## Centers for Medicare & Medicaid Services Quality Improvement Organization (QIO) 10<sup>th</sup> Statement of Work Summary of Contract Results

## Making Gains across the Continuum of Care Spring 2014

Medicare Quality Improvement Organizations (QIOs) are funded by the Centers for Medicare & Medicaid Services (CMS) to work with beneficiaries, consumers, physicians, hospitals, and other providers to improve care delivery systems with an aim of better healthcare, better care for populations and communities, and lower costs through improvement.

The present Medicare QIO program consists of a national network of QIOs responsible for each state, territory, and the District of Columbia. QIOs serve as "a cadre of boots on the ground" professionals, bringing transformation at the local level to achieve national goals by serving as conveners, organizers, motivators and change agents. QIOs provide a call to action and will for change through outreach, education, and social marketing; achieving measurable quality improvement targets and quality improvement results; providing expertise in data collection and analysis; education; monitoring for improvement and information exchange and dissemination; and developing efficient and effective improvement strategies. Their work is performed in partnership with an array of stakeholders that includes beneficiaries and their families.

Over the course of the current contract, the 10<sup>th</sup> Statement of Work (SOW), QIOs have worked with providers, beneficiaries and their families, patients, nursing homes, home health agencies, pharmacists, Hospital Engagement Networks, Regional Extension Centers, Area Agencies on Aging, the Agency for Healthcare Research and Quality (AHRQ), the Centers for Disease and Prevention (CDC), the Health Resources and Services Administration (HRSA), the Administration of Community Living (ACL) and other HHS partners, state health departments and many more community stakeholders to improve coordination of care and safety.

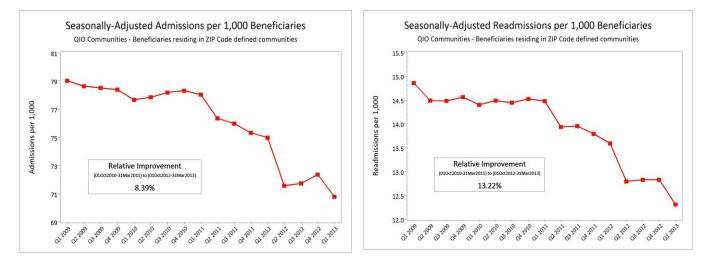
When the QIOs were first established more than 30 years ago, one of their key responsibilities was to provide an avenue for Medicare beneficiaries and their families to become engaged in and address issues of concern regarding their care.

This charge has continued, with QIOs reviewing more than 200,000 cases for quality of care concerns during the 10<sup>th</sup> SOW at the request of beneficiaries, families, and referral agencies. QIOs provide an avenue for Medicare patients to raise issues regarding hospital care, including premature discharge. They also are charged with helping to safeguard the integrity of the Medicare program by supporting effort to ensure that payment is made only for medically necessary services.

Although case review remains an important function of the QIO program, CMS realizes that a proactive, continuous quality improvement process is preferred to a retrospective identification of concerns after they have occurred. As such, QIOs also lead quality improvement activities across the continuum of care through Learning and Action Networks (LANs) and technical assistance, to support the spread of best practices across the country.

QIOs work alongside national efforts such as CMS's Partnership for Patients <sup>SM1</sup> initiative to reduce harm and readmissions in hospitals. By working with QIOs, communities across the country have prevented over 95,000 beneficiaries from being admitted to the hospital, and averted over 27,000 readmissions, resulting in improved coordination of care and nearly one billion dollar in savings, although the savings estimated are not solely attributable to QIOs. The following chart describes results from the 10<sup>th</sup> SOW:

| Number of Communities Engaged in QIO Supported                      | 410          |
|---|--------------|
| Number of Beneficiaries Living in the Communities                   | 14.6 million |
| Number of Communities with Signed Coalition Charter                 | 230          |
| Number of Communities Receiving Formal CCTP<br>Funding <sup>2</sup> | 83           |
| Number of Recruited Hospitals                                       | 884          |
| Number of Recruited Nursing Homes                                   | 1,619        |
| Number of Recruited Home Health Agencies                            | 965          |
| Number of Recruited Hospice Facilities                              | 367          |
| Number of Recruited Dialysis Facilities                             | 92           |



