

**National Institutes of Health
National Cancer Institute (NCI)**

**caEHR Deployment Support
Task Order Number 29XS233STO2
Basic Order Agreement 29XS233**

Project Summary Report

March 1, 2010 – May 31, 2010 Submitted May 31, 2010

March 1, 2010 – June 30, 2010 Updated June 30, 2010

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PROJECT SUMMARY REPORT

Project Title: caEHR Deployment Support	Current Project Status: Transition
Contract Number: 29XS233 (BOA)	Task Order Number: 29XS233STO2
Reporting Period: March 1, 2010- June 30, 2010	Date of Report: May 31, 2010 Updated June 30, 2010 to include June activity
Milestone Description: The Project Summary Report describes work accomplished during the March 1, 2010 to June 30, 2010 reporting period along with issues encountered and resolutions to them, future enhancements, potential implementation strategies, and lessons learned.	

Executive Summary: During the period from March 1, 2010 to June 30, 2010, the Cancer Electronic Health Record (caEHR) Deployment Team has made substantial progress with the tasks and deliverables outlined in Statement of Objectives for this Task Order (TO).

These accomplishments include:

- Standing-up the caEHR Deployment Team
- Developing a project management plan and schedule, and updating both artifacts as the project evolved
- Establishing regular communications with the project management office (PMO), Contracting Officer's Technical Representative (COTR), and other caEHR streams
- Engaging the National Community Cancer Centers Program sites selected to participate in the caEHR project
- Conducting a Joint Kick-off Call with the 5 participating NCCCP sites, subsequently conducting a Site Visit Planning Call with each of the sites individually, and working to schedule and plan site visits with each NCCCP site
- Scheduling two site visits (Billings, MT: June 22, 2010; St. Joseph Towson, MD: June 30, 2010), which were subsequently postponed because of the project transition
- Writing a Project Summary to capture March 1, 2010 to May 31, 2010 activity then updating it to add June 2010 activity
- Defining a mechanism to hand-off requirements and use cases gathered from NCCCP sites to the caEHR Analysis Team to inform ongoing project requirements and documenting the process and data capture template
- Expanding and refining caEHR business capability definitions to facilitate discussions with the NCCCP sites regarding needs and priorities, working in collaboration with the

caEHR Analysis Team and PMO

- Developing an overall plan to assess the readiness of the NCCCP sites to deploy caEHR components, defining the three phases of assessment and key processes for deployment, e.g., software release, interface management, data management, interoperability plan, etc.
- Developing a detailed general assessment survey / interview guide to conduct site survey
- Developing the approach to assessing the readiness of sites to deploy specific caEHR business capabilities and working to tie that assessment to an interoperability framework
- Developing a vendor engagement plan that highlights the assessment of vendor EHR products, different options for deploying caEHR specifications or components, and the responsibilities of the caEHR Deployment Team, NCCCP sites, EHR vendors, and other caEHR discipline teams in supporting the various deployment options/implementation strategies

Issues encountered during this period include:

- Establishing the team leadership and organization to meet the evolving needs of the project
- Establishing ongoing and timely communications with the PMO, SAIC-F COTR and other caEHR discipline teams to keep them abreast of our progress
- Identifying process integration points with the other discipline streams to define information needs and hand-offs
- Working with NCCCP sites to schedule planning calls and site visits in a timely manner
- Developing definitive communications about the caEHR project and target business capabilities in the midst of a rapidly evolving project
- Keeping abreast with other projects involving NCCCP sites that may overlap or be synergistic with the caEHR project

Lessons learned during this reporting period suggest the following enhancements to our project management and deployment approaches going forward: We need to

- Establish the processes and discipline to populate GForge, the caEHR wiki and other communication tools with project artifacts and status updates,

- Integrate more fully and regularly with the other caEHR discipline streams not only to provide feedback from our work but to ensure we receive the information and support we need for site assessment and deployment activities,
- Establish a more formal process to get input to and approval of our work products, and
- Tie our work more closely to iterations/sprint cycles of the overall caEHR project.

