Presentation overview

- Overview of UW Medicine IT business imperatives
- Action items
  - Electronic Medical Record system – Phase III (ORCA)
  - Lawson Human Resources system
Overview: Strategic Projects & Requirements
Key IT business imperatives

• Provision of clinical decision-support data through the electronic medical record:
  ▪ Improve patient safety
  ▪ Manage the variation in practice (and cost)

• Effective management of the key factors of production:
  ▪ Labor
  ▪ Supplies
  ▪ Facilities

• Effective and efficient management of the revenue cycle
The move to a single medical record for the medical centers is our most urgent quality and patient safety issue.

Cerner Electronic Medical Record (EMR) supports Harborview Medical Center (HMC), University of Washington Medical Center (UWMC), Seattle Cancer Care Alliance (SCCA).

Implementation phases:
- Phase 1: Physician documentation; results reporting; inpatient pharmacy – systems in daily operational use.
- Phase 2: Cerner software upgrade (completed); hardware upgrade in process – focus is disaster recovery, system performance, system reliability.
- Phase 3 (July 2006-Feb 2011): Non-physician documentation; retail pharmacy.
- Phase 4 (beginning Feb 2011): Computerized physician order entry; Emergency Department management.
Strategic Project: Cerner Electronic Medical Record
Business case

- Patient safety
  - Elimination of transcription errors
  - Reduced adverse drug events
  - Reducing communication gaps
- Clinical efficiency
  - Improved work flow
  - Decreased utilization of diagnostics & therapeutics
  - Clinical decision support – reductions in practice variation
- Financial benefits
  - Improvements in coding accuracy
  - Improvements in charge capture
  - Meeting health care purchaser requirements for participation
- Replacement of existing systems
  - Phase I, II, and III are all required to replace existing, disparate IT systems supporting patient tracking, results reporting, and documentation
Strategic Project:  
Human Resources Management System - Lawson

Project overview

• Currently there is no centralized human resources management system for the nearly 8,000 employees of UW Medical Center and Harborview Medical Center
• Health care compliance and other regulatory requirements, such as tracking of CPE credits for nursing staff, demand a computerized solution
• Lawson was selected as the vendor of choice
• Planning for this implementation is in progress
• Target timeframe is in 2006 – 2008

Business Case

• Increased security
  ▪ Reduced liability for inappropriate access
  ▪ Terminating IT system access when employees leave
• Financial
  ▪ Position control – accountability for budgeted FTEs
  ▪ Control of agency costs
  ▪ Accuracy of leave administration
  ▪ Reduced hiring and separation costs
• Regulatory compliance
  ▪ Background investigation
  ▪ Work authorizations
  ▪ JCAHO, DOH, DOL requirements
Lessons learned & corrective action taken

**Inadequate hardware & software to support system**
- Updated software to current release
- Upgraded UWMC data center to accommodate additional servers
- Imaging data bases to provide for rapid recovery

**Absence of clear leadership & project accountability**
- Reorganized UW Medicine IT leadership team – appointed Jim Fine, MD as CIO
- Established clear project leadership reporting directly to Jim Fine
- Restructured medical center involvement to focus on policy issues & not operations

**Need for more rigorous project planning & management**
- Broke project into phases & prioritized phases – each phase requiring approval by management, board, ITAC, Regents, and ISB
- Phase II – 6 month hiatus
- Developed 7-year strategic plan
- Enhanced project management office
- Enhanced reporting structure for UW Medicine management & boards (UW Medicine Board, Harborview Board)
- Independent QA consultant
Time frame & budget
Cerner Medical Records – Phase III

Key milestones

Non-physician documentation
- Start-up
  - Functional requirements (6.12.06)
  - Project plan documentation (7.12.06)
- Solution definition
  - Software design for 12 key workflows (9.22.06)
- Solution development
  - System build (12.27.06)
  - Testing (5.02.07)
  - Training – Harborview (8.29.07)
  - Training – UWMC (12.31.07)
- Implementation
  - HMC pilot (9.28.07)
  - HMC rollout (10.31.07)
  - UWMC pilot (1.31.08)
  - UWMC rollout (2.28.08)

Retail pharmacy
- Start-up
  - Functional requirements (8.04.06)
  - Project plan documentation (8.04.06)
- Solution definition
  - Workflow design (9.05.06)
  - Software design (10.03.06)
- Solution development
  - System build (2.08.07)
  - Testing (5.03.07)
  - Training – Harborview (4.12.07)
- Implementation
  - Production pilot (7.26.07)
  - Production rollout I (10.18.07)
  - Production rollout II (1.10.08)
  - Production rollout III (4.03.08)
  - Production rollout IV (6.26.08)
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<tr>
<th>Capital Expenditures</th>
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<th>Reporting Database</th>
<th>Retail Pharmacy</th>
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Lawson Human Resources System
Key milestones

• Phase I – Lawson core system implementation
  ▪ Installation of current version of Lawson software (9.13.06)
  ▪ Proof of concept acceptance (3.07.07)
  ▪ Application development & testing (7.10.07)
  ▪ Data entry processes & procedures (9.12.07)
  ▪ Pilot test (12.04.07)
  ▪ Go live (2.13.08)

• Phase II – Centralized workforce management processes
  ▪ Component testing – application, data conversion, web components tests completed (7.01.08)
  ▪ System test (8.05.08)
  ▪ Report development & user signoff (9.25.08)
  ▪ Training & go live (9.25.08)
# Lawson Implementation Project Budget

## Capital Expenditures

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<th>FY09</th>
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## Operating Expenditures

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## Capital & Operating

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Regent action requested

• Approval of an increase of $17,454,654 in the Electronic Medical Record System budget to cover the costs of Phase III of the system implementation

• Approval of an increase of $580,000 in the Lawson Human Resource system budget
Next strategic needs for IT support

• Admission/Discharge/Transfer & Facility Billing system
• Time management system
• Departmental systems
  ▪ Anesthesia
  ▪ Surgery
  ▪ Materials Management
• IT infrastructure
  ▪ Disaster recovery & business continuity
  ▪ Security
  ▪ Data centers
  ▪ Management of end-user devices
  ▪ Web services
  ▪ Portfolio management