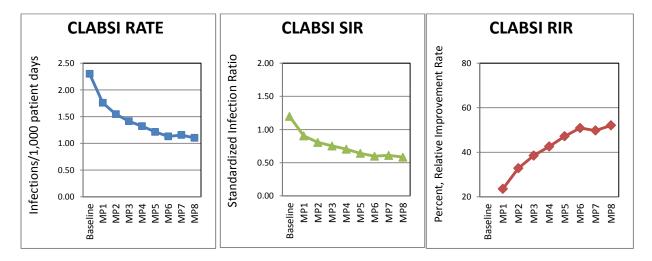
During the course of the 10<sup>th</sup> SOW, QIOs also worked with Intensive Care Units (ICU) and other hospital units to reduce Healthcare Associated Infections (HAI), a top priority for CMS. To ensure transparency in reporting, QIOs work with nearly every Inpatient Prospective Payment System (IPPS) facility in the country to provide technical assistance on reporting HAI data through the CDC's National Healthcare Safety Network (NHSN). In addition to technical assistance in reporting, QIOs worked with more than 800 facilities across the country to provide intensive assistance in the reduction of HAIs through the implementation of evidenced based guidelines such as the AHRQ Comprehensive Unit-based Safety Program (CUSP) toolkit.

<sup>&</sup>lt;sup>1</sup> Centers for Medicare & Medicaid Services. Partnership for Patients. Available at: <u>http://partnershipforpatients.cms.gov/</u>

<sup>&</sup>lt;sup>2</sup> Centers for Medicare & Medicaid Services. CCTP: Community-based Care Transitions Program. Available at: <u>http://innovation.cms.gov/initiatives/Partnership-for-Patients/CCTP/index.html</u>

Through these efforts, QIOs noted a 53 percent relative improvement in reduced Central Line Associated Blood Stream Infections (CLABSI) among engaged facilities. Improvement was also seen in the Standardized Infection Ratio (SIR), which compares the observed rate of infections in a specific hospital unit to the unit's expected rate of infection. Ideally the rate would be 1.0 or lower. As noted below, the SIR for assisted facilities was 0.6, better than expected<sup>3</sup>.

| CLABSI BASELINE: 02/01/2011 - 07/31/2011            |           |            |           |        |        |             |                |
|---|-----------|------------|-----------|--------|--------|-------------|----------------|
| Number of   | Number of | Number     | Number    | Number | CLABSI | CLABSI      | CLABSI SIR for |
| <b>Recruited facilities</b>                         | Recruited | of Patient | of        | of     | Rate   | Relative    | Baseline       |
|   | Units     | Days       | Central   | CLABSI |        | Improvement |                |
|   |           |            | Line Days |        |        | Rate (RIR)  |                |
| 148   | 219       | 415,164    | 159,098   | 366    | 2.30   | n/a         | 1.2            |
| CLABSI RE-MEASUREMENT PERIOD: 03/01/2013-08/31/2013 |           |            |           |        |        |             |                |
| Number of   | Number of | Number     | Number    | Number | CLABSI | RIR         | CLABSI SIR     |
| <b>Recruited facilities</b>                         | Recruited | of Patient | of        | of     | Rate   |             |                |
|   | Units     | Days       | Central   | CLABSI |        |             |                |
| 148   | 219       | 412,169    | 155,977   | 172    | 1.10   | 52.1        | 0.6            |



Note: N=239; Units recruited from baseline through the 8th Measurement Period MP: Measurement Periods overlap and span six months each. MP8: Used as re-measurement at the 27th Month Evaluation. Data shown are through August 2013.

Catheter Associated Urinary Tract Infections (CAUTIs), a type of HAI, continue to persist throughout the country, but intensive quality improvement efforts are in place to reverse the trend. More than one-third of the QIOs achieved a CAUTI SIR of 0.85 or less for facilities they supported, while 32 percent of QIOs achieved a CAUTI SIR of 0.75 or less. One major intervention for reducing CAUTI is reducing the number of days in which a catheter is used. During the 10<sup>th</sup> SOW, 85,149 fewer catheter days were achieved in facilities, as noted in the table below. QIOs continue to work with hospitals to establish

<sup>&</sup>lt;sup>3</sup> The figures illustrate the decrease over time in the CLABSI rate and the SIR (ratio of the observed rate to the expected) and the increase in the improvement from baseline Relative Improvement Rate (RIR).

