
Evolution of Quality Review Programs for Medicare: Quality Assurance to Quality Improvement

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This article outlines the development, successes, and future directions of the Medicare Peer Review Organization (PRO) program. As established by the Tax Equity and Fiscal Responsibility Act of 1982, the purpose of the PRO program is to promote the quality, medical necessity, and appropriateness of services reimbursed through Medicare. We describe the evolution of the PRO program from a retrospective quality review approach, focused on individual events, to a proactive, quality improvement approach. Priorities for future development are described, including the identification of additional clinical areas for attention, improvements in program infrastructure, and broadening the scope of projects to new provider settings.

INTRODUCTION

Soon after the enactment of the Medicare program in 1965, it became clear that fulfilling the mandate of providing health care security to Medicare beneficiaries would require assurances that funds were used effectively and that beneficiaries received care consistent with medical quality standards. The systems designed and implemented to meet these obligations matched what was occurring throughout the health care industry. Here we discuss the evolution of these systems from quality assurance, primarily based on retrospec-

tive quality review, to proactive quality-improvement approaches, and describe the direction of the quality improvement program as administered by HCFA.

DEVELOPMENT BEGINS

In 1971, Congress authorized the Experimental Medical Care Review Organizations (EMCROs) to determine whether area physician groups could reduce unnecessary utilization of services reimbursed through Medicare and Medicaid (Institute of Medicine, 1990). Reviewing inpatient and ambulatory services, the EMCROs focused on individual cases to improve the appropriateness and quality of care. The EMCRO program provided the model for the first legislated Medicare quality review program, the professional standards review organizations (PSROs).

The first national quality-assurance system administered as a part of Medicare itself, the PSRO program, was established in 1972 by amendment to Title XI of the Social Security Act. Based on the EMCRO model, the PSRO program reviewed services and items reimbursed through Medicare. The purpose of these reviews was to determine whether such services and items were medically necessary, had a quality that met professionally recognized standards, and were provided in the most effective, economic manner possible.

Through the PSRO program, a mechanism was implemented to monitor services, to ensure the quality of care provid-

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ed to beneficiaries, and to ensure that appropriate action was taken when it appeared that Medicare beneficiaries had received care that did not meet recognized standards (Institute of Medicine, 1990). However, with their focus primarily on utilization review, PSROs were widely viewed as a mechanism for containing costs and controlling medical practice, not as a means of improving clinical quality of care.

The PSROs were also highly localized in their areas of coverage, with 195 separately designated PSRO areas by 1981 (Mihalski, 1984). The localized structure ensured that assessment of cases reflected local practice patterns. This fragmentation led to large differences in PSRO operations, including differences in funding mechanisms. Some PSROs were funded by grants, some operated by cooperative agreement, and some undertook formal contracts with the Federal Government. This loose program structure contributed significantly to wide variations in individual PSRO performance and made it virtually impossible to make comparisons between them. Despite extensive efforts, the PSRO program was unable to effectively contain increasing health care utilization and costs.

DEVELOPMENT CONTINUES

In the early 1980s, concern about the viability of the hospital insurance and supplementary medical insurance trust funds, about protection of beneficiaries, and about the quality of care reimbursed through Medicare increased. These concerns led to changes in the quality-assurance system and the reimbursement structure for Medicare.

To increase consistency and effectiveness of quality review organizations, Congress, through the Peer Review Improvement Act of 1982 (Title I, Subtitle C of the Tax Equity and Fiscal Responsibility

Act of 1982) (Public Law 97-248) dismantled the PSRO structure, and in its place, authorized the utilization and quality control peer review organization (PRO) program. Section 1862 (g) of the Social Security Act required the Secretary to contract with utilization and quality control PROs to promote the economy, effectiveness, efficiency, and quality of services reimbursed through Medicare.

The Deficit Reduction Act of 1984 (Public Law 98-369) mandated development and implementation of the Medicare prospective payment system (PPS), designed to contain spiraling health care costs by reimbursing providers at a fixed rate based on diagnosis-related groups (DRGs) reflecting the groups and quantities of resources typically used per instance of a specific diagnosis, replacing a reimbursement system based on reasonable or prevailing charges. The financial incentive for providers subject to PPS is to reduce the resources expended per hospital stay either by reducing the kinds or amounts of services provided or by reducing patient length-of-stay. Thus, the advent of PPS further increased the importance of quality assurance and utilization control oversight of health care services provided to Medicare beneficiaries.

In 1984, HCFA issued a request for proposals to contract with PROs for utilization and quality control. The PSRO regions were consolidated into 54 regions consisting of each State, the District of Columbia, Puerto Rico, the Virgin Islands, and the combined area of Guam, American Samoa, and Northern Marianas (later merged with Hawaii, leaving the current 53 regions). PROs are physician-sponsored or physician-access organizations that are paid under contract by the Federal Government to review medical services reimbursed by the Medicare program. The PROs are the primary tool for monitoring the quality of

medical services provided to Medicare beneficiaries. PROs are contracted to ensure that the reviewed medical care is medically necessary, is provided in the most appropriate setting, and meets professionally recognized standards of care.

The first PRO contract cycle (1984-1986) retained a strong emphasis on reducing inappropriate admissions. PRO activities at that time continued to focus on retrospective case review with educational or punitive measures for individual providers when appropriate or necessary. Targeted and random samples of cases meeting specified parameters were selected from electronic hospital reimbursement claims from the PRO's area. PROs obtained and reviewed copies of the complete medical record for the selected cases. If the care did not meet professionally accepted standards or was not delivered in the appropriate setting, the PRO could use its authority to deny part or all of the payment to the provider. Consequently, the relationship between PROs and provider communities was frequently adversarial.

