

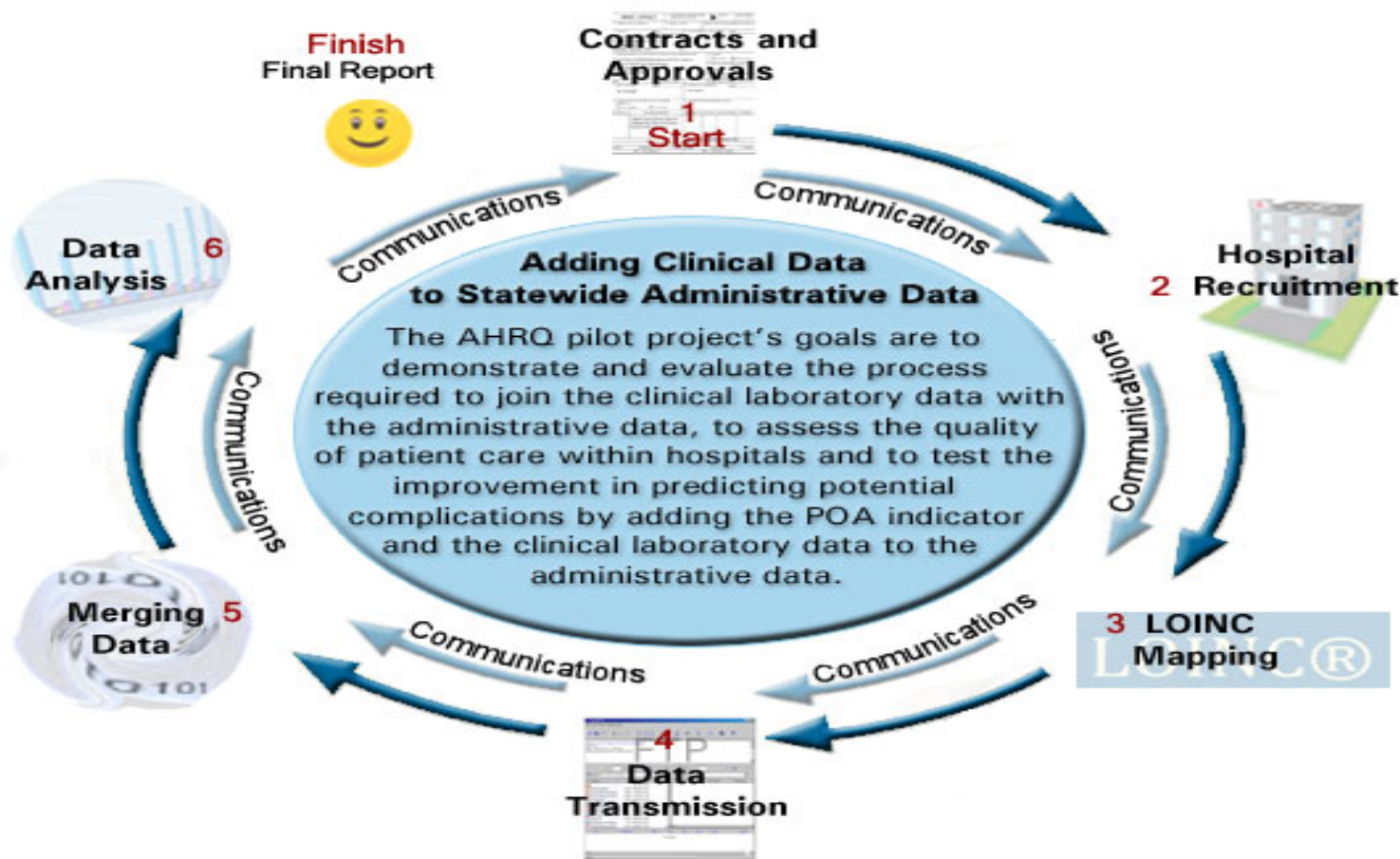
**Adding Clinical Data Elements
to Administrative Data**

**Evaluation of Logical Observation
Identifiers Names and Codes (LOINC)
Mapping and Transmission of Data
Processes: Barriers and Lessons
Learned**

