

# ACHIEVING SUCCESS IN QIO AND RURAL HOSPITAL PARTNERSHIPS

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Final Report  
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## EXECUTIVE SUMMARY

**Policy Background** - The Centers for Medicare and Medicaid Services (CMS), the federal agency that administers the Medicare program, contracts with a national network of 53 state-based Quality Improvement Organizations (QIOs) charged with assisting providers to meet designated quality improvement objectives. This is accomplished by engaging providers in quality improvement (QI) projects and by offering technical assistance, tools, and QI resources.

During the program's 8<sup>th</sup> statement of work (SOW) (August 2005 through July 2008), QIOs for the first time were explicitly required to assist Critical Access Hospitals (CAHs) and rural prospective payment system (PPS) hospitals, providing a unique source of technical assistance and access to resources for small rural hospitals. Specifically, the 8<sup>th</sup> SOW required that QIOs assisted CAHs and other rural hospitals in three areas:

- Encouraging non-reporting CAHs to submit clinical process data to the QIO Clinical Data Warehouse via QualityNet Exchange, a secure, CMS-approved web site for communications and health care quality data exchange between QIOs, health care providers, data vendors, and CMS clinical abstraction data centers;
- Supporting CAHs that already report to the QIO Clinical Data Warehouse in improving performance on an Appropriate Care Measure, a composite measure of care at the patient level for any one of three clinical topics, including Acute Myocardial Infarction (AMI), Heart Failure, and Pneumonia; and
- Assisting rural PPS hospitals and/or CAHs to improve organizational safety culture using the Agency for Healthcare Research and Quality's (AHRQ) Hospital Survey on Patient Safety Culture.

Although the 8<sup>th</sup> SOW offered considerable and concrete benefits for rural providers, the 9<sup>th</sup> SOW makes no specific provision for QIOs to assist rural and critical access hospitals in conducting quality improvement activities. Even though rural hospitals may participate in QIO activities, there is no specific requirement that QIOs engage rural providers in quality improvement initiatives.

**Purpose:** This report describes four case studies that highlight the strategies employed by QIOs to help small rural hospitals implement successful quality improvement initiatives. These case studies are presented with the goal of describing successful QIO-hospital relationships, where success is measured in terms of quality improvement. These relationships are spotlighted to emphasize the value that rural hospitals derive from the technical assistance offered to CAHs and small rural providers. As previously indicated, the 9<sup>th</sup> SOW does not require QIOs to engage rural hospitals in quality improvement initiatives. It is therefore unclear whether or not rural providers will continue to realize quality improvement gains, as described in this report.

**Methods:** Examples of hospitals that have collaborated with their state QIO and have achieved quality improvement objectives were identified primarily from discussions with staff from Stratis Health, the Minnesota-based QIO and the QIO charged with supporting the rural-focused activities of the Hospital Interventions Quality Improvement Organization Support Center (QIOSC). Semi-structured telephone interviews were conducted with staff from each of 4 QIOs that were identified.

**Summary of Findings:** Across all QIOs, several factors were found to contribute to successful performance.

- (1) In most cases the QIOs or CAHs collaborated with outside entities, such as professional associations, State Offices of Rural Health, and other QIOs and CAHs to leverage resources. In some cases outside funding was used to further QI objectives;
- (2) QIOs involved in these projects recognized that successful partnerships required a strong relationship with hospital leadership, and that these leaders served as QI advocates;
- (3) QIOs disseminated and encouraged the use of existing tools or resources as a means to reduce the costs associated with the provision of technical assistance as well as to standardize the provision of care.

**Conclusions:** The 9<sup>th</sup> SOW makes no specific provision for QIOs to assist rural and critical access hospitals in conducting quality improvement activities. Although the QIOs that were part of this study indicated that they would continue to offer assistance to these small providers and would attempt to include them in their hospital QI activities, they also stated that the lack of a specific rural task would likely limit them financially in responding to these providers' needs.

The rural hospitals interviewed for this study emphasized their limited resources and the benefits that they obtained by working with their state QIO. QIO staff allowed the hospital staff to extend internal quality improvement resources and to be more productive with those resources.

