Operational Innovation Drives Clinical Integration

2011 Acclaim Award Honoree Carolinas Physicians Network

Editor’s Note: In September 2011, Carolinas Physicians Network was named an honoree for the American Medical Group Foundation’s 2011 Acclaim Award for its initiative “Operational Innovation Drives Clinical Integration.”

Carolinas Physicians Network (CPN) is part of Carolinas HealthCare System (CHS), one of the leading health systems in the southeast and the second largest public, not-for-profit system in the nation. CHS is the largest employer in the Charlotte, North Carolina metro area. The organization owns, leases, or manages 33 hospitals, directly employs more than 1,700 physicians and more than 300 residents and fellows, and serves patients at more than 600 care locations including physician practices, freestanding emergency departments, outpatient surgery centers, pharmacies, laboratories, imaging centers, and other facilities.

The primary service area contains approximately 1.6 million people across 15 surrounding counties in North and South Carolina. CHS currently holds approximately 55 percent of the market share in its primary service area. The secondary market has approximately 3.5 million people. The health system comprises more than 6,300 licensed beds and employs more than 48,000 people with combined annual net revenues in excess of $6.5 billion. Its flagship facility, Carolinas Medical Center, located in Charlotte, is one of only five academic medical center teaching hospitals in the state and is designated as the satellite campus of one of the top medical schools in the region, The University of North Carolina School of Medicine.

From 2005 to 2010, the network grew dramatically while simultaneously demonstrating improved care coordination, patient and provider satisfaction scores, and appropriate care measures.

CPN provides care through over 2.4 million patient visits each year in its physician practices, in specialties as varied as adult and pediatric primary care, urgent care, cardiology, gastroenterology, dermatology, endocrinology, rheumatology, pulmonology, and hospitalist services. From 2005 to 2010, the network grew dramatically from 104 sites and 395 physicians to 212 sites and 731 physicians, while simultane-
Recognizing that the physician network serves as the primary gateway for patients to access the healthcare system, expanding the network by adding locations to serve high growth suburban areas and growing demographic groups, provided an opportunity to care for a greater number of patients.

The lack of clinical integration between the physician network and the healthcare system created opportunities for improvement, including sharing clinical information and operational best practices and refining care coordination across inpatient and outpatient settings.

Acknowledgement that a co-leadership approach, between physicians and management, was absolutely instrumental in driving physician engagement in this cultural transformation. Therefore, an evolution from a “physicians as customers” to “physicians as partners” mindset was required.

The critical need for actionable information drove the required development and implementation of a data warehouse to transform raw data from multiple applications into meaningful information distributed to the right person at the right time.

The driving forces behind the clinical integration initiative led to the development of the healthcare system’s six strategic priorities: Electronic Medical Records (EMR); Single Unified Enterprise; Enterprise-Wide Quality; Patient Relationship Management; Efficiency and Productivity; and Physician Partnership.

These six priorities align very well with the Institute of Medicine Aims and the six attributes of an ideal healthcare delivery system, as identified by the Commonwealth Fund Commission on High Performance Health Systems.

Once the aspirational vision for the network role within CHS was defined, a systematic approach to organizing People, defining Process and establishing Priorities was created to drive execution.

People
CPN has four core sets of leadership teams with differing responsibilities:

1. **Performance Enhancement Team:** The Performance Enhancement Team is responsible for specific initiatives and tactics to drive clinical integration, such as EMR implementation and usability improvements, quality and safety, enhancing the patient experience, and care coordination.

2. **Data Warehouse Team:** The data warehouse team, with expertise in data analysis and business intelligence, was hired to lead the team and drive the development and implementation of a data warehouse, which provides measurement, improvement, and accountability.

3. **Practice Management Team:** The practice managers at each group partner with assistant vice presidents, who are each responsible for 8-10 groups, and vice presidents who are each responsible for approximately 150 providers. These individuals are responsible not only for day-to-day management but also for practice growth and expansion and for sustaining the ongoing performance of all initiatives implemented by the performance enhancement team.

4. **Physician Leadership Team:** This team primarily partners with the practice management team in leading physicians, aligning individual provider goals with group goals, and determining Physician Network goals with a primary focus on quality and service.
physician network embarked on a comprehensive physician leadership engagement plan in 2009 that included the following:

- Creation of the group medical director role (80 people): A position description was developed, compensation was established and each group selected its own group medical director to provide physician leadership.

- Appointment of specialty medical directors (5 people): These positions were appointed by CPN executives to supply physician leadership in family medicine, internal medicine, OB/GYN, pediatrics, and urgent care. These individuals chair a quarterly specialty meeting with all group medical directors in their specialty in attendance.

