Project Management 101
The Basics Every Project Manager Should Know
Introduction to the basic Project Management (PM) skill sets and fundamental concepts. Designed to assist you in providing high-quality Project Management in your healthcare IT environment.
Today’s Topics

Project Management Fundamentals

• What is a Project Manager?
• What does a Project Manager look like?
• What is and is not a project?
• Matrix versus line management
• What are some of the challenges of PM?
Today’s Topics

Project Management Fundamentals

• What is a PMI?
• What is PMBOK?
• What is the value of PM?
• What is in the PM Toolkit?
Today’s Topics

Six Major Principals of PM

- Define project success
- Involve the right people
- Develop a realistic schedule
- Make accurate estimates of time
- Recognize change is inevitable
- Agree what constitutes closure and acceptance (the job well done)
More and more healthcare and IT organizations are choosing to use “project based” management to get more accomplished with fewer resources.

Trending away from traditional line management styles with divisional silos and moving towards matrix style (project based team management).
Project managers in healthcare are being pulled from other departmental areas and thrown into PM without formal training or certifications.

Example: Lab manager, Radiology lead or Infection Control Director asked to manage large laboratory systems or quality care implementation project.
What is a Project Manager?

More than a manager of tasks – A coordinator, leader, coach, mentor, communicator, scientist, artist, facilitator...
Project – temporary endeavor, to produce a unique product or service. A project has a definite beginning and end, and in one or more ways it is different from anything the organization has produced before.
Examples of projects:

• Building a new hospital
• Adding a maternity wing to a hospital
• Developing new software application for a patient care area (Pharmacy, Radiology)
• Implementing new interface between systems
Project Challenges for PMs

- Leading a team that has never worked together before
- Accomplishing something that has never been done before
- Accomplishing project with a limited number of resources
Operational goals are not projects. They sustain the organization and are not unique or temporary in nature. Operations have a direct line of authority.

- Processing customer orders
- Performing accounts receivable and payable activities
- Working in a production line
- Providing customer support functions 24/7
Project management evolved from the construction industry and the fundamental PM concepts do not always precisely relate to the healthcare IT industry.
• Project Management Institute (PMI) - [www.pmi.org](http://www.pmi.org), globally recognized standards organization for PM

• Project Management Body of Knowledge (PMBOK) – PM Bible

• Project Management Professional (PMP) - testing/certification process of PMI
The PMBOK defines 5 process groups in every project: Initiating, Planning, Executing, Controlling and Closing.
Value of PM

• Allows organizations to accomplish more with less cost

• Provides greater visibility on each project to enable better management decision making

• Enables better leverage of internal and external expertise

• Maximizes the innovative and creative capabilities of the organization by creating teams of focus and open communication (eliminates line reporting in team format)
Challenging Projects

- Uncharted Territory: Since each project is unique, the same work has not been done by this team of people before in this organizational environment.

- Multiple stakeholders with multiple expectations: Each have their own needs of the project, not accustomed to working together.
Challenging Projects

- Communication boundaries: Due to the natural silo’d structure of large hospital/healthcare organizations
- Managing Competing demands: Time, scope, cost and resources
Challenging Expectations
What Does the Customer Need?

- How the customer described it
- How the PM understood it
- How the analyst designed it
- How the programmer wrote it
- How the business consultant described it
- How the project was documented
- How operations installed it
- How the customer was billed for it
- How it was supported
- What the customer really needed
• If the project is a success, the PM has probably broken enough rules and ticked-off enough people that he/she may not even benefit from the success.

• If the project is a complete failure, the PM usually takes the rap.

• So try to remember “what doesn’t kill us makes us stronger” and try not to complain.
• Vendors managing projects
• Managing multiple vendors
• Using PM teams to facilitate product and vendor selection processes
• Using PM teams to identify and manage risk and provide risk mitigation strategies
• Growing awareness that servant leadership style is paramount for effective project management
Goal: Achieve the success criteria set forth at the beginning of the project to meet our stakeholders expectations throughout the project lifecycle.

Remember: In order to achieve success the PM should be thinking end from the start.
Project Charter: Authorizes project and project manager. Serves as notification to the organization (may list sponsors).

- Not necessarily a formal document, may be email notification. Charter notifies the organization the project is official, formalizes the projects existence.

- Constraints prevent you from achieving goals

- Assumptions are what we expect to happen
Project Definition Document: Living, not static. Changes must be approved.

- Reason for project: Why project undertaken?
- What will be accomplished, goals/objectives?
- Scope definition: In/out of scope
- Success criteria: Critical success factors
Project Definition Document: Living, not static. Changes must be approved.

• Lists risks, constraints and assumptions from Charter

• Lists primary stakeholders: Who is impacted?

