A Collaborative Approach to Supporting Information System Migration Projects

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Learning Objectives

Participants will be able to:

• Identify activities, phases and tools to manage an information system migration or any IT project.

• Describe the IIS Technical Assistance Collaborative approach and strategies for supporting IIS migration projects, and how it could be applied to any area of public health.

• Identify how project management approaches and tools support cost-effective migration projects.

• Identify how change management approaches and tools support stakeholders in navigating change.
Information System Migrations

• Complex and resource-intensive undertaking involves:
  – Planning
  – Requirements documentation
  – Procurement
  – Design, development and/or configuration
  – Data migration
  – Testing
  – Training
  – Go-live
  – Transition to operations and maintenance
Information System Migrations (continued)

- Requires leadership engagement, support and active coordination among various stakeholders:
  - Program Manager/Director
  - Central IT
  - Contracting office
  - Vendor
- Requires rigorous processes for prioritizing requirements/needs, and decision-making.
- Alternative options available:
  - Maintain status quo
  - Buy vs. build
Managing a System Migration

• Use of project management and change management can ensure a coordinated and systematic approach.
• Separate disciplines that greatly complement each other in meeting project goals and mitigating risk.

Project Management
Focus on cost, schedule and sufficient resource allocation to ensure performance and scope objectives are achieved.

Change Management
Focus on the process, tools and techniques to manage the people side of change to achieve a required business outcome.
The Collaborative Support of Migration Projects

• The Collaborative is a joint initiative supporting awardees who are working to address similar needs.

• Members of the Collaborative are:
  – American Immunization Registries Association (AIRA)
  – Centers for Disease Control and Health Protection (CDC)
  – Public Health Informatics Institute (PHII)

• The Collaborative efforts are supported through CDC Cooperative Agreements with AIRA and PHII.
TA Collaborative Approach

• Assess an individual program’s migration capabilities and needs.
  – How “informatics-savvy” are they? Where are the gaps in knowledge or experience?
  – Do they have access to project management resources?

• Deliver technical assistance to best support the needs of the participating program.
  – Operational guidance in the use of migration resources, guidance templates, and tools
  – Mentoring
  – Workshops with other programs that have common challenges
  – Peer sharing
  – Participation in a Learning Community
TA Collaborative Migration Project Framework

• Framework for managing a migration project:
  – Encompasses both project management and change management activities.
  – Organized by an industry-standard five project phases: initiate, plan, execute, monitor and close.
  – Identifies key milestones and project management and change management activities/artifacts by phase.
  – Can be tailored to accommodate diverse project needs.
## Migration Project Framework

<table>
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<tbody>
<tr>
<td><strong>Milestones</strong></td>
<td>- Information-gathering: business case &lt;br&gt; - Go/no-go decision on pursuing a platform transition</td>
<td>- Develop approaches for: procurement, data exchange/interoperability, data migration, testing, training, Help Desk &lt;br&gt; - Begin data quality review/cleansing &lt;br&gt; - Project planning: scope, timeline, resources, stakeholders, governance</td>
<td>- Requirements Documentation &lt;br&gt; - Procurement/Platform Selection &lt;br&gt; - Data Assessment and Preparation &lt;br&gt; - Design, Development, and Configuration &lt;br&gt; - Testing &lt;br&gt; - Implementation Preparation and Training &lt;br&gt; - Go-Live</td>
<td>- Transition to operations and maintenance &lt;br&gt; - Lessons learned documented and shared &lt;br&gt; - Disposition</td>
<td></td>
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<tr>
<td><strong>Project Management Activities</strong></td>
<td>- Define project concept &lt;br&gt; - Conduct due diligence in terms of project feasibility/readiness &lt;br&gt; - Outline project purpose and high-level requirements &lt;br&gt; - Develop business case</td>
<td>- Develop project roadmap, goals and objectives &lt;br&gt; - Document project scope &lt;br&gt; - Define project governance &lt;br&gt; - Confirm resource requirements and costs &lt;br&gt; - Draft project plan to identify cost, quality, available resources and realistic timeframe &lt;br&gt; - Identify stakeholders</td>
<td>- Schedule and conduct kickoff meeting &lt;br&gt; - Identify and convene team resources &lt;br&gt; - Execute project management plans &lt;br&gt; - Identify and set up tracking systems and project repository &lt;br&gt; - Schedule and facilitate team meetings</td>
<td>- Identify key performance indicators to measure project performance (e.g., cost, objectives, performance, etc.) &lt;br&gt; - Track project progress in alignment with the project plan &lt;br&gt; - Identify key performance indicators to measure project performance (e.g., cost, objectives, performance, etc.) &lt;br&gt; - Track project progress in alignment with the project plan</td>
<td>- Conduct post mortem to identify things that went well and opportunities for improvement &lt;br&gt; - Determine outstanding activities/deliverables for completion/future consideration &lt;br&gt; - Identify activities and develop plan to transition from project mode to operations &amp; maintenance</td>
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</table>
A word about the IIS environment