- Inclusion of the large group medical directors (5 people): These physician leaders oversee the five largest groups in the network.

### Process

Prior to the start of every fiscal year, the entire leadership team participates in a planning process to establish annual goals and objectives for the physician network. This is a collaborative process that begins with evaluating current and proposed initiatives, as well as the prior years’ baseline performance on key metrics. The goals are objective, quantifiable and, to the extent possible, measured against external benchmarks such as patient and provider satisfaction surveys, as well as employee commitment indicators.

The physician network goals are then cascaded to each divisional leader, resulting in five to six goals for each of our specialty/large group medical directors, vice presidents, assistant vice presidents, directors, practice managers, and leaders of the performance enhancement team. These goals also serve as a strong financial incentive for the leadership team, as a portion of each leader’s total compensation is tied to the achievement of his or her goals.

There are keys to managing a network that includes more than 200 sites, 900 providers, and 3,700 employees. Strong leadership and a highly sophisticated reporting tool, which communicates results at a provider, site, group and network level (data warehouse) result in an informed and empowered network. A sequential communications structure that begins with the senior leadership team ultimately ensures that common messages and themes are communicated to every provider and staff member in their monthly site meetings.

### Priorities & Results

**EMR**

An internal EMR design/implementation/support team was created in 2006, and fully integrated within the physician network, placing the network in the best position to maximize physician adoption and utilization of a “patient-centric” longitudinal EMR. This team was composed of staff members who primarily had operations experience, versus an IT background. Its primary focus was training and supporting the physicians and their staff in the utilization of the new electronic workflows. Classroom training, coupled with elbow-to-elbow support, allowed the physicians to learn and hard-wire new processes while they continued to care for their patients. The EMR team standardized all best practice workflows during all implementations.

Several months prior to each practice’s implementation, the team conducted a kick-off meeting to communicate the EMR longitudinal record vision and demonstrate the tool to the physician group. These meetings were led by the EMR medical director, able to provide the perspective of a practicing physician who was using the system each day to see his patients. This communication strategy enabled physicians to discuss any perceived issues or fears
directly with a physician colleague. These meetings provided effective communication, garnered physician support, and maintained the implementation timeline. Physician leadership was recognized as essential to the continued success of the EMR implementation. The physician leadership team was expanded to include a representative from the four main specialties (internal medicine, family medicine, pediatrics, and OB/GYN). Through this physician leadership team, the organization can develop and pilot all new EMR content, improve system usability, and facilitate physician communication. As a result of these efforts, CPN anticipates successful attestations for meaningful use in 2012 on behalf of more than 300 providers.

Single Unified Enterprise

To ensure maximum care coordination for the 700,000 patients under management by CPN practices, it was essential to create a single, unified approach to care coordination. Historically, the practices had operated as silos without coordinating patient care across the healthcare system. The new approach put the patient at the center of the care coordination process, ensuring a consistent approach in all practices. Because outside vendors could not offer a product aligned with the healthcare system’s vision of true clinical integration, a team within the Physician Network developed a proprietary, web-based care coordination management program or portal.

Of the total patients, more than 20 percent received a referral in 2010. Each year more referrals are captured in the tool (30 percent more in 2010 vs. 2009). In addition, referrals to the healthcare system’s preferred providers increased to more than 85 percent in 2010.

Enterprise-wide Quality

In 2006, 56 diabetes and 62 heart/stroke providers in the network successfully achieved the first of CHS’s many NCQA recognitions. Over the next four years, the number of recognized providers has grown to include 194 providers in diabetes and 140 providers in heart/stroke, helping to boost North Carolina’s NCQA ranking to number 3 in the country. As of December 2010, 94 percent of eligible providers hold the diabetes recognition, and 96% of eligible providers maintain heart/stroke recognition.

In 2008, the first year the network submitted Physician Practice Connections (PPC) applications to NCQA, 32 providers achieved the distinguished Level 3 PPC recognition. Within two years, a total of 124 providers were recognized with...
Level 3 PPC. Starting in late 2010, the organization began the transition to the NCQAPPCC-Patient Centered Medical Home (PPC-PCMH) recognition application. By December 2010, 46 pediatricians, 32 internal medicine, and 88 family medicine providers had achieved the Level 3 Medical Home distinction. As of 2012, a total of 74 practices were recognized as Patient Centered Medical Homes by the NCQA, representing nearly 400 providers.

Performance and outcomes related to the network’s poorly controlled diabetic population ($Hgb A1C >9$) has improved. Poorly controlled diabetes patients dropped from 13 percent of the population in 2008 to a low of 10.1 percent at the end of 2010. During the same period, the number of patients with diabetes under management swelled from 30,000 to nearly 40,000.

