2013 | VALUE REPORT

Carolinas HealthCare System

DIFFERENTIABLE **CARE** AND **VALUE** WITHIN

ONE INTEGRATED SYSTEM

Dear Friends,

Carolinas HealthCare System has a unique value story to share. Operating as an integrated delivery system across a dense geographic footprint, we can provide seamless access to coordinated, high-quality healthcare and research – and provide that care closer to where our patients live.

Nationally recognized clinicians within Carolinas HealthCare System share their expertise and collaborate with care teams across the entire system of approximately 900 care locations in three states, including 40 hospitals. Our 60,000+ employees – including 2,800+ physicians and advanced practitioners and 14,000 nurses – provide care through more than 10 million patient encounters every year.

By gathering and analyzing data from our diverse patient population, we have the ability to "learn from ourselves," further enabling our ability to deliver value to our patients. In addition, we are working diligently to enhance our capabilities in the area of predictive analytics to proactively treat patients even more effectively. With the integrated design of Carolinas HealthCare System, we are able to deliver value in three important ways: create a consistent and innovative patient experience throughout our system, build a culture of effective cost management and increased efficiency, and provide the highest quality outcomes for every patient, every time.

Carolinas HealthCare System is transforming healthcare delivery by putting the patient at the center of everything we do. As the industry continues to evolve and change, we know we must change, too. Within this report are many ways in which we are fulfilling the value equation for our patients and reaching a higher standard of care. I hope you find the contents of this report as interesting and valuable to your work in healthcare as I do. By sharing our experiences, we believe together we can change the health of our communities – One community at a time.

Sincerely,

Michael C. Tarwater

MICHAEL C. TARWATER

CHIEF EXECUTIVE OFFICER
CAROLINAS HEALTHCARE SYSTEM

BUILT FOR EVERYONE

FROM THE KNOWLEDGE OF MANY

TO BRING HEALTH TO ALL

one

Dear Friends,

When it comes to our patients at Carolinas HealthCare System, we believe in always striving for excellence. By strategically focusing our efforts, Carolinas HealthCare System works to enhance the overall health and well-being of our communities through high-quality patient care, better outcomes and an overall better experience.

It's our responsibility and our commitment, as an integrated system of care, to constantly improve our connections to one another and to provide our patients and their families with a seamless experience of care. What makes Carolinas Healthcare System unique is our capability to provide this type of care consistently at each point of the continuum. To keep us true to our promise, we have developed internal measures, which support our mission through the use of a success scorecard and tools aimed at elevating service line performance and integration.

It is our goal and responsibility to provide our patients with an experience that is high-value, cost efficient and satisfying. To this end, in 2012, we put initiatives into place that would reduce healthcare costs for our patients, decrease the number of readmissions to our hospitals and, most importantly, save lives. Thanks to these quality improvement initiatives and to our teams, which are dedicated to delivering nothing short of the best care, Carolinas HealthCare System saw 35 percent fewer inpatient mortalities than expected and avoided approximately 300 readmissions.

We will remain among the top chosen providers of care as our diverse healthcare system continues to evolve and to integrate best practices into care delivery that improves the health of every patient.

Sincerely,

ROGER A. RAY, MD, MBA, FACPE

EXECUTIVE VICE PRESIDENT & CHIEF MEDICAL OFFICER

CAROLINAS HEALTHCARE SYSTEM

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WHO WE ARE

Carolinas HealthCare System provides the full spectrum of healthcare and wellness programs throughout North and South Carolina. Our diverse network of nearly 900 care locations includes academic medical centers, 14 owned hospitals, 26 leased or managed hospitals, healthcare pavilions, physician practices, destination centers, surgical and rehabilitation centers, home health agencies, nursing homes, and hospice and palliative care.

Carolinas HealthCare System works to improve and enhance the overall health and well-being of its communities through high quality patient care, education and research programs, and a variety of collaborative partnerships and initiatives. As Carolinas HealthCare System has evolved in recent years, reflecting a broader footprint and a more comprehensive continuum of services, we have worked to innovate, integrate and coordinate the delivery of healthcare. We believe in an advanced system that allows patients to move seamlessly and efficiently from one care location or provider to another.

DELIVERING VALUE: INTEGRATED SYSTEMS OF CARE

We recognize that successfully transforming healthcare in an environment that is increasingly shifting provider incentives from volume to quality, service, and efficiency will require the System to integrate our capabilities. Consequently, we designated "Integrated Systems of Care" (ISOC), a System Strategic Priority.

ISOC represents a transformational approach to healthcare delivery. It is focused on creating value for the patient by elevating the provision and coordination of care. The success of ISOC is measured by improved clinical outcomes, an enhanced patient experience, and a reduction in waste, duplication and inefficiencies. We are committed to becoming a more innovative, value-based system, characterized by high quality and coordinated patient care across and at each point in the continuum. We believe that increased integration in our clinical areas will create a higher level of quality and service performance, as well as transform the care we provide patients and the communities we serve.

CAROLINAS HEALTHCARE SYSTEM PATIENT EXPERIENCE

The Carolinas HealthCare System patient experience refers to the sum of all interactions, shaped by the One culture, that influences patient perception across, and at each point of, the continuum of care. It includes superior personalized service, patient and family engagement, and compassionate caregivers working together to create enduring patient relationships. The experiences of the patient and the patient's family are crucial components of healing and elevating the "value" of healthcare. We strive to continue to be the most trusted system of care by creating a consistent, high quality and high satisfaction experience for all patients.

QUALITY OUTCOMES AND PROCESSES

Value derived from healthcare can be measured through outcomes and the quality infrastructure. Evidence-based processes and techniques allow Carolinas HealthCare System to deliver high quality outcomes and a superior culture of safety for our patients and employees. By engaging physicians and by driving integration, Carolinas HealthCare System elevates performance in measurable quality improvements and achievements over time.

COST AND EFFICIENCY

Carolinas HealthCare System has a unique approach to managing cost and maximizing resources. Employees are encouraged to provide proven or innovative ideas aimed at increasing efficiencies both across the organization and with focused area transformation.

At Carolinas HealthCare System, patient experience is built upon the foundation that all teammates contribute to a patient's superior, personalized healthcare experience. We listen to our patients and their families and strive to meet their every need by providing individualized, patient-centered care that keeps them safe, promotes their healing, informs them and inspires them.

Much of our approach to providing an exceptional patient experience is based on our culture of service excellence and strategy of being proactive rather than being reactive. Our approach is led by management at all levels and, most importantly, by the consistent, supportive actions of all employees.

Every Carolinas Healthcare System teammate is empowered to act, when necessary, to turn an unpleasant patient experience into a positive one. In turn, Carolinas Healthcare System commits to promoting excellent communication, a culture of reward and recognition, and leader development.

While bricks and mortar form the physical structure of our hospitals and other care facilities, it is the compassionate, caring and dedicated employees and physicians who comprise the true heart of the organization. Carolinas Healthcare System's commitment to the patient experience ensures long-term success in being the provider of choice.

EVERY Carolinas HealthCare System **TEAMMATE**

IS EMPOWERED TO TURN AN UNPLEASANT PATIENT EXPERIENCE INTO A POSITIVE ONE.

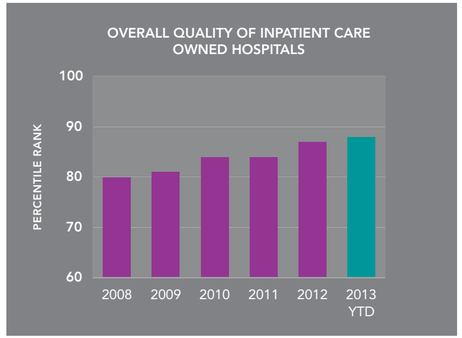
EVERY PATIENT, EVERY ENCOUNTER, EVERY TIME

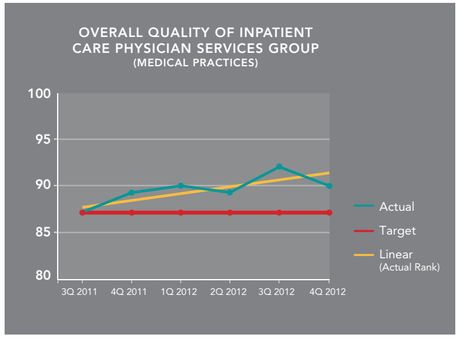
In 2012, Carolinas HealthCare System developed a Patient Experience Division, aligning all patient-centered efforts throughout the organization. The division drives the System Strategy of developing enduring patient relationships, based on superior personalized service and high quality outcomes. Through consistency and standardized practices, this will be the experience provided to every patient – every encounter, every time.