While findings from this study cannot be generalized to the larger population of QIOs and CAHs, results suggest that QIOs provide a valuable service to CAHs. By serving as QI mentors, QIOs are assisting in improving the quality of care available to persons residing in rural communities. It is possible that the foundation built by the QIOs as a result of these investments from the 8<sup>th</sup> SOW will continue to pay dividends into the future. However, without a rural mission in the 9<sup>th</sup> SOW it is unclear whether the QIOs will have the resources or incentives to continue to focus their efforts on small rural hospitals.

## **BACKGROUND**

The Centers for Medicare and Medicaid Services (CMS), the federal agency that administers the Medicare program, contracts with a national network of 53 state-based Quality Improvement Organizations (QIOs). Over the course of a three-year statement of work (SOW) with CMS, QIOs seek to improve the quality of care for Medicare beneficiaries by collaborating with health care providers to assist them in meeting evidence-based standards. This is accomplished by engaging providers in quality improvement (QI) projects and by offering technical assistance, tools, and QI resources. During the program's 8<sup>th</sup> SOW (August 2005 through July 2008), QIOs for the first time were required explicitly to assist Critical Access Hospitals (CAHs) and rural prospective payment system (PPS) hospitals, whereas, in the past, the demographics and health system infrastructure of each state drove CMS expectations of QIO activities.<sup>1</sup> As a result of the 8<sup>th</sup> SOW rural requirements, QIOs assisted CAHs and other rural hospitals nationwide in three areas of quality improvement:

- 1) Encouraging non-reporting CAHs to submit clinical process data to the QIO Clinical Data Warehouse via QualityNet Exchange, a secure, CMS-approved web site for communications and health care quality data exchange between QIOs, health care providers, data vendors, and CMS clinical abstraction data centers;
- 2) Supporting CAHs that already report to the QIO Clinical Data Warehouse in improving performance on an Appropriate Care Measure, a composite measure of care at the patient level for any one of three clinical topics, including Acute Myocardial Infarction (AMI), Heart Failure, and Pneumonia; and
- 3) Assisting rural PPS hospitals and/or CAHs in improving organizational safety culture using the Agency for Healthcare Research and Quality's (AHRQ) Hospital Survey on Patient Safety Culture.

Although the 8<sup>th</sup> SOW offered considerable and concrete benefits for rural providers, the 9<sup>th</sup> SOW makes no specific provision for QIOs to assist rural and critical access hospitals in conducting quality improvement activities. Even though rural hospitals may participate in various QIO activities, there is no specific requirement that QIOs engage rural providers in quality improvement initiatives.

## **PURPOSE**

The QIO program provides a unique source of technical assistance and access to resources for small rural hospitals, which often face a number of unique challenges in comparison to their larger and more urban counterparts. For example, their small staff size requires rural hospital employees to “wear many hats.” They may serve multiple job functions, affecting their ability to channel resources to new and emerging quality initiatives. Additionally, because they have fewer financial resources at their disposal (due in large part to low patient volume), monies are spent on the most essential expenses first, often leaving little available for quality improvement efforts beyond those required for licensing, accreditation, or reimbursement.

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<sup>1</sup> Eight QIOs were exempted from the rural requirement.

This report describes four case studies that highlight the strategies employed by QIOs to help small rural hospitals implement successful quality improvement initiatives. These case studies are presented with the goal of describing successful QIO-hospital relationships, where success is measured in terms of quality improvement. These relationships are spotlighted to emphasize the value that rural hospitals derive from the technical assistance offered to CAHs and small rural providers. As previously indicated, the 9<sup>th</sup> SOW does not require QIOs to engage rural hospitals in quality improvement initiatives. It is therefore unclear whether or not rural providers will continue to realize quality improvement gains, as described in this report.

## **SELECTION OF THE CASE STUDIES**

In this section we describe the approach used in identifying cases of successful initiatives that could be used to illustrate positive approaches to achieving quality improvements and to exemplify achievable relationships between QIOs and rural hospitals.

