Vanderbilt University Medical Center

Project Implementation Process (PIP)

Guidelines

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Overview

This document contains guidelines for managing Informatics Implementation Projects. This document is general in nature and not intended to treat the subject of project management in depth. The purpose of this document is to provide a standard process for implementing projects. This process includes common terms, definitions, form templates, and a repository for all project documentation. Another goal of documenting the Project Implementation Process is to define roles and responsibilities and thereby set expectations for the project teams.

Typically, Informatics Implementation Projects involve the implementation of a vendor software product, a software release, a system enhancement, or an in-house developed software product. Usually, one or more user departments are involved as well as vendor representatives, Informatics staff, and external consultants.

Prior to starting the Project Implementation Process (PIP), projects must have successfully completed the Project Evaluation Process (PEP) and the project has been approved for implementation. The Project Evaluation Process includes performing a needs analysis, an architecture review, and vendor contracting. The project evaluation could result in the definition of one or more projects to be implemented. Several distinct implementation projects rather than one large implementation could limit risk and aide in scope and resource management.

> *The Project Evaluation Process (PEP) Documents are available at the following location: http://www.mc.Vanderbilt.Edu/infocntr/infosys/isc.*

The Project Implementation Process (PIP) includes the following phases:

Phase
Project Planning Phase
Design Phase
Build and Unit Test Phase
Integrated Test Phase
Training and Go-Live Phase
Close Out Phase

Table. Project Implementation Process Phases

Project Planning Phase

Phase Purpose

The purpose of the Project Planning Phase is to define the scope and approach, determine the resources needed, and create a high-level plan for the project. This phase sets the stage for the remainder of the implementation project. This phase also includes a formal transition from the Project Evaluation Process (PEP) to the Project Implementation Process (PIP). Input is solicited from many Informatics groups (e.g. Help Desk, Change Control, Data Center, Network Security, Database Team, Disaster Recovery, etc.) using an Impacts Checklist. In addition, the manner in which issues and scope changes will be communicated and managed for the project is also defined within this phase.

Tasks	Task Responsibility	Deliverables	Milestones
Transition from PEP to PIP	Implementations Project Manager	Transition from PEP to PIP Checklist	
Kick-Off Project With Executive Steering Committee	Executive Steering Committee	Project Overview Document	Exec. Steering Committee Approval of Project Overview Document
Organize Project Team & Work Groups	Executive Steering Committee & IPM	Team Structure Document, Project Team Vacation Schedule	
Define Issue & Scope Management Process	Implementations Project Manager	Report of Issues and Scope Changes	
Solicit Input using Impacts Checklist	Implementations Project Manager	Impacts Checklist	
Create High-Level Project Plan	Project Team	High-Level Project Plan	Exec. Steering Committee Approval of High-Level Project Plan

Task: Transition from PEP to PIP

Task Responsibility:	Implementations Project Manager (IPM)
Additional Resources Required:	Information Service Consultant (ISC)
Task Deliverables:	Transition from PEP to PIP Checklist
Task Dependencies:	Approval to Implement Milestone from The Project Evaluation Process (PEP)
Milestones:	N/A

This purpose of the Transition from PEP to PIP task is to transition the project from the evaluation stage to the implementation stage. Included in this transition is transferring both the knowledge and the documents created by the Information Service Consultant (ISC) during the Project Evaluation Process. These documents not only provide an identification of the objectives and functionality that will be delivered as part of the project but also serve as an understanding of the detailed functional requirements for this project between Informatics staff, vendors (if applicable), and the user departments.

At the time the project has been approved for implementation, a Transition from PEP to PIP Checklist with all applicable documentation attached is filled out by the Information Service Consultant and given to the Implementation Project Manager. The Implementation Project

Manager will review all evaluation documentation and initiate a transition meeting with the Information Service Consultant in order to further transfer project information.

The Transition from PEP to PIP Checklist includes the following documents created during the Project Evaluation Process (See Appendix A for an example Transition from PEP to PIP Checklist):

- Project Executive Summary Form. The Project Executive Summary Form is filled out by the project requestor, which when approved by the Purpose Team, initiates the evaluation. This form includes a description of the expected benefits and measurable outcomes as well as any estimated costs. The Executive Sponsor also must be identified on this form. The Executive Sponsor typically names an official Project Sponsor to drive the direction of the implementation effort. The Purple Team, a priority setting group, uses Project Executive Summary Forms to prioritize evaluation projects as well as implementation projects.

- Problem Analysis/Definition, Proposed Solution and Return On Investment (ROI) Analysis. The Information Service Consultant creates these documents where the Business Problem is clearly defined and its operational impact analyzed. Alternative solutions to the business problem, along with the recommended solution, are identified. The rationale behind recommending the proposal is clearly stated. An ROI analysis should be completed. This ROI should compare the estimated cost of implementing the solution to the benefits and/or the costs of not implementing the proposal.

- Project Scope Definition. During the evaluation process, the Information Service Consultant creates a Project Scope Definition. This document specifies the features and functions will be included in the project. It will establish the broad timeline of the implementation, including the limits of each implementation phase.

- Architecture. Detail design documentation should identify the technical requirements, interface and systems impact, design constraints, and the proposed approach for developing the solution.