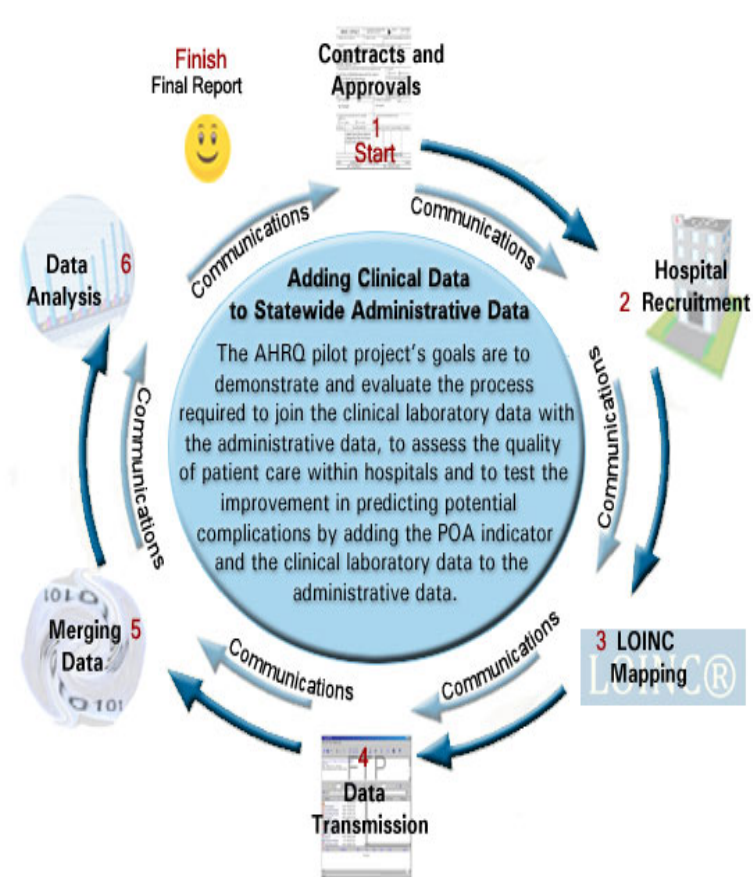
Bahia Diefenbach, Ph.D.