In 2010 an Appropriate Care process measure set (14 elements) was developed to measure overall clinical performance in diabetes, CAD/IVD, heart failure, and asthma. A manual chart audit of 12,000 charts per quarter was completed to measure performance in these four disease states at a group level. Based on a focused effort on measurement, education, process improvement and physician leadership, results have improved dramatically from the 2010 baseline performance, as highlighted in Figure 1.

Patient Relationship Management

From 2005 to 2010, CPN grew the urgent care service line from eight sites to 17 sites in an effort to extend the medical home and give patients access to coordinated care after hours and during weekends. Through urgent care locations, CPN was able to identify potential new patients and place them within a medical home. Additionally, CPN focused on supporting the medical home by using a patient-centric continuity model to facilitate the unique, enduring relationship between a patient and his or her physician.

In 2006, CPN embarked on a customer access initiative aimed at reducing patient barriers and improving access to the appropriate healthcare resources. Whether it was calling the provider’s group to ask a question, reaching a nurse after hours, booking an appointment online 24/7, or receiving assistance in finding a medical home provider, the goal was to connect patients to “the right person, at the right place and the right time.” The planning and implementation of the customer access initiative involved a team of former practice managers, supervisors, and information services staff, hired to manage and coordinate all aspects of the patient experience. Several programs were implemented in a staged approach. They aimed to reduce variation among the medical groups while prioritizing local group cultures.

The leading metric for success with the patient relationship programs has been patient satisfaction. Other metrics include the number of calls answered within three rings through the Live Answer initiative (see Figure 2), number of patients recalled for overdue care through the Reminded Care model, no-show rates for direct scheduled appointments, and the number of patients placed in a medical home for post-ED or urgent care follow-up. Patient satisfaction is collected by independent surveys. Other statistics are compiled through a combination of reports from the telephony technology, internal databases, and the practice management and billing system.

Efficiency & Productivity

Prior to the creation of the data warehouse, practice managers spent countless hours compiling, interpreting, and entering data into spreadsheets with little or no time for analysis and action. Comparative statistics were limited to previous performance, an often outdated budget, and few productivity and financial benchmarks. Much of management’s focus concentrated on volumes, rates, and expenses, as those were the only data elements available on a consistent basis. The ambulatory data warehouse was developed with the physician network as the corporate sponsor and support from the Information Services department, and with data warehouse expertise from the acute care world. Development began with a meeting of key business stakeholders to understand existing capabilities, define missing gaps, and prioritize goals.

Physician Partnership

As part of the physician leadership engagement plan, CPN created a co-leadership structure, pairing a group medical director with a practice manager at each of the 145 groups. The physicians at each group selected the group medical director from among their peers, and the physician appointed received an annual stipend for these additional responsibilities.

One specialty medical director was chosen from each of five main primary care specialties—family medicine, internal medicine, obstetrics/gynecology, pediatrics, and urgent care. They provide leadership to the group medical directors within their specialty. Specialty medical directors are appointed by the Physician Network, and they maintain an indefinite staff role reporting to the Physician Network medical director. Each quarter, the specialty medical director leads a meeting of the group medical directors within their specialty with a focus on accountability, efficiency, and best practices. As a result of this communication and leadership platform, CPN has been able to improve in many areas of performance. One example of this is improvement in patient satisfaction—in 2009, scores improved six straight quarters.

In addition to the creation of a leadership structure, CPN created a Co-Leadership training program. Every group medical director and practice manager duo attended a compulsory six-session training
program, preparing them to co-lead their practice. This program included two-hour trainings in each of the following competencies: mission/vision/strategy, collaborative leadership, quality/process improvement, physician recruiting/mentoring/staff development, managing disruption, and business decision making.

Strong physician leadership and engagement is the cornerstone of any high-performing physician network. The key metrics used to measure physician partnership include physician compensation, turnover and satisfaction. The physician network utilizes an annual Provider Satisfaction survey to annually assess and benchmark overall satisfaction. The 2010 physician satisfaction results reflect an overall partnership score of 79.0, representing the 85th percentile nationally (see Figure 3).

**Conclusion**

Through the hard work of the four core sets of leadership teams, all sharing Carolinas HealthCare System’s vision of value creation for patients, Carolinas Physicians Network was able to preserve the best of individual group cultures while aligning toward a unified focus on enduring patient relationships, superior customer service, and clinical excellence.

*Adapted from the 2011 Acclaim Award Application of Carolinas Physician Network submitted by Senior Vice President Dan Wiens.*