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BUILDING CARDIOLOGY CENTERS OF EXCELLENCE



“We knew that to be successful we would have to share data and outcomes, improve communication between clinical areas, and help each other address problems in care improvement that may be too big for one area to manage.”

—Pam Ragland, BS, RCIS
Cardiology Operations Manager
Heart and Vascular Center
Rockingham Memorial Hospital
Harrisonburg, VA

Impeccable Data and Collaborative Spirit Support Successful Quality Model

CV Service Line Sets the Standard for Enterprise-wide Programs at Rockingham Memorial Hospital

Highlights

Registry Participation a Cornerstone of Quality

Improvement. To track outcomes and improve care, Rockingham Memorial Hospital Heart and Vascular Center participates in numerous registries, using the LUMEDX Apollo system to automate data collection and submission.

Quality Initiatives Lead to Multiple Successes. After instituting a comprehensive quality model, the Heart and Vascular Center has achieved significant success: lower door-to-balloon times, improved Core Measures scores, improved Get With The Guidelines scores and more.

Heightened Spirit of Collaboration. The Heart and Vascular Center included physicians, clinicians and staff from across clinical areas in the development of quality programs. This has led to a heightened spirit of collaboration and a renewed sense of purpose.

Adoption of Heart and Vascular Center’s Quality

Model by Hospital as a Whole. Because the Center’s quality model has led to visible, quantifiable improvements, hospital administration is now adapting this model for other departments.



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The Heart and Vascular Center at Rockingham Memorial Hospital in Harrisonburg, VA, has developed a sophisticated, comprehensive quality-improvement model. This model—the product of years of analysis, collaboration and brainstorming—has yielded impressive results. Perhaps the clearest sign of success is the acceptance and approval of hospital Administration, which is currently adapting the H&V model for implementation across the enterprise.

Registry Participation Crucial to Quality

Cardiology Operations Manager Pam Ragland, BS, RCIS, explains the origins of the model, “It began as a multi-source push for improvement. The Quality Department was working on Core Measures across the facility; H&V was working for GWTG, ACTION (then Crusade) and ACC improvements. When financial impacts became apparent (i.e., from major payers), our Administration and Board of Directors also began to take interest in our outcomes and started a program through the Quality Department to help bring about physician compliance.”

The Heart and Vascular Center has been using the Apollo Advance™ data repository for several years. Automating data collection and registry submission has made it easier for staff to query clinical data and analyze outcomes. It has also streamlined the data collection-and-submission process, critical because the Heart and Vascular Center views registry participation as a cornerstone of quality. “We participate in many benchmarking databases: ACC-NCDR CathPCI, Get With The Guidelines, ACTION, Door to Balloon Alliance, STS and TJC/CMS Core Measures,” says Pam. “Others will be added as we continue to grow. We’re looking into NCDR ICD, Thoracic Surgery and multiple Vascular registries, both diagnostic and surgical.”

RMH HEART AND VASCULAR CENTER QUALITY MODEL

Six Key Components

1. Participation in benchmark databases: ACC CathPCI, GWTG, ACTION, D2B Alliance, STS, TJC/CMS Core Measures and others.
2. Analyze data and take action: focus on outliers vs. all data; select primary targets; appoint “action teams” to develop and implement solutions.
3. Collaboration across the Heart and Vascular service line, including any department where a cardiac patient may receive treatment.
4. Formation of the H&V Quality Care Committee: a collaborative avenue to share data, outcomes, address issues, improve communication between areas, and help each other address problems in care improvement too big for one area to manage.
5. Physician involvement.
6. Administration acceptance, approval of methodology and support.

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Ranked number one in Virginia by HealthGrades™, the Heart and Vascular Center has been committed to quality since its inception. However, past improvement efforts had occurred largely within individual departments. There was no system in place to enact broad changes. Recognizing that an effective quality campaign would require participation from all quarters, the Heart and Vascular Center worked to:

1. Enact a culture change; transmit a keen sense that everyone's contribution is critical to clinical successes.
2. Spread this change to other departments that closely affect H&V outcomes: CCU, Telemetry units, ED, etc.
3. Establish a committee inviting representatives from all areas; introduce data sharing, interpretations and goals. The H&V Quality Care Committee is comprised of:
 - Quality department, which is responsible for TJC/CMS Core Measures as well as ancillary entities.
 - One representative from each clinical area considered critical to the patient's care.
 - Ad hoc members as determined by improvement target.
 - Core group of about 10-12 members including the Cardiology Medical Director as Chair, H&V Cardiology Operations Manager as Co-Chair and the H&V Data Analyst for support.
4. Constantly evolve the data management, presentation and improvement process.
 - Focus on outliers vs. all data.
 - Select primary targets.
 - Appoint "action teams" to develop—or, where feasible, to implement—solutions.
 - Utilize Quality department, staff education, Administration and particularly Directors of various areas to help spread knowledge and process changes.
 - Keep this process as simple as possible and involve as few people as needed to create solutions.
5. Meet only when the data is ready; when stratified results and benchmarks are available, more informed decisions can be made.