Please note that the assessment of completeness of deliverables is based on deliverables outlined in the Task Order Extension fully executed June 4, 2010 and discussion of expectations with the SAIC-F COTR regarding preparations for project transition.

Progress Details:

Task 1: 10-ST1013-D01 Project Management Plan

Due: 05/15/2010, 05/31/2010, 6/30/2010

Submitted: 05/10/2010 (draft), 05/17/2010 (with permission from SAIC-F COTR), 05/31/2010, 06/28/2010

The Project Management Plan (PMP) provides an overview of the project, the roles and responsibilities of staff involved in the project, and the approach to project management that will be used by the Cancer Electronic Health Record (caEHR) Deployment Team. The PMP:

- Demonstrates an understanding of the basic tenets of the project mission and identifying stakeholders;
- Identifies milestones where Government/Program Management Office (PMO) information or activity is required and timeline dependencies for subsequent activities by the caEHR Deployment Team;
- Provides an integrated master management plan describing our overall management strategy, policies and procedures; and
- Provides a detailed staffing plan for our team.

The PMP was updated to align with updates to the task order, specifically changes to the deliverable due dates.

Project management activity during the reporting period included the following:

- Standing up the project team: We assembled a strong multidisciplinary team comprised of Booz Allen Hamilton (Booz Allen) and Massachusetts eHealth Collaborative staff.

Collectively, our team's experience spans clinical care, health care operations, EHR requirements analysis, EHR vendor engagement, EHR product development, EHR product deployment in inpatient and outpatient settings, service-oriented architecture design, stakeholder engagement, change management and project management.

- Onboarding process: The onboarding process evolved, becoming more structured for the newer team members. However, we needed to streamline the process further to gain access to the project Wiki, GForge and JIRA more rapidly. BOA non-disclosure agreements (NDAs) were signed by project team members. Two team members signed NDAs to review NCCCP site proposal content relevant to this project, and only those two people were given access to that content. All team members active in June 2010 completed the NIH Information Security Awareness Training. The certificates and suitability roster were sent to SAIC-F.
- Communications and integration with other caEHR discipline teams: We established standard weekly meetings with the PMO and SAIC-F COTR, and included them in our team weekly meetings. We assigned liaisons to the Analysis, Architecture, Development, Quality Assurance and Continuous Integration, and Infrastructure Environment. Each liaison participated in standing discipline team meetings and interacted with their respective Discipline-Specific Leads (DSL) or designees to define integration points and information hand-offs. We participated in the weekly DSL meeting and planning sessions.
- Microsoft Project (MS Project) Schedule: We developed and submitted a MS Project Schedule with the PMP and have included all activities from March 1, 2010 through June 30, 2010. We updated tasks in JIRA based on the project schedule.

Status of Task 1: Complete. Throughout the project, the MS Project Schedule was a living document and evolved as the project progressed.

Task 2: 10-ST1013-D02 Monthly Status Reports

Due: 04/10/2010, 05/10/2010, 06/15/2010, 06/30/2010

Submitted: 04/12/2010 (with permission from SAIC-F COTR), 5/10/2010, 06/15/2010, 06/28/2010

The Monthly Status Reports were submitted for March, April, May and June 2010 to the Subcontracts Specialist and SAIC-F COTR and included information pertaining to project activity during the reporting month. This information included technical progress, task status, team roster, participation in external meetings, site engagement activities, work planned for the next

month, external dependencies, issues and mitigation approach, and lessons learned. Given the project transition, the June Monthly Status Report did not include activities planned for July 2010. Since Booz Allen generates a summary of project financials at the time the monthly invoice is created, the project financials update was submitted with the monthly invoices rather than the Monthly Status Reports. This process was approved by the SAIC-F COTR.

Status of Task 2: Up to Date. Monthly status reports for March, April, May and June 2010 activity were submitted. Project financials were submitted with the monthly invoices.