- Primary users are private providers
- Very sophisticated informatics projects
- Bi-directional exchange with hundreds of data partners
  - Vaccine history and decision support
- Wide disparities in program size, maturity and capacity
- Three major products in use but 18 using “home-grown” systems
Project Management Overview
Project Management Triangle

Core elements in project planning include **scope, cost and time**—also referred to as the “project management triangle.” Quality is included as another potential (critical) constraint in managing project delivery.

Various tools and techniques are available to manage a project and coordinate:

1. Project phases
2. Project schedule
   - Tasks
   - Duration
   - Dependencies
   - Resources
   - Timeframe
3. Budget
4. Project team
5. Project progress
Key Project Management Artifacts*

Initiate Phase
- Business Case
- Project Charter

Plan Phase
- Project Management Plan
- Project Schedule

*See "Management Framework for IIS Platform Migrations" for complete framework
Getting Started: Business Case and Project Charter

**Business case** - Builds the case for change, rationale for *why* the project should be done and the “problem” to address/resolve.

**Charter** - Defines the project scope, objectives, stakeholders, participants, timeline, and roles and responsibilities.

- Provides well-defined starting point and project boundaries
- Often used to formally appoint the project manager and support the mobilization of project resources
- Direct way for senior leadership to formally approve and commit to a project
Getting Organized: Project Management Plan

- A formal document that provides further detail on:
  - Project scope
  - Milestones/tasks
  - Level of effort
  - Resources
  - Schedule (project plan)
  - Dependencies

- Defines the basis for all project work.

- Describes **HOW** the project will be executed, monitored and reported.

- Could be summary or detailed definition; adjunct to the charter.
Project Management Plan

- Depending on project resources/capacity, the Project Management Plan could be an inclusive artifact or reference subsidiary management documents, such as:
  - Resource forecast
  - Communication plan
  - Training plan
  - Test plan
  - Implementation plan
  - Maintenance and operations plan
  - Project closeout plan
Project Schedule

- The project schedule is a critical tool for managing a project and planning and coordinating:
  - Tasks
  - Duration
  - Dependencies
  - Resources
  - Timeframe

- A common tool is Microsoft Project, but Excel and other applications can also be used to indicate the parameters of project activities/tasks and milestones.
# Project Plan

One project schedule tool is a Microsoft Project Plan

<table>
<thead>
<tr>
<th>Task Name</th>
<th>Duration</th>
<th>Start</th>
<th>Finish</th>
<th>Predecessors</th>
<th>Resource Names</th>
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<tbody>
<tr>
<td>1 Public Health Informatics Project</td>
<td>355 days</td>
<td>Mon 1/1/18</td>
<td>Fri 5/10/19</td>
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<tr>
<td>2 Initiate</td>
<td>45 days</td>
<td>Mon 1/1/18</td>
<td>Fri 3/2/18</td>
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<tr>
<td>3 Define project concept</td>
<td>5 days</td>
<td>Mon 1/1/18</td>
<td>Fri 1/5/18</td>
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<tr>
<td>4 Conduct due diligence</td>
<td>10 days</td>
<td>Mon 1/8/18</td>
<td>Fri 1/19/18</td>
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<tr>
<td>5 Develop business case</td>
<td>10 days</td>
<td>Mon 1/22/18</td>
<td>Fri 2/2/18</td>
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<tr>
<td>6 Draft charter</td>
<td>15 days</td>
<td>Mon 2/5/18</td>
<td>Fri 2/23/18</td>
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<tr>
<td>7 Obtain approval of charter</td>
<td>5 days</td>
<td>Mon 2/26/18</td>
<td>Fri 3/2/18</td>
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<td>8 Plan</td>
<td>80 days</td>
<td>Mon 3/5/18</td>
<td>Fri 6/22/18</td>
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<td>9 Define project governance</td>
<td>10 days</td>
<td>Mon 3/5/18</td>
<td>Fri 3/16/18</td>
<td>7</td>
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<tr>
<td>10 Confirm resources</td>
<td>30 days</td>
<td>Mon 3/5/18</td>
<td>Fri 4/13/18</td>
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<tr>
<td>11 Draft project plan</td>
<td>10 days</td>
<td>Mon 4/16/18</td>
<td>Fri 4/27/18</td>
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<tr>
<td>12 Identify stakeholders</td>
<td>15 days</td>
<td>Mon 4/30/18</td>
<td>Fri 5/18/18</td>
<td>11</td>
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Project Management Discussion
Change Management
Overview
Managing a Migration

- Use of project management and change management can ensure a coordinated and systematic approach.
- Separate disciplines that greatly complement each other in meeting project goals and mitigating risk.