Assistance in identifying QIOs and hospitals for inclusion in this study was obtained from the American Health Quality Association (AHQA), the trade association for all QIOs, and from Stratis Health, the Minnesota-based QIO and the QIO charged with supporting the rural-focused activities of the Hospital Interventions Quality Improvement Organization Support Center (QIOSC). Representatives from both of these organizations support QIO activities and are aware of which QIOs are achieving the quality improvement goals established by CMS. Stratis Health and AHQA nominated the QIOs highlighted in this report based on their assessments of the effectiveness of the QIOs in collaborating with rural hospitals to achieve quality improvement objectives.

Semi-structured telephone interviews were conducted with staff from four QIOs. An interview guide was constructed to ensure that discussions with respondents covered each of the following essential elements:

- 1) the QIO's role in helping rural hospitals identify areas and initiatives for quality improvement;
- 2) the types and frequency of technical assistance offered by QIOs to rural hospitals;
- 3) major barriers and facilitators encountered in implementing rural quality improvement initiatives;
- 4) the extent to which QIO assistance contributed to measurable changes in hospitals' quality improvement performance; and
- 5) any other key factors identified by respondents as critical to forming successful QIO-rural hospital relationships.

In addition, to gain a better understanding of quality improvement initiatives from the provider perspective, QIO staff were asked to provide contact information for rural hospitals they had worked with during the 8<sup>th</sup> SOW so that interviews could be conducted with hospital representatives. Semi-structured interviews were conducted with a total of four rural hospital

representatives; a similar protocol to the one used for QIO respondents was developed. Interview notes were synthesized into four detailed case studies and reviewed for common themes, which are presented below.

### Case Study 1 – IPRO and Margaretville Hospital, New York Reporting of Quality Measures

During the 8<sup>th</sup> SOW IPRO, the New York State QIO, made a commitment to assist CAHs in reporting performance measures. Currently, PPS hospitals have financial incentives to take part in quality reporting initiatives as they get a full payment update if they report quality data. CAHs are not paid through the inpatient PPS. Therefore, they have no direct financial incentive to report their quality data. Nonetheless, IPRO determined that, in addition to having the data accessible for

***“We had to get everyone motivated, and had to deal with that completely. We tried to understand where each hospital was in thinking about quality and transparency. Our approach was to tell hospitals that this was an opportunity for them to develop QI infrastructure to get better, and to get better quickly. We told hospitals this would help them in the long run. It was a chance for them to learn and make improvements so that when CMS actually required them to report they’d be prepared. This approach really worked at all levels.”***

**- New York State QIO (IPRO) Representative**

quality improvement purposes, it was useful for CAHs to begin to report quality data in preparation for the future, since it appeared that CMS might require CAHs to submit performance data. At the time that IPRO began this initiative in 2005, only one of the 13 CAHs in the state was publicly reporting data and one was voluntarily reporting data.<sup>2</sup>

Staff at IPRO quickly determined that the most important step in promoting data reporting was building strong professional working relationships with hospital leaders. Communication with CAH staff occurred routinely through phone calls, e-mails, and, as needed, in-person meetings. Other critical relationships were established with stakeholders who had the expertise to assist the QIO in establishing relationships with CAHs in the state and who were capable of providing resources to promote public reporting; these organizations included, among others, the New York State Office of Rural Health, the State Office of Public Safety, and the New York State Association of Rural Health.

In devising their process redesign approach IPRO found it valuable to work directly - often in person - with the information technology staff available at each CAH. As part of the technical assistance offered, IPRO assisted CAHs in using the CMS Abstraction and Reporting Tool (CART), a system for the collection and analysis of quality improvement data. The CART system allows hospitals to meet CMS or The Joint Commission performance measurement requirements and to monitor quality improvement in areas such as acute myocardial infarction, heart failure, pneumonia, and surgical care performance.

In this QIO service area, the CAHs that were linked or part of a larger health system already had good information technology (IT) infrastructure and capacity, and required the least amount of assistance. At the other extreme, a small hospital did not have access to broadband, making the

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<sup>2</sup> Publicly reported data is disseminated by CMS via the Hospital COMPARE system. Performance data that is voluntarily reported is released to CMS, but is not made available to the public.



downloading of the CART tool an arduous process, despite the fact that it is available free-of-charge.