The experience of patients and their families is a crucial component of the healing process. By exceeding our patients' expectations, we are able to provide an experience that ensures patient safety, quality care and excellent customer service.

Recent initiatives focused on enhancing the patient experience:

- 10,000 Registered Nurses received education on improving patient engagement and health literacy.
- Innovative, alternative therapies were added in the Pastoral Care Division.
- The Patient Navigator program was established to assist patients and families with medical treatment options.
- An online portal for patients, called *MyCarolinas*, was developed to allow patients to communicate with their caregivers, receive lab results, book appointments, and more.
- Physician practices eliminated automated responses for phone calls to ensure that patients speak directly with a staff member.
- Multiple technical solutions were added as resources to keep patients informed and involved in their care.
- Patient and Family Advisory Councils were established to give patients a voice in processes that affect them.





PATIENT EXPERIENCE

DELIVERING A BETTER EXPERIENCE

To ensure we remain among the top chosen healthcare systems in the nation, Carolinas HealthCare System uses patient satisfaction surveys. These data help improve processes that impact the patient experience.

Leaders and other staff continue to focus on evidence-based tactics that result in a better patient experience, including:

- Hourly rounding on patients
- AIDET (Acknowledge, Introduce, Duration, Explanation, Thank You)
- Post-hospital discharge calls
- "Key Words at Key Times" in every care location
- "Teach Back" and "Ask Me Three"– health literacy approaches that equip patients to be more engaged in their own care

These focused tactics have improved the patient experience and have led to improved clinical outcomes, due to better communication. They have been deployed in our owned facilities and steady improvements have been seen in recent years.

IMPROVING AMBULATORY CARE

In addition to focusing on evidence-based tactics, the Medical Practice team also understands the importance of the physician–patient relationship and works to support our physicians in delivering patient-centered care. Some of our Physician Service Excellence initiatives are:

- Individualized provider coaching
- New physician orientation
- Physician/Provider champions
- Group/Division engagement discussions
- Communication skills training

These programs have led to increased patient loyalty and trust, while enhancing the satisfaction that physicians experience in the practice.

PROCESS: CREATING A QUALITY INFRASTRUCTURE

Quality performance at Carolinas HealthCare System is achieved by forming a single unified enterprise. Accelerated growth in recent years has been leveraged to launch collaborative efforts that span the entire system. These include forums in which best practices are shared among acute and continuing care environments, private practices and other care locations. The following approaches provide the foundation for quality improvement at Carolinas HealthCare System.

CAROLINAS HEALTHCARE SYSTEM QUALITY GOALS

Carolinas HealthCare System Quality Goals provide the framework for the quality improvement initiatives developed each year. Many goals span several years and depend on past performance and relevance to the current state of the healthcare industry. The process starts each year during a planning retreat, during which leaders discuss and build consensus for system-wide quality goals for the upcoming year. Retreat attendees include members of the executive leadership team, leaders from each hospital, and representatives from clinical areas such as continuing care, physician services, nursing, quality and analytics.

Goals fall within one of three areas: patient safety, clinical outcomes and clinical efficiency. Dickson Advanced Analytics Group (DA^2), Carolinas HealthCare System's analytics department, develops definitions, baseline, target and stretch values for each goal. Where possible, the team utilizes definitions of publicly reported measures. The data to assess the goals are reported out to our care environments on a monthly basis, showing individual facility performance and overall Carolinas HealthCare System performance.

QUALITY & SERVICE SHARING DAY

Quality & Service Sharing Day is an annual opportunity for Carolinas HealthCare System to recognize individual and group efforts exhibiting exceptional performance in the areas of patient safety, clinical outcomes, clinical efficiency and service excellence. Attendees include representatives from owned and affiliated care locations, as well as from physician practices and continuing care locations. Applicants from across the System submit their projects to a group of internal judges, who score submissions and determine the winners of the Carolinas HealthCare System Touchstone Awards. There were 107 applications for the 2012 event and more than 200 applications for the 2013 event. Gold awards are presented to projects that achieve the greatest level of improvement and that are a "best practice." These projects are presented at the event in breakout sessions, and the silver winner projects are displayed as storyboards.

QUALITY OUTCOMES AND PROCESSES

QUALITY AND SAFETY OPERATIONS COUNCIL (QSOC™)

Carolinas HealthCare System has developed an organized approach to drive and integrate quality and patient safety across the System through the Quality and Safety Operations Council (QSOC™). The QSOC™ teams are comprised of various members from each care location. They focus on functional areas and provide a vehicle for development and rapid replication of best practices. They build on the clinical experiences and achievements of all care environments. The methodology includes systematic improvement approaches and methods to develop durable, long-term solutions to existing gaps in care. Meetings for each QSOC™ team are typically held monthly via videoconference to support cross-continuum clinical transformation. Committee oversight is managed by quality and clinical leaders, chief medical officers, and other medical staff.

2012 GOLD TOUCHSTONE PROJECTS

CLINICAL EFFICIENCY

- Discharge Home from Triage Lean Project
- CMC Rx MCP Window Prescription Process Lean Project
- Using "Lean" Methodology to Improve Emergency Department Presentation to Provider Times

CLINICAL OUTCOMES

- Reducing Avoidable Re-hospitalizations: Striving to Keep Patient Healthy@Home
- Lipid Management for Ischemic Vascular Disease Patients: A Performance Improvement Team Approach
- Worth the Wait: Reduction in <39 Weeks Elective Deliveries

PATIENT SAFETY

- Analyzing Clinical and Operational Impact of Construction on Patient and Facility Safety
- Post-Op Pediatric CVICU Patient Transport (Lean Six Sigma Project)

SERVICE EXCELLENCE

- Reducing Catheter-Associated Urinary Tract Infections: Harnessing Canopy as a Decision Support Tool for Urinary Catheter
- Hourly Rounding on an Inpatient Unit
- Show Patients That We Care, That We Really, Really Care!
- Our Journey to Family Centered Couplet Care

CAROLINAS HEALTHCARE SYSTEM HOSPITAL ENGAGEMENT NETWORK

The Carolinas HealthCare System Hospital Engagement Network (HEN) is a two-year project involving 29 System hospitals, focused on reducing patient harm by 40 percent and preventable readmissions by 20 percent by the end of 2013. Carolinas HealthCare System is one of 27 organizations awarded a contract from the Centers for Medicare & Medicaid Services (CMS) to accomplish the 40/20 goals, and one of only five healthcare systems in the nation awarded the contract.

The development of enterprise-wide quality initiatives is a strategic priority for Carolinas HealthCare System and, in recent years, there has been tremendous progress in reducing hospital acquired conditions and readmissions. One of our motivations to seek the national HEN contract was needed support to achieve this strategic priority and strengthen our quality and safety efforts. Through the course of the project, Carolinas HealthCare System has created new initiatives and positions in critical areas, such as medication safety and infection prevention, and enhanced progress toward a single unified enterprise by collaborating, sharing of best practices, and standardizing of processes, tools and data collection via the QSOC™ structure.

TEN FOCUS AREAS OF THE HEN
Adverse drug events
Catheter-associated urinary tract infections
Central line-associated bloodstream infections
Falls
Obstetrical adverse events
Pressure ulcers
Surgical site infections
Venous thromboembolism
Ventilator-associated pneumonia
Readmissions

1 OF 5 HEALTH SYSTEMS

IN THE NATION AWARDED THE HEN GRANT

FEATURED CLINICAL INITIATIVES

QUALITY OUTCOMES: FEATURED CLINICAL INITIATIVES

The following pages highlight a few of the key initiatives for 2012. Carolinas HealthCare System provides the full spectrum of care from the ambulatory setting to acute care hospitals and continuing care. Patient health outcomes are a product of the quality and value of care that a patient receives and we strive to achieve top tier performance every time. For instance:

- We decreased the number of patient safety events from 614 in 2011 to 465 in 2012, significantly reducing the amount of harm incurred by patients. This reduction translated into $2.98 million in cost savings.
- Our inpatient mortality was 35 percent lower than expected from risk-adjusted figures from Premier, Inc.'s national comparative database. This equates to 750 lives saved in 2012. Premier healthcare alliance is the nation's largest performance improvement alliance, comprised of 2,800 hospitals, and maintains clinical, financial and outcomes databases based on 1 in every 4 patient discharges.
- We provided appropriate care, care which is both effective and evidence-based, to patients with children's asthma, pneumonia, acute myocardial infarction, heart failure and surgical care in 95.2 percent of cases, up from 94.2 percent in 2011.
- Ambulatory appropriate care, measured in four disease categories (diabetes, asthma, vascular disease and heart failure) improved from 53.5 percent in the baseline period to 79.8 percent by end of 2012.
- Carolinas HealthCare System reduced the number of diabetic patients (with hemoglobin A1c (blood sugar) level higher than 9 percent) to 11.3 percent. This represented approximately $2.7 million in cost savings.
- Readmissions for home health transfers to acute care facilities decreased in 2012 by 6 percent (207 patients avoided readmissions), associated with $1.9 million in cost savings.