- Requirements Document. A formal Requirements Document (RFP or RFI) is developed and completed during the Evaluation Process (also called Detailed Functional Specifications). This document is created for both a vendor solution type implementation well as an in-house developed software type implementation. This document lists all equipment, materials, resources, and functions and features that are required for the project. This document should be as specific and detailed as possible thereby setting the stage for a successful implementation. A record should be kept of all vendor proposals and communications, including documentation of the rationale for choosing the selected vendor.

- Contract. A copy of all final agreements for products and services related to the project is documented.

- Schedule of Deliverables. This document serves as the basis of the detail Project Implementation Plan. It provides a delivery schedule of the requirements and functionalities that will be delivered as part of the project, as well as identify the party responsible for completing each deliverable.

Task: Kick Off Project with Executive Steering Committee

Task Responsibility:	Executive Steering Committee including The Project Sponsor
Additional Resources Required:	Implementations Project Manager (IPM)
Task Deliverables:	Project Overview Document
Task Dependencies:	Transition from PEP to PIP Task
Milestones:	Approval of Project Overview Document

The purpose of the Project Kick-off task is to initiate the implementation project. Included in this initiation is defining the purpose of the project using the documents created during the Project Evaluation Process (PEP) as input. If a Project Sponsor has not yet been named, the Implementations Project Manager will request one from the Executive Sponsor. The Executive Steering Committee, lead by the Project Sponsor, is responsible for creating this Project Overview Document. This document is used to provide direction not only to the Project Team, vendors, but also to any work groups that are formed in order to complete project tasks (refer to Template 1-Project Overview Document).

Included in this task, the Implementation Project Manager along with the Project Sponsor will organize an Executive Steering Committee Kick-Off Meeting if the committee is not already in existence. During this meeting, the Executive Steering Committee meeting frequency, meeting day and times, and meeting location will be agreed upon and work will start on the Project Overview Document. The Implementation Project Manager will distribute meeting agendas in advance of the meetings and a selected scribe who will distribute minutes a few days after each meeting is held.

> **Role of Project Sponsor**
>
> *The role of the Project Sponsor is to chair the Executive Steering Committee as well as champion the project. Typically, the Executive Sponsor who originally approved the Project Executive Summary Form designates someone as the Project Sponsor at the time the project is approved for implementation. The Project Sponsor is expected to attend all Executive Steering Committee meetings, be available as needed for Project Team Meetings, attend dress rehearsal testing, and also attend any project close out and celebration meetings.The Project Sponsor must have budget authority in order make scope changes to the project.*

> **Role of Executive Steering Committee**
>
> *The role of the Executive Steering Committee is to provide the high-level business direction for the implementation project. This committee generally meets monthly or quarterly throughout the project to review progress and provide issue resolution. This committee is responsible for creating the Project Overview Document. Once it has been created, the Executive Steering Committee must approve it before the project can proceed.*

The Project Overview Document is comprised of the following information:

- Executive Summary. This section should clearly state the nature and objectives of the project from a business perspective.

- Implementation Approach. An overview of the implementation approach should be stated. For example, a pilot system could be implemented, followed by a phased rollout to all other departments. A multitasking approach may be recommended to reduce the critical path for the project. The implementation approach may be driven by the architecture identified in the evaluation phase.

- Implementation Phases and Milestones. High-level project phase timelines as well as milestones should be identified, along with the target dates for achieving each milestone.

- Project Objectives and Measurements. The specific objectives of the project should be clearly stated, and a measurement must be identified for each objective. These critical success measurements determine what makes a successful project implementation. For example, a project may be completed on time and under budget, but if the department staff fails to successfully implement the system into their operations, the project could not be called a success. The factors must be able to be measured. Often baseline data must be gathered before and during project implementation.

- Resource Requirements. A list of resources required for the project should be developed. This document should include internal staff, consultant services, hardware, software, cable, power, space, etc. In addition to the resources required for project implementation, any resources required for ongoing management and maintenance should be clearly identified. The resource requirements should also be incorporated into the project plan.

- Risk Analysis and Contingency Plans. An analysis of the various risks associated with the project should be identified, and contingency plans should be developed for all significant risk factors.

- Evaluation Documentation Attachments

Task: Organize Project Team and Work Groups

Task Responsibility:	Executive Steering Committee
Additional Resources Required:	Implementations Project Manager (IPM), Project Team, applicable Work Groups
Task Deliverables:	Team Structure Document, Project Team Vacation Schedule
Task Dependencies:	Approval of Project Overview Document Milestone
Milestones:	N/A

The purpose of the Organize Project Team and Work Groups task is to define the necessary human resources as well as define the roles and responsibilities of the people participating in the project. The Executive Steering Committee, lead by the Project Sponsor, is responsible for defining and approving the Project Team and any necessary work groups. All Executive Steering Committee, Project Team, and Project Work Group members are documented in a Team Structure Document. (Refer to Template 2-Team Structure Document).

Role of the Project Team

The role of each Project Team member is to define and approve the detailed project plan as well as perform the tasks needed to complete the project. Each team member is expected to attend all Project Team meetings (sending a replacement person from their area on any days they cannot attend a meeting) in order to provide a continuous status of the tasks assigned to them. Each member typically represents an area of the organization.