Given that access to technological resources and staff expertise differed substantially across hospitals, progress in reporting of performance data also varied. IPRO employed a change readiness model to ensure that each hospital received the type of assistance that was of most use to them. The QIO encountered little resistance from hospitals participating in this initiative; again, this lack of resistance was credited to time spent (prior to undertaking this initiative) in building collaborative relationships with hospitals and public partners.

Hospitals involved in this initiative had a strong history of collaboration. Even before working with the QIO on this initiative each hospital was involved as part of a CAH performance improvement network, where they would periodically meet to learn about and discuss quality improvement efforts.

***“Often, the problem is that people leave and there isn’t clear information and documentation about what needs to be done, how to do it, the process for reporting, etc... The hospital didn’t want this void of information, so we needed to fix these holes. We really knew that we weren’t where we needed to be. We’re a very small hospital with a lot of physician turnover. We really needed to get into the reporting system because of the turnover and because physicians were often taking calls for each other.”***

**- Margaretville Hospital Representative**

One of the providers participating in IPRO’s statewide initiative was Margaretville Hospital, a 15-bed Critical Access Hospital located in the western Catskill Mountains of New York State. The hospital struggled with quality reporting at the time that IPRO was recruiting hospitals to participate in this QI program. With a new CEO and a small staff, the hospital had experienced high turnover among physicians. In a five year period five physicians had come and gone, making it difficult to develop and maintain a QI reporting system. A process that requires physician buy-in was even more challenging because of the high turnover rate.

Hospital staff met with IPRO representatives on several occasions to assess their reporting needs. Prior to the QIO’s visit, CART had not been installed at the hospital. IPRO staff assisted the hospital IT staff to install the system and to better understand its use and the benefit it could offer the hospital. These interactions greatly enhanced the hospital’s computer capabilities and enabled the hospital to begin voluntary quality reporting for three measures – congestive heart failure, acute myocardial infarction, and community acquired pneumonia.

Working with IPRO, Margaretville Hospital has successfully obtained a grant from the New York Rural Health Alliance to purchase a web-based tool that will enable the hospital to compare its

***“Even if we only have a small number of patients, staff were on board because it’s about saving a life....”***

**- Margaretville Hospital Representative**

performance to that of other hospitals in the state and, in the future, to hospitals across the nation. “There are so many things out there for quality that you’re totally confused by the time you start looking...Leapfrog, Niagara...[This] program will be a direct line to the specific criteria that we can all use to collect data the same

way.” Today, every utilization review meeting at Margaretville Hospital involves a discussion of missed criteria and “why things didn’t happen the way they should.”

## Case Study 2 – Primaris and Community Hospital, Missouri Improving Pneumococcal Polysaccharide Vaccination (PPV) Rates

After carefully examining state performance on various clinical process measures Primaris, the QIO for the state of Missouri, identified pneumonia management as a top priority for quality improvement. Low rates of receipt of the pneumococcal polysaccharide vaccination (PPV) were thought to result from the large distances that rural primary care physicians must cover. Primaris staff were aware of the misconception within the medical community that once a patient is discharged from the hospital he or she will make an appointment with their primary care physician and, as part of this visit, receive a pneumonia vaccine. In order to ensure that high-risk patients were appropriately vaccinated, Primaris focused rural QI efforts on ensuring that patients were vaccinated while still in the CAH's acute care unit.

Primaris' first objective was to obtain buy-in from rural hospitals. This was accomplished using baseline data (from 2005) that was distributed to CAHs and other rural hospitals in the state. These data allowed providers to see how well they performed in this measure.

Aggregate state performance on the PPV measure and national rates of pneumonia vaccination administration were included for comparison purposes. Having provided evidence that significant room for improvement existed, Primaris set about working with rural providers to increase PPV rates.