750 PROJECTED **LIVES SAVED**

IN 2012, THANKS TO QUALITY IMPROVEMENT INITIATIVES AT CAROLINAS HEALTHCARE SYSTEM

CASE FOR IMPROVEMENT

The ambulatory appropriate care score is an all-or-none composite score of 14 measures across four disease states (diabetes, asthma, vascular disease and heart failure), established from evidence-based clinical practice guidelines.

OBJECTIVES/GOALS

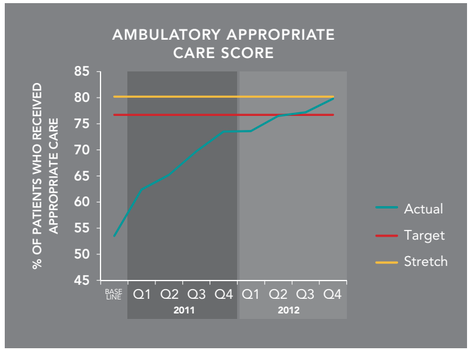
The goal for 2012 was to have at least 76.7 percent of patients receiving appropriate ambulatory care for these disease states.

HIGHLIGHTED QUALITY INITIATIVES

In 2012, interventions were focused on clinical support using tools within the electronic medical record (EMR) to close care gaps. Reminders in the EMR alert the clinical team to care that is overdue. Care teams can immediately respond to the alerts and close care gaps while the patient is still in the office. Chronic disease registries were also used to identify and reach out to patients who were out of care and required follow-up.

RESULTS

In 2012, 76.8 percent of patients System-wide received appropriate ambulatory care. The measure has been steadily improving from Q1 of 2011 through Q4 of 2012.



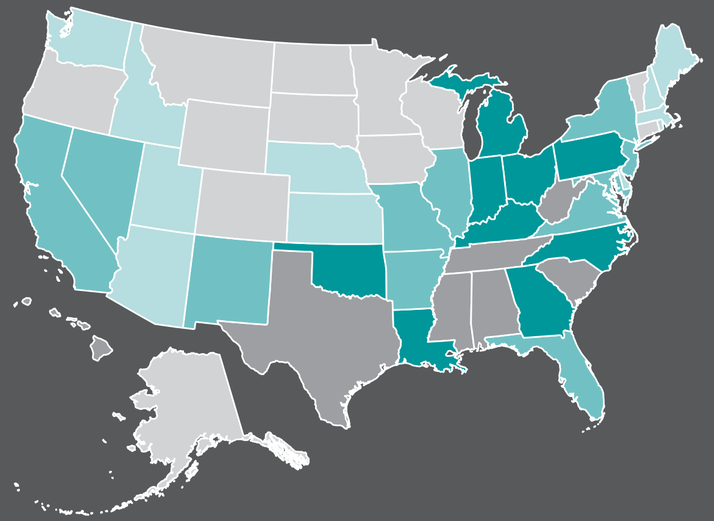
QUALITY INITIATIVES FOR 2013

The goal for 2013 is to have at least 82 percent of patients receive appropriate ambulatory care for asthma, diabetes, heart failure and vascular disease.

To help us reach this goal, physician practices will utilize Measuring for Daily Improvement (MDI) to drive improvement. MDI uses daily huddles, transparent metrics, and a climate of accountability to empower clinical staff to identify and solve problems and to develop best practices, leading to improved patient care and clinical operations.

CASE FOR IMPROVEMENT

Approximately 8 percent of the United States (U.S.) population has diabetes.[1] Type-2 diabetes can remain asymptomatic for years, creating challenges for diagnosis, follow-up and adherence to treatment. The total economic cost associated with diabetes was $174 billion in 2002.[1] Studies show that diabetic patients with a hemoglobin A1c (blood sugar) level higher than 8 percent are more likely to have higher healthcare costs and an increased risk of preventable long-term complications, including heart disease and stroke.[2] It has also been shown that a one point reduction alone in these levels can reduce the risk of microvascular (eye, nerve and kidney) complications by 40 percent.[3]



The figure (left) shows the age-adjusted prevalence of diagnosed diabetes among adults aged ≥ 18 years in the United States during 2010. In 1995, age-adjusted prevalence was ≥ 6% in only three states, DC, and Puerto Rico, but, by 2010, it was ≥ 6% in all states.[4]

OBJECTIVES/GOALS

North and South Carolina have some of the highest diabetes rates in the country. Carolinas HealthCare System's providers care for the 65,000 known diabetics in this region. Despite the well-known benefits of diabetes control and the effective medications and treatments, management of the disease remains a national healthcare challenge. The goal of our Physician Services Group is to have no more than 11.4 percent of diabetic patients with an hemoglobin (Hb) A1c level higher than 9 percent. The stretch goal is 11.2 percent.

QUALITY INITIATIVES FOR 2012

2012 saw the implementation of a standardized registry, a management process to improve follow-up rates among diabetic patients, new point-of-care testing protocols and the use of clinical decision support in the EMR.

RESULTS AND IMPACT

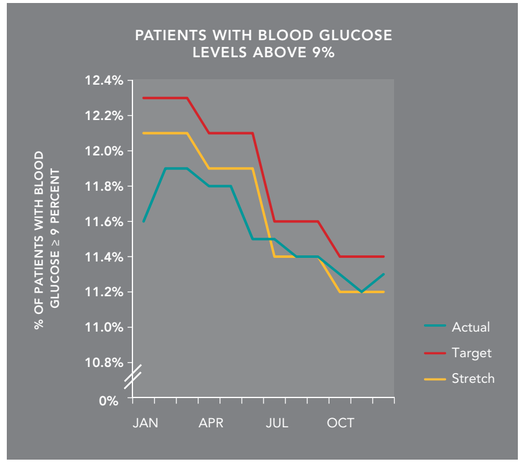
11.3 percent of System-wide diabetic patients had an HbA1c level above 9 percent every quarter. One study has shown that reducing a patient's HbA1c level by 1 percent could reduce diabetic patients' average total healthcare costs by $685 to $950 per person.[5] Using the conservative estimate of $685 and data from providers, the blood sugar level reductions of our patients resulted in a total cost savings of $2.7 million in 2012.

QUALITY INITIATIVES FOR 2013

In 2013, Carolinas HealthCare System will be targeting HbA1C levels even more aggressively, with the goal of having no more than 10.8 percent of diabetic patients' blood glucose levels above 9 percent.

Non-physician staff will provide high-risk diabetic patients with between-visit care via pharmacists and nurse care managers. Shared Medical Appointments, in which a group of patients sharing similar medical conditions meet with a physician at the same time, will be offered in endocrinology clinics. By offering patients a 90-minute session instead of the typical 20-minute session, patients have more face time with their physician and receive additional benefits, such as a built-in support system in dealing with their illness.

$2.7 MILLION
HEALTHCARE COST SAVINGS
FROM REDUCING DIABETIC PATIENTS' BLOOD SUGAR LEVELS



CASE FOR IMPROVEMENT

Medical errors and unsafe care harm and kill tens of thousands of Americans each year. Approximately two million healthcare-associated infections occur annually in the U.S., accounting for an estimated 90,000 deaths and more than $4.5 billion in hospital healthcare costs. Unplanned, often preventable, hospital admissions and readmissions cost Medicare and the private sector billions of dollars each year and take a significant toll on patients and families, who suffer from prolonged illness or pain, emotional distress, and loss of productivity.[1]

Keeping our patients as healthy as possible is of the utmost importance to Carolinas HealthCare System. The Agency for Healthcare Research and Quality Patient Safety Indicators (PSIs) allow us to monitor patients' safety and design targeted interventions to address areas of concern.

