

DPH Information Systems Update

April 5, 2011

Overview of Presentation

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 - Healthcare Reform
 - CCSF IT Consolidation
 - DPH Program Integration Plan
 - New Facility Construction
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Strategic Issues for DPH IT

- **Healthcare Reform**
 - Meaningful Use of Electronic Medical Records
 - Acute and Ambulatory Care requirements
 - Quality Indicator management reporting
- **CCSF IT Consolidation**
 - Consolidation of CCSF data centers
 - Virtualization of computing and network infrastructure
 - Projected cost savings and staffing reductions (10% Reserve)
- **DPH Program Integration Plan**
 - Primary Care Home and alignment of services
 - Multiple information systems and data sharing
 - Data reporting for Population Health
- **New Facility Construction**
 - Replacement of San Francisco General Hospital
 - Significant increase in technology implementations
 - Facility infrastructure dependent on network

Impact on DPH IT Work Planning

- **Healthcare Reform**
 - Multiple simultaneous system implementations
 - Siemens CPOE and Clinical Decision Support
 - eClinicalWorks Ambulatory EMR and ePrescribing
- **CCSF IT Consolidation**
 - Consolidate 400 servers and virtualize network
 - Potential phase-out of 1380 Howard St. data center
 - Re-allocate or reduce staffing based on technical plan
- **DPH Program Integration Plan**
 - Complete system implementations at all sites
 - Implement technical data sharing strategy
 - Develop comprehensive reporting databases
- **New Facility Construction**
 - Design and install new SFGH technical infrastructure
 - Retrofit all Primary Care and Specialty clinics
 - Consolidate network services to all locations

Impact on DPH IT Organization

- **Current organizational structure is outmoded**
 - Staff assigned to historical Divisions
 - Need to align to evolving DPH integration strategy
 - Eliminate duplication and consolidate key functions
- **IT staffing levels are under-resourced**
 - New systems require increased application and end-user support
 - Technical infrastructure is expanding at all locations
 - Existing systems need to be expanded or replaced (CCSF email)
- **Strategic IT assessments for organizational plan**
 - CCSF / Sierra Systems organizational structure and staffing engagement
 - CCSF / Hewlett-Packard – VM Ware computing virtualization
 - CCSF / Cisco Systems network consolidation
 - Align with DPH Integration Steering Committee vision
 - Adhere to CCSF Committee on Information Technology policies
 - Collaborate with CCSF Dept. of Technology for City-Wide plan

DPH IT 5 Year Planning Summary

- **FY 11-12**
 - Initial Phase One Meaningful Use
 - Complete organizational and technical plans

- **FY 12-13**
 - Expand Phase One Meaningful Use
 - Implement organizational and technical consolidations

- **FY 13-14**
 - Complete Phase One Meaningful Use
 - Complete infrastructure and data center consolidations

- **FY 14-15**
 - Integrate Phase One Meaningful Use
 - Implement infrastructure at new SFGH

- **FY 15-16**
 - Prepare for Phase Two Meaningful Use
 - Activate new SFGH and campus

Clinical IT System Governance

- **Integration Steering Committee**
 - Chaired by Barbara Garcia
 - Oversees Divisional IT Steering Committees for San Francisco General Hospital, Laguna Honda Hospital, Behavioral Health and Community Health Services
 - Policy level decisions for DPH IT strategic planning and resources
- **Clinical IT Steering Committee**
 - Co-Chaired by Barbara Garcia and Dr. Hal Yee
 - Reports to Integration Steering Committee.
 - Policy level decisions for DPH Clinical IT system development, implementation and integrated clinical data needs.
 - Oversees Clinical IT system project implementation Committees
- **Clinical Project Implementation Committees**
 - SFGH Siemens Computerized Provider Order Entry (CPOE) / Meaningful Use
 - eClinicalWorks Ambulatory Electronic Medical Record
 - Behavioral Health Avatar Electronic Medical record
 - Community Health Services Coordinated Case Management System
 - Long Term Care / MDI Achieve Electronic Medical Record

Current Project Status

- **San Francisco General Hospital**
 - Siemens / Invision “Meaningful Use” Phase One in FY12-13
 - Computerized Provider Order Entry (CPOE), Assessments and Quality Reporting
 - Expanded implementation in FY13-14
- **Ambulatory Care**
 - eClinicalWorks pilot clinics in FY11-12
 - COPC clinics planned for completion in FY12-13
 - Specialty clinics estimated in FY13-14
- **Long Term Care**
 - Expand MDI Achieve system to Laguna Honda in FY11-12
 - Clinical Documentation, MDS Care Planning and Reporting in FY12-13
- **Community Health Services**
 - Coordinated Case Management system expansion in FY11-12
 - Clinical system interfaces in FY12-13
 - Reporting Data Warehouse in FY13-14
- **Behavioral Health**
 - AVATAR project Phase Two in FY11-12
 - Contract extension for MHSA components in FY11-12 to FY16-17

Clinical System Integration

- **Common Infrastructure**
 - All systems reside on DPH Wide Area Network (WAN)
 - Data may be transmitted via Health Level 7 (HL-7) and Web-Based standards
- **Common Transaction System Foundation**
 - Siemens Invision, eClinicalWorks and AVATAR gather patient demographic, clinical and fiscal information
 - Other external systems have similar capabilities (Pharmacy, Radiology, Laboratory)
- **Common Medical Record Number**
 - Siemens Invision generates master common medical record number
 - Common medical record number is embedded in eClinicalWorks, AVATAR and CCMS
 - Systems programmed to send and receive data based on common medical record number
- **Common Data Exchange Specification**
 - “Meaningful Use” regulations define the Continuity of Care Document (CCD) as specification for healthcare data exchange
 - CCD contains summary data for diagnosis, treatment and follow-up