***"In Missouri, because of the CAHs' remote locations, they were really hungry for this forum. They didn't have the natural open exchange that urban acute care hospitals did on a regular basis, so they really ate this up."***

**- Missouri QIO (Primaris) Representative**

As an initial step, Primaris had to ensure that all providers were collecting and systematically reporting quality data. Once all hospitals were capable of reporting quality data Primaris relied on CAHNet,<sup>3</sup> Missouri's network of CAHs and other rural stakeholders, as an education and presentation platform to share QI tools and information on data reporting and best practices in pneumonia prevention. Other educational forums consisted of in-person regional meetings, a series of conference calls, and an active listserv where CAHs could communicate, ask questions, and learn from each other. Because the Missouri Hospital Association was also engaged in a parallel vaccination initiative, Primaris was able to pool efforts to share available tools and resources. One such tool was a set of "cue cards" that providers could slip into their pockets as they made their rounds; these cards reminded providers of the best practices in the treatment of specific conditions.

***"Really, what [Primaris] brought to us was an awareness of how badly the state was doing overall. Basically, if we could help them collect the data, then they could raise awareness. By raising this awareness alone, improvements could come about."***

**- Community Hospital, Fairfax Representative**

Community Hospital, a 25-bed not-for-profit CAH located in Fairfax, Missouri, had little to no information on their PPV performance prior to receiving data from Primaris. Beginning with a paper-based tool provided to them by Primaris, Community Hospital began to collect PPV data.

To support the hospital in this effort Primaris conducted in-person meetings with Community Hospital's utilization and health information staff. At this and other meetings Primaris offered technical assistance in the collection and submission of PPV data to the QIO; Primaris would then

<sup>3</sup> CAHNet was launched in Missouri as a partnership of four key stakeholders: Primaris; the Missouri Hospital Association; the State Office of Rural Health; and the Missouri Rural Hospital Network. Developed with Flex funds, CAHNet includes 23 of the 36 CAHs in the state.

compile performance measures, submitting a copy to CMS and another copy for review by Community Hospital's administrative and QI staff. Over time, Community Hospital began submitting data on other performance measures. Despite slight physician resistance, Community Hospital implemented several strategies to raise awareness of the importance of pneumococcal vaccination. For instance, "sticky notes" were placed on charts to remind physicians that selected patients required a PPV prior to discharge. As another strategy the hospital added a pre-admission nursing assessment that contained questions on whether the patient had received an influenza and pneumonia vaccination, as per existing guidelines. Furthermore, the utilization manager participated in rounds with physicians and was able to discuss or remind providers about the need to vaccinate patients.

### **Case Study 3 - Health Care Excel and Rush Memorial Hospital, Indiana Improving Care for Heart Failure Patients**

With the start of the 8<sup>th</sup> SOW, Health Care Excel, the QIO for the state of Indiana, established a collaborative with the Indiana State Office of Rural Health, the Indiana chapter of the American Heart Association, and the Indiana Rural Health Association to improve inpatient care for patients diagnosed with heart failure. Excel extended an invitation to all CAHs in the state that expressed interest in this initiative. During the first year, a total of 10 CAHs participated in Excel's heart failure initiative.

Prior to participation in the Heart Failure initiative the QIO did not expect CAHs to report data to the QIO Clinical Warehouse, though a few providers were already submitting this information. Among Health Care Excel's first tasks was to assist the non-reporting hospitals to submit data. The QIO encouraged CAHs to utilize the American Heart Association's patient management tool, "Get with the Guidelines." This interactive assessment and reporting tool offers clinical decision support and enables hospitals to track their performance. Because of the costs associated with this program the Indiana State Department of Health provided grants to the Indiana Rural Health Association to assist CAHs to purchase vendor rights to this tool.

***"The success we experienced was a result of the strong relationship among stakeholders. Each of the stakeholders took its own role in assisting hospitals. We worked with individual hospitals to meet their needs. Some hospitals needed more help in collecting data and using tools; some more assistance with actual quality improvement and rapid-cycle changes; some needed an opportunity to network with other hospitals to see how other hospitals were addressing barriers. Each stakeholder took on a unique independent role in working with hospitals; but, they did so in a manner so that partners also worked collaboratively."***

**- Indiana QIO (Health Care Excel) Representative**

The technical assistance needs of each hospital varied substantially, and the QIO found that some providers needed more assistance in collecting data and using the "Get with the Guidelines" tool, whereas others needed more assistance with actual quality improvement efforts and conducting rapid cycle change. Each partner in the collaborative (e.g., the American Heart Association, the Rural Health Association) worked with individual QIOs, primarily through face-to-face meetings and teleconferences,

offering CAHs assistance in their particular area of expertise.

