CLINICAL INFORMATION SYSTEMS

OVERVIEW OF AREAS

Clinical Development
Leader: Larry Markson
Strategy: To design, build and maintain clinical systems.
Staffing: VP, 4 Managers, 24 Programmers

Clinical Application Services
Leader: Karen Rapuano
Strategy: To select, implement, and support clinical applications
Staffing: Director, 4 Managers, 21 Analysts

Decision Support Systems
Leader: Carolyn Conti
Strategy: To implement decision support systems, including data warehousing, master physician directory, web–based reporting, and workflow applications.
Staffing: Manager, 1 Programmer, 2 Analysts, 2 SQL Developers

Web Applications and Applied Informatics
Leader: Qiang Wang
Strategy: To design, build and implement web applications, search technologies and integration tools.
Staffing: Manager, 6 programmers, 1 Web Administrator

FY11 GOALS

Inpatient/POE/Pharmacy
• Complete implementation of POE for NICU and New Born Nursery
• Complete implementation of POE for ED and Dialysis
• Complete rollout of bar-coded patient identification by extending the process to the infant population
• Continue to implement pharmacy, charging and other revisions to support Pharmacy 340B requirements
• Continue to support code 44 compliance with POE and billing interface enhancements.
• Implement outpatient pharmacy for oncology/chemotherapy
• Develop a project plan and timeline, and begin to implement, enhanced infection control management and surveillance
• Enhance allergy documentation in two phases: (1) Migrate to new database, and (2) Improve documentation
• Continue to enhance ICA (Inpatient Clinical Applications) committee structure/process/membership
• Enhance inpatient applications as prioritized by ICA
• Continue to deliver project management, implementation and post–go–live support for in–house development projects including CPOE, Oncology Management System, and eTicket

WebOMR
• Implement referral tracking to “close the loop” for outpatient referrals
• Continue to develop and expand the roll out of test results tracking. New functionality will including labs and provider workflow/efficiency enhancements
• Continue to develop and expand the roll out of online surgical booking order
• Enhance problem lists to improve user interface and support SNOMED–CT
• Pilot expanded HIE technologies in Cancer Center to push outpatient notes to referring MDs
• Expand the roll out of pharmacy–initiated renewals
• Enhance webOMR as prioritized by webOMR Users Group
Clinical Documentation:
- Develop a strategy, plan and timeline, in conjunction with Clinical Leadership, to implement meaningful use standards for 2011 and future years.
- Begin planning for acute care documentation, standardized problem lists, and eMAR.
- Complete rollout of inpatient medication reconciliation.
- Continue expansion of NEHEN notification and communication systems.
- Participate in a proof of concept for an electronic forms product that integrates with webOMR.
- Participate in multidisciplinary evaluations of web-enabled mobile devices for clinical and bedside documentation.
- Develop plan and timeline to implement online clinical documentation in OB/GYN.

OR
- Complete intra-operative documentation in PIMS (Perioperative Information Management System).
- Implement “Big Boards” Phase I – read-only display of current PIMS dashboards in non-public areas.
- Enhance PIMS as prioritized by OREC (O.R. Executive Committee).

Scanning
- Implement scanned external records in webOMR.
- Implement scanned consent forms for Ob.
- Integrate scanned notes and reports in webOMR as prioritized by the webOMR Users Group.

LIS
- Continue implementation of SCC Laboratory system and go live with Phase 1.
  - Remediation of in-house systems, including development of a new webOMR clinical viewer.
  - Support test planning and execution.
  - Participate in management of the application environment including software upgrades.
  - Perform analysis and planning for Soft Lab results to three Community Health Centers.
- Support implementation of PPID bedside solution for nurse-collected specimens (front-end labeling) as prioritized by the LIS Steering Committee.

Critical Care/Anesthesia
- Perform major upgrade to MetaVision (MV ICU).
- Continue to evaluate and implement MV ICU enhancements as prioritized by MV ICU governance.
- Upgrade AIMS, advancing its decision support capabilities and expanding multidisciplinary use.
- Support existing systems including Patient Safety Reporting System, OB–TracVue, Transplant and Trauma Registry.

Cardiology
- Implement Vascular Information System and Vascular PACS (Consensus).
- Implement Reporting solutions for Cath Lab, Echo, Electro-Physiology and Vascular.
- Upgrade Echo PACS.
- Continue implementing/supporting CVI Registries.
- Support implementation of People-Soft/MacLab/CardioLab interface.
- Support Apollo, MacLab/CardioLab and Echo.

Radiology
- Implement multi-year roadmap to enhance CCC RIS and achieve RIS-based workflow.
- Complete implementation of Children’s AccelaRAD.
- Continue project management and technical support for projects / enhancements as prioritized by department governance including:
  - Enhancements to CCC RIS.
  - Front–end voice recognition.
  - RIS/PACS integrator.
  - Installation of new Radiology modalities.
  - Needham PIX (Patient Identity Cross Reference system).
  - Nuclear Medicine RIS/PACS infrastructure upgrades.
Rad/Onc
• Continue project management and technical support for projects / enhancements as prioritized by department governance including:
  ▪ Upgrade Philips Pinnacle Treatment Planning System workstations
  ▪ Upgrade to Mosaiq 2.2 Treatment Delivery system
• Ongoing support for existing systems including: Impac, Cyberknife and associated treatment planning systems.

Enterprise Image Management
Advance enterprise PACS efforts in conjunction with the IS infrastructure teams, including:
• Provide consultative, project and technical management to Radiology, OB, GI, CVI and other medical center PACS projects as prioritized by the Enterprise PACS committee
• Perform major upgrade from Enterprise Archive 3.0 to 4.x
• Begin to plan and implement a centralized process for Enterprise Archive management
• Complete CardioPACS Migration Including:
  ▪ Echo DVD Migration
  ▪ CVI Cath / Echo Web Images
• Continue Radiology PACS Disaster Recovery activities
• Complete technical assessment and recommend approach for image sharing with referring institutions

Ambulatory/Community EMR
• Continue to support efforts to implement the eClinicalWorks EHR to BIDPO clinicians (APG & API-private)
• Support the migration of APG Chestnut Hill to WebOMR
• Design and implement an online archive system for all Logician retired systems and practices.
• Support Logician and other community systems

Decision Support
• Implement Performance Manager reports and dashboards as needed to support organizational needs.
• Implement clinical data marts as needed to enable quality measurement, pay for performance goals, and other decision support needs.
• Continue to provide CPI support for HIE via NEHEN gateways.
• Implement enhancements to the Patient Activity Profile to support enhanced reviews required by JCAHO.
• Enhance SOAR (Accounts Receivable workflow) to support denial tracking and appeals workflow
• Explore the introduction of new BI tools as funding permits
• Support Cactus and NEHEN Express users

Web Applications
• Continue to enhance the Adverse Events Manager as prioritized by Healthcare Quality.
• Continue the migration of account provisioning and metadirectory services to SQL Server and ASP.NET.
• Continue to develop services to support document scanning, metadata capture, and document display.
• Continue to support the BIDMC internal portal
• Continue to support the BIDMC external site, and to work with Verndale to remediate code.
• Enhance and support the internal portals for Mt. Auburn and NEBH.
• Create web services as needed for integration of BIDMC applications and for interactivity with external collaborators
• Support PatientSite for clinicians and the end-user community, including the ongoing pilot of OpenNotes