

CASE STUDY



Cooper Health System Healthcare Institution

Southern New Jersey

With CareScience Quality Manager, Cooper Health was able to evaluate clinical process performance and conduct opportunity analyses to determine how to provide the highest quality of care to its patients. From these findings, Cooper was able to set specific targets for senior management, establish clinical improvement goals and implement a three-phase plan of action.

Cooper Health The Organization

The Cooper Health System is a premier provider of comprehensive health services and advanced medical technology in southern New Jersey. It consists of a regional hospital and an extensive ambulatory care network, including practice sites across eight counties in southern New Jersey. The only clinical and core teaching facility in the area, Cooper has become a national leader in medical education and research. Its 544-bed acute care facility provides a full continuum of primary and tertiary care, innovative diagnostic and treatment options, and access to cutting-edge research and protocols. As a Regional Referral Center and Level 1 Trauma Center, the hospital receives more than 70 percent of critical care transfers in southern New Jersey, focusing on complex services such as trauma, critical care, cardiology and orthopedics.

Cooper's ongoing mission has been to provide the highest quality of clinical services to its patient population to help build a healthier community. However in 1999, Cooper was forced to significantly reduce its Outcomes and Quality Performance Departments due to market conditions and financial performance. As a result, performance improvement became fragmented and isolated, provided little value, and had minimal support from executive management or physician leaders. It also resulted in the loss of proper quality-focused resources and key skill-sets, such as clinical data analysis for performance improvement. Despite Cooper's achievement of a \$40 million turn around

and a positive net margin in 2002, its long-run market position and mission remained at-risk.

Opportunity to Improve

Having achieved financial stability, Cooper wanted to attack its quality improvement problem aggressively. The organization believed it should make quality the centerpiece of its market strategy to address three key objectives: to gain true, sustainable market-advantage; to improve patient care quality and efficiency; and to maintain corporate competencies to grow physician affinity, and operational excellence, while maintaining its safety-net focus and positive operating margins.

Cooper approached CareScience, a leading care management solutions provider and an expert in care management design. CareScience provided an initial assessment to identify the elements required to implement a coordinated, data-driven care management program built on Cooper's existing organizational strengths. The assessment consisted of interviews with key leaders and management staff and a thorough review of business plans, organizational charts, performance improvement plans and quality flow reports. CareScience employed the use of a peer-based dimensional rating system that scored the hospital on nine functional areas (Culture, Organization, Leadership, Strategy, Staff, Information, Process, Incentives and Accountability).

The results of this dimensional assessment were compared to a knowledge base of more than 50 other organizations. Based on the findings,



CARESCIENCE

A QUOVADIX DIVISION

CASE STUDY

“We wanted to make quality the center of our organizational strategy. We were looking for a partner who could address our organization at all levels, had proven methodologies and results in academic settings, and could offer services wrapped around its information systems. Our strategic sourcing partnership with CareScience offers joint incentives that ensure an active partnership and tangible results for both organizations.”

Simon Samaha, M.D.
Acting Chief Operating Officer
Cooper Heath System

CareScience recommended that Cooper aggressively implement a care management infrastructure in three sequential phases:

1. Mandatory Quality Reporting;
2. Performance Improvement; and
3. Care Management

The three-tiered infrastructure would be implemented in a five-year period via a unique strategic sourcing partnership model. The strategic sourcing model would allow CareScience to work side-by-side with Cooper to provide strategic vision, leadership and care management support. The key characteristics of the sourcing partnership included:

Alignment, Leadership and Strategic Development
Dedicated CareScience professionals, working with Cooper, would help obtain physician buy-in, define strategic goals and metrics, establish yearly targets to measure success and select the best types of interventions.

Deployment of On-site Staff
Full-time, on-site CareScience staff would report directly to Cooper’s executive team and blend seamlessly into the organizational infrastructure of the hospital.

Specialized Technologies
The CareScience Quality Manager would be installed to enable data management, performance measurement, risk assessment and patient care management.

Gain-and-Risk Sharing
A metric driven gain-sharing agreement would be developed to drive return on investment for Cooper, but allow CareScience to benefit when key metrics are achieved.

This approach was not a significant new cost outlay. While each phase would require some

incremental investment from Cooper, it would offer an associated return on investment from efficiencies gained, errors averted and risks mitigated.

The Process

With industry experts in place and executive and clinical leadership in agreement, implementation began. Implementation occurred in three phases.

Phase 1: Implementation
Mandatory Quality Reporting
(6 months)

CareScience hired, trained and placed staff onsite at Cooper to develop a performance plan for mandatory quality reporting targets and for the involvement of the clinical team. The plan detailed the new staff’s roles and responsibilities and how they would integrate into existing departments. The new plan and staff were then introduced to the board, senior leadership, medical staff, management teams and department managers.

Cooper’s Joint Commission on Healthcare Accreditation of Healthcare Organization’s (JCAHO) survey was scheduled to take place in eight months. The team established a goal of receiving zero “Type I Recommendations” on the Improving Organizational Performance standards section of the survey. This goal served as the first year’s key metric for success.