OBJECTIVES/GOALS

The PSIs provide information on potential in-hospital complications and adverse events following surgeries, procedures and childbirth. Our target was to have an overall reduction of 5 percent of the composite PSI.

QUALITY INITIATIVES FOR 2012

Several key initiatives positively impacted the PSI for 2012 including the Venous Thromboembolism (VTE) QSOC™ and the Infection Prevention and Control QSOC™.

VTE QSOC

The enterprise-wide VTE QSOC™ team was established in late 2009 to identify and implement best practices to reduce VTEs and Deep Vein Thrombosis. The QSOC™, led by an internal medicine physician in partnership with nursing, pharmacy and patient safety, standardized VTE risk assessment. It unified team members around the appropriate preventive measures to use for each risk level. Additionally, an in-depth chart review is conducted when data reveal increased risk at a facility or with a specific physician. Carolinas Medical Center is piloting a "hard stop" within the EMRs, requiring physicians to complete the VTE risk assessment on admission. If this pilot shows an improvement, the hard stop will likely spread to other care environments.

149 HARM EVENTS PREVENTED

INFECTION PREVENTION AND CONTROL

The Infection Prevention and Control (IPC) QSOC™ team has focused on Central Venous Catheter-related Bloodstream Infections, also known as Central Line-Associated Blood Stream Infections (CLABSI), for several years. The IPC team reviewed the Institute for Healthcare Improvement (IHI) and Centers for Disease Control and Prevention guidelines to standardize prevention processes across facilities. All Carolinas HealthCare System care environments use the evidence-based IHI CLABSI Bundle and the Central Line Insertion Checklist to prevent these infections. The QSOC™ team developed staff in-service materials to educate employees on CLABSI prevention techniques and developed education materials, in English and Spanish, to inform patients and their families about the risks of central line infections and how to partner with clinical staff to prevent them.

RESULTS

In 2012, we exceeded our target goal of 0.434 and stretch goal of 0.411, with a score of 0.35. Our care environments focused intense effort on reducing harm events among patients. As a result, they collectively prevented 149 harm events and saved nearly $3 million in costs.

QUALITY INITIATIVES FOR 2013

In 2011, Carolinas HealthCare System was awarded a Hospital Engagement Network (HEN) contract and began to explore additional opportunities to reduce inpatient harm by 40 percent and preventable readmissions by 20 percent. Carolinas HealthCare System was one of only five healthcare systems in the nation selected to participate in the two-year project.

In 2013, the organization is using a Patient Safety Composite metric, developed to align with the quality goals already in place, creating a single measure of harm that would eliminate redundancy and incorporate HEN goals.

The Patient Safety Composite is unique to Carolinas HealthCare System and measures adverse events that patients experience as a result of exposure to the healthcare system. These metrics have a direct impact on patient outcomes, clinical performance and the financial performance of Carolinas HealthCare System. A Global Trigger Tool now measures harm events, and Quality Coaches are assigned to each facility to aid in monitoring and synthesizing data, identifying opportunities, and developing initiatives to reduce harm.

COST SAVINGS

Carolinas HealthCare System facilities focused intense effort on reducing harm events among our patients. As a result, our facilities collectively prevented 149 harm events and saved nearly $3 million in costs.

CAROLINAS HEALTHCARE SYSTEM 2012 PATIENT SAFETY INDICATOR COMPOSITE METRICS

	2011 CASES	2012 CASES	CASES AVOIDED	COST SAVINGS
PSI 3: Pressure Ulcer	26	25	1	$28,684
PSI 6: Iatrogenic Pneumothorax	66	57	9	$161,946
PSI 7: Central Line Blood Stream Infection	24	11	13	$448,604
PSI 12: Postoperative Pulmonary Embolism or Deep Vein Thrombosis	190	154	36	$734,184
PSI 13: Postoperative Sepsis	32	26	6	$394,896
PSI 14: Postoperative Wound Dehiscence	15	12	3	$125,739
PSI 15: Accidental Puncture or Laceration	261	180	81	$1,089,531

COST SAVINGS IN 2012 FROM REDUCTION OF HARM EVENTS TOTALED
$2,983,584

35% FEWER INPATIENT MORTALITIES THAN PREDICTED

CASE FOR IMPROVEMENT

Patients who receive better care during their hospitalizations will likely have improved outcomes and rates of survival.

Carolinas Healthcare System tracks mortality for all inpatient stays. These events can often be prevented if hospitals follow best practices for treating patients.[1]

OBJECTIVES/GOALS

Mortality was defined as an observed to expected ratio (O/E), specially, the number of actual mortalities divided by the number of expected mortalities. We set a 2012 quality goal of 0.78, compared to a baseline mortality rate of 0.80. The overarching goal is to eventually attain top quartile performance among South Atlantic region hospitals.

QUALITY INITIATIVES FOR 2012

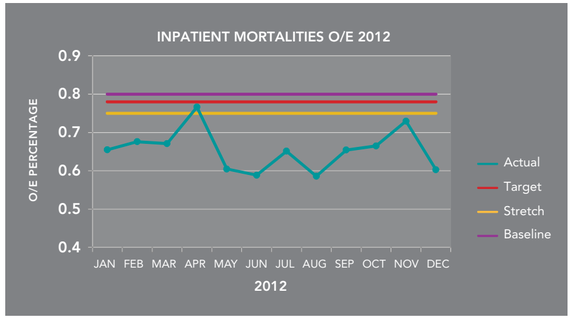
Two interventions adopted by Carolinas HealthCare System have impacted in-hospital mortality: increasing the number of in-hospital palliative care consultations and the utilization of hospice services, where appropriate. Involving palliative care and hospice teams with seriously ill patients earlier in their disease progression helps patients avoid hospitalization and manage their care in community settings.

Carolinas HealthCare System palliative care and hospice entities have developed their own quality scorecards. Palliative care developed toolkits and brochures to increase awareness of palliative care. The goals are to increase the total number of palliative care consultations, where appropriate, and consult seriously ill patients earlier in their hospital stay. Hospice tracks the number of patients hospitalized in the last 30 days of life, with the goal of keeping hospice patients in a lower acuity care setting towards end of life.

RESULTS

Overall performance as a System was 0.654, surpassing the goal by a substantial amount, with 35 percent fewer mortalities than expected. Approximately 750 lives were saved due to Carolinas Healthcare System improved performance.

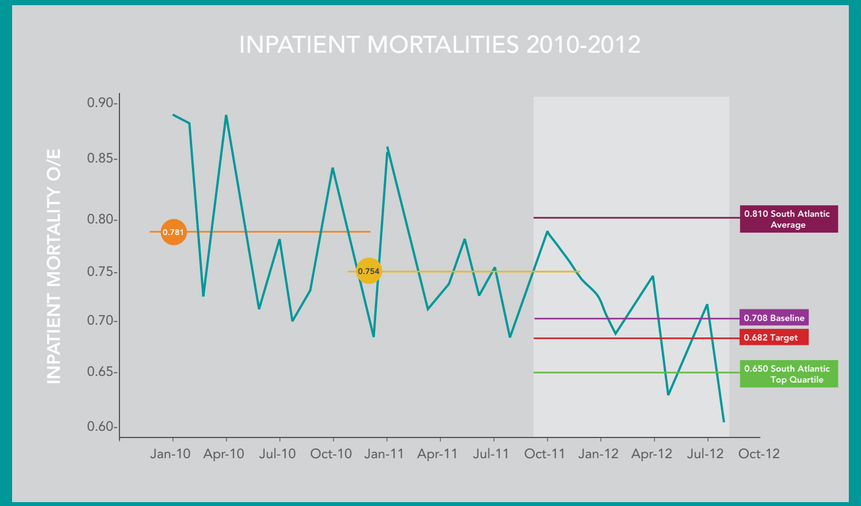
The top quartile for the South Atlantic region in the Premier, Inc. database was an O/E of 0.650. This benchmark was surpassed by 62 percent of Carolinas HealthCare System care environments, indicating top quartile performance. There were 73.6 percent fewer mortalities than expected at Wilkes Regional Medical Center and 35.5 percent fewer at Carolinas Medical Center-Pineville. All other Carolinas HealthCare System hospitals and care environments were within this range of improvement.