Role of the Project Work Groups

The role of each Project Work Group is to perform the specialized tasks needed to complete the project. These work groups have specific objectives that they need to meet (e.g. perform user training, perform integrated testing, etc.). Each work group member is responsible for attending all work group meetings (sending a replacement person from their area on any days they cannot attend a meeting).

Role of the Project Work Group Leader

The role of each Project Work Group Leader is to lead the work group including initiating standard meeting days, times, and locations. Each work group leader is responsible for distributing agendas in advance of the meeting (copying the Implementations Project Manager). Meeting minutes should be generated by a designated scribe and should be distributed within a few days of the meeting (copying the Implementations Project Manager). The work group leader is responsible for bringing any issues or scope change requests back to the Project Team. The work group leader is also responsible for reporting status back to the Project Team at each Project Team meeting.

Examples of Project Work Groups that may be formed include the following:

- Testing Work Group (coordinates the QA/Integrated testing for the project)
- Training Work Group (coordinates the training for the project)
- Technical Work Group (performs the design, build, and unit test of the system solution)
- Work Flow Process Work Group (defines the work flow process changes required for the project)

Once the Project Team is defined, a Project Team Kick-Off Meeting is held (Refer to Template 4-Project Team Kick-Off Meeting Agenda). At this meeting, the Project Overview Document and Team Structure Document are distributed and reviewed. The Project Team meeting frequency, meeting day and times, and meeting locations are agreed upon. A Project Team Vacation Schedule should also be created at this meeting in order to determine resource availability. The Implementation Project Manager will distribute meeting agendas in advance of the meetings and a selected scribe will distribute minutes a few days after each meeting is held.

Once the Project Team has met and the project team members have a good understanding of the project, each Work Group Leader (who is also on the Project Team) is responsible for holding Work Group Kick Off Meetings.

Any questions or issues that the Project Team or a Work Group may have regarding the project that cannot be resolved within the project team are documented and brought back to the Executive Steering Committee by the Implementations Project Manager. As a result of any needed clarifications, the Executive Steering Committee may update the Project Overview Document at any point in the lifecycle of the project.

Task: Define Issue and Scope Management Process

Task Responsibility:	Implementations Project Manager (IPM)
Additional Resources Required:	Executive Steering Committee, Project Team, and applicable Work Groups
Task Deliverables:	Report of Issues and Scope Change Requests
Task Dependencies:	Organize Project Team and Work Groups Task
Milestones:	N/A

The purpose of the Define Issue and Scope Management task is to establish the process for communicating and resolving any issues or scope change requests that may come up during the project. All issues and scope change requests must be communicated to the Implementation Project Manager and a Report of Issues and Scope Change Requests will be included as part of the standard project documentation that the Implementations Project Manager distributes on a regular basis to the Project Team and the Executive Steering Committee.

> **Definition of Project Issue**
>
> *A Project Issue is a problem that arises for which an obvious solution is not readily apparent or there is a disagreement for which course of action should be taken to resolve the problem. Issues arise in every project and arise within the scope of the project but need clarification and resolution.*

A project issue may be raised by anyone involved with the project (Project Team member, Work Group member, Executive Steering Committee member), during any point during the project life cycle. Each Project Issue is logged on the Report of Issues and Change Requests and requires follow-up and must have a primary responsibility person assigned to resolve it along with a target resolution date. Issues may be escalated first to the Project Team for resolution and if needed to the Executive Steering Committee.

> **Definition of Scope Change Request**
>
> *A scope change is when an enhancement or change in required project resources is requested that is beyond the scope of the project as defined in the Project Overview Document.*

Each scope change request is logged on the Report of Issues and Change Requests and discussed during the Project Team Meetings. Once the Project Team approves the request it is escalated to the Executive Steering Committee. This committee then evaluates it for either inclusion or exclusion within the project. If the Executive Steering Committee approves the change for inclusion in the project, the impact will be assessed and the project plan may need to be revised accordingly. If it is not approved for inclusion, the change request will be documented as a future enhancement in the CSR Database in order to be considered for future implementation. In some cases, the change request may be significant enough to bring the project back to the Purple Team for re-prioritization of the project.

Task: Solicit Input Using Impacts Checklist

Task Responsibility:	Implementations Project Manager (IPM)
Additional Resources Required:	Disaster Recovery, Help Desk, Network Security, Change Control, HIPAA Team, Database Team, Data Center
Task Deliverables:	Impacts Checklist
Task Dependencies:	Organize Project Team and Work Groups Task
Milestones:	N/A

The purpose of the Solicit Input Using Impacts Checklist task is to communicate the project to various impacted internal Informatics as well as solicit their input and buy-in for the project. The impacted areas may include but are not limited to the following: Disaster Recovery, Help Desk, Network Security, Change Control, Database Team, The HIPAA Team, and the Data Center. A formal review of these areas should continue at various points in the implementation project lifecycle including at the time of the Technical Review?, Project Review and also at the Pre-Go Live Review.

Task: Create High-Level Project Plan

Task Responsibility:	Project Team
Additional Resources Required:	Executive Steering Committee, Work Groups
Task Deliverables:	High-Level Project Plan
Task Dependencies:	Solicit Input Using Impacts Checklist Task
Milestones:	Executive Steering Committee Approval of High-Level Project Plan

The purpose of the Create High-Level Project Plan task is to define the phases and a rough timeline for various tasks within the phases. The plan is created (using Microsoft Project) during the preliminary Project Team Meetings. Once the Project Team created and approved the project plan, the Implementations Project Manager presents the plan to the Executive Steering Committee. Any requested changes are brought back to the Project Team and incorporated and the approval is achieved from the Executive Steering Committee before proceeding to the next phase of the implementation project.