• Expected benefits: Value from the project
SMART Project Goals & Objectives

- Specific
- Measurable
- Achievable
- Realistic/rewarding
- Time-based
Scope Statement: Work that needs to be accomplished to deliver the product, service or result with the specific features and functions. Often called Project Justification.
The PM Toolkit

Scope Statement

• Is project’s scope defined clearly enough to show when scope creep occurs?

• Did you document items that are considered out of scope/exclusions?

• Difference between Scope Statement and Scope of Work (SOW). SOW is more specific because it is more legalistic and is part of the contractual agreement
Project Schedule: The difference between Project Schedule, Project Plan and Work Breakdown Structure

• Project Schedule: Shows when the work will be done and by whom. Drives the project execution.

• Project Plan: An all encompassing planning document used as a basis for execution and control of the project. The Plan is the strategy for delivering value from a project. Includes communication document, risk planning, etc.

• Work Breakdown Structure (WBS): Defines work at a task level, breaking it
Famous Planning Quotes:

• “Plans are nothing; planning is everything” – Dwight D. Eisenhower. This is not an excuse for not planning. The role of planning is understanding the value of the project.

• “It’s easier to use an eraser than a jackhammer!” – Mike Applegate

• “Never confuse effort with results.” If you are measuring your effort as your progress, you’re not measuring the right thing.
Famous Planning Quotes:

• “Strategy without tactics is the slowest route to victory. Tactics without strategy is the noise before the defeat.” – Sun Tzu. The Plan is the strategy for delivering value from the project. You need both the project plan and the project schedule.

• “Experience is simply the name we give our mistakes.” – Oscar Wilde
Creating the Project Schedule:

- Identify the WBS: work tasks to be performed
- Estimate the effort for each task (PMs don’t work alone)
- Determine task relationships (predecessor and parallel tasks)
- Assign Resources
- Develop a preliminary structure
- Add in contingency buffer (risk contingency)
- Finalize the schedule. Incorporate feedback from the stakeholders and get acceptance
## Preliminary Schedule

### Sample Project

<table>
<thead>
<tr>
<th>ID</th>
<th>Task Name</th>
<th>Duration</th>
<th>Preceded</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Software Project</td>
<td>172.5 days</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Requirements</td>
<td>7 wks</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Design</td>
<td>5 wks</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Programming</td>
<td>60 days</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>Unit Tests for Feature A</td>
<td>3 wks</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Program Feature A</td>
<td>7 wks</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>Unit Tests for Feature B</td>
<td>4 wks</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>Program Feature B</td>
<td>8 wks</td>
<td>7</td>
</tr>
<tr>
<td>9</td>
<td>Feature-Complete Build</td>
<td>0 days</td>
<td>6,8</td>
</tr>
<tr>
<td>10</td>
<td>Test Preparation</td>
<td>40 days</td>
<td></td>
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<tr>
<td>11</td>
<td>Build Test Plans</td>
<td>6 wks</td>
<td>2,3FF</td>
</tr>
<tr>
<td>12</td>
<td>Review, Correct Test Plans</td>
<td>2 wks</td>
<td>11</td>
</tr>
<tr>
<td>13</td>
<td>Test Execution</td>
<td>52.5 days</td>
<td>12</td>
</tr>
<tr>
<td>14</td>
<td>Execute Test Plan A</td>
<td>3 wks</td>
<td>9</td>
</tr>
<tr>
<td>15</td>
<td>Execute Test Plan B</td>
<td>1.5 wks</td>
<td>14SS</td>
</tr>
<tr>
<td>16</td>
<td>Fix Defects</td>
<td>1 wk</td>
<td>14,15</td>
</tr>
<tr>
<td>17</td>
<td>Regress Test Plan A</td>
<td>6.5 wks</td>
<td>16</td>
</tr>
<tr>
<td>18</td>
<td>Regress Test Plan B</td>
<td>3 wks</td>
<td>17SS</td>
</tr>
<tr>
<td>19</td>
<td>Deliver Beta Build</td>
<td>0 days</td>
<td>17,18</td>
</tr>
</tbody>
</table>
Project Schedule
Sample: Milestones Explained
Status Reports: Communication documents that help create clarity with the goals, direction and actual status of the project.

- Think about fundraising thermometers used by organizations like the Red Cross or food drives to track donations. At the top, they list how much money or food they intend to raise. This is their goal.
Responsibility Matrix: Outlines what is expected from the various resources allocated to your team. Typically, it is a basic matrix template that defines activities / responsibilities and assigns responsible resources.