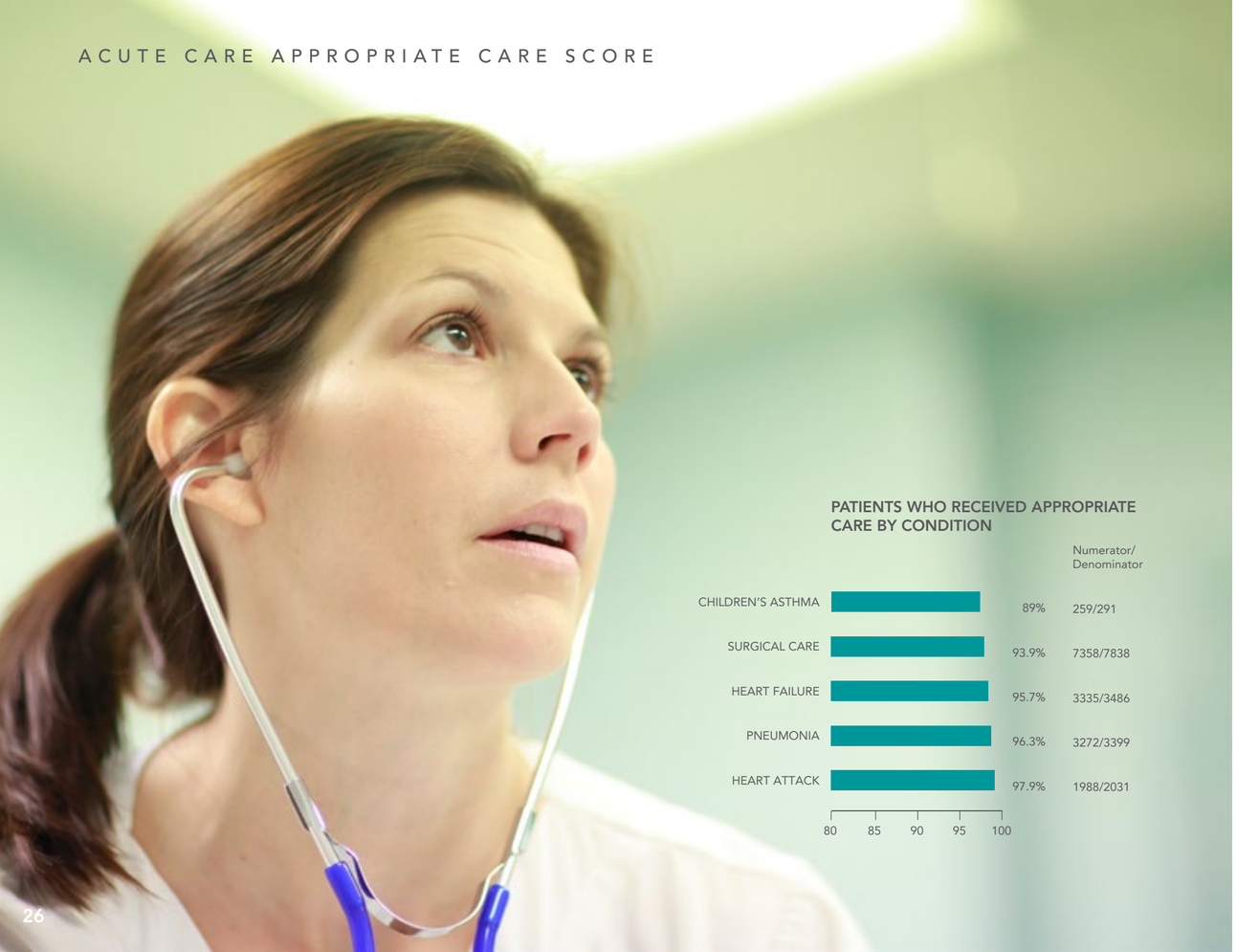


TOP QUARTILE FACILITIES	MORTALITY O/E
Wilkes Regional Medical Center	0.264
Stanly Regional Medical Center	0.305
MedWest-Swain	0.323
Anson Community Hospital	0.356
Cleveland Regional Medical Center	0.373
Roper St. Francis Mount Pleasant Hospital	0.378
Bon Secours St. Francis Hospital	0.433
Carolinas Medical Center-University	0.469
Scotland Health Care System	0.488
Grace Hospital	0.506
MedWest-Harris	0.513
AnMed Health Medical Center	0.526
Carolinas Medical Center-NorthEast	0.526
Carolinas Medical Center-Union	0.592
Carolinas Medical Center-Lincoln	0.595
Carolinas Medical Center-Mercy	0.607
Carolinas Medical Center-Pineville	0.647

The 2013 metric definition for mortality will include diagnosis for palliative care patients. Concerns were raised about coding of palliative care and the consistency of this coding among facilities. Thus, a decision was made to include this diagnosis back into the definition. Exclusions will include principal diagnosis as E-codes, inpatient skilled nursing, inpatient long-term care and same facility Medicare swing bed.

When using the 2013 definition for mortality applied retrospectively, the O/E has been steadily decreasing over time from 0.781 in 2010 to 0.754 in 2011 to 0.708 for the baseline period (9/1/2011-8/1/2012) to set the target and stretch values for 2013 which are 0.682 and 0.650, respectively. The stretch was chosen to be equal to the South Atlantic Top Quartile in Premier, Inc.'s QualityAdvisor database.





CASE FOR IMPROVEMENT

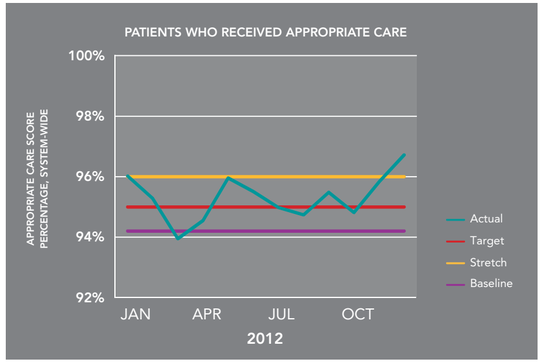
Appropriate care scores represent the reliability with which patients receive evidence-based care within Carolinas HealthCare System acute care environments. The appropriate care score is a composite score comprised of care measures for Acute Myocardial Infarction (AMI), Heart Failure (HF), Pneumonia (PN), Surgical Care Improvement Project (SCIP) and Children's Asthma Care (CAC).

OBJECTIVES/GOALS

The target and stretch goals for 2012 were 95 and 96 percent, respectively.

RESULTS

Our facilities collectively achieved a 95.2 percent appropriate care score.



QUALITY INITIATIVES FOR 2012

A Core Measures Awareness campaign was disseminated and included visual job aids (pocket cards and posters) to serve as a resource guide to evidence-based care. The core measure performance was shared with medical departments on a more frequent basis.

A database was established to document core measure opportunity analysis, follow-up and action planning, especially with members of the medical staff and with nursing partners. Staff used mapping of key clinical processes that impact specific core measures in the pre- and post-computerized physician order entry environments and instituted a daily dialogue around evidence-based processes of care, to ensure staff awareness of best practices.

Members of the pharmacy team were engaged to leverage their knowledge in support of processes of care that impact appropriate selection, administration and discontinuation of medications. Dedicated quality and facility resources oversaw the care process and intervened if the patient was at risk of not receiving evidence-based care.

CASE FOR IMPROVEMENT

It is known that many hospital readmissions are preventable. Unplanned readmissions accounted for $17.45 billion in Medicare payments in 2010, making them an appropriate target for cost reduction.[1] The Centers for Medicare & Medicaid Services (CMS) reports that 19.6 percent of patients are readmitted within 30 days, 34 percent within 90 days and 56.1 percent within 365 days.[2]

Carolinas HealthCare System is committed to caring for patients while they receive treatment in our facilities and to preparing them for success when they leave the hospital. Studies show that patients who receive better care while in the hospital, and during the transition after, are likely to have better rates of survival, functional ability and quality of life. The Affordable Care Act requires CMS to reduce payments to hospitals with excess readmissions, starting October 1, 2012.

OBJECTIVES/GOALS

Carolinas HealthCare System set a 2012 readmissions rate goal of 16.28 percent, with the baseline readmission rate of 17.14 percent. The long-term goal is to attain top quartile performance among South Atlantic region hospitals.