**Florida Agency for Health Care Administration
HCUP Partner's Meeting - November 2009**

Project Stages

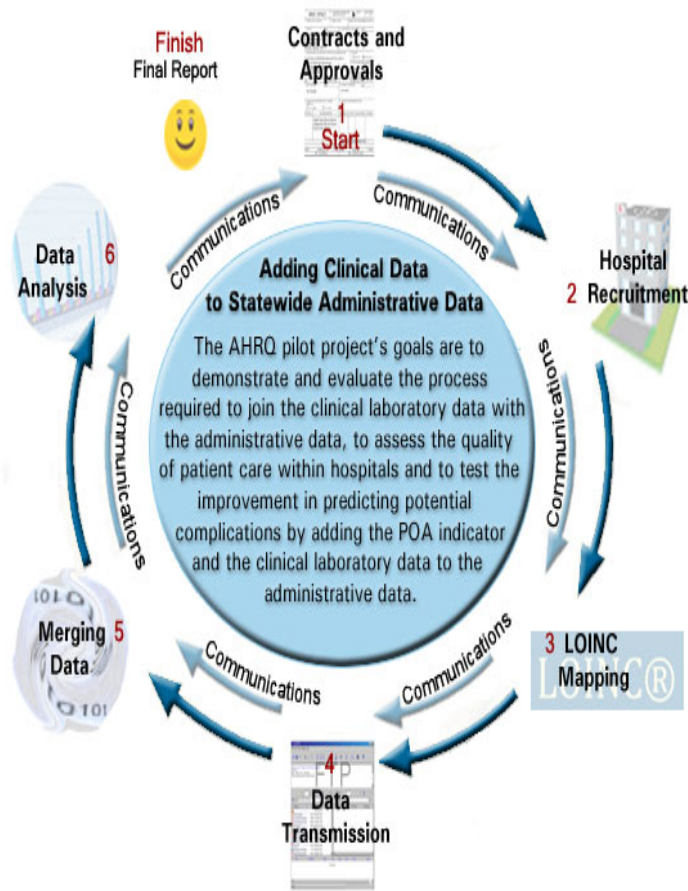


Contracts and Approvals



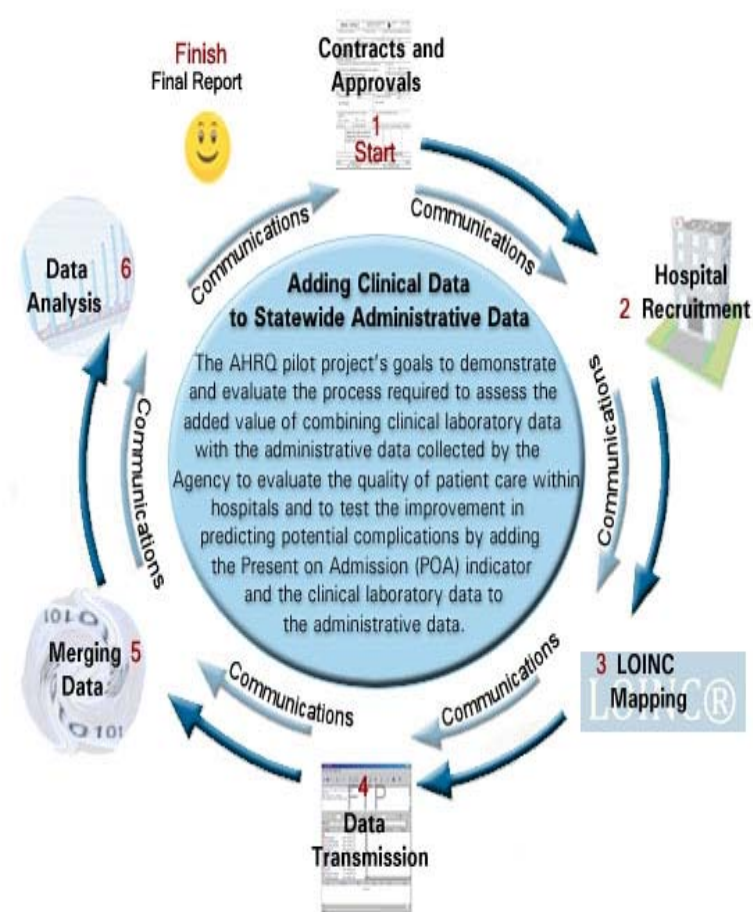
- Get a budget amendment approved by the Legislative Budget Committee before the Agency can receive any funds from AHRQ. Once budget authority is granted,
- Project manager contract
- 3M contract
- Participating hospitals' Data Sharing Agreement

Hospital Recruitment



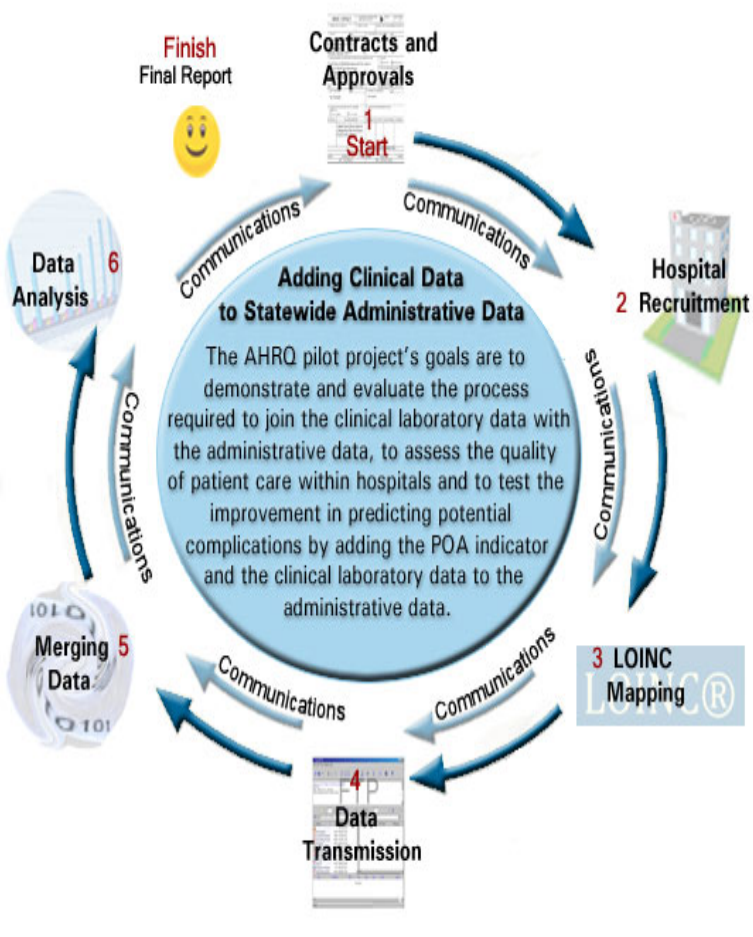
- A total of 22 hospitals participated in the pilot project:
- Broward Health System (5)
- Memorial Healthcare System (6)
- BayCare Health System (9)
- Miami Children's Hospital
- All Children's Hospital