Providing rural hospitals with the expertise to succeed in this initiative was not without its problems. Among some providers, physician buy-in was difficult to obtain. Health Care Excel found that

hospital participation in the initiative was more successful if a key leader, such as the administrator or a physician champion, was available to promote the program. For instance, at one CAH the administrator performed an in-service for each department, discussing the importance of the initiative with staff. Eventually, and after a period of performance tracking, others in the organization “started carrying the message.”

Several other factors posed significant QI barriers for hospitals. At one facility the identification of heart failure patients, particularly when not the patient’s primary diagnosis, was a major concern. Moreover, as is true for many small rural providers, because quality improvement staff conduct many diverse functions, employees at several hospitals were not well versed on basic quality improvement principles. This required the QIO and collaborators to offer additional assistance to staff at these facilities.

Evidence of Health Care Excel’s success in this initiative was noted in the first year of the program. During the time that this initiative was in place, the following improvements occurred:

- The proportion of heart failure patients discharged home with written instructions increased from about 20 percent to more than 80 percent;
- The proportion of smokers with heart failure who received counseling concerning their smoking increased from 40 percent to about 100 percent; and
- The proportion of heart failure patients with left ventricular systolic dysfunction (LVSD) and without both angiotensin converting enzyme inhibitor (ACEI) and angiotensin receptor blocker (ARB) contraindications who were prescribed an ACEI or ARB at hospital discharge increased from slightly more than 80 percent to over 90 percent.

Rush Memorial Hospital, a full-spectrum 25-bed hospital located in Rushville, Indiana, worked with Health Care Excel during the 8<sup>th</sup> SOW to improve their performance on heart failure process measures. Rush Memorial began reporting CMS quality data in 2005. Despite the added workload, the hospital made the decision to participate in the heart failure initiative because of the large elderly population residing in the market area and because they recognized the need to improve performance in this area.

Rush Memorial participated in weekly conference calls held by members of the coalition. Throughout these meetings Health Care Excel staff served as “interpreters,” assisting CAHs to better understand CMS guidelines and measurement requirements. Most assistance to the CAH was provided over the telephone or by e-mail. Since Rush Memorial staff were fairly sophisticated in quality improvement, measurement, and reporting, in-person meetings were generally not required.

***“We may have only 5 AMIs for the year, but we want to be able to do the same thing as the tertiary care centers would do; that’s why CAHs were reporting...even though we weren’t required...our standard is the same or higher than anybody else’s.”***

**-Rush Memorial Hospital Representative**

Spurred by the emergency room director and the medical surgical manager, the hospital developed pathways, discharge instructions, and educational materials. Rush Memorial’s discharge planner assumed a major role in implementing the heart failure initiative by spearheading a process whereby patients with a primary or secondary

diagnosis of congestive heart failure arrived at the hospital and a monitor was placed on the chart to remind staff to follow heart failure guidelines.

Rush Memorial experienced tremendous success under this initiative. This is evidenced by the fact that in the one year period between 2006 and 2007 the following results were noted:

- Inpatient counseling on smoking cessation increased from about 75 to 100 percent;
- The proportion of patients receiving discharge instructions increased from 50 to 100 percent;
- Receipt of appropriate tests to evaluate left ventricular systolic functioning increased from 33 to 100 percent; and
- Receipt of angiotensin converting enzyme inhibitor for heart failure patients with left ventricular ejection fraction less than 40 percent increased from about 75 to 100 percent.

While on occasion the hospital may not be 100 percent compliant, outcomes are constantly monitored and individual cases reviewed in order to find out where the breakdown has occurred. This allows hospital staff to re-educate or address the process in a manner to assure continued success.

