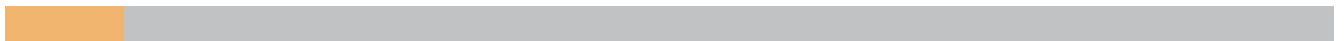




HIMSS Analytics

HIMSS Analytics Stage 7 Case Study

Carolinas HealthCare System



Profile

Carolinas HealthCare System is the one of the nation's leading public, not-for-profit healthcare systems.

- 39 hospitals and 900+ care locations in the Carolinas and Georgia
- More than 7,000 licensed beds
- 11 million patient encounters per year
- 2,500+ system-employed physicians, 15,000+ nurses and 60,000 teammates
- More than 50 disease-specific certifications from The Joint Commission
- Charlotte region's only Level I trauma center
- One of five academic medical centers in North Carolina
- One of the largest HIT and EMR systems in the country

HIMSS Analytics EMR Adoption Model Stage 7

2013 - Carolinas Medical Center Mercy

2015 - Carolinas Medical Center (including Levine Children's Hospital), Carolinas HealthCare System Cleveland, Carolinas HealthCare System Kings Mountain, Carolinas HealthCare System Lincoln, Carolinas HealthCare System NorthEast, Carolinas HealthCare System Pineville, Carolinas HealthCare System Union, and Carolinas HealthCare System University

HIMSS Analytics Ambulatory EMR Adoption Model Stage 7

2015 – Carolinas HealthCare System Medical Group (270 practice locations to date representing 901 providers)

The Challenge

The Carolinas HealthCare System EMR program set out with a goal of a single patient record across the System. This goal would require the implementation of new EMR foundation capabilities, integration with core revenue cycle and ancillary systems, and expansion of capabilities including a Patient Portal and Health Information Exchange.

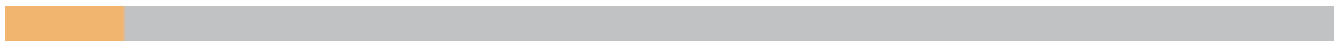
This foundation would then be built upon to further the vision and system strategy of Carolinas HealthCare System with advanced functionality such as decision support, evidence-based medicine, and patient engagement tools.

OUR VISION

Carolinas HealthCare System will be recognized nationally as a leader in transformation of healthcare delivery and chosen for the quality and value of services we provide.

SYSTEM STRATEGY

Carolinas HealthCare System will achieve its vision through the development of a single unified enterprise focused on developing enduring relationships with our patients based on superior personalized service and high quality outcomes.



Implementation Overview

Carolinas HealthCare System began its EMR journey in 2005 to create a single patient record across the System. In 2006, the implementation of nursing and ancillary documentation, pharmacy automation, barcode medication administration, and order entry capabilities began and spread across multiple acute facilities. Simultaneously physician office deployments started which enabled key functions including nursing documentation, electronic messaging among the care team, electronic prescribing, and health maintenance alerts. The patient had one electronic record enabling seamless flow of information between care settings.

CPOE leveraging evidence-based medicine, provider documentation, and advanced decision support capabilities followed in 2011 in both the acute and ambulatory areas.

The implementation and adoption of these foundational EMR capabilities were integral to enabling more advanced capabilities including:

- Creation of a paper-less environment
- Enabling over 15,000 annual virtual visits, with the EMR as a foundational element
- The advancement of the Dickson Advance Analytics (DA2) program utilizing analytics to identify, measure, and improve care and quality outcomes
- Advanced decision support capabilities allowing advancement in management of Sepsis, VTE, asthma, catheter infections, readmission reductions, and overall quality measures
- MyCarolinas, the Carolinas HealthCare System patient portal, advancing patient engagement and providing patients with a single source to their healthcare records
- The launch and implementation CareConnect, a Health Information Exchange uniting all Carolinas HealthCare System facilities regardless of EMR and connection with affiliated physician and hospitals across the Carolinas

“As the first healthcare system to achieve Stage 7 for both hospitals and physician offices in North and South Carolina, it shows our commitment and dedication to our patients to provide access to quality health and care,” said Craig Richardville, FACHE, MBA, senior vice president and chief information officer. “Using the electronic medical record to its fullest potential connects our clinical providers and our patients across all points of health and care. That means our patients experience a seamless integrated system of care from their work or home, to their physicians’ offices, to the emergency department, to the hospital, at all points of care. Most importantly, our EMR engages our patients to become full partners with their providers to live healthier lives.”

Resulting Value / ROI

Quality and Patient Safety

- VTE clinical decision support improved VTE ordering compliance from 71% to 96%
- Improved the HBIPS Discharge measure from 72 % to 89% through Q3 2015
- Improved IMM from 98% in 2014 to 99% through Q3 2015
- Over 98% of all inpatients are managed via an evidence-based order set
- Improved Ambulatory Appropriate Care Score by over 30 percentage points

Efficiency and workflow

- Savings through a greater than 60% reduction in transcription lines
- Scanning of documents on the nursing units reduced time to availability in the EMR by as much as 3 days.
- Establishing a paperless environment enabled centralization of acute Medical Records and Coding operations

Lessons Learned

- Executive leadership and support for the EMR program and goals are key to success
- A well-established governance structure to guide direction of the EMR program and to prioritize optimization projects through objective and value-based criteria will continue to serve the organization long after initial implementations
- Engage physicians and clinician leaders in the design of evidence-based content and EMR workflow design
- Your training approach must expand beyond preparing users for the go-live event, to also support ongoing education, communication, and coaching to cultivate adoption of best practices and achievement of EMR goals