QUALITY INITIATIVES FOR 2012

Each of the 29 Carolinas HealthCare System Hospital Engagement Network (HEN) hospitals committed to reducing all-cause readmissions for Acute Myocardial Infarction (AMI), Heart Failure (HF), and Pneumonia (PN) by 20 percent by the end of 2013. The Readmissions QSOC™ team formed in Q1 of 2012 has representatives from all acute care facilities as well as ambulatory practices, nursing homes, home health, long-term care facilities, hospice, urgent care, emergency departments and case management. The team began with a self-assessment of the current status of readmissions quality improvement at each facility. It later explored the Tribal Leadership model, use of palliative care in readmission prevention and the development of a transitions bundle. The QSOC™ team piloted the modified LACE model (Length of stay, Acuity for admission, Co-morbidities and number of recent ED visits) to identify patients at a high risk for readmission.

$17.45 BILLION

TOTAL 2010 NATIONAL MEDICARE PAYMENTS
DUE TO UNPLANNED READMISSIONS

CAROLINAS HEALTHCARE SYSTEM FACILITES TOP QUARTILE

Top Quartile Facilities	Readmission O/E
MedWest-Swain	0.362
Kings Mountain Hospital	0.591
Carolinas Medical Center-Randolph	0.594
MedWest-Harris	0.602
St. Luke's Hospital	0.653
Roper St. Francis Mount Pleasant Hospital	0.679
Carolinas Medical Center-University	0.697
Carolinas Medical Center-Pineville	0.709
Carolinas Medical Center-Mercy	0.718
Anson Community Hospital	0.737
Blue Ridge HealthCare	0.768
Bon Secours St. Francis Hospital	0.781

READMISSIONS FOR AMI, HF AND PN

RESULTS

In 2011, Carolinas HealthCare System had a readmission rate of 16.7 percent for AMI, HF, and PN diagnoses. In 2012 the readmission rate fell to 16.2 percent. This equates to approximately 90 avoided readmissions and approximately $828,900 in cost savings.[4]

IN 2012, CAROLINAS HEALTHCARE SYSTEM OUTPERFORMED ALL THREE NATIONAL CMS BENCHMARKS:

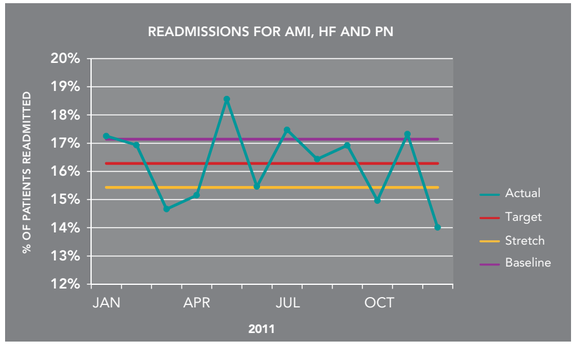
11.1 PERCENT OF AMI PATIENTS WERE READMITTED (COMPARED TO 19.7 PERCENT IN THE U.S.)

20 PERCENT OF HF PATIENTS WERE READMITTED (COMPARED TO 24.7 PERCENT)

15.4 PERCENT OF PN PATIENTS WERE READMITTED (COMPARED TO 18.5 PERCENT)[5]

QUALITY INITIATIVES FOR 2013

Next year, the diagnosis-specific readmissions measure will change to a hospital-wide risk-adjusted readmissions measure, endorsed by the National Quality Forum, and it will be posted on *Hospital Compare* starting in 2013. Seven mutually exclusive cohorts will be identified using the Agency for Healthcare Research and Quality clinical classification software system: medicine, surgery, cardiorespiratory, cardiovascular, neurology, obstetrics/gynecology and behavioral health.[3]

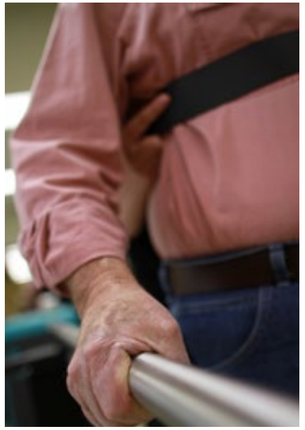


$828,900 TOTAL COST SAVINGS

FROM CAROLINAS HEALTHCARE SYSTEM'S REDUCTION IN UNPLANNED READMISSIONS

CASE FOR IMPROVEMENT

In an attempt to reduce readmission rates, our continuing care services, such as Home Health, are developing tools and programs that improve patient care overall and that decrease the number of avoidable readmissions. We believe that one of the most important components to keeping patients from returning to the hospital is having excellent home care.



OBJECTIVES/GOALS

Home Health plays a vital role in keeping patients out of the hospital and impacts acute care readmissions. In 2008, the rate of readmission among Home Health patients was 29 percent.[3] Carolinas HealthCare System set a readmissions reduction goal of 5 percent for 2012. Overall targets are aimed toward achieving top quintile performance over time.

QUALITY INITIATIVES FOR 2012

In an effort to reduce unplanned readmission rates among patients, our Home Health agencies created a number of quality improvement projects utilizing branch directors, an analytics group, quality personnel and a physician sponsor. Over the past two years, Home Health agencies have developed tools and programs aimed at improving patient care and decreasing the number of avoidable readmissions.

A readmissions workgroup continues to meet monthly to develop these tools and best practices. All tools are distributed to each home health agency to be implemented by its own performance improvement teams.

The primary quality improvement project during 2011 focused on designing and executing a telehealth program for at-risk patients with heart failure. The program utilizes telemonitors in patient homes, along with scripted phone monitoring. The monitors transmit patient vital signs, oximetry and weight, and alert trained branch staff when there are variations in these elements. For 2012, continued efforts resulted in a 6 percent reduction in readmissions, or 207 avoided readmissions, and $1.9 million in cost savings. Since 2011, improvements in reducing readmissions have resulted in an estimated cost savings of $4.8 million.

In 2011, we analyzed seven-day, 14-day, and 30-day readmission rates among heart failure patients with usual care, compared with heart failure patients with a telemonitor. Results indicated that readmissions rates among heart failure patients with a telemonitor were significantly lower than heart failure patients with usual care, across all timeframes. Among the readmitted heart failure patients, the use of telemonitors increased the number of days between hospitalizations.

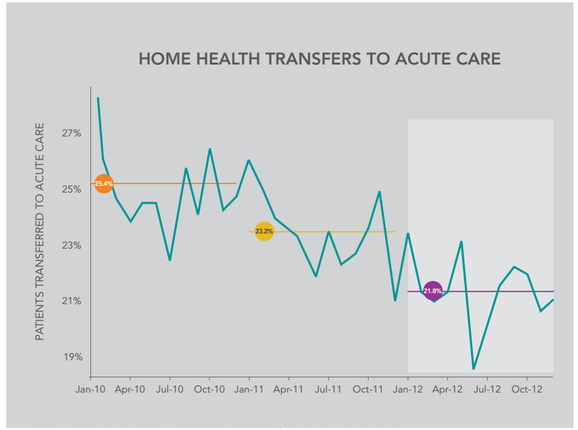
Other efforts included a “call us first” program, a focus on improving oral medication management, and an auditing tool to review patient hospital admissions. “Call us first” was a patient-friendly reminder to call Home Health with any non-emergency issues rather than going to the Emergency Department or a physician office. The auditing tool provided key focus areas on all hospitalized patients and opportunities to address re-education needs in each agency.

RESULTS

From 2011 to 2012, our Home Health agencies have reduced their overall readmission rate from 23.15 percent to 21.77 percent. The Home Health agencies have surpassed their target of 22.58 percent and almost achieved their stretch of 21.4 percent. These results put Carolinas HealthCare System Home Health agencies on average with the national top 20 percent of home care agencies and well below the current national and state rates for readmissions.

QUALITY INITIATIVES FOR 2013

There are no anticipated future changes to the Carolinas HealthCare System Home Health Transfer to Acute Care metric definition. Areas of opportunities for sustaining the reduction in readmissions may include focused attention on patients with respiratory problems and congestive heart failure. Home Health data will be utilized to develop and run risk-adjusted readmission models to find patients most at-risk for a readmission.