Task 3: 10-ST1013-D03 Project Summary Report

Due: 05/31/2010, 06/30/2010

Submitted: 05/31/2010, 06/28/2010

The Project Summary Report describes work accomplished during the March 1, 2010 to June 30, 2010 reporting period along with issues encountered and resolutions to them, future enhancements, potential implementation strategies, and lessons learned. The report includes information about tasks and work products that support the TO deliverables including:

- Project Management Plan
- MS Project Schedule
- Monthly Status Reports
- Project Summary Report
- Site Requirements and Use Cases, including Business Capabilities Definitions, Use Case Template, Requirements Template, Business Capability Assessment Report Template
- Deployment Site Surveys (Overall Site Assessment and Deployment Plan, Interview Guide, and Deployment Site Survey Template and Process)
- Site Deployment Plans (Overall Site Assessment and Deployment Plan, Vendor Engagement Plan, Site Deployment Plan Template)
- Deployment Site Installation Summary Reports (Installation Summary Template)
- caEHR Training Material (Internal Site Survey Training Presentation)
- Two Site Visits (Joint kick-off Documents, Planning Call Documents, Site Visit

Documents, NCCCP Pre-visit Site Profiles, Other NCCCP Site Communications)

Status of Task 3: Complete

Task 4: 10-ST1013-D04 Site Requirements and Use Cases

Due : 06/30/2010

Submitted: 6/28/2010

The caEHR Deployment Team developed the following artifacts in support of this deliverable:

- Business Capabilities
- Use Case Template
- Requirements Template
- High Level Business Capability Assessment Template

Specific Site Requirements and Use Cases documents were not developed for each site, as doing so would require completing the site visits and defining the specific business capabilities/services the sites are going to deploy.

Business Capabilities and High Level Business Capability Assessment:

The caEHR Deployment Team worked with the PMO and caEHR Analysis Team to expand and refine the definitions of the business capabilities that are being considered for development in the caEHR project. The revised list of business capabilities and definitions will be used to facilitate discussions about needed capabilities and priorities from the NCCCP sites' perspective. The caEHR Deployment Team has revised the business capability document developed by the caEHR Analysis Team as follows:

- Slightly reorganized the capabilities in keeping with how the industry thinks of them,
- Expanded the definitions to help focus discussions with the NCCCP sites,
- Added oncology-specific language to target oncology-specific needs, and
- Aligned the capabilities to Meaningful Use requirements as currently defined.

This document was reviewed and revised by the involved parties.

Meanwhile, the caEHR Deployment Team introduced the NCCCP sites to a preliminary list of

business capabilities during the Joint caEHR Project Kick-off Meeting and during site visit planning calls with the individual sites. Once the business capabilities list and definitions are approved by CBIIT project sponsors, the caEHR Deployment Team will conduct formal working sessions with each site individually to review the capabilities and capture development priorities from their perspective.

In order to fully assess the current state and priorities of the business capabilities at each of the NCCCP sites, the caEHR Deployment Team defined the Phase II High-level Business Capability Assessment. Through this mechanism, the caEHR Deployment Team would determine what business capabilities each site already has, what systems provide the business capability, how satisfied the site is with the existing solution, and the importance of the business capability. For business capabilities/services being developed by the caEHR Team, the caEHR Deployment Team planned to drill down into greater detail on the inputs, outputs, and constraints related to those capabilities/services.

Requirements Template:

In preparation for upcoming NCCCP site visits, during which comments, questions, suggestions (known collectively as high level site requirements) would be collected, the caEHR Deployment Team worked with the PMO and caEHR Analysis Team to define the process by which site requirements would be collected by the caEHR Deployment Team and handed off to the caEHR Analysis Team to be vetted and incorporated into the baseline requirements as appropriate. These discussions highlighted several issues to be addressed:

