

The Role of the Quality Improvement Organization

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Quality Improvement Organizations (QIOs) are an unbiased source of quality improvement support and expertise for health care professionals and institutions across the nation. The Carolinas Center for Medical Excellence, the QIO in North Carolina and South Carolina, is supporting the advancement of the National Quality Strategy.

Medicare's Quality Improvement Organization (QIO) Program—formerly known as the Utilization and Quality Control Peer Review Organization Program—is the largest federal program dedicated to improving the quality of health care at the community level. Each state, as well as the District of Columbia, Puerto Rico, and the US Virgin Islands, has an assigned QIO contractor. QIOs contract with the US Centers for Medicare & Medicaid Services (CMS) to improve the effectiveness, efficiency, economy, and quality of services delivered to Medicare beneficiaries in that state or territory.

The Carolinas Center for Medical Excellence (CCME) is the federally designated QIO for both North Carolina and South Carolina. CCME has held its QIO contract with CMS for nearly 30 years. During that time, CCME has worked with health care practitioners and providers across the health care continuum to focus on topics of great importance to the Medicare population—areas of care that are in need of improvement and for which there is good evidence that improvement is possible.

QIOs across the nation work under performance-based, 3-year contracts with CMS and are required to meet contract-specific process and outcome metrics. QIO contractors nationwide are all working to meet the same performance goals, such as reducing hospital admissions and readmissions, meeting recruitment targets for participating providers, and reducing the use of physical restraints in nursing homes. Thus they have a rich opportunity for learning and sharing methods of advancing and transforming the quality of health care in an efficient manner. QIOs are able to share best-practice information with one another in several ways: via an electronic information intranet; at national meetings sponsored by CMS; and in other learning forums that are sponsored by national coordinating center CMS contractors who support QIOs throughout the contract period.

The health care communities in North Carolina and South Carolina have come to trust CCME as a credible, collabora-

tive, committed, patient-centered, and knowledgeable partner in health care quality improvement. CCME fulfills its statutory and contractual requirements by functioning as a convener, organizer, motivator, and change agent. CCME's goal is to achieve measurable quality improvement results through data collection, analysis, education, and monitoring for improvement. Its role is to facilitate information exchange within the health care system and to disseminate and spread best practices to ensure that the care provided to the more than 1.5 million Medicare beneficiaries in North Carolina and the more than 800,000 beneficiaries in South Carolina meets the highest quality standards.

During the 3-year period from August 1, 2012, through July 31, 2014, CCME and other QIOs have been asked to partner with CMS to improve the nation's health care through the National Quality Strategy. That strategy has 3 broad aims: better health care, better health for people and communities, and affordable care (through lowering costs by making improvements). QIOs have recruited health care providers, practitioners, Medicare beneficiaries, and other committed partners to work on 4 priorities to meet these broad aims. The first of these priorities is to make beneficiaries and their families the center of care by teaching them how to be better informed and more engaged consumers of health care. The second is to improve individual patient care by improving medication safety and by reducing health care-acquired conditions (such as infections or other health problems that occur in a health care setting). The third is to integrate care for populations and communities by bringing together communities of providers to improve care transitions and to reduce unnecessary hospital readmissions. And the fourth is to improve health for populations and communities by helping physicians use electronic health record (EHR) systems to improve preventive and cardiovascular care for the population of patients they serve.

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professionals and institutions. Their services are offered to the health care community without fees. They are directed by CMS to reach out to the providers who are most in need of assistance with quality improvement—those who are not meeting performance expectations or benchmarks. QIOs provide assistance at a local level, in communities where people live, work, and receive health care.

The team of professionals at CCME is vast and varied. It includes doctors, nurses, social workers, occupational and physical therapists, other allied health professionals, quality improvement experts, health policy analysts, and health data analysts. CCME's quality improvement support and expertise are not limited to a single type of provider setting or to a particular clinical topic, and although CCME's mandate is directed at improving care for the Medicare population, its health care quality improvement initiatives are aimed at improving health care processes and systems in ways that will benefit all patients, regardless of age or insurance coverage.

One of the important obligations of QIOs is to protect the rights of Medicare beneficiaries by reviewing complaints about the quality of care and appeals regarding the denial or discontinuation of health care services. These reviews require CCME to determine whether care meets professional standards. The review findings are communicated to beneficiaries; in addition, CCME is able to work directly with providers in the areas that have been identified as needing improvement.

The estimated cost of the QIO program in fiscal year 2006 was approximately 0.1% of the total Medicare budget, and the cost per beneficiary that year was approximately \$9 for each of the more than 43 million Medicare beneficiaries [1]. A 2000 Institute of Medicine (IOM) report titled *To Err is Human* estimated that some 44,000 to 98,000 Americans die each year as a result of medical errors [2]. The Dartmouth Atlas Project has consistently reported large variations in medical resource distribution and use, but the project has not found any positive correlation between resource expenditure and improved outcomes [3, 4]. Further variations in health care were confirmed in a 2001 IOM report titled *Crossing the Quality Chasm* [5], which identified large gaps in the quality of care provided. The Committee on the Quality of Health Care in America, which authored the report, suggested that the cause of those gaps was the inability of our health care system to keep up with the rapid achievements in scientific knowledge and technology. The committee further recommended the systematic application of scientific evidence to clinical practice, with the goal of reducing what is believed to be a 17-year gap between the knowledge gained via randomized controlled research to the adoption of that knowledge into routine clinical practice [5].