Project Design Phase

Phase Purpose

The purpose of the Project Design Phase is to design the project solution both from a technical as well as an operational perspective that meets the business requirements of the project (as identified in the Project Overview Document). From a technical perspective, a system design is created and includes the specific features and functions as well as the detailed technical specifications for both application and interface construction. From an operational perspective, a Process Design is created which includes changes or additions to any current operational procedures that will be required to use the completed system.

Tasks	Task Responsibility	Deliverables	Milestones
Design Kick Off	Technical Work Group		
Create System Design	Technical Work Group	System Design Document	Project Team Approval of Application Design, Technical Design Review
Create Process Design	Process Work Group	Process Design Document	Project Team Approval of Process Design
Create Detailed Project Plan	Project Team	High-Level Project Plan	Project Team Approval on Detailed Project Plan

Task: Design Kick-Off

Task Responsibility:	Technical Work Group
Additional Resources Required:	Implementations Project Manager (IPM)
Task Deliverables:	
Task Dependencies:	Solicit Input using Impacts Checklist Task
Milestones:	N/A

This purpose of the Design Kick-Off/Review Project Overview task is for the Technical Work Group to review all project documentation and gain an understanding of the purpose of the project as well as the business and functional requirements of the project. This review includes the Project Overview Document (with all accompanying evaluation documents) created by the Executive Steering Committee during the previous phase.

Task: Create System Design

Task Responsibility:	Technical Work Group
Additional Resources Required:	Implementations Project Manager (IPM), Project Team
Task Deliverables:	System Design Document
Task Dependencies:	Design Kick-Off/Review Project Overview Task
Milestones:	Project Team Approval of Application Design, Technical Design Review

This purpose of the Create System Design task is for the Technical Work Group to design a technical system solution that meets the needs of the project according to the Project Overview

Document. This System Design should, whenever possible, follow Universal Modeling Language standards.

The System Design Document should include the following:

- Application Design. This includes the functions, features, reporting, reporting Distribution, user security aspects of the application. It should be detailed and specific in nature (e.g. include diagrams, prototypes and/or mockups).

- Database Design. This is the design of the database changes or additions required in order to support the system solution. Where the database resides, the type of database, and the specific database design is included.

- Interface & Data Communication Design. The Interface Design includes all the systems that need to be interfaced to one another and the format of the data being sent and being received to each system.

- Final System Architecture Design. An Architecture Review was performed during the Project Evaluation Process. As the system is designed, the system architecture may need to be revised accordingly. This is the final system architecture resulting from the system design. The System Architecture should include which servers are being used for what purposes (e.g., database server, business/application server, any firewalls, etc.). It should also include an approved Disaster Recovery plan.

- Unit Test Plan. This should include the plan for unit testing the developed application. It should include unit test scenarios, results of testing, and unit testing assignments. It does not typically include the testing of interfaces, which is typically performed during the Integrated/QA Testing Phase.

Once the Application Design is completed, it is presented to the Project Team. Once the project team has approved the Application Design, the Process Work Group can proceed with the Create Process Design Task in this phase. The additional design documents (Interface Design, System Architecture, Database Design, User Security Specifications, Unit Test Plan) are then created by the Technical Work Group and presented to a Technical Design Review Board.

The role of the Technical Design Review Board is to review from a technical perspective all systems designs. Need some more beef here…… Who is on this board?

Task: Create Process Design

Task Responsibility:	Process Work Group
Additional Resources Required:	Implementations Project Manager (IPM)
Task Deliverables:	Process Design Document
Task Dependencies:	Project Team Approval of Application Design Milestone
Milestones:	Project Team Approval of Process Design

This purpose of the Create Process Design task is to define the process procedures needed in the various impacted business areas in order to use the proposed system solution. The Process Work Group will start this task as soon as the Project Team has approved the Applications Design portion of the System Design.

The Process Design should include documenting and/or reviewing existing operational flow procedures, revising or creating new operational flow procedures required in order to use the proposed system solution, and documenting any policies and procedures required. The Process

Design Document is then presented to the Project Team, revised if necessary, and then approved by the Project Team.

Task: Create Detailed Project Plan

Task Responsibility:	Project Team
Additional Resources Required:	Implementations Project Manager (IPM), Work Groups
Task Deliverables:	Detailed Project Plan
Task Dependencies:	Process Design and System Design tasks
Milestones:	Approval on Detailed Project Plan

This purpose of the Create Detailed Project Plan task is for the Project Team to create a detailed Project Plan with detailed tasks for each remaining phase of the implementation project. Input is solicited from each work group. This detailed project plan is created and then will be revised at the conclusion of each subsequent phase of the implementation project based upon the information that is available at that time.

Build & Unit Test Phase

Phase Purpose

The purpose of the Build and Unit Test Phase is to construct the system solution and test the applications constructed as well as the Process Design. During this phase, the hardware, software, network, cable, and power items are ordered and received. In addition, data from an existing system is converted as needed.