Continuity of Care Document (CCD)

- CCD sections include:
 - Payers
 - Advance Directives
 - Support
 - Functional Status
 - Problems
 - Family History
 - Social History
 - Alerts (e.g. Allergies, Adverse Events)
 - Medications
 - Medical Equipment
 - Immunizations
 - Vital Signs
 - Results
 - Procedures
 - Encounters
 - Plan of Care

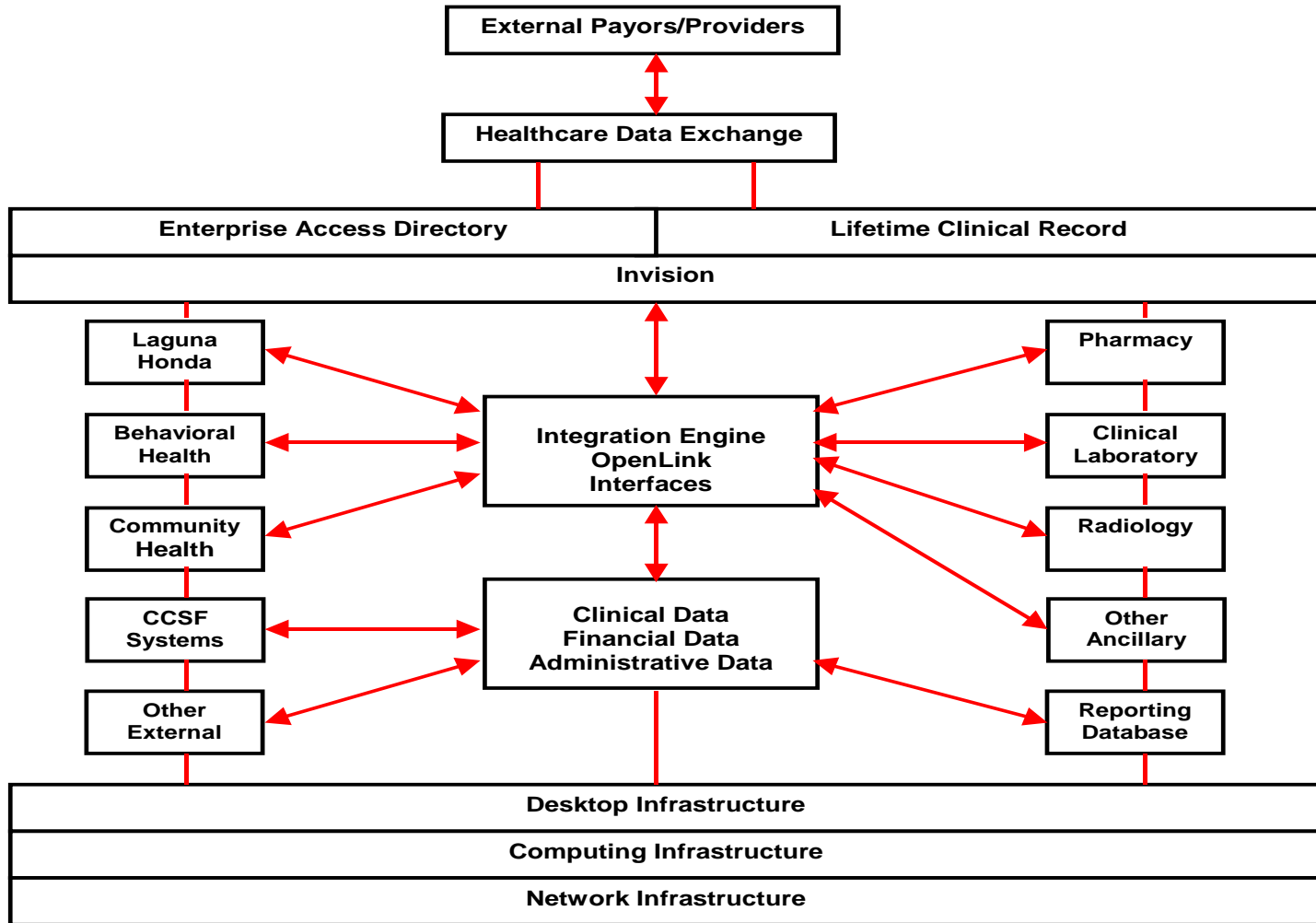
Information Systems Deployment

	SFGH	LHH	COPC	JHS	MH	SA	PHP	CHS	HAH
Financial Systems									
FAMIS	1	1	1	1	1	1	1	1	1
Invision	1	1	1	1					1
Avatar	1				1,2	1,2			
Clinical Systems									
Invision/LCR	1	1	1	1	1,2	1,2	1,2	1,2	1
Avatar	1		1		1,2	1,2			
eClinicalWorks	1	1	1						
CCMS	1		1	1				1,2	
CHART				1					
Admin. Systems									
Human Resources	1	1	1	1	1	1	1	1	1
Contracts	1	1	1	1	1,2	1,2	1,2	1,2	1
Purchasing	1	1	1	1	1	1	1	1	1

1 = Civil Service Programs

2 = Civil Service and Community-Based Programs

DPH Application Integration Model



Questions and Answers