Project Management
Focus on cost, schedule and sufficient resource allocation to ensure performance and scope objectives are achieved.

Change Management
Focus on the process, tools and techniques to manage the people side of change to achieve a required business outcome.
Change is a Process, Not an Event

- Change is a process that should be managed.
- Begins at the individual level to achieve organizational outcomes.
- People do not change because of an e-mail, a go-live date or even training.
- Have to meet them where they are and assist them over time in transitioning through the change.
- Assume they will need continued support months after go-live.
Individual Building Blocks for Change

• Awareness
  – Do they really know what is happening?
• Desire
  – Do they see value for themselves in the change?
• Knowledge
  – Do they know what to do?
• Ability
  – Do they know how to do it?
• Reinforcement
  – How and when to reinforce the above?
Key Change Management Artifacts*

Plan Phase

• Stakeholder Analysis Worksheet
• Communication Plan

*See “Management Framework for IIS Platform Migrations” for complete framework
Stakeholder Analysis Worksheet

• What?
  – Identifies individuals, groups or organizations that could impact or be impacted by the project
  – Analyze each stakeholder in terms of their expectations, needs, and level of interest in and influence over the project to effectively engage them

• Why?
  – Overlooking a project stakeholder could increase project risk, especially if it diminishes stakeholder satisfaction or prevents the timely identification of requirements
  – Supports the development of an effective communication plan
# Stakeholder Analysis Worksheet

<table>
<thead>
<tr>
<th>Stakeholder/Organization Name</th>
<th>Primary Contact Person (Name, Title, Contact Information)</th>
<th>Are they aware of the project? (Yes, No)</th>
<th>How much interest do they have in the project? (A Lot, Some, None)</th>
<th>How much influence do they have over the project (program perspective)? (High, Medium, Low)</th>
<th>Stakeholder Position on Project (Advocate, Neutral, Resister)</th>
<th>How much does the project impact the stakeholder (stakeholder perspective)? (High, Medium, Low)</th>
<th>What is the benefit to the stakeholder of the project?</th>
<th>How could the stakeholder contribute to the project?</th>
<th>How could the stakeholder block the project?</th>
<th>Strategy for getting feedback from the stakeholder (if different from stakeholder engagement)</th>
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## Using the Stakeholder Analysis Matrix to Plan Communications

<table>
<thead>
<tr>
<th>Level of Interest</th>
<th>Power to Influence</th>
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<tbody>
<tr>
<td></td>
<td>High</td>
</tr>
<tr>
<td>High</td>
<td>These stakeholders need high levels of ongoing communication and attention to ensure they continue as “High/High.” Think about how you can use them strategically to advance your project.</td>
</tr>
<tr>
<td>Low</td>
<td>Could these stakeholders be used strategically to advance your project? If ‘yes,’ do you have a communications strategy to move them to High Influence/High Interest?</td>
</tr>
</tbody>
</table>
Communication Plan

• What?
  – Identifies the key stakeholder groups; message content, frequency and timelines; and communication channels for the dissemination of migration activities

• Why?
  – Effective communications build awareness of the nature of and need for the change and risk of not changing
  – Formalizes feedback mechanisms and enables two-way communication
  – Publicly celebrates success (Reinforcement)
Communication Plan

- **Objectives and Goals** – Identify the purpose of the Communication Plan and the timeframe for which it applies.

- **Strategies and Key Messages** – Identify the stakeholder(s), key communication strategies and messages.

- **Planning and Tracking** – Provide a template for planning and tracking communication activities.

- **Communication Schedule: ‘Year at a Glance’** – Provides a calendar template for identification of key activities.

- **Change Management** – Provides a change management template to plan for stakeholder resistance.
Change Management Discussion
Lessons learned

• Dedicated project management if at all possible
• Create project charters that clearly define roles and responsibilities
• Adapt templates/samples from others
• Create a single repository for all documentation
• Divide and conquer; can’t have everyone providing input into every decision
• Communication and training plans are essential
Discussion questions

• What have you learned from migration or other IT projects? What is your best advice for your peers?
• If you migrated to a new system, what was the most compelling reason, the strongest driver?
• What project management resources did/do you have access to?
• Do you have any lessons learned to share regarding your experience with stakeholder engagement?
Contact Us

For more information on migration projects, on the IIS technical Assistance Collaborative, or to receive editable copies of the tools, please contact Sara Sanford, PHII at ssanford@phii.org