Tasks	Task Responsibility	Deliverables	Milestones
Build Kick Off: Review System Design	Technical Work Group		
Order & Receive System Components	Implementation PM		
Construct System per System Design	Technical Work Group	Developed and/or Installed Applications and Interfaces	
Perform Data Conversion	Data Conversion Work Group	Data Converted	Approval of Data Conversion
Execute Unit Test Plan		System Unit Tested	Approval of Unit Test Results
Install & Configure Test System	Technical Work Group	Configured Test System	
Verify Process Design	Process Work Group	Process Design	Approval of Revised Process Design
Create Detailed Project Plan	Project Team	High-Level Project Plan	Project Team Approval on Detailed Project Plan

Task: Build Kick-off/Review System Design

Task Responsibility:	Technical Work Group
Additional Resources Required:	Implementations Project Manager (IPM)
Task Deliverables:	N/A
Task Dependencies:	Completion of System Design Phase
Milestones:	N/A

This purpose of the Build Kick-off/Review System Design task is for the Technical Work Group to review the system design created in the previous phase in order to prepare for system construction. All system design documentation along with the Project Overview is presented and discussed with all Technical Work Group members in order to facilitate understanding of the project and the system solution.

Task: Order & Receive System Components

Task Responsibility:	Implementations Project Manager (IPM)
Additional Resources Required:	
Task Deliverables:	
Task Dependencies:	Technical Design Review Milestone
Milestones:	N/A

This purpose of the Order & Receive System Components task is for the Implementations Project Manager to order the system components needed for the project. System components can include the following:

- Hardware
- Software
- Network
- Cable
- Power
- Data Center Floor Space

Task: Perform Data Conversion

Task Responsibility:	Data Conversion Work Group
Additional Resources Required:	
Task Deliverables:	
Task Dependencies:	
Milestones:	Approval of Data Conversion

This purpose of the Perform Data Conversion task is for the Data Conversion Work Group to convert any data from an existing system into the new system. Not every implementation project will include the need for data conversion but most will. Included in this task is analyzing the current data, creating a data conversion plan including a description of what data needs to be converted along with detailed tasks and assignments, and executing the data conversion plan.

Executing the data conversion plan typically involves creating data conversion programs/utilities and performing a dry run of the data conversion into the test system. Careful tracking of the time required for data conversion will later needed to estimate the amount of time to install the solution during the go-live phase. Once the data has been converted into the test system, approval of the data converted by the Project Team must occur.

Data cleanup is also part of this task. Codes may change, duplicates may need to be removed, and old data may need to be removed. The vendor may have tools to help with this, or utilities may need to be developed.

Task: Construct System per System Design

Task Responsibility:	Technical Work Group
Additional Resources Required:	
Task Deliverables:	
Task Dependencies:	Build Kick Off/Review System Design Task

Milestones:	N/A

This purpose of the Construct System per System Design task is for the Technical Work Group to construct the system solution according to the System Design Document. Included in this task is also developing the Technical procedures that accompany the system components. System components impacted can include the following:

- Applications (e.g., screens, reports, etc.)
- Databases
- Interfaces

Examples of technical procedures that must accompany new or modified system components are the following:

- Backup procedures
- Database maintenance procedures
- System maintenance procedures
- Disaster Recovery procedures
- Change Control procedures
- Help Desk procedures
- Data Center Operations procedures

Task: Execute Unit Test Plan

Task Responsibility:	Technical Work Group
Additional Resources Required:	
Task Deliverables:	Completed Unit Test Plan
Task Dependencies:	Construct System per System Design task
Milestones:	Approval of Unit Test Results

Overview

This purpose of the Execute Unit Test Plan is for the Technical Work Group to test each system component according to the Unit Test Plan created during the System Design Phase. Unit testing includes testing each system component and verifying both its inputs and outputs. It does not include testing between systems (e.g. between Medipac and the various Ancillary systems). This integrated testing is performed in the next phase.

Task: Install & Configure Test System

Task Responsibility:	Technical Work Group
Additional Resources Required:	Data Conversion Work Group
Task Deliverables:	Installed & Configured Test System
Task Dependencies:	Construct System per System Design task
Milestones:	

This purpose of the Install & Configure Test System task is for the Technical Work Group to install and configure the test system. Included in this task is the final data conversion into the test system by the Data Conversion Work Group. Once this task is completed the Verify Process Design Task can start.

Task: Verify Process Design

Task Responsibility:	Process Work Group
Additional Resources Required:	Data Conversion Work Group
Task Deliverables:	Installed & Configured Test System
Task Dependencies:	Construct System per System Design task
Milestones:	

The purpose of the Verify Process Design task is for the Process Work Group to attend vendor training in order to learn the new system as well as set the system by setting up appropriate profiles and parameters. After the system is setup accordingly and the test system has been installed and configured, the process design created during the System Design Phase can be verified and revised if necessary. The Project Team prior to the next phase of the project, Integrated Test, must perform approval of the final Process Design.

Any work flows in the user area that are changing because of new processes need to be tested with appropriate forms, new written procedures and any other process related steps that may or may not involve the automated system itself.

If the project does not include any "in–house developed" applications, but is solely a vendor solution with interfaces, this task can be moved into the System Design Phase after the Process Design has been created. In this case, the sooner the Process Work Group can get training and start to use the system, the better.

