hardware powering on, etc.
- Establish set workflow from meetings with all staff and verify to make sure that this is the proper workflow they need and want
 - On staff downtime make sure testing is done to ensure that they know how to operate program and chart information properly
 - Check off each part of workflow to ensure that each staff member has fulfilled the learning needed to operate new system for their responsibilities
- Notify all existing and incoming patients of new system being implemented
- Make sure all staff credentials are working and updated with testing in place as well
- Go-live day schedule distributed and communicated with all staff and needs are addressed
- Procedures in place for orders that need to be processed in case of system down time

Go-Live Day

- Schedule of system go-live is given to staff, when each component is to be tested throughout day for final go around
- Beginning of day huddle initiated to verify staff knows roles of day and what is expected and goals set to achieve
- Communication between hardware is fluid, fax machines connected, internet connectivity verified and printers are able to receive data
- Staff informed and trained on down time procedures, plan for quarterly refreshment of policies and procedures in case of event
- Paper forms for patient intake as well as visit documentation ready to go in event of down time
- Daily backups verified for all patient data as well as offline backup of patient files
- Support staff is onsite to make system changes that are needed
- Team meets mid-day to address any questions that have arises, make changes as needed with support team

Appendix G – Project Closure Document

PROJECT CLOSURE REPORT

1 – INTRODUCTION

1.1 Project Identification

Proposal for implementation of electronic record cloud-based system ‘Project Fusion’ to manage Waverly Family Health Clinic patient data.

1.2 Project Sponsor

Project Sponsor is the Waverly Family Health Clinic

1.3 History of the System

Waverly Family Health Clinic is in the transition from a paper-based medical record keeping system to a electronic cloud-based medical record management and patient management system. The goal of the transition is to increase efficiency and improve patient care overall.

2 - EVALUATION SUMMARY

The purpose of this section is to provide a summary of the overall adequacy and acceptance of the system.

2.1 General Satisfaction with the System

Most users of Project Fusion system are receptive of the change it is bringing and the improvement in patient care workflow processes. Increase in patient flow has also been a welcome change as the new system has been able to increase efficiency, accuracy, and communication within and outside clinic.

2.2 Current Cost-Benefit Justification

Decrease in time spent on patient post-care documentation, increase of patient satisfaction due to increasing time able to be spent with patients, patients able to be seen faster due to decrease of time in other areas that will be streamlined due to new electronic based record system versus paper.

2.3 Needed Changes or Enhancements

More acceptance of change needs to be implemented; leadership needs to step in to create a fostering environment of transition to new system. More training for new system as most staff has been trained on paper system and learning new forms, etc.

3 ANALYSIS AND IMPLEMENTATION

3.1 Purpose and Objectives

[Evaluate the adequacy of the original definition of purpose and objectives presented in the Project Charter document and if the objectives were achieved during implementation. Comments should address the extent to which goals and objectives were met.]

3.2 Scope

Proper limits were adequately established for initial project implementation. Allocated resources for the project were used appropriately and within its established limits.

Original scope was accomplished to reach goal of transition to electronic medical record system. Initializing transition for clinic to the new established systems.

3.3 Benefits

Decrease in patient record processing time has dramatically improved, decreasing cost associated with extra time needed per patient and possible revenue loss with less patients given care during same period.

3.4 Development Cost

Since majority of hardware had already been implemented into workstations as well and treatment areas the initial hard, known costs were already taken care of. As for variable costs such as loss of patient treatment due to time spent with project as well as extra time needed to train staff for new system were calculated at losses initially. The majority of cost was put towards system development as well as workflow establishment as well as transfer of existing patient data as we were transitioning directly from a paper based record system to a electronic system as that data transfer was the largest portion of the project that needed all hands on deck.

3.5 Operating Cost

Operation costs are still yet to be fully realized at this point of the project implantation, as it is still in its initial stages of deployment in the clinic. Initial operation costs have been calculated such as initial fees for using the Practice Fusion, however in the near future if there are any operational issues that need intervention from third parties a budget will be set aside to address those problems promptly.

3.6 Training

Training for staff was done over the course of the project, training was properly done before full implementation and go-live of the new electronic EHR system as part of the planning phase was made a priority and goals were reached.

4 OUTPUTS

The purpose of this section is to evaluate the adequacy and usefulness of the outputs from the system. Outputs are defined as the clinical records (data) generated by patient visits and any associate data such as billing , coding, quality reports/data.

4.1 Usefulness

The clinicians have felt that the new EHR system has overall met their expectations and needs of transitioning into the new system. The new system has improved systems such as streamlining biling, increasing patient scheduling, prescription filling, documentation of care and communication with patients. Main goals of increasing workflow efficiency in the clinic as well as patient satisfaction has been addressed with the new system and been able to help the clinic realize that this is the correct system and transition for them.