#### **Case Study 4 – Mountain-Pacific Quality Health & St. Luke Community Hospital, Montana Improving Rural Organizational Safety Culture**

As part of the 8<sup>th</sup> SOW, QIOs were required by CMS to recruit and collaborate with a group of at least six critical access and/or rural prospective payment system hospitals to improve organizational safety culture.<sup>4</sup> To that end, QIOs were tasked with assisting each hospital to use the Agency for Healthcare Research and Quality’s Hospital Survey on Patient Safety Culture (HSPSC) to assess the patient safety culture at baseline and at re-measurement, particularly with regard to the extent that hospital management promotes a culture of safety, demonstrates that safety culture is a top priority, and seems interested in patient safety (regardless of whether an adverse event occurs). Results from a baseline survey were used by QIOs to assist hospitals in selecting and implementing “change models” that would facilitate direct involvement by senior hospital leadership in improving the safety culture.

Mountain-Pacific Quality Health (MPQH), the QIO for Montana, Hawaii, Wyoming, Alaska, and various U.S. territories in the Pacific, identified and worked with 8 CAHs in Montana to help improve their organizational safety culture. A number of the hospitals had identified safety culture as an issue within their own facility and thus volunteered for the initiative. However, MPQH faced a formidable barrier in recruiting some of the hospitals; administrators were concerned about staff perceptions regarding safety culture and were nervous about sharing this information with the board of directors. To gain the trust of each hospital, MPQH assured senior leadership that the survey results would be as objective as possible given that it would be administered by the QIO, i.e., a

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<sup>4</sup> QIOs serving a state/jurisdiction with fewer than six CAHs and/or rural PPS hospitals must have received permission from CMS to work with fewer than six facilities on this initiative.

neutral third party whose sole role was to help the hospitals improve regardless of their baseline results.

Additional barriers included CEO turnover, which often forced MPQH to “re-initiate” new hospital leadership to obtain their support and continued involvement of hospital staff, who often had a difficult time focusing on quality initiatives amid their day-to-day responsibilities and hospital operations.

***“One facility used the survey as a platform to look at communication within the facility, expand their clinical measures in existing programs, and to find out where people stood in terms of understanding reporting errors, patient safety, and communication. The survey has brought people’s attention to the fact that quality really is a big deal and leads to [improved] patient safety.”***

**-Montana QIO( Mountain-Pacific Quality Health Representative**

With all 8 CAHs fully on board, MPQH assisted them in all facets of survey administration, including data collection, data submission, and data analysis and interpretation. Baseline measurement of the hospitals’ organizational safety culture took place in the first quarter of 2006 and re-measurement occurred approximately 18 months later, in the second and third quarters of 2007.

Throughout the initiative, MPQH held a series of monthly Web-based conference calls and “how-to” seminars that brought the 8 CAHs together for

instruction and discussions on such topics as how to administer and tabulate the AHRQ survey as well as how to implement various culture change initiatives, including senior leadership walk-arounds and staff debriefings. These Web-based meetings provided a forum not only for MPQH to provide technical assistance, but also for the CAHs to share their experiences, challenges, and successful resolution strategies with each other. In addition, MPQH provided telephone support to individual hospitals on an as-needed basis.

Staff at St. Luke Community Hospital, a critical access hospital in Ronan, Montana, had begun their own assessment to determine the status of the hospital’s various departments in patient safety reporting. As a result, St. Luke staff and leadership viewed the MPQH-led culture survey initiative as an opportunity to supplement their internal efforts at developing a more formalized process for identifying risks and trends that may be occurring within the hospital, as well as to learn from other CAHs in the state.

To begin, St. Luke participated in the web-based conference calls facilitated by MPQH, which provided specific instructions and tools for developing timelines, raising awareness about the initiative among staff at the hospital, administering the survey and collecting the data, and submitting the data to MPQH for analysis. Based on St. Luke’s baseline survey results, MPQH provided guidance on implementing culture change initiatives, including patient safety briefings. For this particular effort, MPQH provided St. Luke with the Institute for Healthcare Improvement’s Safety Briefings Tool, a step-by-step guide designed to assist front-line hospital staff share information about potential safety problems and concerns. Ultimately, this method can help to raise staff awareness about patient safety, create an environment in which staff feel comfortable sharing their concerns about safety without fear of blame or punishment, and integrate safety and safety culture into the hospital’s daily routine.<sup>5</sup> Staff at St. Luke found this tool and others provided by MPQH to be especially helpful since the QIO was not simply “re-inventing the wheel,” but was providing

<sup>5</sup> <http://www.ihl.org/IHI/Topics/PatientSafety/SafetyGeneral/Tools/Safety+Briefings+%28IHI+Tool%29.htm>



resources that were in use at the national level by many other hospitals engaged in similar initiatives. In addition, MPQH staff conducted site visits at St. Luke’s to gauge the hospital’s progress and address any outstanding questions or concerns.