- How and when will NCCCP site requirements be incorporated into the business architecture model? How much will NCCCP requirements influence the overall caEHR project plan and priorities? The answers to these questions are yet to be determined.
- When does traceability of these requirements begin? The current plan is for the caEHR Deployment Team to maintain a record of requirements captured through direct communications with the NCCCP sites, noting from which sites the requirements originated. After de-duplicating the requirements among those the team collects, the requirements would be handed-off to the caEHR Analysis Team to be managed per their existing processes. Traceability would begin once the caEHR Analysis Team formally examines the requirements. A template to capture and communicate the requirements was developed, reviewed and revised by the involved parties.
- How can the NCCCP sites participate in the requirements development process managed by the caEHR Analysis Team involving other stakeholders from the oncology community? The caEHR Deployment Team in collaboration with the PMO, communicated to the NCCCP sites the multi-layered engagement models that are

available, potential opportunities for the sites to participate, and the commitment each level of participation represents. The PMO stated that they would be sending out additional information to the NCCCP sites.

Use Case Template:

Discussions with the caEHR Analysis Team about capturing site-specific use cases were ongoing and the caEHR Deployment Team developed a template and process for documenting and communicating site-specific use cases focused on deployment of specific business capabilities developed by the caEHR Team.

Going forward the following activities will need to occur:

- Schedule and conduct the business capability working sessions with the NCCCP sites. A report documenting the outcome of these sessions will need to be developed and shared with the PMO and caEHR Team.
- Finalize the set of templates to capture and communicate requirements and site-specific use case information. The ability to accomplish these tasks will depend on completing the reviews with the PMO and caEHR Analysis Team and securing the input and approval from the CBIIT project sponsors.

Issues to resolve:

- The ability to capture feedback about the business capabilities and capture requirements and use cases will depend on the availability of the NCCCP sites for site visits and separate or concurrent business capability working sessions.
- The ability to develop business capability-specific use cases will depend on an agreement with the SAIC-F COTR, PMO and CBIIT project sponsors on the scope of the use case development; the maturity of the caEHR components being developed; and the availability of the NCCCP sites for site visits and subsequent discussions.

Status of Task 4: Complete for purposes of transition. The business capability document will continue to evolve as the overall caEHR Project Scope and Vision are refined. The templates will need to be piloted and refined as the caEHR Analysis Team further defines how it will incorporate feedback from deployment activities. CBIIT decisions about the scope of the uses cases may impact the use case process template as well.

Task 5: 10-ST1013-D05 Deployment Site Surveys

Due : Overall Site Assessment and Deployment Plan due 05/31/2010; Deployment Site Surveys due 06/30/2010

Submitted: Overall Site Assessment and Deployment Plan submitted 05/31/2010, 06/28/2010
Artifacts Supporting the Deployment Site Surveys submitted 06/28/2010

The caEHR Deployment Team created the following artifacts in support of this deliverable:

- Overall Site Assessment and Deployment Plan
- Interview Guide
- Deployment Site Survey Template and Process

Specific Deployment Site Survey documents were not developed for each site, as doing so would require completing the sites visits.

Overall Site Assessment:

The assessment approach was presented iteratively in PowerPoint presentations and Word documents and is captured in the Overall Site Assessment and Deployment Plan submitted as a deliverable. The assessment is intended to:

- Measure each NCCCP site's readiness for caEHR deployment
- Allow development of a risk and readiness profile for each site
- Facilitate defining the risk areas, mitigation strategies and areas for improvement
- Inform recommendations for caEHR deployment options and steps to prepare the sites for caEHR deployment.

The caEHR Deployment Team has defined a three-phased approach to site assessment:

- Phase I: General Site Assessment - The purpose of the general assessment of the NCCCP sites (Phase I) is to determine their readiness to deploy caEHR components from the perspectives of People, Process, Business Management, Operations and Technology. To accomplish this general assessment, the caEHR Deployment Team developed a survey of over 380 questions focused on these perspectives. This survey was translated into an interview guide to allow the caEHR Deployment Team to capture the right information from the right people at the NCCCP sites during a series of concurrent interviews and through documentation provided by the sites. Documents that capture the process to conduct the surveys and to score the results were created. The survey questions were reviewed and revised based on input from the PMO and other caEHR discipline teams and refined and formatted for ease of use. The Interview Guide will

require review from CBIIT Project Sponsors.