4.2 Timeliness

Easy access to medical records has been a big issue that has been addressed with the new records system. The purpose of the system was to make the patient care more streamlined and this has been a step in the right direction. Communication with outside providers such as specialty clinics and pharmacies has become more streamlined and better communication established, catching errors and

miscommunication earlier as well as communication with patients and the progress of their care plan is updated much faster leading to better patient satisfactions as well as overall care.

4.3 Data Quality

There has been a big decrease in medical records and catching medical errors. Transitioning into the electronic record system has led to faster processing of patient care records as well, communication with outside vendors has become more streamlined therefore being able to catch those errors and fix them in as appropriate. Patient history and active care has become better documented as the clinician now directly enters it into the care file and can be accessed later for audits of data in case patient files need to have changes made. Increasing efficiency has led to better data quality and decrease of data entry errors.

5 SECURITY

The purpose of this section is to determine if the system provides adequate security of data and programs. A reassessment of HIPPA compliance should be part of the review process. In addition to access security, procedures for backup, recovery, and restart should be reviewed.

5.1 Data Protection

In event of system failure staff is adequately trained to temporarily transition to paper-based forms for patient intake as well as care documentation. Data is backed up on a daily basis onto remote servers in a separate facility to ensure that data is always available in event of a crash. Servers are encrypted and HIPAA compliant. Practice Fusion software is also 256-bit encrypted to protect information that is entered into its cloud-based servers which is also backed up in a separate facility. Active malware detection and training of staff to sniff out phishing software is done on a quarterly basis to protect the internal system as Waverly Family Clinic.

5.2 Disaster Recovery

As mentioned earlier as part of data protection, disaster recovery is also embedded in the process planning. When disaster strike to have continuity of care patient information is temporarily transcribed onto paper forms that are always ready to go. Once disaster event has been resolved then recovery is initiated and patient care can be updated and continue on.

5.3 Audit Trails

With Practice Fusion all documentation is timestamped so it is a very easy process in creating an audit trail to trace how a patient care file was put together. Any changes to documentation can also be tracked appropriately. This will help the clinic determine when and how errors may have occurred and how to address the issues to reduce future incidents.

5.4 System Access

System access only comes from clinic owners who will grant access on an ongoing basis when new employees are onboarded and when third party access is needed. Possibility of one time access keys could be granted if system is desired to have those capabilities in the future.

6 COMPUTER OPERATIONS

The purpose of this section is to ascertain the current level of operational activities.

6.1 Control of Work Flow

Workflow has been dramatically improved with the new system in place. Each step of the process has been properly planned out from new patient intake to ongoing patient follow-up and care. Each area that needs to be addressed has to be completed before the new system allows the next steps to be taken. Template creation has been finalized to address those areas that need the most attention and most data to provide the adequate and appropriate care.

6.2 Scheduling

In terms of getting patients the appropriate appointment times, follow-ups it has become a more efficient flow to not missing patients because of lack of follow up. The new system reminds both patients as well as front office staff of upcoming schedules with automation in place. Also the system reminds clinicians of time sensitive tasks that need to be completed for certain patients and that they need to follow up.

6.3 Computer systems

As addressed in security section, when there are issues with the system there are contingency plans in place to address a temporary fix to the system while the main system is being taken care of. When it comes to dealing with hardware issues or software issues of the new system a third party is usually involved when it is not able to be addressed internally from staff present. As they are using a third-party software that is web based, issues should be able to be address in real time. Hardware issues will be addressed by outside IT vendors.

6.4 Peak Loads

Peak loads that have occurred have been able to be offloaded by scheduling patients using the online based system and since the new system has become more efficient it has been easier to deal with patient care documentation thus being able to see more patients in the same time frame. So mostly peak volume issues have not necessarily occurred as of yet.

7 MAINTENANCE ACTIVITIES

The purpose of this section is to evaluate maintenance activity involving the EHR system software and all hardware components.

7.1 Activity Summary

As of now no major maintained activity has been done as the system is still in its beginning stages of use. However, down the line there will inevitably be the need of maintenance services and activities.

7.2 System Maintenance

Quarterly maintenance will need to be conducted on the system as there needs to be analysis of the actual needs of the system and if they are being met. Hardware checks will also need to be conducted to ensure that everything is operating efficiently and able to handle the software updates that are constantly being released by Practice Fusion. Storage of patient data is not as big of a concern as patient database increases since they are using a cloud-based system and not internal servers.