Upon re-measurement, St. Luke showed improved safety culture in the composite score for nine different areas covered by the survey—most notably in staff perceptions of the following:<sup>6</sup>

- safety overall (from 42% in 2006 to 62% in 2007);
- frequency of events reported (from 42% to 54%);
- organizational learning based on continuous improvement (from 53% to 67%);
- feedback and communication about errors (from 46% to 51%);
- hospital management support for patient safety (from 55% to 66%);
- teamwork across hospital units (from 54% to 68%); and
- hospital handoffs and communications (from 39% to 56%).

***“The CAHs would all talk and see how each facility was doing; we generated ideas and success tips. We had a lot of information sharing. MPQH provided the guidance for that, facilitated the phone calls, offered tools along the way, and kept us on track. CAHs get really sidetracked with day-to-day management so that it’s hard to keep up with what’s going on at the national level. The QIO provided that link to national discussions and the tools other hospitals are using.”***

**- St. Luke Community Hospital Representative**

The hospital staff most directly involved in the initiative shared the survey results with their fellow staff members at department meetings, with the hospital administration at management meetings, and with the board of directors at the annual board meeting.

## Summary of Findings

Despite differences in location or QI focus, these QIO and provider examples share several commonalities that contributed to successful performance in each of the areas described:

First, in most cases the QIOs or CAHs collaborated with outside entities, such as professional associations, State Offices of Rural Health, and other QIOs and CAHs. Collaboration offered opportunities for the QIOs and providers to learn from each other as well as to leverage resources so that the “sum” of the organizations’ efforts was greater than that which could have been achieved separately by individual organizations. Indeed, in a couple of instances outside funding was obtained from these organizations and used to further hospitals’ QI objectives.

Second, the QIOs involved in these projects recognized that the key to a successful partnership with the hospital required a strong relationship with hospital leadership. At the same time, CAHs

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<sup>6</sup> Data provided by St. Luke Community Hospital.

credited their success to the presence of strong physician, CEO, or other hospital leadership. Hospital leaders served as QI advocates and, despite some resistance, ensured that other physicians and/or staff participated in QI initiatives.

Third, rather than “re-inventing the wheel” QIOs disseminated and encouraged the use of existing tools or resources that were already prepared by professional organizations (some of which were collaborating with the QIOs) and the QIOSC. The use of pre-existing resources freed the QIOs to offer assistance in the use of these resources, reduced the costs associated with the provision of technical assistance as well as standardized the provision of care. Particularly because they lacked both human and capital resources, all CAHs welcomed the tools and training that the QIO made available to them.

### **Conclusions - Moving Forward in the 9<sup>th</sup> SOW**

The 9th SOW makes no specific provision for QIOs to assist rural and critical access hospitals in conducting quality improvement activities. Although the QIOs that were part of this study indicated that they would continue to offer assistance to these small providers and would attempt to include them in their hospital QI activities, they also stated that the lack of a specific rural task would likely limit them financially in responding to these providers’ needs.

The rural hospitals interviewed for this study emphasized their limited resources and the benefits that they obtained by working with their state QIO. In some cases, the rural hospital staff we spoke with suggested how the availability and capabilities of QIO staff benefited them. QIO staff allowed the hospital staff to extend internal quality improvement resources and to be more productive with those resources.

While findings from this study cannot be generalized to the larger population of QIOs and CAHs, results suggest that QIOs provide a valuable service to CAHs. By serving as QI mentors, QIOs are assisting to improve the quality of care available to persons residing in rural communities. It is possible that the foundation built by the QIOs as a result of these investments from the 8<sup>th</sup> SOW will continue to pay dividends into the future. However, without a rural mission in the 9<sup>th</sup> SOW it is unclear whether the QIOs will have the resources or incentives to focus their efforts on small rural hospitals.