LOINC Mapping Process



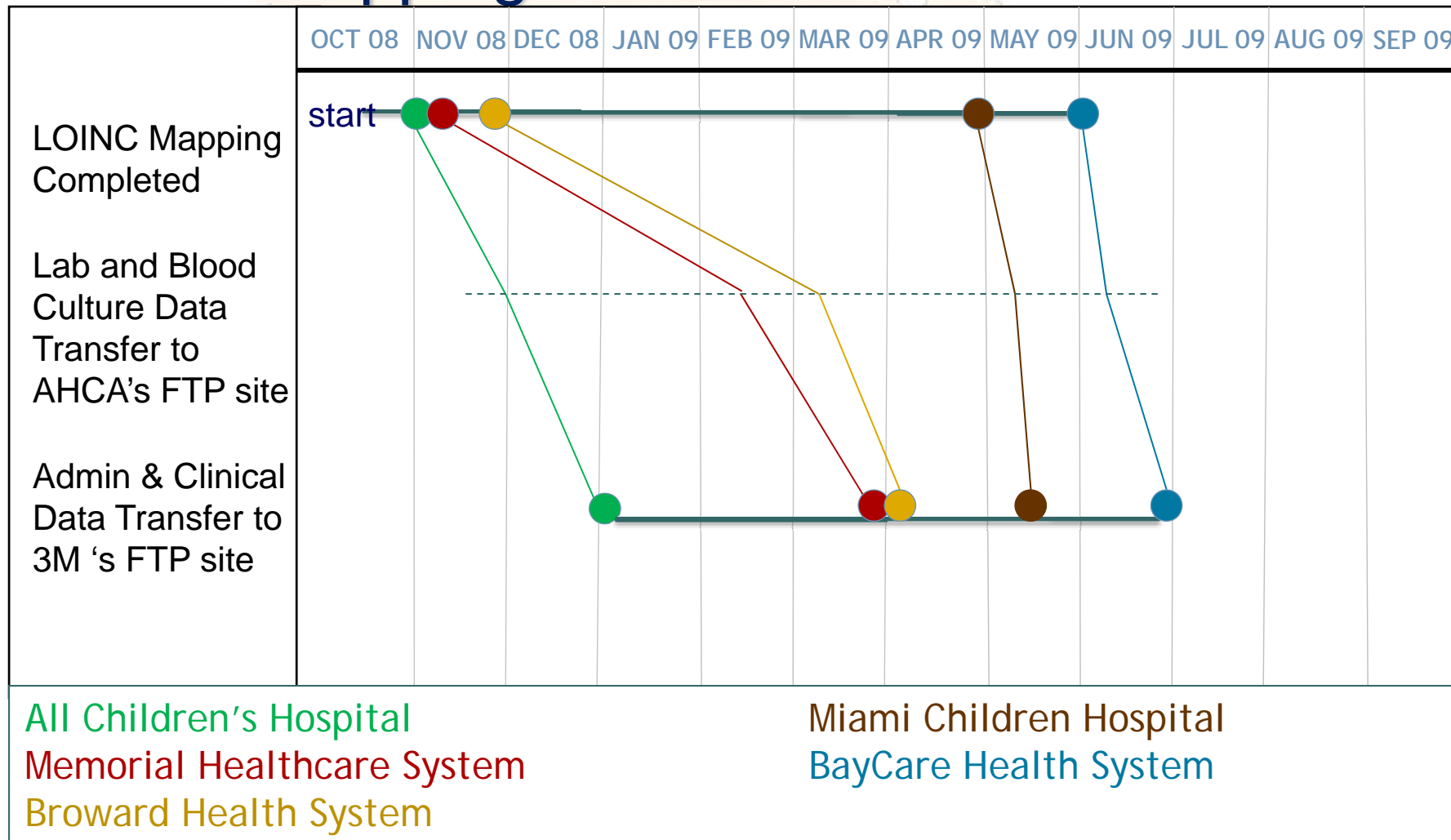
- Standardize the selected 31 laboratory data elements into a common nomenclature based on the Logical Observation Identifiers Names and Codes (LOINC).
- 3M Terminology Consulting Services worked with each hospital to standardize its laboratory data terminology and to verify accuracy of the final normalized map of laboratory values.
- Eight weeks were initially estimated to complete the LOINC mapping.