At the same time, CareScience installed the CareScience Quality Manager. All relevant staff was trained on how to use the solution to begin generating and analyzing performance data. To improve the hospital’s overall score in the areas of Performance Improvement, Leadership and Medical Staff, CareScience conducted mock surveys to assess compliance with standards, any required changes and the potential exposure to any negative survey findings. Once this assessment





was completed, the team met weekly to develop an action plan and timeline to address any potential Type 1 Recommendation findings. Accountability for each action item was defined and communicated across departments, and status reports were communicated regularly to the Board of Trustees, steering committees and senior leadership at the hospital.

Top Reviews

In January 2003, Cooper received top reviews on its JCAHO survey, including no Type I Recommendations related to CareScience's accountability for Improvement of Organizational Performance. The Cooper team was able to achieve this goal because they had access to CareScience expertise, the appropriate level of resources and their management's support.

Phase 2: Implementation

Performance Improvement
(6 months)

After implementing an infrastructure for mandatory quality reporting (phase one), the team turned its attention to building the second tier of the infrastructure for Performance Improvement.

The team established year-two performance improvement targets in the clinical areas of: stroke, atrial fibrillation, and coronary artery bypass graft procedures, and in the operational areas of: Emergency Department Throughput, Radiology Turnaround Time for MRIs and CT Scans, and Operating Room Throughput. In conjunction with phase two, CareScience expanded the team by hiring and training Outcome Managers to facilitate the care coordination and achievement of these targets.

The team continued to integrate the CareScience Quality Manager into the performance improvement staff's ongoing monitoring activities. Reports

generated from the system identified target patient populations with the greatest improvement opportunities. With this information, educational campaigns were designed to help address specific opportunities. These campaigns included a monthly newsletter on performance improvement, risk management, and patient safety and educational

With 200 stroke patients a year, a decrease of .5 days in length of stay, plus a radiology savings of \$50 per case, can save Cooper \$132,000 annually.

sessions for specialized medical staff. Organizational-wide education programs were also held on performance improvement methods.

Encouraging Results

The performance improvements made in the treatment of Cooper's stroke population are an encouraging example of phase two results. Original analysis revealed that the average length of stay for stroke patients at the facility was two days longer than expected. This was due to long turn around times for MRIs, a lack of practice guidelines and the high use of diagnostic testing.

To address these process short-comings, the team worked with radiologists to accomplish a 24-hour turn-around time for all MRIs. They also provided education on successful practice guidelines. These process changes can decrease a patient's length of stay by .5 days and radiology costs by \$50 per case.

Phase 3: Implementation

Care Management
(Currently underway)

In phase three, the team entered into early discussions on how to re-design their Care Management initiatives to support the final tier of

CareScience Solutions

CareScience Solutions help provider organizations take advantage of the vast data resources that often remain inaccessible or underutilized. With a deeper understanding and insightful analysis of your clinical and financial data, you can:

- *Pinpoint opportunities for care process improvement.*
- *Identify the cause of care process deficiencies.*
- *Develop measurable plans to improve care processes.*
- *Monitor your improvement initiatives to ensure success.*

For more information please visit www.carescience.com



CARESCIENCE

A QUOVADX DIVISION

3600 Market Street
7th Floor
Philadelphia, PA 19104
(888) 223-8247

the infrastructure. The risk-share targets for this phase will focus on increasing care coordination between three critical care management functions:

Care Management – performance improvement, JCAHO compliance, clinical excellence and regulatory reporting;

Loss Prevention – patient safety, evidence-based medicine, compliance and risk management; and

Care Coordination – denial management, discharge planning and utilization management.

The team will take six months to evaluate current care management processes and propose a plan for redesign and implementation.

Accomplishments to Date

The CareScience and Cooper sourcing relationship allowed Cooper to capitalize on the added resources, expertise and competencies of the CareScience organization. The shared-risk arrangement helped align incentives, which ultimately led to the realization of significant performance improvement. These improvements supported Cooper's initiatives to increase market share and payer preferences in strategic priority areas.

This experience sets the groundwork for a performance improvement infrastructure and the blueprints for the redesign of a comprehensive care management infrastructure at Cooper. Cooper is now able to set specific targets for senior management and drive the establishment of clinical improvement goals. Cooper also has access to

quality data via CareScience software which will provide performance, care process, outcomes and data mining opportunities in the future.

Benefits Beyond Original Goals

Nearly one year into the sourcing arrangement, the CareScience-Cooper partnership had accomplished defined milestones, but Cooper also experienced cultural and procedural changes that positively impacted the organization.

Change in Culture

In order for the Cooper-CareScience collaboration to be successful, the team had to tackle several issues surrounding organizational culture, turf, trust and the value of the services offered. To accomplish this, new staff members were integrated into the organizational structure at an early stage, policies, procedures, goals and targets were clearly defined, and an appropriate reporting structure was established to help create accountability for results and a culture of collaboration versus one that was punitive and retaliatory.

Strong Executive Sponsorship and Commitment

Performance improvement was incorporated into the overall strategic business plan. Strategic priorities and improvement targets were presented to the Board of Trustees, senior leadership, middle management and physician champions to ensure buy-in and cross-departmental support. This helped reverse the organizational-wide perception that change could not be effectively achieved and created both top-down and bottom-up support.

QUOVADX is a registered trademark of Quovadx, Inc. All other company and product names mentioned may be trademarks of the companies with which they are associated.

© Copyright 2005 Quovadx, Inc.
All rights reserved.