Cook County Health and Hospitals System
Presentation to Inform Strategic Plan
Health Information Systems (HIS)
Donna Hart, CIO
May 20, 2016
OVERVIEW
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HIS supports the following organizations:

- John H. Stroger, Jr. Hospital
- Provident Hospital
- Ambulatory Community Health Network
- Cook County Department of Public Health
- Cermak Health Services serving Cook County Jail
- Juvenile Temporary Detention Center
OVERVIEW

HIS supports integration between these systems:

Cook County Health & Hospitals System - System Flow Diagram
John H. Stroger, Jr. Hospital

Cerner Millennium
2015.01.04
Powerchart Ambulatory 2015, Powerchart, RadNet, PharmNet, FirstNet, PCO, SurgiNet Patient Scheduler and Registration, ePrescribe, LightHouse, Open Engine, CDI Scan Documents and Mobile Millennium

Enterprise Rx
Outpatient Pharmacy
Stroger Data Center

M3
Medical Document Transcription
Chicago North Side

Nuance
HIM Coding
Stroger Data Center

Digital Innovation
Trauma Burn Registry
Stroger Data Center

ICARE
Immunization Registry
IDPH

Lawson
Item Master & Supply Usage
Stroger Data Center

Virco
Core Center

GE Fetal Monitoring
Stroger Data Center

Teletracking
Bed Tracking & Transport System
Stroger Data Center

QuadraMed/WinPFS
Acuity/Supplemental Staffing System
Stroger Data Center

McKesson
Physician Billing

Quest Diagnostics
Reference Lab/ACHN Main Lab

RALS
POCT Glucose Testing
Stroger Data Center

CareFusion
SomnoStar
Sleep Lab

GE MUSE
Cardiology System
(EKG/Holter/Stress)
Stroger Data Center

GE PACS
Radiology
PeerVue
Stroger Data Center

GE Centricity
Cardiology System
(Echo)
Stroger Data Center

CBORD
Dietary Dept System
Stroger Data Center

GE PACS
Radiology Imaging
Stroger Data Center

TalkTech
Radiology
Transcription
Stroger Data Center

CDC
Infectious Disease
Stroger Data Center

Olympus
Endoscopy Gastroenterology
Stroger Data Center

Phoenix
OB/GYN
Stroger Data Center

DoseMonitor
Radiology Radiation Dose
Stroger Data Center

Viassys
Pulmonary System
Stroger Data Center

Varian
Radiation Therapy
Stroger Data Center

ePrescribe
Electronic Prescriptions
Stroger Data Center

STIX
Employee Health
Stroger Data Center

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OVERVIEW

HIS strengths:

• Integrated Electronic Medical Record (EMR) across all facilities
• Alignment of technology to business
• High performance (human capital)
• Flexibility
• Partnership with EMR vendor (Cerner)
• Ability to work outside of standard application packages:
  • Develop content to meet the unique complex clinical environment (Specialty services, medical home, correctional, care coordination)
• Meeting regulatory requirements (Meaningful Use, Joint Commission)
• Alignment with Quality initiatives
HIS has reached HIMSS Level 6:

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<tr>
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<th>Cumulative Capabilities</th>
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IT STEERING INITIATIVES

• Regulatory
• Financial
• Quality
• Population Health
• Patient Experience
• Provider Experience
• Patient Care Improvements
• Interoperability/Interface
• Technology
Strategic Planning Framework Guidelines

To deliver, optimize and sustain an integrated information technology system that will strengthen the ability of CCHHS to be a leading-edge institution in clinical services, education and research.

- Improve Health Equity
- Patient Experience Interoperability Population Health Technology

- External Provider Messaging
- Health information Exchange
- Population Health
- Behavioral Health
- Patient Centered Medical Home
- Patient Portal
- Purple binder
- Community Resources
- Internet accessible Health Questionnaires /History
- Health Education Materials
- Biometric patient identification With Self-Registration
Strategic Planning Framework Guidelines

To deliver, optimize and sustain an integrated information technology system that will strengthen the ability of CCHHS to be a leading-edge institution in clinical services, education and research.