Raise Awareness Across the Service Line, the Enterprise and the Community

"Within our own service line, we worked on a culture change. We had to get staff and cardiologists to accept that their participation was necessary for us to achieve our goals," explains Pam. "In addition, our Quality Model required collaboration across not only disparate Heart and Vascular departments, but across any hospital department where a cardiac patient may be treated: the ED, the OR, diabetes clinic, etc. We knew that

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to be successful we would have to share data and outcomes, improve communication between clinical areas, and help each other address problems in care improvement that may be too big for one area to manage.”

The committee began to acknowledge those who participated with public thank-yous, celebrations, etc. “We also started a series of articles in staff and physician publications to educate about guidelines, our improvement efforts and our successes. And we included occasional articles in our patient education publication that goes out quarterly throughout the communities we serve.”

This public relations effort has paid off. A wide cross-section of staff, clinicians and physicians now participate in the quality-improvement programs: Directors, those on the front lines in clinical areas, data extractors, physicians, the hospital Quality department—and many others. “And working with ED and CCU/Telemetry units has been key for us,” notes Pam.

Identify Data Trends and Take Action

When the H&V Quality Care Committee was established, its first meeting served primarily as ‘show and tell’ of data results. Shortly thereafter, Pam and the other members decided to focus on data as indicators of problem areas or trends rather than the data itself. They then gradually began excluding non-actionable information. “We select primary targets based on what the data tells us and then develop action plans,” Pam says.

They are also now beginning to use immediate data to improve care. “Our Data Analyst was able to help create a mechanism for concurrent data input which thus alerts to outliers while the patient is still in-house,” says Pam. “This is done in the Quality department. Their extractor then alerts that patient’s nurse or the unit charge nurse, and notice is passed to the patient’s physician. The outlier could be an omission from expected treatment modalities or just the lack of documentation as to why that patient should not receive that particular treatment.”

“I am starting to run internal data reports [as well as the registry reports]. These reports are specific to some of our H&V departments, but we are always looking for improvement within as well as across the Service

A QUALITY MODEL WITH HIGH-QUALITY RESULTS

Since implementing multiple quality initiatives, the RMH Heart and Vascular Center has achieved:

- Improved door-to-balloon times.
- Improved Core Measures scores.
- Improved Get With The Guidelines scores.
- Improved unit standing orders in CCU/ Telemetry.
- Improved data timeliness with concurrent reporting available.
- Standardized ED protocols.
- Improved EMS relationships.
- Increased physician participation in quality efforts.
- A heightened spirit of collaboration between departments across the Service Line.

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Line. We have IT solutions, such as the Apollo ACC and STS modules, for collecting clinical information; traditionally this has only been available through manual extraction, which is not efficient and timely,” says Pam. The committee knows that quality improvement hinges on collecting impeccable, accessible data in a simple, streamlined way.

Results: Door-to-Balloon Reduction, Higher GWTG Scores, Better Communication

“We’ve seen overall improvement in Core Measures (AMI/HF), in D2B times, in collaboration between departments,” Pam says. Other changes include: better Get With The Guidelines scores; improved data timeliness with concurrent reporting available; standardized protocols in the ED; Cath lab call team activation from the field (“We’re nearly there,” says Pam); improved process for inter-facility patient transfer; improved staff education.

Additionally, the culture change the committee has worked so hard to achieve has led to improvements that are less quantifiable but no less powerful. “We have improved EMS relationships. Improved physician participation. Improved communication across Service Line departments. Our cardiac care reputation is improved—per word of mouth, patient surveys, etc. And, best of all, we have improved collaboration between the departments in our Service Line.”

There are financial benefits to a successful quality model as well. “Patients are receiving more appropriate care in a more timely manner—thus there is less waste of resources,” says Pam. “Many payers provide ‘bonus’ incentives for participation in these benchmark databases; some are now moving to requiring specific score levels for these to apply. We believe that this will be a growing trend, and would like to be ahead of the curve when it arrives.”

The achievements of the H&V Quality Care Committee have not gone unnoticed. “We had some surprises,” Pam explains. “The first was the recognition and adaptation of this model by Rockingham Administration and the Board of Directors. And the second surprise: our committee now reports officially and directly to Administration and Board Quality Councils.” Pam notes that as the H&V model is adapted to other service lines, the spirit of collaboration spreads too—ultimately making it easier to improve quality of care across the enterprise.

KEY LUMEDX SOLUTIONS AT RMH HEART AND VASCULAR CENTER

- Apollo Advance™ Clinical Data Repository
- ACC Registry Module
- STS Registry Module