TELEMONITORING YIELDS SIGNIFICANT IMPROVEMENT IN READMISSIONS

	7 days	14 days	22.3% Reduction 30 days
USUAL CARE (N=1137)	11.9%	19.9%	29.1%
TELEMONITOR (N=638)	8.5%	14.9%	22.6%
	p=0.028	p=0.016	p=0.012

Table (above): Telemonitor results displaying a significant difference in 30-day readmission rates between heart failure Home Health patients with a telemonitor compared with heart failure Home Health patients receiving usual care.

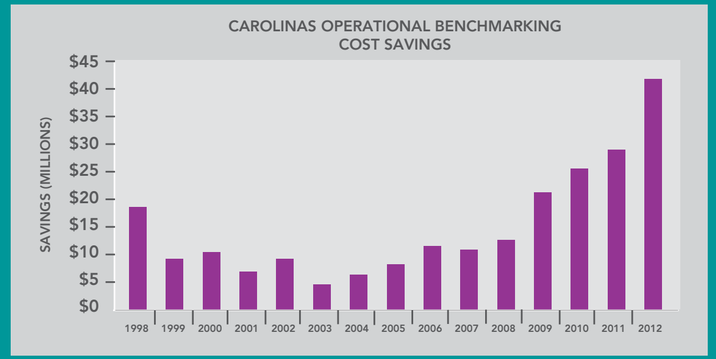
CASE FOR IMPROVEMENT

Carolinas HealthCare System employs many approaches to manage cost and efficiency both across the organization and within focused areas. In addition, the entire organization is encouraged to provide ideas that are innovative or proven to work in other healthcare organizations or industries. Some of our more effective approaches:

- **Carolinas Operational Benchmarking (COB) Teams**: In these benchmarking teams, leaders from each hospital focus on comparative performance discussion, sharing and spreading of best practices, and supply standardization.
- **The Ideas Create Excellence (ICE) Box:** The ICE Box is a virtual suggestion box located on our intranet where any employee can submit cost savings and efficiency ideas.
- **Deployment of Lean Practices**: Lean practices, made famous by Toyota, remove waste, improve cycle time and maximize efficiency in key areas of the organization.
- **Business Innovation Culture**: We have recently taken steps to build a culture around business innovation.

CAROLINAS OPERATIONAL BENCHMARKING

COB Teams were established in 1997 to share best practices and standardize supplies across the organization. In 2012, the 20 existing teams identified and implemented more than $40 million in savings for hospitals in the System. Within each team, representatives from our 40 hospitals discuss cost and efficiency, share their hospital's best practices, and review supply standardization opportunities. For example, the Pharmacy COB, made up of pharmacy leaders from each hospital, may together decide which distributor to use and which specific pharmaceuticals should make up the formulary, as well as ensure that newly established generics replace name brand drugs where appropriate, across all hospitals. These decisions result in significant savings and a consistently well-performing operation at each care environment.



FIFTEEN YEAR TOTAL
$226 MILLION
SAVED WITH COB PRACTICES

THE IDEAS CREATE EXCELLENCE SUGGESTION BOX

Located on the employee intranet, the ICE Box is designed to stimulate employee ingenuity, expertise and knowledge into measureable results that shape the future of our organization.

In 2012, 132 ideas (up from 122 ideas in 2011) were assigned to Executive Vice Presidents, adding $147 million to the total savings of $343 million.

The ultimate goal is an evolution to a culture that continually identifies opportunities in all areas and at all levels within Carolinas HealthCare System, especially mid-level management and above, focused on more efficient and productive work.

LEAN PRACTICES

Lean practices provide the safest possible environment for workers, remove wasteful practices from operating processes, reduce wait times, and maximize process performance, throughput and consistency.

We use Lean practices to drive focused process transformation in areas that include:

- Laboratories
- Pharmacies
- Medical Practices
- Emergency Rooms
- Inpatient Nursing Units

The approach uses the collective knowledge of all workers in those areas. A process for "managing for daily improvement" was established. The process includes daily performance reviews on key metrics, and daily discussion of performance lags and improvements. Management and staff are trained on how to make daily improvements impacting key metrics.

Daily improvement approaches are paired with week-long improvement sessions reserved for more complex problem solving. Groups of workers, customers and support individuals assess, identify change ideas, pilot the ideas and implement changes by the end of the week. These sessions are also used for efficient design of new facilities and renovation projects. During the week, support personnel and workers who will inhabit the new space assess work flows and build the space using cardboard. The work is then simulated and the cardboard work-space is adjusted or rebuilt until all participants are comfortable with the final design. This hands-on approach has yielded savings in floor space, late and expensive design changes, and capital and operating costs.

COST AND EFFICIENCY

Overall, the Lean work at Carolinas HealthCare System has saved our organization nearly $12 million in operating costs and significant capital costs. Some specific successes include:

- Three Touchstone Gold Awards for quality improvement
- Reduction of average length of stay and improved "discharge within three hours" rates in the Emergency Department
- Reduced window prescription processing time
- Improvement of transportation safety for post-operative open heart pediatric patients
- Reduction of surgical instrument processing defect rate by 21 percent
- Improvement of inpatient "discharges within two hours of physician order" from 36 to 68 percent
- Reduction of registration processing time by 50 percent at a Pediatric Specialty Clinic
- Reduction of prescription fill times at a retail pharmacy by 47 percent
- Improvement in inventory turns at the System's mail order pharmacy

BUSINESS INNOVATION

Carolinas HealthCare System and Edison Nation teamed up to form Edison Nation Medical in 2012. The joint venture was created to stimulate innovations in healthcare delivery and improvement in patient care. This combination provides a unique and creative platform for physicians, nurses, and patients and their family members to submit their best ideas to further medical innovation and technology.

Edison Nation is a Charlotte-based product developer and online social community for inventors. Currently, Edison Nation partners with major retailers and manufacturers such as Proctor & Gamble, Clorox, Mattel, Colgate and Bed, Bath & Beyond, as a catalyst for companies to find new products to develop and sell.

In 2012, more than 600 ideas were submitted and are currently being assessed by the Edison Nation Medical team.

Other business innovation activities pursued during 2012:

- An Innovation Leadership Board was formed and a new coordination model was developed to align all innovation groups across the System.
- The Innovate to Greatness event brought together 250 leaders from around the System to learn about "Accelerating Change in Healthcare."
- Extensive innovative design work began on three major initiatives: care transitions, patient waiting experience and health literacy training for nurses throughout Carolinas HealthCare System.
- More than 200 ideation/prototyping sessions were held, touching nearly 3,000 participants.
- We joined the Innovation Learning Network, a collaboration that includes 25 of the most innovative healthcare organizations in the country.
- The Leadership Development retreat, attended by more than 1,500 organizational leaders, focused on the topic of innovation, with a keynote lecture by Tom Kelly of IDEO.

INITIATIVES	Patient Safety	Clinical Outcomes	Patient Experience	Clinical Efficiency
Acute Care Length of Stay				✓
Acute Myocardial Infarction Care		✓		
Adult Ketogenic Diet Clinic		✓	✓	
Appropriate Care Measures	✓		✓	✓
Bariatric and Metabolic Services		✓		✓
Behavioral Health Services Expansion		✓	✓	
Best Fed Beginnings Program				✓
Cancer Patient Navigator Academy		✓	✓	
Cancer Treatment Guidelines		✓		✓
Catheter-Associated Urinary Tract Infections (CAUTI)	✓			
Central Line Blood Stream Infections (CL-BSI)	✓			
Clinical Trials	✓	✓		
Computerized Physician Order Entry (CPOE)				✓
Corporate Health Services			✓	✓
Dementia Diet Program		✓		
Diabetes Care Delivery Model		✓		✓
Dickson Advanced Analytics Group		✓		✓
Disease Specific Certifications	✓			
Early Elective Newborn Delivery		✓		
Extracorporeal Membrane Oxygenation Care		✓		

SUMMARY OF INITIATIVES, 2012

INITIATIVES	Patient Safety	Clinical Outcomes	Patient Experience	Clinical Efficiency
Edison National Medical Program			✓	✓
eHealth Strategy			✓	✓
Emergency Department Patient Satisfaction Surveying			✓	
Emergency Department Length of Stay				✓
Emergency Patients Left Without Being Seen by Provider	✓			✓
Emergency Services Expansion	✓	✓		✓
Employee On-Site Care		✓	✓	
Employee Wellness		✓	✓	
Evidence-based PowerPlans				✓
Fragility Fracture Program	✓	✓	✓	
Get with the Guidelines Stroke Care	✓	✓	✓	
HCAHPS Surveying			✓	
Health Literacy		✓	✓	
Heart Failure Care		✓		
Hernia Repair Surgery Mobile App	✓	✓	✓	
HIMSS Stage 6 Certification	✓	✓	✓	✓
Hospital Acquired Conditions (HAC)	✓	✓	✓	
Hospital Engagement Network	✓	✓	✓	✓
IHI Global Trigger Tool	✓			
Infection Prevention	✓	✓	✓	