QIOs are perfectly positioned to provide the technical support necessary to help health care providers apply scientific evidence to health care delivery at the community level by making that evidence more useful and more accessible to

clinicians and patients. A 2006 IOM report titled *Medicare's Quality Improvement Organization Program: Maximizing Potential* described the QIO program as a "unique national resource," and recommended that the program remain a key player in quality improvement because of its ability to "foster and coordinate change across the country ... [providing] greater consistency and the national alignment of improvement efforts" [6].

Health care providers and practitioners are committed to monitoring, providing, and implementing the safest, most effective care possible. However, change requires support and persistence. This, in part, is why the health care community in North Carolina has been eager to accept CCME's offer of assistance to participate in quality improvement initiatives, such as those aimed at optimizing care transitions to prevent hospital readmission, improving indicators of quality nursing home care, and decreasing adverse drug events in ambulatory care.

One of CCME's current initiatives targets 12 health care communities in North Carolina—which together contain 42 hospitals, more than 70 nursing homes, and more than 60 home health agencies—that are working with CCME to improve care transitions. The goal is for patients being discharged from hospitals to understand their medications, to know what to do if their condition worsens, and to know when to seek assistance. With that information, patients are well prepared to avoid unnecessary returns to the hospital. This effort requires that hospitals work with other providers, such as home health agencies, nursing homes, physician offices, and community support services that provide transportation, meals, and other resources; it takes the proverbial village to keep a community well.

CCME has facilitated interactions at the community level. The work includes analyzing root causes; conducting focus groups for physicians, patients, families, and community service providers; and providing detailed analyses of readmissions, noting where the hospital discharged the patient to and where the patient was readmitted from. In addition, with assistance provided by CCME, 3 North Carolina communities will receive direct funding via the Community-Based Care Transitions Program; this funding was made available under section 3026 of the Patient Protection and Affordable Care Act of 2010 [7, 8].

Forty-four nursing homes in North Carolina with the highest rates of pressure ulcers and use of physical restraints have accepted CCME's invitation to improve care by reducing those rates. CCME has offered on-site technical assistance to these nursing homes to help develop action plans to improve the care they deliver to their residents in the targeted areas. CCME has sponsored in-person learning sessions, periodic group educational webinars, and direct coaching to nursing homes to ensure ongoing improvement.

The old adage in quality improvement is that "you can't manage what you aren't monitoring or measuring." CCME has helped nursing homes to measure the results of the changes

they implement to determine whether they are achieving the desired improvements. In aggregate, the nursing homes participating with CCME saw a reduction in the proportion of patients on whom physical restraints were used, from 7% in the period from the fourth quarter of 2010 through the first quarter of 2011, to 3% in the period from the second quarter of 2012 through the third quarter of 2012; this is a relative improvement rate of 60%. In this same period, measureable improvement was seen in the rate of pressure ulcers among patients in the nursing homes participating with CCME; this rate was reduced from 13% to 10%, for a relative improvement rate of 25% (CMS, unpublished data, November 2012).

Adverse drug events disproportionately affect patients who are 65 years of age or older. Improving medication safety in the Medicare population will not only save Medicare costs but will also have a direct positive impact on the quality of life of Medicare beneficiaries. CCME is working with 10 community-based health care centers to improve medication safety and to reduce the incidence of adverse drug events. CCME partners with these clinics in their participation in the national Patient Safety and Pharmacy Services Collaborative, which is designed to integrate evidence-based clinical pharmacy services into the care and management of patients with high-risk, high-cost, complex health conditions. For some of these clinics, this has been their first experience participating in a structured quality improvement initiative.

Unlike hospitals and some other providers, physician offices typically do not have formal quality improvement programs as part of their organizational structure. In an effort to improve health care through the use of EHR systems, the 2009 American Recovery and Reinvestment Act included the Health Information Technology for Economic and Clinical Health Act, also known as HITECH [9]. HITECH allocated \$19 billion to hospitals and physicians in support of their use of certified EHR systems. CCME is able to help physicians better utilize their EHR systems to manage their patient population by providing EHR technical expertise and quality improvement expertise. More than 240 physicians and practitioners have benefited from the opportunity to work with CCME to improve the recommended preventive care provided to their patients, including cancer screening and adult immunizations, and the recommended care provided to their patients with cardiovascular disease through better use of their EHR systems.

QIOs are well suited to assist providers and improve health care quality as required by the Affordable Care Act. The landmark health care reform legislation, signed into law in March 2010 [8] and upheld by the US Supreme Court in June 2012, requires sweeping changes to our health care system. Numerous provisions will be implemented over the next several years. QIOs can help providers to establish accountable care organizations and medical homes and to execute other systematic changes. QIOs are a national resource, and they are well positioned and well prepared to play an integral part in our nation's quality improvement strategies.

CCME takes very seriously its role as the federally designated QIO for North Carolina and South Carolina. We consider this designation an honor and a privilege, and we look forward to continued opportunities to fulfill our organizational mission as an independent nonprofit corporation: "to provide leadership, education, and services to promote improvement in the quality and cost effectiveness of health care" [10]. NCMJ

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