

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 include 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 Mosaic 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