Task: Review and Revise Detailed Project Plan

Task Responsibility:	Project Team
Additional Resources Required:	All Work Groups
Task Deliverables:	
Task Dependencies:	Completion of all prior tasks in this phase
Milestones:	N/A

The purpose of the Review and Revise Detailed Project Plan task is for the Project Team, along with input from the various work groups, to review the progress on the project plan to date and revise it as needed based upon the information known at this stage of the implementation project life cycle. This is the last task performed in the Build and Unit Test Phase and all prior tasks must be completed prior to this task.

QA/Integrated Test Phase

Phase Purpose

The purpose of the QA/Integrated Test Phase is for the Testing Work Group to perform Quality Assurance and Integrated Testing of the system solution including all interfaces. For a description of the various types of testing (unit testing, functionality testing, and integrated testing), refer to the QA Best Practices Document.

A QA Lead from the Implementations Team is assigned to each project and is in charge of coordinating this phase and reporting issues as well as status back to the Implementations Project Manager. At this point in the life cycle of the project, the requirements and system design must be frozen in order for a proper QA/Integrated test effort to occur. Any changes to requirements or design during this phase or afterwards will require re-testing.

First a QA Test Plan is created and then the Testing Work Group executes it. Included in the QA Test Plan is a listing of all of the test requirements (what needs to be tested). The Project Team approves the testing requirements and then the Test Work creates the remainder of the QA Test Plan (how it needs to be tested and by whom). The Testing Work Group along with the Implementation Project Manager approves the QA Test Plan.

Once the approvals have taken place, execution of the QA Test Plan takes place. The QA Test Lead reports testing status back to the Project Team at least on a weekly basis in order to facilitate communication.

Tasks	Task Responsibility	Deliverables	Milestones
QA Kick-Off /Review Project Documentation	Testing Work Group		
Document Test Requirements	Testing Work Group	Test Requirements Document	Approval of Test Requirements
Create QA Test Plan	Testing Work Group	QA Test Plan	Approval of QA Test Plan
Execute QA Test Plan	Testing Work Group		Approval of QA Test Results
Execute Unit Test Plan			Approval of Unit Test Results
Review/Revised Detailed Project Plan	Project Team		

Task: QA Kick-off/Review Project Documentation

Task Responsibility:	Testing Work Group
Additional Resources Required:	Implementations Project Manager (IPM)
Task Deliverables:	N/A
Task Dependencies:	Approval of Process Design Milestone
Milestones:	N/A

This purpose of the QA Kick-off/Project Documentation task is for the Testing Work Group to review all project documentation order to facilitate understanding of the project and the system solution. Once approval has been achieved on the Process Design, the QA Work Group can start its process using this Process Design and other project documentation as input.

Task: Document Test Requirements

Task Responsibility:	Testing Work Group
Additional Resources Required:	Implementations Project Manager (IPM)
Task Deliverables:	Requirements Document portion of the QA Test Plan
Task Dependencies:	Kick-Off QA/Review Project Documentation Task
Milestones:	Project Team Approval of Test Requirements

This purpose of the Document Test Requirements task is for the Testing Work Group to review all project documentation and the Process Design and create a Test Requirements Document. The Test Requirements are a categorized listing by operational area describing what needs to be tested (Refer to the QA Test Best Practices Document for more details on test requirements).

Task: Create QA Test Plan

Task Responsibility:	Testing Work Group
Additional Resources Required:	Implementations Project Manager (IPM)
Task Deliverables:	QA Test Plan
Task Dependencies:	Document Test Requirements task
Milestones:	Testing Work Group & IPM Approval of QA Test Plan

This purpose of the Create QA Test Plan task is for the Testing Work Group to define how each test requirement will be tested (step-by-step). The QA Test Plan includes a description of all of the test scenarios as well as test assignments and timeframes of those assignments. A test scenario can be satisfied by either a manual test (user inputting data into a test system) or an automated test (using the Testing Tool to automate data entry). Refer to the QA Test Best Practices for more details on test requirements.

Task: Execute QA Test Plan

Task Responsibility:	Testing Work Group
Additional Resources Required:	
Task Deliverables:	
Task Dependencies:	Create QA Test Plan task
Milestones:	Testing Work Group & Project Team Approval of QA Test Results

This purpose of the Execute QA Test Plan task is for the Testing Work Group to perform the QA and Integrated Testing according to the QA Test Plan created and approved during the previous task. Once the Testing Work Group has completed the testing satisfactorily, they approve the test results and bring them back to the Project Team for approval. The Project Team at this point can either approve the QA Test Results or request additional testing. Once the Project Team is satisfied with the test results, they approve them. Refer to the QA Test Best Practices for more details on test requirements.

Once testing has started, all system changes must be carefully tracked and communicated to the QA Lead to 1) determine what must be re0tested and 2) assure the change is part of the go0live plan. In general, the defect tracking should provide the list of changes. The Project Manager, QA Test Lead, and Technical Work Group all have responsibility to make sure that the list of changes is complete. Weekly meetings or some other method may be required in order to ensure proper communication. This is the key to having the integrated testing be successful.