<table>
<thead>
<tr>
<th>Key Activity</th>
<th>Hospital</th>
<th>Iatric</th>
<th>Other Vendor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Determine Physician Fields</td>
<td>X-Chad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Document Reports Required</td>
<td></td>
<td>X-Sally</td>
<td></td>
</tr>
<tr>
<td>3. Perform Testing</td>
<td>X-Mary</td>
<td></td>
<td>X-Dawn</td>
</tr>
<tr>
<td>4. Analyze Lab Result Provided</td>
<td></td>
<td></td>
<td>X-Ted</td>
</tr>
<tr>
<td>5. Provide Radiology Exams</td>
<td></td>
<td></td>
<td>X-Samuel/Miles</td>
</tr>
<tr>
<td>6. Perform Audit Report</td>
<td></td>
<td></td>
<td>X-Dave</td>
</tr>
</tbody>
</table>
Communication Plan: Getting the *right information* to the *right stakeholders* at the *right time*

Some basic rules of communication is PM:

- Keep it short
- Keep it relevant
- Keep it fun (add some humor when possible)
- Do it often
- Communicate, communicate, communicate
Communication Plan

- Assign a communication point person
- Provide agendas and minutes at key team meetings
- Provide schedule and important team documents. Centralize documentation for team use (provide location)
- Communicate key milestone dates: Testing, Go Live, Downtime, Downtime procedures and Training
- Provide phone numbers, e-mail and other contact information of key team players / leaders to the entire team for use, problem solving and strategic updates
Quality Plan: PMI defines quality as “conformance to requirements and fitness of use.”

• Basically, does the project produce what it said it would and does the customer feel it produced what satisfies his real need?

• Consider this: 50% of all new products fail to meet their goals because they do not meet the needs of their target customer and are released with unacceptable quality issues.
To focus on quality:

• Be relentlessly obsessed with the customer.

• Include the customer from the start. Don’t be too busy to involve the customer. Define the quality process from their perspective.

• Plan quality into your project. Assign tasks to ensure quality (testing).

• Right size your quality initiative. Does it need to pass FDA approval or is it more a “quick and dirty” initiative?

• Trust but verify. Assume nothing. Whether it is assigned externally or assigned to a team member, perform some level of verification to ensure the resulting work product meets the targeted criteria.
Risk Planning: The goal of managing risk is to *identify and prepare* for potential threat to the project’s critical success factors before it actually occurs.

- Risk Management is the essence of being proactive.
- Every project entails risk. Remember, without risk, there is typically little or no reward.
- A risk response plan means potentially adding time, resources or cost to a project to mitigate the risk that is identified.
Deliverable: A *tangible, verifiable work product* such as a detail design, a working prototype.

*Note the word deliver which implies that something is produced and given to someone else (like delivering pizza). Deliverables are the little pizzas your project gives to you, your team and your customer.*

Milestone: Milestones are *key events* and have a *symbolic purpose*. They are not necessarily tangible but can be. Often, more than one deliverable is completed within a milestone task.
Suggestions for deliverable tracking:

- Identify: Work product name
- Modification: Is this newly created or updated (document)
- Version: Current version of the work product
- Status of product: In process, completed, approved
- Owner: Person responsible for the product / change
- Target deliverable completion date
- Actual completion date
- Approver: Person approving product / change (customer)
Remember, the main purpose of project management is to achieve the success criteria set forth at the beginning of the project and meet stakeholder expectations.

1. Always define the project success criteria in detail...in writing. Exactly what must be done? What product is to be delivered? When it is expected to be delivered?

   This is scope, requirements (specs), date expectations.
2. Get the right people involved and keep them involved. Try to include your customers every step of the way.

- Roles / responsibilities matrix
- Get customer approval / sign-off
- Communicate, communicate, communicate
- Know all your stakeholders. Yes, even the doctor that is never on call.
3. Develop the schedule.

   Break down the project into tasks. Put these tasks on the schedule and determine milestones, key accomplishments.
4. Estimate the time.

Estimate each phase. Start by estimating task by task. Determine time involved. Is the customer date expectation reasonable? Sometimes it is better to think backward.
5. Recognize that change is inevitable and establish a procedure for dealing with change.

    Record it. Email the team. Get approval from the customer / programmer. Get a time estimate for the change requested and introduce it into the schedule. Determine how it will impact the delivery date. Determine if it needs to be broken into a separate project phase.
6. Agree in advance what constitutes *closure* and *acceptance*.

Obtain written acceptance of deliverables throughout your project. Acceptance is an iterative process and typically not a one time event.
Every project is unique. Every project has a discrete beginning and end. You are producing a one-of-a-kind project every time and it requires using all of your skill sets:

- Business skills
- Technical knowledge / Clinical knowledge
- Leadership skills
- Communication skills
- Project Management fundamentals

Learn from experience (mistakes) and
For more information:

Please contact your Iatric Account Manager or send an email to info@iatric.com
Thank you for attending!