UMHS Financial Systems Integration Strategy
Overview

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UMHS Financial Systems Strategy

• Integrate Hospital, Medical School, EVPMA and MHC financial and decision support systems into one centralized environment utilizing current industry technology

• Objectives of a integrated system:
  – Provide one “version of the truth” of data to be used by all UMHS Financial Systems managed applications
    • Deploy standard hierarchies and consistent definitions across suite of products and applications
    • Match data with appropriate technology and drive out data redundancy
    • Eliminate data integrity concerns and multiple reconciliations
  – Provide enterprise-wide financial reporting and business intelligence solution
    • Gradual elimination of the need for shadow financial reporting systems & tools
  – Provide single management and end-user support for all systems that support UMHS financial reporting and decision support efforts
  – Common infrastructure and support model
**Strategy Approach**

- Significant scope and magnitude to unify all UMHS into a single Financial System
- “Big Bang” approach is not an option.
- Change user relationship model.
- Need to ensure business continuity.
  - An entirely new environment is being created that facilitates a transition from old to new allowing the opportunity for parallel processing and User Acceptance Testing.
- Multiple phase approach:
  - Defined subject areas
  - Establishing data governance processes
  - Partnering with subject area owners using an Agile methodology to collaboratively define data sets, develop reporting and dashboard functionality and design.
What does this mean to Users?

- Finance BI (Business Intelligence)
  - Health System wide data & analysis reporting tool
  - Finance BI utilizes same Oracle Platform* akin to “Data Mart”
- Data Mart is not going away
  - The current Data Mart will run in parallel with Finance BI for a minimum of 6 months
  - The current Data Mart will remain active until all subject areas and reporting requirements have been integrated into the new Finance BI system.
- One Common Hierarchy
  - Same results regardless of tool
    - Eliminating reconciliations between systems
  - Unified summary level account data across all Health System entities
    - The strategy requires all systems to use a single account structure.
      - Use current UMHS forecast entry level
      - Budget Categories as you know them ARE going away
- Latest technology platform and mobile access

*OBIEE (Oracle Business Intelligence Enterprise Edition)
Future System Landscape

TOOL OF CHOICE

COMMON PORTAL – HARMONIZED DATA

UMHSCons
- Hyperion Essbase
- UMHS Consolidated Financial Reporting
- Full Trial Balance

UMHS Forecast
- Hyperion Planning
- UMHS Annual Financial and Statistic Budgeting Process

Finance BI
(Data Mart)
- Phase 1 Subject Areas
  - Financials, Project Grant, HR, FTE’s, SOA, Gross Payroll
- Future Phases
  - Activity, Metrics etc.

EPSi
- SQL
  - Costing, Patient Decision Support, and Contract Modeling
Changing relationship model with Users

• **Current Relationship Model**
  – Views Financial Systems as “service providers” and Users or Business Owners as “customers”

• **Future Partnership Model**
  – Utilize an **Agile Methodology** to enhance collaboration
  – Focus on developing successful, long term relationship with Business Owners or Users
  – Achieve business objectives utilizing a collaborative approach to reach shared objectives
  – Focus on maximizing business value
  – Create transparency and a continuous feedback loop for improvements and shared initiatives

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**Agile Manifesto**

- **Individuals and interactions** over processes and tools
- **Working solutions** over comprehensive documentation
- **Customer collaboration** over process negotiation
- **Responding to change** over following a plan

Agilemanifesto.org
WHY INTEGRATE?

OBIEE, ESSBASE, AND HYPERION
Benefits of Integration

• Use tools of choice to access data across all databases
  – Users can choose how they would like to access data, and which tool will best serve their needs
    For example, access to PDF format, boardroom-quality financial statements in Hyperion Workspace, or create an ad-hoc, user-defined view of financials using the Microsoft Smart View add-in.

• Data consistency regardless of tool used to access the data, everyone will talk to the same set of data
  – All hierarchies will be harmonized regardless of which tool or database is accessed

• Drive change management efficiencies and effectiveness through the implementation of shared data structures and automated system changes

• Facilitates formal data governance processes to improve overall system data integrity

• Fully utilize Business Intelligence Dashboard technology to provide quality financials and Key Performance Indicators with an intuitive design

• Provide end user access to a single version of the truth for all financial related health system data
System Integration Approach

- Turn large amounts of complex data into a single version of the truth...
- on the fastest, most robust BI platform...
- to complete the type of analysis....
- when and where you need it.

- Hyperion Essbase/Planning
- Epic/Clarity
- Peoplesoft
- EPSi
- External Data
- CRIMS/RIS

- All Data Sources

- Non-stop Operations
- In-memory Performance
- Highest Scalability
- Complete Security

- Industrial Strength

- Alerts & Monitoring
- Dashboards
- Reporting
- Analysis

- Business Intelligence

- All Styles of BI

- Web
- Mobile
- Desktop
- Printers
- E-Mail

- All Interfaces

Data Integrity, Access Security and Performance
System Integration Approach

Develop Data Model

- Combine data from multiple sources throughout UMHS, campus, and external sources
- Organize data into subject areas that meet the needs of Users, Administration, and UMHS Finance
- Use common hierarchy and naming conventions across data model
- Institute data governance policies to drive data integrity and improve customer confidence
System Integration Approach