- Provide high quality, safe and reliable care
- Quality Technology

- Security
- Health Information Exchange
- EMR Remote Hosted Reliability
- Decrease complexity / Interfaces via Cerner Integrated Solutions
- Cardiology
- Women’s Health
To deliver, optimize and sustain an integrated information technology system that will strengthen the ability of CCHHS to be a leading-edge institution in clinical services, education and research.

Demonstrate value, adopt performance benchmarking

Financial Technology

- Healthe Registries
- Meaningful Use
- ProFee Billing
To deliver, optimize and sustain an integrated information technology system that will strengthen the ability of CCHHS to be a leading-edge institution in clinical services, education and research.

- Demonstrate value, adopt performance benchmarking
- Financial Technology

- Population Health Analytics
- Meaningful Use
- ProFee Billing
- Biometric patient identification: With Self-Registration assists with EMPI Cleanup and reduces registration time and costs
- Device integration to reduce errors and frees clinical staff from data entry
Strategic Planning Framework Guidelines

To deliver, optimize and sustain an integrated information technology system that will strengthen the ability of CCHHS to be a leading-edge institution in clinical services, education and research.

Develop human capital

Provider Experience Technology

- Registries with external data included
- Timely identification of gaps in care – right care / right place
- Clinical Provider Communication
- CMIO
- Provider Portal
- VPN / Remote Access
- Health Exchange External Data
- Clinical Decision Support
- Customized order sets
- DME / Supplies as Orderables
- Referral orders & Management
To deliver, optimize and sustain an integrated information technology system that will strengthen the ability of CCHHS to be a leading-edge institution in clinical services, education and research.

Lead in Medical Education and Clinical Investigation relevant to vulnerable populations

Patient Care Improvement Technology

- Business Intelligence/Data Warehouse
- IRB software
- Sepsis Protocols
Projects in Motion

• Over 115 active IT projects in process

• Projects include a wide variety of projects: Time and Attendance clock installation, Meaningful Use, Network Upgrades, ActiveDirectory, McAfee Antivirus Standardization, AlertLink, iAccess, Commonwell Data Exchange, Oracle ERP Cook County Project, Lawson Migration, Stroger Data Relocation, JTDC Cerner, LH Rapid Response, HIS Change Control Automation, Clairvia, Workflow Optimization, eSignature, etc.
IT RISKS

• Security
• Limited IT resources (people)
• Inability to keep up with industry standards
• Unplanned Purchases and Projects (non-integrative)
• Government regulations, competition, rapidly changing technology footprint outpacing resources to maintain complex expanding systems
• Training:
  • End-users on new IT applications
  • Continuing education for IT staff
  • Development of internal “bench strength”
• Interoperability of internal and external systems
VISION

“To improve and promote the utilization of health information technology, to its highest capacity, by both patients and health care providers, to optimize health outcomes and overall quality.”
Achieving the Vision

Develop/Implement an IT staffing plan that is reflective of the healthcare IT industry.

- Build a hybrid team consisting of core CCHHS staff, augmented by contracted subject matter experts.
- Allows for flexibility and rapid response of hiring in a competitive environment.
- Continuing support/maintenance of implemented systems.
Achieving the Vision

Continued investment in the latest IT infrastructure technology across the health system.

• Allows for more predictive outcomes with upgrades and greater protection from external security threats.
• Fulfills the need to keep up with the technology in order to maintain the highest level of productivity.
• Move to a leased environment to allow continuous refresh of technology.
Achieving the Vision

Continued investment in EMR optimization to improve efficiency, safety, quality of care and ultimately user satisfaction across the health system.

• Investment in the integration of clinical equipment with EMR to improve efficiency and reduce errors.

• Replace “best-of-breed,” stand-alone systems with Cerner EMR integrated solutions, when possible, to minimize interfaces, complexity and potential points of failure.
Achieving the Vision

Connect patients, providers and community partners with CCHHS.

• Integrate information exchange with community partners via HIE and robust and timely exchange of electronic continuity of care documents.
• Improve patient accessibility and usage of internet portals/ online resources.
• Increase interoperability and cost savings by creating IT partnerships with other hospitals.
Achieving the Vision

Build a stable team of training staff to facilitate efficient application adoption.

Create a panel of informed clinical leaders by considering opportunities for informatics training of CCHHS clinical staff.
PREMIER

Obtaining HIMSS Level 7:

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