Data Transmission



- Hospitals extracted three quarters of laboratory and blood culture data, from April 1, 2007 to December 31, 2007, on all inpatients, for all laboratory tests conducted.
- Hospitals uploaded the standardized laboratory dataset, in a Tab Separated Value format to the secure AHCA File Transfer Protocol (FTP) site.

LOINC Mapping & Data Transmission Timeline



All Children's Hospital
 Memorial Healthcare System
 Broward Health System

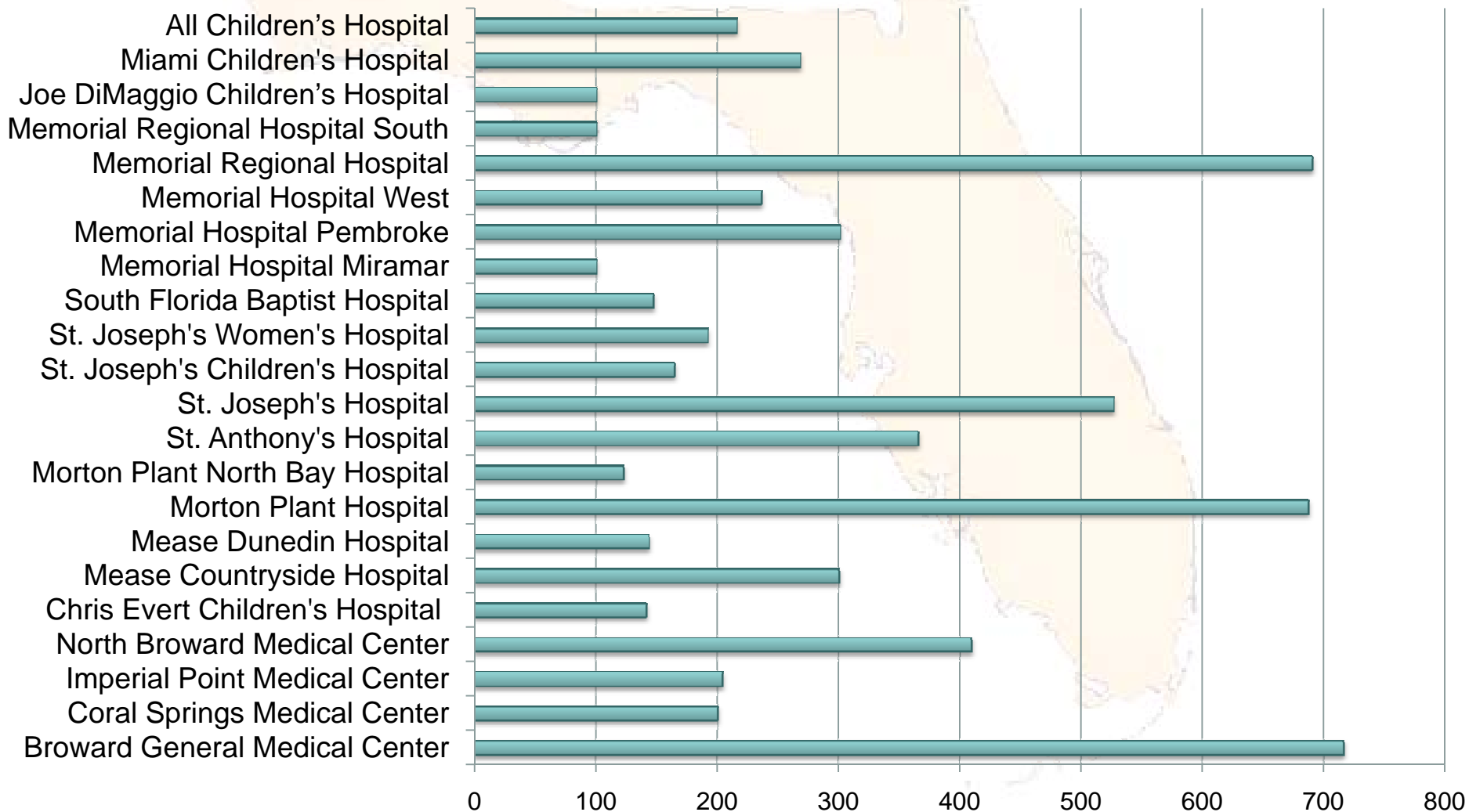
Miami Children Hospital
 BayCare Health System