INITIATIVES	Patient Safety	Clinical Outcomes	Patient Experience	Clinical Efficiency
Inpatient Satisfaction Surveying			✓	
Integration of Services – Pediatrics and Cardiology			✓	✓
Intensivist Program	✓	✓	✓	
Interactive Patient Care Technology	✓		✓	✓
International Medical Outreach Program		✓	✓	
International Virtual Communication Between Providers				✓
Lean Procedures			✓	✓
Levine Cancer Institute Academic Center		✓	✓	✓
Meaningful Use				✓
Medication Reconciliation	✓			
Medication Safety	✓	✓		
Methicillin-resistant Staphylococcus aureus (MRSA)	✓	✓	✓	
Mobile Applications			✓	
MyHealth Online			✓	✓
Outpatient Satisfaction – Primary Care			✓	
Outpatient Satisfaction – Specialty Care			✓	
Outpatient Satisfaction Surveying			✓	
Pain Management		✓	✓	✓
Paired Kidney Transplants		✓		

SUMMARY OF INITIATIVES, 2012

INITIATIVES	Patient Safety	Clinical Outcomes	Patient Experience	Clinical Efficiency
Palliative Care Consults	✓	✓	✓	
Patient Online Portal			✓	✓
Pediatric Bone Marrow Transplant Program		✓	✓	
Pharmacy Clinics		✓	✓	
Pneumonia Care		✓	✓	
Pressure Ulcer Prevention	✓	✓		✓
Primary Care Delivery Expansion			✓	✓
Readmission Reduction		✓		✓
Research Grants		✓		✓
Ruptured Abdominal Aortic Aneurysms		✓		
Skilled Nursing Facility Care Collaboration		✓	✓	✓
Surgical Care Improvement Project	✓	✓	✓	
Surgical Safety Checklist	✓	✓		
TeamSTEPPS Teamwork Training	✓			
Telepsychiatry Services		✓	✓	✓
Trans-Catheter Aortic Valve Replacement		✓		
Trauma Prevention	✓	✓		✓
Ventilator Associated Pneumonia	✓	✓		
Women's Center for Pelvic Health		✓	✓	✓

The value that Carolinas HealthCare System brings to our patients and communities is reflected in the numerous awards and recognitions that we have received.

HEALTHGRADES AWARDS

- Healthgrades recognized Carolinas Medical Center, Carolinas Medical Center-NorthEast, and Stanly Regional Medical Center with the 2012 **Patient Safety Excellence Award**. This award is based on 13 Patient Safety Indicators (PSIs) and reflects performance from data from 2009 and 2010.
- AnMed Health earned recognition as one of the winners of Healthgrades' **America's 100 Best Hospitals Award**.
- Carolinas Medical Center was recognized as one of **America's Best Hospitals for Specialty Care™.**

TRUVEN AWARDS

- In 2012, *Truven* (formerly Thomson Reuters) measured **quality and efficiency** among 255 health systems nationwide. Carolinas HealthCare System performed in the top decile for the 24 acute care hospitals that were part of the system in 2011. *Truven* reports are based on objective, quantitative metrics from independent research and public data sources. The top performers saved more lives, caused fewer patient complications, followed industry-recommended standards of care, made fewer patient safety errors, released patients half a day sooner and scored better on patient satisfaction scores than their competitors.
- AnMed Health earned recognition as one of the **Top 100 Hospitals** hospitals by *Truven*. Annually, the publication produces a report of the nation's top performing hospitals and summarizes the results of an evaluation covering a total of 10 performance areas, including:
    - Mortality
    - Medical complications
    - Patient safety
    - Average patient stay
    - Expenses
    - Profitability
    - Patient satisfaction
    - Adherence to clinical standards of care
    - Post-discharge mortality
    - Readmission rates for AMI, HF and PN

U.S. NEWS & WORLD REPORT AWARDS

- Levine Children's Hospital was ranked by *U.S. News & World Report* as being among the **50 Best Children's Hospitals** in the nation for pediatric care in cancer, cardiology and heart surgery, gastroenterology, neonatology, nephrology and orthopedics.
- Bon Secours St. Francis Hospital and Roper Hospital were recognized by *U.S. News and World Report* as among **America's Best Hospitals** in adult specialties in 2012.
- *U.S. News & World Report's* annual ranking lists Carolinas HealthCare System Rehabilitation in the **Top 25 Inpatient Rehabilitation Hospitals**.

AWARDS AND RECOGNITIONS

OTHER AWARDS AND RECOGNITIONS

- Carolinas HealthCare System attained **51 disease-specific care certifications**, more than any other integrated delivery network in the nation. Carolinas HealthCare System was first in the nation to obtain seven of the certifications and first in North Carolina to obtain eight of them. Certification requirements address compliance with consensus-based national standards, effective use of evidence-based clinical practice guidelines to manage and optimize care, and the creation of an organized approach to performance measurement and improvement activities. These certifications help create improvements across defined patient populations and are a valuable tool for our organization to formalize quality improvement efforts.
- Carolinas HealthCare System transplant programs received **national recognition for quality outcomes** from the **Health Resources and Services Administrations**, a subsidiary of the U.S. Department of Health and Human Services. Carolinas Medical Center is the only hospital in North Carolina to receive recognition for three programs: heart, liver and kidney-pancreas. The heart transplantation program at Carolinas HealthCare System's Sanger Heart & Vascular Institute has seen a one-year survival rate of 96 percent in adults and 100 percent in pediatric patients. The one-year survival rates for kidney-pancreas and liver transplants are 90 percent and 86.4 percent, respectively, which rank in the top quartile nationally. Carolinas Medical Center and Carolinas Medical Center-NorthEast received the **Medal of Honor for Organ Donation** for achieving and sustaining national goals for donation.
- Carolinas HealthCare System received seven **Top Performer** awards from the **Professional Research Consultants** (PRC). These are awarded to "hospitals, areas or units that meet or exceed the 100 percentile ranking, on the Overall Quality of Care question." Carolinas HealthCare System also had **108 five-star awards** (exceeding the 90 percentile ranking) and **12 four-star awards** (exceeding the 75 percentile ranking).
- Several Carolinas HealthCare System hospitals made the **2012 Cleverly+Associates Community Value Leadership Awards**. The awards were based on financial viability and plan reinvestment, hospital cost structure, hospital charge structure and hospital quality performance. **Community Value Top 100**:
    - Carolinas Medical Center
    - Carolinas Medical Center-Mercy
    - Carolinas Medical Center-University
    - Carolinas Medical Center-Union
    - Harris Regional Hospital
    - Scotland Memorial Hospital
    - Wilkes Regional Medical Center
    - Columbus Regional Healthcare System
- 2012 marked the 15th year that Carolinas Medical Center received the **National Research Corporation** award for **overall quality and image**. This is the nation's largest and most comprehensive study of its kind, covering 300 markets throughout the U.S. In 2012, as part of the eHealth strategy, the patient portal *MyCarolinas* was deployed, providing patient access to medical records and online interaction with their physicians.
- ***Becker's Hospital Review***, a publication providing current business and legal news and analysis relating to hospitals and health systems, named Carolinas Medical Center and Carolinas Medical Center-NorthEast on their list of **Top Great 100 Hospitals**. The *Becker's* editorial team accepted nominations, conducted research and considered other recognized industry sources.
- **The Society of Chest Pain Centers**, a national accrediting organization that promotes best practices in emergency cardiac care, awarded nine hospitals in Carolinas HealthCare System as **accredited Chest Pain Centers**.
- Carolinas HealthCare System was ranked among the top **Most Wired** health systems by ***Hospitals & Health Networks*** *(H&HN)* for the ninth consecutive year.
- ***InformationWeek*** is a national trade publication that serves the information technology industry. Carolinas HealthCare System was selected for the seventh consecutive year as a member of the **Top 250 Innovators** list.

Patient Safety

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