- Phase II: High Level Business Capability Assessment - The Phase II high-level business capability assessment (as discussed above in Task 4: 10-ST1013-D04 Site Requirements and Use Cases) would identify which caEHR business capabilities already exist at a site and which EHR systems provide these capabilities. The assessment would also allow the caEHR Deployment Team to identify the site's priorities for the remaining business capabilities.
- Phase III: Detailed Business Capability Assessment - The Phase III Detailed Business Capability assessment would provide a more detailed and technical assessment. The main objective of the Detailed Business Capability Assessment is to address a common scenario wherein a caEHR Business Capability already exists at a site, but the extent to which it conforms to the caEHR profile is undetermined and requires a detailed analysis. To identify areas of improvement, a gap analysis would be performed using caEHR SAIF artifacts. One of the main advantages in using SAIF-based gap analysis is that it represents the "distance" between the "as-is" state for an existing business capability and the "to-be", fully caEHR-compliant functionality. The gap analysis would be based on the SAIF framework and compliance with the SAIF/ECCF conformance statements would be scored from the perspective of the SAIF viewpoints: Business/Enterprise, Technology, Informational, Computational, and Engineering. The caEHR Deployment Team developed a draft document that shows how the alignment to the SAIF framework could be implemented, using the PODS specifications as an example, and engaged the caEHR Architecture Team in discussions to further define this approach.

Interview Guide:

The overall site readiness assessment process was designed to provide a framework for evaluation of the NCCCP site's readiness for quick and effective development of the resources and capabilities necessary to deploy caEHR services. The Interview Guide was one important component of the overall site readiness assessment process. The Interview Guide captured data about

- the roles, responsibilities and departmental groupings of staff at the NCCCP site,
- the workflow and functionality of the site, and
- the processes and technology utilized at the site.

The Interview Guide is comprised of over 380 questions, grouped into the six analysis perspectives: Business Capabilities, Business Management, Operations, People, Process and Technology. Each question is also mapped to a specific department, content area or process to help align the questions with the type of NCCCP site staff who will most likely have the answer.

Question types include Free Text – Short Answer (e.g., address, city, state of site), Yes/No, 5-point Likert Scale, and Free-Text – Long Answer. Much of the data will be captured during the site visits either through conversations with site staff, review of documentation provided by the sites, or validation of data the caEHR Deployment Team pre-populates based on publicly available information and data previously collected by other CBIIT projects involving the NCCCP sites. The overall readiness of a site will be determined by both objective and subjective analysis of the information gathered.

The caEHR Deployment Team investigated online survey tools that could support the capture of site assessment data, and identified LimeSurvey, an open source product, as a promising candidate. However, given competing priorities of the caEHR Environment Team at the time, we were asked to consider SurveyMonkey as a more readily available alternative. The caEHR Deployment Team configured a survey within SurveyMonkey to test the tool against several high level requirements. The team documented the context of the site assessment, the tool requirements, the findings and our recommendations. We concluded that SurveyMonkey was not sufficient to support the site assessment. Compared to SurveyMonkey, using Microsoft Excel is preferable.

The caEHR Deployment Team developed the Deployment Site Survey Template and Process document which is intended to be used to report the findings of the sites visits. This document includes the assessment methodology, findings and assessment of the sites' readiness to move forward.

Status of Task 5: Complete for purposes of transition. The overall assessment and deployment plan should be refined as the project evolves and feedback is received during site visits. The interview guide should be revisited after piloting at the first site visit. The deployment site survey template and process should also be refined as the first report is written.

Task 6: 10-ST1013-D06 Site Deployment Plans

Due : Overall Site Assessment and Deployment Plan due 05/31/2010; Site Deployment Plans due 06/30/2010

Submitted: Overall Site Assessment and Deployment Plan submitted 05/31/2010, 6/28/2010; Vendor Engagement Plan submitted 05/29/2010, 6/28/2010

The caEHR Deployment Team developed the following artifacts in support of this deliverable:

- Overall Site Assessment and Deployment Plan

- Vendor Engagement Plan
- Site Deployment Plan Template

Specific Site Deployment Plans were not developed for each site, as doing so would require completing the site visits and defining the specific business capabilities/services the sites are going to deploy.