Task: Review and Revise Detailed Project Plan

Task Responsibility:	Project Team
Additional Resources Required:	All Work Groups
Task Deliverables:	
Task Dependencies:	Completion of all prior tasks in this phase
Milestones:	N/A

The purpose of the Review and Revise Detailed Project Plan task is for the Project Team, along with input from the various work groups, to review the progress on the project plan to date and revise it as needed based upon the information known at this stage of the implementation project life cycle. This is the last task performed in the QA/Integrated Test Phase and all prior tasks must be completed prior to this task.

Training and Go-Live Phase

Phase Purpose

The purpose of the Training and Go-Live Phase is for the Training Work Group to create and execute the training plan and for the Project Team to prepare for going live with the system solution. Included in go-live preparation is planning and performing a dress rehearsal, planning a back-out plan, defining a go-live day plan, and training and documenting various internal groups such as the following:

- Help Desk
- Technical Support/Operations Support
- Application Support (Technical Teams where application development was performed e.g., Epic Team, Medipac Team, Information Technology groups, etc.)

Once the Go-Live plan has been established and the Project Team has approved the QA test results, the Technical Work Group and the Implementations Project Manager performs a Pre-Go-Live Review with the following internal VUMC Informatics Groups:

- Change Management
- Disaster Recovery

Tasks	Task Responsibility	Deliverables	Milestones
Training Kick-Off /Review Project Documentation	Training Work Group		
Create Training Plan	Training Work Group	Test Requirements Document	Approval of Training Plan
Execute Training Plan	Training Work Group	QA Test Plan	
Create Go-Live Plan	Project Team		Pre-Go-Live Review Go/No-Go-Live Decision by Exec Steering & Project Team
Execute Go-Live Plan	Project Team		Verification of Installation
Monitor Go-Live	Project Team		

Task: Training Kick-off/Review Project Documentation

Task Responsibility:	Training Work Group
Additional Resources Required:	Implementations Project Manager (IPM)
Task Deliverables:	N/A
Task Dependencies:	Approval of Process Design Milestone
Milestones:	N/A

This purpose of the Training Kick-off/Review Project Documentation task is for the Training Work Group to review all project documentation order to facilitate understanding of the project and the system solution. Once approval has been achieved on the Process Design, the Training Work Group can start creating the training plan process using this Process Design and other project documentation as input.

Task: Create Training Plan

Task Responsibility:	Training Work Group
Additional Resources Required:	Implementations Project Manager (IPM)
Task Deliverables:	Training Plan
Task Dependencies:	Training Kick-Off/Review Project Documentation Task
Milestones:	Training Work Group & Project Team Approval of QA

This purpose of the Create Training Plan task is for the Training Work Group to create a plan for training the impacted users on the new system solution. The Training Work Group then will present the Training Plan and achieve Project Team approval. Included in the training plan are the following:

- Impacted Users List
- Skill Set Criteria per User Group
- Policies and Procedures
- Training Materials
- Training Rooms Scheduling
- Train the Trainer
- On-going Training
- Training Assignments including timelines

Task: Execute Training Plan

Task Responsibility:	Testing Work Group
Additional Resources Required:	
Task Deliverables:	
Task Dependencies:	Create Training Plan
Milestones:	Testing Work Group & Project Team Approval of QA Test Results

This purpose of the Execute Training Plan task is for the Testing Work Group to execute the training plan established during the previous task.

Task: Create Go-Live Plan

Task Responsibility:	Project Team
Additional Resources Required:	Test Work Group, Train Work Group
Task Deliverables:	Go-Live Plan
Task Dependencies:	Approval of Training Plan Milestone
Milestones:	Pre-Go-Live Review and Go/No-go Live Decision by Project Team/Exec Steering

This purpose of the Create Go-Live Plan task is for the Project Team to define the process of going live with the system solution. The first step to preparing for go-live is to plan the go-live effort and the back-out plan. Additional portions of the go-live plan include the documentation and training of the Help Desk, Operations/Tech Support, Application Support, and performing any appropriate pre-installation steps.

Task: Perform Dress Rehearsal

Task Responsibility:	Project Team
Additional Resources Required:	Test Work Group, Train Work Group, Tech Work Group
Task Deliverables:	
Task Dependencies:	Create Go-Live Plan
Milestones:	

The purpose of the Perform Dress Rehearsal task is to test the installation or go-live process before going live. Once the go-live plan is completed, and then a dress rehearsal testing effort is performed. This is when the system is installed into a training region and the installation effort itself is tested. Whenever possible, the back-out plan should also be tested during the dress rehearsal effort.

Task: Perform Pre-Go Live Review/Technical Review???

Task Responsibility:	Project Team
Additional Resources Required:	
Task Deliverables:	
Task Dependencies:	Create Go-Live Plan
Milestones:	

The purpose of the Perform Pre-Go Live Review is

Task: Execute Go-Live Plan

Task Responsibility:	Project Team
Additional Resources Required:	Test Work Group, Train Work Group, Tech Work Group
Task Deliverables:	
Task Dependencies:	Create Go-Live Plan Task
Milestones:	Verification of Installation

This purpose of the Execute Go-Live Plan task is for the Technical Work Group to install or promote the system components into production. Designated members of the Test and Train Work Groups will be there to verify the installation effort. If the installation is not successful, the back-out plan will be performed and the installation will occur at a later point. In addition, the Implementations Project Manager will be on hand to provide any coordination of go-live tasks.