antimicrobial stewardship programs, engage beneficiaries, patients, and families in HAI reductions, and spread best practices to ensure continuous improvement in this critical area.

| Catheter UTILIZATION BASELINE: 02/01/2011 - 07/31/2011   |   |                      |                       |                         |              |                         |                    |
|--|---|----------------------|-----------------------|-------------------------|--------------|-------------------------|--------------------|
| Number of<br>Recruited   | Number of<br>Recruited                                      | Number of<br>Patient | Number of<br>Catheter | Catheter<br>Utilization | *SDUR<br>for | Relative<br>Improvement |                    |
| facilities   | Units   | Days                 | Days                  | Rate                    | Baseline     | Rate (RIR)              |                    |
| 667  | 1169  | 2,170,406            | 943,168               | 43.46                   | 1.1          | n/a                     |                    |
|  | Catheter Util. RE-MEASUREMENT PERIOD: 03/01/2013-08/31/2013 |                      |                       |                         |              |                         |                    |
| Number of<br>Recruited   | Number of<br>Recruited                                      | Number of<br>Patient | Number of<br>Catheter | Catheter<br>Utilization | SDUR         | RIR                     | Number of<br>Fewer |
| 667  | 1169  | 2,641,186            | 1,045,235             | 39.57                   | 1.0          | 8.9                     | 85,149             |
| Number of Fewer days assuming the same number of patient days in the re-measurement as in the baseline= re-measurement RIR * Number of catheter days |   |                      |                       |                         |              |                         |                    |

\* SDUR: Standardized Device Utilization Rate - used to measure urinary catheter use.

The work of the QIOs extends beyond the hospital setting to the community including ambulatory settings, nursing homes, home health agencies, state health departments, community health centers, and other settings – including home- that impact the health of Medicare beneficiaries. As one example, QIOs supported efforts to achieve a 34.4 percent reduction in pressure ulcers for high risk nursing home residents. Complications from pressure ulcers in nursing homes decrease quality of life and result in millions of dollars spent for occurrences that in many instances are preventable.

| QIO 10 <sup>th</sup> SoW Results in Supporting the Reduction of Pressure Ulcers in Nursing Homes |          |                |            |  |  |
|--|----------|----------------|------------|--|--|
| N=787 Nursing Homes  | Baseline | Re-measurement | Difference |  |  |
| Number of Instances of<br>Pressure Ulcers  | 10,784   | 7,410          | 3,374      |  |  |
| Number of Residents with<br>Pressure Ulcers  | 6,794    | 4,442          | 2,352      |  |  |

Nursing homes, with the support of QIOs, have also been hard at work implementing quality improvement strategies to reduce the number of physical restraints used on residents. As noted by the Advancing Excellence Campaign, physical restraints can be harmful and lead to serious consequences such as poor circulation, constipation, incontinence, weak muscles and bones, pressure sores, poor appetite and infection, and death. During the 10<sup>th</sup> SOW, restraint use was decreased by 70 percent in participating facilities - over 10,000 instances of resident restraints avoided.

| QIO 10 <sup>th</sup> SoW Results in Supporting the Reduction of Physical Restraints in Nursing Homes |          |                |            |  |  |
|--|----------|----------------|------------|--|--|
| N=981 Nursing homes  | Baseline | Re-measurement | Difference |  |  |
| Number of Instances  | 15,263   | 3,756          | 11,507     |  |  |
| Number of Residents with   | 8,259    | 2,009          | 6,250      |  |  |

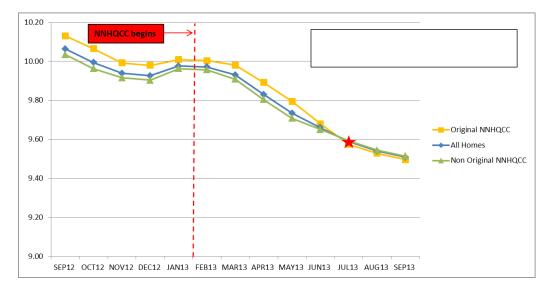
In 2013 many nursing homes across the country joined the National Nursing Home Quality Care Collaborative (NNHQCC), which seeks to rapidly spread the practices of high performing nursing homes and ensure that every nursing home resident receives high quality care. The NNHQCC strives to instill quality and performance improvement practices, eliminate healthcare acquired conditions, and dramatically improve resident satisfaction by focusing on the systems that impact quality such as staffing, operations, communication, leadership, compliance, improved clinical models, quality of life indicators and specific performance outcomes (targeted focus on inappropriate antipsychotics in dementia residents, falls, UTIs, HAIs). The NNHQCC supports the development of strategies for overall quality utilizing Quality Assurance Performance Improvement (QAPI) as the roadmap, creating multiple synergies for participating nursing homes.