LOINC Mapping Survey

An evaluation survey was developed by AHCA's team and sent to participating hospitals to gather their feedback related to:

- hospital description,
- resources needed,
- LOINC mapping,
- data transmission,
- communication tools,
- barriers encountered, resolutions, and the lessons learned.

Total Number of Beds in Each Hospital



Personnel involved in this project

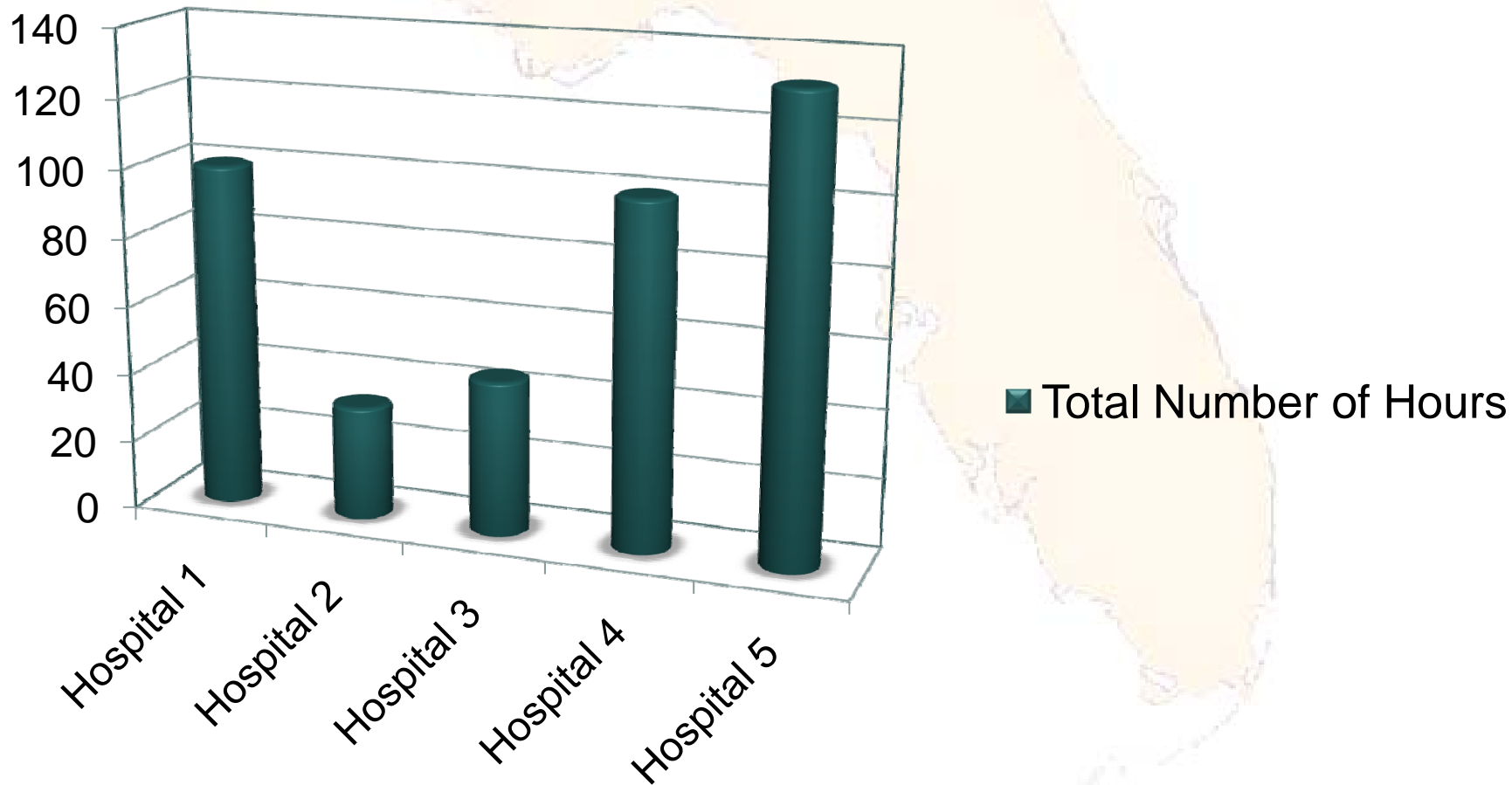
- All hospitals participated in the 3M/AHCA first meeting.
- From that date on, hospitals worked independently and at their own pace from submitting their data catalog to 3M to uploading their data on the FTP site.
- The number of hours each participating hospital's personnel spent on this pilot project varied from 33 hours to 132 hours.
- In general most of the time spent was by the IT or systems analyst team members.