The Overall Assessment and Deployment Plan provides a detailed overview of the deployment approach that should be followed by the caEHR Deployment Team. This plan serves as a blueprint for the site assessment and caEHR deployment processes. In addition to the site assessment process, this document addresses the following deployment topics:

- The software release process
- User acceptance testing
- Interface management
- Data management including data standards and semantics
- Data mapping
- Data migration
- Data dictionary and data model
- Interoperability plan
- Security
- Certification and accreditation
- ECCF / SAIF compliance
- Operations and maintenance
- Risk management.

Site Deployment Plans will be created in collaboration with the deployment sites following the site assessments and after the business capabilities the sites intend to deploy are identified and defined. The Site Deployment Plans will identify the scope of the deployment, the deployment network architecture, schedule and milestones, resources, risk mitigation plan, security integration plan, site communication plan, plan for site installation technical support, site deployment use cases and other activities that will occur before and after the installation.

The template for the site-specific deployment plan was developed. This template will be

populated as the site assessment is conducted, gap analysis is completed, and deployment plans are developed.

Although not a required deliverable, we developed a Vendor Engagement Plan to guide the assessment of EHR products in use at the NCCCP sites. This document provides an overview of the caEHR Deployment Team's approach to engaging EHR Vendors. This approach incorporates industry standard best practices and the caEHR Deployment Team's experience implementing EHR systems. There are several options for deploying caEHR Business Capabilities, each of which requires a different plan to engage the EHR Vendors. Each option also requires different activity by the caEHR Deployment Team, NCCCP sites, EHR vendors, other caEHR streams.

Status of Task 6:

Overall Site Assessment and Deployment Plan: Complete for purpose of transition
Vendor Engagement Plan: Complete for purposes of transition
Site Deployment Plan Template: Complete for purposes of transition
Site Deployment Plans: Not started - dependent on conducting site visits

Task 7: 10-ST1013-D07 Deployment Site Installation Summary Reports

Due: Approach, process and template due 06/30/2010; summary reports due within 15 business days after site installation is completed

Submitted: Submitted 6/28/2010

The Deployment Site Installation Summary Reports will be compiled and submitted once software installation takes place. In preparation, the caEHR Deployment team developed an Installation Summary Template to capture installation results.

The following information will be documented:

- System architecture
- Data Flow Design
- Technology Infrastructure
- Compliance with NCI adopted standards (ECCF, BDA, 508)

- Identified Project Prerequisites
- Integration with Site Change Management Processes
- Software Integration Process
- Interface Integration
- Data Management
- Implementation Testing
- Training
- Timeline/Events
- Listing of Identified Issues
- Modifications to Design
- Post Installation Activities

Status of Task 7:

Installation Summary Template: Complete

Installation Summary Report: Not started – dependent upon completion of software installation

Task 8: 10-ST1013-D08 User Acceptance Test Reports

Due: Approach, process and template due 06/30/2010; reports due within 15 days after user acceptance tests (UAT) are completed

Submitted: User Acceptance Test (UAT) Report Template submitted 6/30/2010

The caEHR Deployment Team worked with the Quality Assurance (QA) and Continuous Integration (CI) Team to define the UAT process and content, to coordinate efforts of the two teams and to share necessary information between the two teams. These discussions were in their beginning stages. As part of this task, the caEHR Deployment Team met with QA team to review the Master QA Plan and reviewed the metrics outline document. The caEHR Deployment Team also met with the QA Team to provide input for UAT planning. As a result of these activities, the caEHR Deployment Team developed the UAT Report Template. Actual UAT Reports can be completed after the testing has occurred.