NNHQCC practices included visiting high performing nursing homes, developing a change package of strategies and actionable items for improvement, and conducting a series of Learning and Action Network events. Nearly 5,000 nursing homes - nearly one third of those participating in the Medicare program - joined in the first few months of the project. Improvement was monitored through a composite measure, which allowed participants to focus on systemic improvements in care. While the appropriate use of anti-psychotics was a required activity, nursing homes selected other topics based on their review of data and consideration of the resident population. The following table provides some information on the range of projects undertaken by the facilities.

| Торіс  | Number<br>of<br>Nursing<br>Homes | Percent of<br>Nursing<br>Homes |
|--|----------------------------------|--------------------------------|
| Appropriate Use of Antipsychotic Medications | 4,596                            | 91.54                          |
| Reduction of Falls                           | 2,296                            | 45.73                          |
| Reduction of Pressure Ulcers                 | 1,541                            | 30.69                          |
| Reduction in UTIs                            | 1,304                            | 25.97                          |
| Staff Turnover/Stability                     | 1,273                            | 25.35                          |

| Reduce Avoidable Hospitalizations, Better Care Transitions | 1,225 | 24.40 |
|--|-------|-------|
| Consistent Assignment of Staffing                          | 921   | 18.34 |

Facilities are also able to utilize the NNHCC to help meet the QAPI requirements of the formal CMS survey and certification process. Rapid results were realized due to the efforts of all partners and the composite score reflected the efforts.



Beyond the institutional settings, QIOS have worked to reduce potential and actual adverse drug events in over 400 communities across the country. This work resulted in a 24 percent relative improvement in the number of beneficiaries whose International Normalized Ratio (INR) was in control. The INR is an important test for evaluating the clotting tendencies of patients on anti-coagulation therapy. A 20 percent improvement was also noted in the number of patients with diabetes whose Hemoglobin A1c was in control. Most notably, over 44,600 adverse drug events were avoided, mitigating serious health issues in these Medicare beneficiaries.

QIOs provided coaching and facilitation to clinical practices in the 10<sup>th</sup> SOW to reduce harm, improve population health and reduce health care disparities. In collaboration with the Regional Extension Centers, funded by the Office of the National Coordinator (ONC), QIOs worked with practices to improve electronic health record adoption for use in care coordination and quality improvement. Clinicians were supported in improving population health with a strong focus on improving cardiac health in collaboration with the Million Hearts initiative<sup>4</sup><sup>®</sup>. QIOs worked to support important prevention activities such as increasing the rates of influenza immunizations, pneumococcal vaccinations, and encouraging mammograms and colorectal cancer screening.

QIOs also work toward the goals of lower costs through improvement by providing assistance to acute care facilities, outpatient departments, ambulatory surgery centers, critical care hospitals, psychiatric facilities, cancer hospitals, and physicians in reporting clinical quality measures for purposes of public

<sup>&</sup>lt;sup>4</sup> Centers for Medicare & Medicaid Services. Available at: <u>http://millionhearts.hhs.gov/index.html</u>.

reporting and, in the case of hospitals, value based purchasing. CMS continues to move beyond payment for volume to payment aligned with quality, using the CMS Quality Strategy<sup>5</sup> as the overall framework.

Great progress has been made towards a transformed healthcare system, and there is more work to be done as CMS introduces the 11<sup>th</sup> SOW in 2014. The Agency will continue to work with the QIO community, Medicare beneficiaries and their families, consumers, patients, providers, federal and state partners and other internal and external stakeholders to achieve better healthcare, better health for populations and communities, and lower costs through improvement.

<sup>&</sup>lt;sup>5</sup> Centers for Medicare & Medicaid Services. CMS Quality Strategy. Available at: <u>http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityInitiativesGenInfo/CMS-Quality-Strategy.html</u>