

# Component 8 Installation and Maintenance of Health IT Systems

## Unit 4 Structured Systems Analysis and Design

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## What We'll Cover

- What is project management?
- Role of the project manager
- What is a project plan?
- Before you begin: factor analysis
- 8 steps of a project plan
- 6 steps to an EHR plan

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## What is Project Management?

- Carefully planned and organized effort to accomplish a specific, (usually) one-time objective
- Includes:
  - Developing project plan
  - Managing plan's implementation, along with appropriate controls to monitor performance
  - Changing plan and schedule when needed
  - Evaluating project outcomes

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## Project Management: Phases

- Projects usually follow major phases.
  - Feasibility: Is project beneficial for organization as a whole?
  - Definition, determining the scope of the project: Who is affected/involved?
  - Planning
  - Implementation
  - Evaluation
  - Support, maintenance

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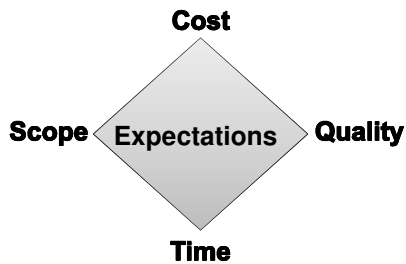
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## Project Management: Competing Pressures



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## Project Manager

- Focal point of project, ensuring successful completion
- Directly responsible for activities of all participants, tasks, & deliverables
- NOT the top of a typical hierarchical management role

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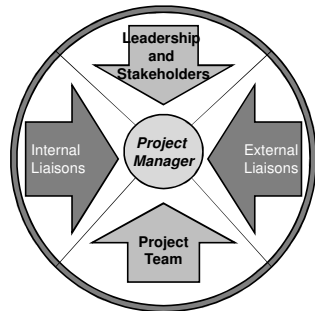
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## Project Manager's Role



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## What is a Project Plan?

- Formally accepted blueprint charting entire project start to finish
- Detailed vs. summarized, as needed
- Balances all components: scope, time, cost, quality, & outcome expectations
- Anticipates & plans for potential negatively-impacting issues

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## Project Plan: Typical Contents

- Applicable agreements
- Purpose
- Business/project goals & objectives
- Scope & expectations
- Roles & responsibilities
- Assumptions & constraints
- Quality management approach
- Project management approach
- Ground rules

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## Factor Analysis

In “Creating a Project Plan”, Joe Launi outlines the technique of factor analysis:

- Consider before you finalize your project plan.
- Disciplined technique for investigating, analyzing, & understanding a project prior to making any formal commitments

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## Factor Analysis: Ten Factors

1. Project definition/scope	6. Change
2. Resources	7. Communications
3. Time	8. Level of commitment
4. Procedures	9. Expectations
5. Environment	10. Risks

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## 8-Part Project Plan

1. Introduction
  - Purpose of project
  - What is the mission?
  - Background information
2. Goals/Objectives
  - Goal: aspiration that states a direction in which company will focus efforts in support of mission
  - Objective: short-term target (typically 12-24 months or less) of defined, measurable achievement

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## 8-Part Project Plan

### 2. Goals/Objectives (cont'd)

- Clearly define project goals & objectives and how they harmonize with overall mission/goals.
- Establish timeframe.
- Reaffirm benefits of successful project completion.
- Define method for measuring progress and change management procedures.

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## 8-Part Project Plan

### 3. Scope

- *Project scope*
  - Work needing to be accomplished
  - Focused on work
- *Product scope*
  - Features & functions which characterize a product, service, or result
  - Focused on functional requirements

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## 8-Part Project Plan

### 3. Scope (cont'd)

- Provides a clear detail of the work to be accomplished (scope definition).
- States which organizational resources will be utilized for the project.
- Deters “scope creep”.

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## 8-Part Project Plan

### 3. Scope (cont'd)

- List of products/deliverables
  - Tangible items or specific results
  - Details in Appendix: name, description, purpose, task(s), audience, sign-off
- Milestones
  - Timeline of project
  - Completion of specific events resulting in a significant or highly visible result
  - Hard deadlines which must be met to ensure project success

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## 8-Part Project Plan

### 4. Assumptions

- Relevant to successful completion
- e.g., resources, scope, expectations, schedules

### 5. Constraints

- Specific limitations under which the project must be conducted
- e.g., upgrades must be performed after closing

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## 8-Part Project Plan

### 5. Constraints (cont'd)

- Related projects: Other projects influenced by project, and how
- Critical dependencies: Important relationships between tasks and subtasks which may influence timeline or completion

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## 8-Part Project Plan

### 6. Quality management

- Define measurable ways of determining whether deliverables are meeting expectations.
- What performance-measuring activities will be needed and when?
- What special tools, skills, techniques?
- What quality standards?
- Who manages quality assurance?

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## 8-Part Project Plan

### 7. Project Management

- Rules agreed to by team; e.g., reporting, communication, naming conventions, acceptance criteria
- Roles & responsibilities
- Mechanism for effective communication across team; directory of all team members & liaisons
- Method to determine & communicate progress

### 8. Approvals

- How to address variations that arise?

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## Managing an EHR Implementation Project

1. Assessment
2. Planning
3. Selection
4. Implementation
5. Evaluation
6. Improvement

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## Summary

- Project management - a carefully planned and organized effort to accomplish a specific, and usually one-time, objective. \
- A Project Manager - Oversees all aspects of the project
- Projects have major phases
  
- Factor Analysis – helps organize the project

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## Summary

- A project plan should have at least eight components, each of which is essentially a work product resulting from subtasks.
- EHR Project Implementations typically follow six stages:
  - Assessment
  - Planning
  - Selection
  - Implementation
  - Evaluation
  - Improvement

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## Reference

- Hohly, Marge. Project Plan Definition[Internet]. 2007. [Cited July 2010]: [about 5 screens].
  - [http://www.cerritos.edu/hohly/WorkExperience/project\\_plan\\_instructions.htm](http://www.cerritos.edu/hohly/WorkExperience/project_plan_instructions.htm)
- Launi, Joe. Creating a Project Plan. JNM [serial on the Internet]. 1999 Sept; [cited 2010 August 15]: [about 3 screens].
  - <http://www.tdan.com/view-articles/5266>
- A Roadmap for an EHR Implementation at a Practice. Binary Spectrum [Internet].
  - <http://www.binaryspectrum.com/HealthcareSolutions/ElectronicMedicalRecords/Roadmap-for-implementation-of-EHRsystem-at-a-practice.html>

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