Status of Task 8:

UAT Report Template: Complete

UAT Reports: Not started - dependent upon completion of software installation

Task 9: 10-ST1013-D09 caEHR Training Material

Due: After June 30, 2010

Submitted: Internal training presentation for upcoming site visits: 06/28/2010, Training materials specific to caEHR components: Not submitted

Development of training modules was scheduled to start in July 2010. Because of the transition, we did not onboard the training materials resource as planned in June 2010. We did, however, create a training presentation for the site visits that conveys how the site visits will unfold, how to use the assessment guide and some nuances of the clinical environment to be aware of.

Status of Task 9: Training presentation for upcoming site visits: Complete; Training materials specific to caEHR components: Work was to begin July 1.

Task 10: Two Site Visits

Due: 2 site visits by 06/30/2010

Submitted: 6/28/2010

During the reporting period, the caEHR Deployment Team planned and facilitated a caEHR Joint Kick-off Meeting with the five NCCCP sites awarded to participate in the caEHR project. Caterina Lasome, Brenda Duggan, Kevin Hurley, Marc Koehn, and Robbin Gosa also participated. The caEHR Deployment Team had multiple communications with the sites subsequently, conveying more about the project, learning more about their goals and expectations, scheduling and conducting site visit planning calls, and scheduling site visits.

NCCCP site engagement began with developing an introductory letter congratulating the sites on their award, introducing the caEHR project and inviting them to the caEHR Joint Kick-off with all five NCCCP sites. In collaboration with the PMO and Brenda Duggan, the caEHR Team developed the agenda and presentation deck for the Kick-off and conducted a run-through with agenda speakers. In preparation for these calls, the caEHR Deployment Team also reviewed information about the NCCCP sites provided by the government or available in the public

domain.

The Kick-off was held by web conference on April 26, 2010, during which the caEHR Team began getting insights about the goals and expectations of the NCCCP sites, as well as some of their concerns. The caEHR Deployment Team provided summary notes of the meeting to the SAIC-F COTR and PMO soon afterward and initiated follow-up calls with each site to confirm points-of-contact, to schedule conference calls with the individual NCCCP sites to plan upcoming site visits, and to schedule the actual site visits.

The caEHR Deployment Team created an agenda and presentation template for each call, customized the documents for each site, and conducted five site visit planning calls. Prior to the planning calls, we created an "NCCCP Site Profile", summarizing publicly available information about the sites including patient volume, patient service areas, clinical expertise, technology, etc. The amount and type of information available varied across sites. Following the first call, we conducted a lessons learned review and modified our facilitation based on that review.

The agenda of the planning calls included:

- An overview of the caEHR project including project goals and objectives, an overview of the Business Capabilities, stakeholder engagement opportunities, the site deployment process, and near term activities
- NCCCP site goals and objectives for the project
- Roles and responsibilities of the NCCCP site and caEHR Deployment team members
- Discussion of preparation for and activities to occur during the site visits
- Identification of risks and issues at the site that may impact the project

A cover letter and a document summarizing the call were sent to each NCCCP caEHR site following their site planning call.

A site visit with the Billings Clinic was scheduled for 06/22/2010 and a site visit with St. Joseph Medical Center in Towson, MD was scheduled for 06/30/2010. The caEHR Deployment Team had numerous follow up calls with the scheduled sites and continued to work with the other three NCCCP sites to schedule their site visits. We developed the agenda and presentation templates for the site visits, the overall strategy for conducting the visits, and the staffing plan. The site visits will be rescheduled.

Status of Task 10:

Joint Kick-off documents: Complete

Planning call documents: Complete

NCCCP site visit documents: Complete for purposes of transition

NCCCP site profiles (pre-visit): Complete

Other NCCCP communications: Complete for purposes of transition

Site visits: Postponed. To be rescheduled.