Implement Business Intelligence Framework

- Use most up to date technology
- Increase performance
- Compatible with all systems
- Develop appropriate data governance and security around data elements
- Implementation of a five year data retention policy as part of the expanded data governance of the systems.
- Allow for scalability to accommodate future Health System growth and respond to changing industry landscape
System Integration Approach

Create Dashboards and Analysis

- Design reports and Dashboards to enhance user experience
- Create new reports using enhanced functionality available from suite of tools
- Develop KPI dashboards and provide ease of use
- Create dashboards and reports that provide clarity in a simplified easy to consume format to facilitate quick decision making
System Integration Approach

Introduce new tools & revitalize existing tool usage

- Single point of access to all data
- User driven, tool of choice selection
  - Canned reports
  - Ad Hoc analysis
  - Mobile Access
  - Interactive reporting with drill through functionality
  - Microsoft Office integration – Smart View
- Board room quality pixel perfect reporting
- Distribution of daily operational data to key administrators and leadership
- Provide multiple training and documentation platforms (self help, video tutorials and live/virtual training)
Phase 1 Scope

Creation of Integrated Systems and “Finance BI”

- Subject areas included:
  - Financial Data
    - M-Pathways sourced trial balance chartfields
    - Transaction (Voucher/Journal line detail) and period ending balances
    - Actual and budget data
  - Payroll and HR
    - Mpathways sourced Gross Payroll Register
    - Staff Listings
    - Creation of distinct and secure subject areas
  - FTEs
    - Calculation of funded FTEs by department
  - Migration and parallel processing of UMHSCons and UMHSForecast applications from ITS to MCIT data centers.
  - Collaboration with UMHS Enterprise Financial Reporting team to develop integrated consolidated financial reports with transaction level detail, KPIs and dashboards.
  - Create a comfort level and unveil the “art of the possible” in dashboard creation and KPI measures.
  - Focused on developing framework and foundation
    - Hardware and software integration, data modeling, application creation, and security and access model
UMHSCons Transformation – Phase 1

- Each fiscal year a new instance of UMHSCons will be created to preserve the year ending hierarchies which will tie to the audited financials.
- ConsFY15 will not include Project Grants, Program Code, Class, FTE’s and Statistics.
- Project Grant, FTE, and statistic reporting will be transitioned to Finance BI beginning in FY15.
When are we doing this?

Use agile methods to collaborate with customers and develop business intelligence solutions to meet their needs.
Future Phases and Subject Areas

• Future phases will address remaining subject areas currently provided by the Data Mart and incorporate new subject areas required by UMHS partners.

• Users will work in partnership with Financial Systems team to define, create and test future subject area rollouts and dashboard and report creation.

• Develop improved dashboards using industry best practices.

• Create reports that drive action for the organization.

• Collaborate with partners to provide training and create business intelligence solutions to meet their needs.
Summary

• Integrate current system structures into one unified environment
• Eliminate data integrity concerns by providing “one version of the truth” infrastructure
• Strategy consists of small phases focused on data subject areas and the development of business user relationships using an Agile Approach
• Utilization of latest technologies to streamline workflow processes and facilitate ease of use
Questions

Contact UMHS Financial Systems with any questions:

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Appendix

1. Current Application Landscape
2. Future Application Landscape
3. Integrated Systems Diagram
4. Further reading materials for Agile
Current Application Landscape

- Multiple tools and points of entry
- Multiple data structures and data sources
- Multiple data sets with duplication across systems
- Systems are not co-located
Future Application Landscape

- **Oracle Mobile Access**
- **Oracle BI Publisher**
  - Executive Dashboards and Pixel Perfect Reports
- **Oracle OBIEE**
  - UMHS Integrated Financial Reporting and Business Intelligence
- **Hyperion SmartView**
- **Hyperion Reporting**
  - Hyperion Planning - Forecast Application
  - Esbase - ASO Cube
    - UMHS Consolidated Financial Reporting & Analysis - Financial Consolidated Reporting for UMHS with Variance reporting against Budget and Forecasted Data
  - Esbase - Planning
    - Cohort Cube - Hospital Actual and Forecasted Activity
    - Forecast Cube - Full Trial Balance with Project Grant
  - Esbase - OBIE & Planning
    - FINP - HIV Activity and Financial Activity for all UMHS. Metadata, security and text for Hyperion
  - Oracle - OBIE & Planning
    - EPSI - Costing, Patient Decision Support and Contract Modeling
- **Database Layer**
  - SQL
  - Allscripts EPSi - Enterprise

**Application Layer**

**Canned Reporting Layer**

**Microsoft Office Integration Layer**

**Business Intelligence Layer**

**MCIT Data Center Hosted**
Integrated Systems Diagram

Common Enterprise Information Model
- Integrated Security, User Management, Personalization
- Multidimensional Calculation and Integration Engine
- Intelligent Request Generation and Optimized Data Access Services

- OLTP & ODS Systems
- Data Warehouse Data Mart
- Business Process
- SAP, Oracle PeopleSoft, Siebel, Custom Apps
- Files Excel XML
- Essbase
Agile Methodology

http://agilemanifesto.org/

AGILE APPROACH

"It is not the strongest of the species that survive, nor the most intelligent, but the one most responsive to change."

Charles Darwin