Task: Monitor Go-Live

Task Responsibility:	Project Team
Additional Resources Required:	Test Work Group, Train Work Group
Task Deliverables:	Post Go-live Issues
Task Dependencies:	Create Go-Live Plan Task
Milestones:	Verification of Installation Go/No-Go-Live Decision by Exec Steering & Project Team Test

This purpose of the Monitor Go-Live task is for the Project Team to monitor the system after it has been promoted into production for at least a week or longer if the project warrants it. For large projects affecting multiple user groups, daily go-live meetings with the Project Team are held to verify the go-live effort and make adjustments if necessary to the system or to the operational procedures established. In these sessions new issues are identified and recorded. Also the status of previously identified issues is reported. Meetings should continue until no new issues are identified and old issues are either resolved or a work around is in place.

Close Out Phase

Phase Purpose

The purpose of the Close Out Phase is for the Project Team to close out the project formally and learn from the things done well and identify ways we can do things better next time. Included in this phase is developing a Project Close Out Summary, posting all implementation project documentation in the project repository, transferring system maintenance responsibility to the appropriate party, conducting a project close out celebration and recognize individuals for their efforts, and lastly, modify the ROI and set a date in the future to follow-up on the ROI.

Tasks	Task Responsibility	Deliverables	Milestones
Develop Project Close Out Summary	Implementations Project Manager	Project Close Out Summary Document	
Post Project Documentation	Implementations Project Manager	Posted documentation	
Transfer System Maintenance Responsibility	Technical Work Group		
Conduct Project Close Out Celebration & Recognition	Implementations Project Manager		Close Out Review with Exec Steering Project Review???
Modify ROI & Set ROI Follow Up Date	Implementations Project Manager	Modified ROI	Verification of Installation

Task: Develop Project Close Out Summary

Task Responsibility:	Implementations Project Manager (IPM)
Additional Resources Required:	Project Team
Task Deliverables:	N/A
Task Dependencies:	Training and Go -Live Phase
Milestones:	N/A

This purpose of the Develop Project Close Out Summary task is for the Implementations Project Manager to use input received during the monitoring of the go-live task as well as input from the entire project life cycle and document what went well and what we can do better next time.

Task: Post Project Documentation

Task Responsibility:	Implementations Project Manager (IPM)
Additional Resources Required:	
Task Deliverables:	Posted documentation
Task Dependencies:	Develop Project Close Out Summary task
Milestones:	N/A

This purpose of the Post Project Documentation task is for the Implementations Project Manager to post all project documentation in the project repository for future re-use on another project.

Task: Transfer System Maintenance Responsibility

Task Responsibility:	Technical Work Group
Additional Resources Required:	Implementations Project Manger (IPM)
Task Deliverables:	N/A
Task Dependencies:	Training and Go -Live Phase
Milestones:	N/A

This purpose of the Transfer System Maintenance Responsibility task is for the Technical Work Group along with the Implementations Project Manager to formally transfer the system maintenance function to the appropriate internal VUMC Informatics group.

Task: Conduct Project Close Out Celebration and Recognition

Task Responsibility:	Implementations Project Manger (IPM)
Additional Resources Required:	Project Team, Executive Steering Committee, Work Groups
Task Deliverables:	N/A
Task Dependencies:	Complete Project Close Out Summary task
Milestones:	N/A

This purpose of the Conduct Project Close Out Celebration and Recognition task is for the Project Team to review the project including what we did well and what we could do better next time as well as celebrate and recognize people for their efforts.

Task: Modify ROI and Set ROI Follow Up Date

Task Responsibility:	Implementations Project Manger (IPM)
Additional Resources Required:	Project Team
Task Deliverables:	Modified ROI
Task Dependencies:	Conduct Project Close Out Celebration task
Milestones:	Review Close Out with Executive Steering Committee & Perform Project Review

This purpose of the Modify ROI and Set ROI Follow Up Date task is for the Project Team to review the ROI established during project evaluation and modify it if necessary. A follow-up date to review the ROI for the project at some point in the future will also be established. The Implementations Project Manager along with the Project Sponsor on the Executive Steering Committee will setup an ROI Follow Up meeting at that point in the future.

Do a Glossary of Terms here.

Add more templates in as well.

Need a Project Review Template (Laura has one I believe).

Appendix – Roles and Responsibilities

Team Member	Responsibilities
Executive Sponsor	• Resource availability • Establishing priority • Budget dollars when necessary • Resolving any contract issues
Business Sponsor (could be the same person as the executive sponsor)	• Relationship with customer • Requestor of Internal Projects • Final Sign-off on Business Requirements Document
Project Manager	• Facilitating & documenting Project Meetings • Maintaining the Project Documentation • Maintaining the Project Plan • Maintaining the Contact Lists • Maintaining the Issues Log • Maintaining and Managing the Risks • Escalating Issues/Concerns • Delivering the Project on Schedule
Department Representatives	• Reviewing and signing off on all documents for the project to determine impact to their department • Providing resources as needed for work flow analysis • Providing resources as needed for testing
Analysts	• Business Requirements Documents • Detailed Design Documents • Client Sign-off • Integrated Testing • Quality Assurance
Technical Developer or Vendor (if required)	• System Design Documents • Code Development • Unit Testing