Project Risks/Issues:

Risk	Severity	Mitigation Approach	Severity Post-Mitigation
Large institution EHR deployment approaches do not match requirements of the community setting.	High	Selection of MAeHC, an organization with extensive experience with the community practice setting. Direct feedback from participating NCCCP sites.	Low
Deployment activities do not effectively engage a complex software development effort.	High	Incorporation of personnel and organizations with experience with NCI-CBIT software development processes and procedures.	Low
Development timeline delays negatively impact Deployment timelines.	High	Flexibility of the caEHR Deployment Team to support multiple deployments later in the period of performance if required.	Medium
caEHR features result in changes to practice operations that are not accepted by all practitioners, and as a result caEHR falls out of use.	High	Review of deployment plans with change experts. Monitoring of post-deployment usage to identify root causes of adoption failures.	Low
NCCCP sites lack the resources or Infrastructure needed to install tools in a timely manner.	High	Early identification of implementation resource gaps via assessments conducted in the inception phase and deployment plan reviews, allowing time for securing additional resources, use of 'Swat Teams'. Engagement of EHR vendors already working with NCCCP sites.	Medium
Regulatory and privacy concerns prevent data sharing.	High	Active engagement with community groups, patient advocates, and early implementation of data sharing plans.	Low
Requirements for caEHR adoption significantly differ from ASCO/NCI agreed functional profiles.	High	Early identification of interoperability requirements, allowing development teams and SAIC-Frederick/NCI with sufficient time to address scope changes.	Low
Other projects involving NCCCP sites diverts the sites' attention from the caEHR deployment or causes confusion about project requirements (e.g., the various outcomes projects). Both scenarios may cause delays in the caEHR Deployment project.	High	Establish ongoing communications with sites to surface issues, incorporate caEHR joint meetings into existing schedule of joint NCCCP calls for other projects, optimize use of web conferencing.	Medium
Insufficient communication between caEHR Deployment Team and other Streams negatively impacts hand-offs and delays feedback	High	Establish caEHR Deployment Team liaisons to other streams, attending other stream meetings, conducting working sessions with other streams as needed.	Low

Lessons Learned:

Lesson	Outcome
Establish the processes and discipline to populate GForge, the caEHR wiki and other communication tools with project artifacts and status updates.	Asynchronous communication and documentation is critical to this project.
Integrate more fully and regularly with the other caEHR discipline streams not only to provide feedback from our work but to ensure we receive the information and support we need for site assessment and deployment activities.	Scope and vision, business capability, process documents are critical to the caEHR deployment and consistent communications with stakeholder.
Establish a more formal process to get input to and approval of our work products.	Important to obtain timely and documented feedback to catalyze forward progress.
Tie our work more closely to iterations/sprint cycles of the overall caEHR project.	Closer ties to iterations and sprint cycles will better highlight our information needs in addition to other touch points between disciplines.
Consistent communication about project goals and objectives is critical to stakeholder engagement but challenging in an evolving project. More frequent communication is needed.	While consistent messaging is ideal, changes in direction are not unexpected in the early stages of an innovative project. Timely notification of changes in vision, scope, focus and other external communication would help synchronize messaging across stakeholder groups.
Regular and direct communication with Brenda Duggan is essential to ensure she is informed of deployment activities and to gain additional context that she can provide.	This is a critical part of consistent messaging from all components of the caEHR project.
The caEHR program needs to be clear about the impact NCCCP site feedback may or may not have on the scope and vision of the caEHR project.	Clarifying expectations on business capabilities being addressed and services being developed is critical to building collaboration between the NCCCP sites and the larger caEHR program.
Artifacts produced by the caEHR Team at NCI need to contain language that is readily understood by the NCCCP sites. Terms, such as SOA and ECCF, require clarification.	Using language understandable by the sites would result in full, open communication and would allow better alignment between the project and site goals.
Sites have a strong focus on patient-centric care, and infrastructure and technology needs are secondary. A business connection needs to be made for each site between use cases and caEHR project definitions. The Business Capability definitions document should continue to evolve to reflect how the sites think about their business.	Business Capability definitions that resonate with the sites are essential for full communication between the caEHR Team and the sites. Definitions that are written from a clinical perspective and patient-centric focus will help ensure that the sites have confidence in the overall caEHR program.