E-folio Interoperability Initiative Pilot Timeline and Task Analysis

November 17, 2009

This document outlines the steps necessary to successfully complete the E-folio Interoperability Initiative (EII) pilot of the Medbiquitous Educational Trajectory specification. The goal of the pilot is the demonstration that data about a learner's educational trajectory can be extracted from institutional systems, put in a common format, and sent to other organizations in furtherance of the learner's academic and career goals.

ID	Task Name	Start	Finish	Duration
1	Identify data sources and stakeholders within your organization	11/2/2009	11/13/2009	10d
2	Identify key staff for extracting data and putting in excel or XML	11/16/2009	11/30/2009	11d
3	Get buy in from data owners and stakeholders within your organization	11/16/2009	11/30/2009	11d
4	Develop initial draft specification for implementation	11/2/2009	12/15/2009	32d
5	Develop Excel template corresponding to the draft specification	12/15/2009	12/18/2009	4d
6	Begin export/compilation process	12/18/2009	1/8/2010	16d
7	Revise spec as needed	12/18/2009	1/15/2010	21d
8	Share lessons learned from task 6	1/8/2010	1/15/2010	6d
9	Continue export compilation process	1/15/2010	2/12/2010	21d
10	Technical discussion among pilot participants	1/29/2010	1/29/2010	1d
11	Upload data to NBME secure web site	2/15/2010	2/15/2010	1d

1 Identify data sources and stakeholders within your organization

Educational trajectory data likely resides in multiple systems within an institution. Below are some possible systems where relevant data may reside. Data needed may change depending on how the specification evolves.

System	May Contain
School Portfolio	Self-selected evidence of competency learning with critical reflection and mentor feedback
ISIS (Integrated Student Information System)	Degree programs, extracurricular learning, academic difficulty, gaps in study
Curriculum Management System	Competency related curriculum and modality
Clinical Course Scheduling System	Clinical training

There are many stakeholders whose support you will need in order to successfully complete the pilot. These stakeholders may include:

- Deans
- Those who manage the systems where the data resides
- IT staff
- The supervisor of the data analyst who can bring the data together

Make note of the systems where educational trajectory data resides in your institution as well as the stakeholders whose support you will need.

2 Identify key staff for extracting data and putting in excel or XML

For each system, identify a data analyst or other staff capable of extracting the necessary data and assisting with the output to a standard Excel or XML format. Make note of that person's name and their supervisor's name. If there are multiple data analysts that will be necessary due to your organizations data architecture, identify one data analyst that will serve as the lead for bringing data together.

3 Get buy in from data owners and stakeholders within your organization

Communicate with stakeholders identified in step 1, along with key staff and supervisors of key staff identified in step 2. Get their buy in on the goals of the project along with the timeline.

A draft letter is available to facilitate getting buy in from high-level stakeholders (URL?). In addition, a fact sheet about the project is available to share with them. (Add URL)

4 Develop initial draft specification for implementation

The MedBiquitous Educational Trajectory Working Group will continue to iteratively develop the draft specification. An initial draft of the specification must be complete before the data compilation and transfer can begin.

5 Develop Excel template corresponding to the draft specification

MedBiquitous staff will develop an Excel template to facilitate the formatting of data from each school's systems. The spreadsheet can then be completed for students in the appropriate class.

6 Begin export/compilation process

We'll start the data collection portion of the pilot with a project kickoff call with the technical leads from each school.

Schools will start export the data from the applicable systems and compiling the data into 1) an Excel spreadsheet using the template developed in Task 5 or 2) an XML file conforming with the schemas and specifications developed by the MedBiquitous Educational Trajectory Working Group.

For purposes of this pilot, we will exchange data for the entering class of 2005, defined as: *Anyone who was accepted for matriculation for the entering class of 2005 regardless of degree program.*

For each system serving as a source of educational trajectory data, the data analyst will:

- Identify data to be exported
- Map the data element names used in the system to those used in the specification
- Identify any incongruities between the existing data and the specification
- Develop a strategy for addressing incongruities between the existing data and the specification

As the export/compilation process proceeds, any incongruities or technical challenges should be brought to the attention of the group so that barriers can be addressed appropriately. One school may have a solution or strategy that could benefit other schools, or revision of the specification may be necessary.

7 Revise spec as needed

If in the process of compiling the data the project team identifies incongruities with the specification or mistakes, the working group will revise the specification to address those problems. The project team will be informed of the revisions and decide whether or not to implement the revision for purposes of the pilot test. If revisions are not implemented, a workaround may be suggested.

8 Share lessons learned from task 6

To encourage a common approach to common problems, the project team will have a call to share the technical lessons learned from the compilation and export process to date. The group will learn from one another and facilitate further progress on the project. The steps the team has undertaken, along with any strategies used for export or compilation, will be noted for publication in a best practices guide.

9 Continue export compilation process

The project team will take the lessons learned from task 8 and complete the export process. The data analyst will take the following steps.

- Export data from a source system in XML or in an excel-compatible format, such as csv.
- Make any modifications necessary to make the data conform to the specification. If you are using XML, an XSLT stylesheet can programmatically make the modifications.
- Bring data from multiple sources together into a single excel or XML document. You may use the school's identifier for the student as the unique identifier for the learner in the educational trajectory dataset.

10 Technical discussion among pilot participants

Midway through step 9, the data analysts and other technical members of the team will have a teleconference to discuss any barriers or challenges to completing the export process. Team members are welcome to share any technical difficulties with the group via email in advance of the call and after the call.

11 Upload data to NBME secure web site

Once the export and compilation is complete, the school will upload the educational trajectory data file to an NBME secure website. The website will accept the data and allow authorized users from the school to view the data uploaded. The system may offer additional benefits, including aggregate statistics on the school's data.

Ultimately the system will allow graphical displays of learner trajectory and residency program access to view learner data, provided the learner has authorized such access.