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	Personnel Title	Task performed	Number of Hours
Hospital One	VP of Information Technology	Project Manager	30
	VP of Medical Affairs	Executive Sponsor	30
	I/T Sr. Systems Analyst	Program download	40
Hospital Two	Consulting systems analyst	Procedure mapping; create the data catalog, and data extraction	21
	Administrative Support	Attended Conference calls and meetings	12
Hospital Three	Mgr LIS	Sample Data extract and LOINC mapping, point person for questions from other teams	20
	CCL team	Modified and ran scripts to extract data and create the data catalog	16
	Database	Security and FTP	5
	Security team	Opened ports for FTP	1
	Cerner Corporate Support	Helped with some database issues	3
Hospital Four	Manager, IT Clinical Systems	Data extract	100
Hospital Five	Manager, Revenue Cycle Applications.	FTP files	2
	Lab System support analyst	Data extraction	10
	Outcomes Research Manager	Project Coordination	120

Total Number of Hours



Issues Encountered By Hospitals: Staff

Barriers	How was issue resolved?
Time: Every team is under time constraints right now	A couple of other projects were put on the back burner
Time availability, staffing shortage	Staff worked in off hours
Coordination of multiple staff members and departments. Project approval by multiple departments	Cross Dept Coordination, working groups and increased collaboration. Interdepartmental coordination and cross collaboration used to secure project approval
This occurred during our phase 2 scheduled build period of our EMR project so resources were extremely tight.	Resources were pulled from build to complete the report

Issues Encountered By Hospitals: Technology

Barriers	How was issue resolved?
Date range requested covered a different system than one in current use	Look up historical data catalog
Concurrent system upgrade project and move of servers off site	Extended time taken to complete
<ol style="list-style-type: none"> 1. Amount of data being pulled back in report put a significant increase on system resources 2. We had the scripts error out twice after running for 20 hours due to the amount of data being returned 	Scripts were broken up into smaller time frames and the scripts were run during off hours when system resources aren't as high.
Database structure on lab system	Multiple extracts with links was required
Patient Data unavailable for year requested, 2007 without significant increase in data extraction efforts	Patient data extraction for 2008
Definitions of data fields were changed during the course of the project.	Additional programming time was required to accommodate the change in data

Lessons Learned and Lessons to Learn

- Coordinate early and often.
- Increase efficiency by using current lab system data.
- Scripts can use some fine tuning to run more efficient.
- Up-front training on LOINC is essential for success.
- Stay flexible in order to achieve your goals.
- Working with good people gets you further than expected.



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