During the second (1986-1989) and third (1989-1993) contract periods, although there were modest changes in the PROs' activities, the retrospective review process continued. However, there was an evolving awareness within HCFA, the PROs, and the health care industry that retrospective individual case review was not an effective means of improving the overall quality of health care. Research had revealed that patterns and outcomes of care vary between regions and between specific hospitals in ways not explained by known variations in severity of patient illness (Chassin, Brook, and Park, 1986; Health Care Financing Administration, 1986). Other research indicated that physician review of hospital medical records had questionable reliability (Rubin et al., 1992). Fostering positive changes in physician

behavior was further stymied by the very nature of retrospective case review, a process that emphasized the review of idiosyncratic, often unusual events that were discovered long after the examined event had occurred.

By the late 1980s, there was also a growing understanding that even care that met recognized standards could be improved through the use of quality improvement models. New models of quality improvement began to be seriously considered by the health care industry. These models focused on improving standards of care by improving care delivery processes, information systems, and training resources. The new models required analysis of patterns of care, and improvement projects aimed at improving specific processes of care.

During the third contract cycle (1989-1993), HCFA began shifting the PRO program's focus toward developing a collaborative relationship with the provider community to create a cooperative program for actively and prospectively improving health care. The residual effects of the older adversarial relationship between PROs and providers were a challenge at the launch of the Health Care Quality Improvement Initiative (HCQII).

Implemented in 1992, the HCQII marked a significant milestone in the evolution of the PRO program. The HCQII moved from concentrating on individual clinical errors to analyzing patterns of care and outcomes as the means toward monitoring and improving mainstream health care (Jencks and Wilensky, 1992).

Originally scheduled to end in 1992, the third PRO contract cycle was extended into 1993 to allow refinement of the fourth contract's design and requirements. HCQII and the new models of quality improvement emphasized the creation of quality-improvement projects. Clinical practice guidelines published by the Federal

Government and professional health care groups provided another resource for such quality-improvement projects. Analyses of patterns of excellence and error in clinical care were used to identify priorities for the design of condition-specific, process-improvement (care-improvement) projects

The first HCQII project was the Cooperative Cardiovascular Project (CCP). The CCP aimed to improve the care delivered to patients with acute myocardial infarction. Quality-of-care indicators were jointly developed by the American College of Cardiology, the American Heart Association, the American Medical Association, and HCFA (Jencks and Wilensky, 1992). The CCP was the first structured attempt by HCFA's PRO program to use process of care indicators to identify areas of quality or performance to target for potential improvement. The CCP demonstrated, based on pre- and post-intervention measures of the quality indicators, that implementing interventions aimed at assisting providers to change care processes can lead to increased rates of compliance with best-clinical-practices guidelines, and to improved outcomes (Marciniak et al., 1998; Marciniak, Mosedale, and Ellerbeck, 1998).

HCFA and the PRO program quickly learned that promoting continuous quality improvement is itself an evolving process. The HCQII underwent many changes as it evolved into the Health Care Quality Improvement Program (HCQIP) program as it is implemented in the current PRO contract (Chin, Ellerbeck, and Jenks, 1995; Weinmann, 1998). Retrospective case review was replaced as the primary PRO activity by quality-improvement projects. Since the quality improvement approach is data driven, the evolution of new data systems and methods of quality-indicator measurement were necessary (Fitzgerald,

Molinari, and Bausell, 1998). HCFA decided to create two clinical data abstraction centers to increase the efficiency, consistency, and quality of clinical data abstracted from patient records. These abstracted data provide much of the raw material used to construct baseline and post-intervention estimates of the frequency with which indicated care processes are delivered.

During the fourth and fifth contract periods, PROs worked to create partnerships with HCFA, providers, experts, and citizens to identify and document opportunities to improve health care for Medicare beneficiaries. More than 2,000 cooperative projects between PROs, health care providers, and beneficiaries addressed quality of care, medical necessity, appropriateness of health care setting, readmissions, and DRG coding (Health Care Financing Administration, 1996). Although the PROs reported improvement in two-thirds of their projects, HCFA was not able to demonstrate any overall improvement or impact on quality (Health Care Financing Administration, 1998).

TODAY

Begun in 1999, the sixth (and current) PRO contract refined and expanded upon the accomplishments of the fourth and fifth contract cycles. The primary goal is to improve the care delivered to all Medicare beneficiaries by implementing statewide improvement projects using standardized quality indicators in specific clinical areas. The PROs are directed to build quality improvement projects in partnership with other government and private entities.

The current PRO contracts are divided into tasks. Task 1 directs the PROs to improve the care for six clinical topics that are major sources of mortality or morbidity for the Medicare population. There is strong scientific evidence and provider

consensus that improving performance on the 24 indicators for these topics will lead to improved outcomes (Jencks et. al, forthcoming). Task 2 directs the PROs to implement three types of local quality improvement projects. First, each PRO is required to conduct an improvement project aimed at reducing a disparity between the care received by a disadvantaged group of Medicare beneficiaries and all other Medicare beneficiaries in the State. Second, PROs must implement a project in a setting other than acute care hospitals. PROs are also encouraged to conduct projects on topics of local significance. Task 3 directs the PROs to partner with managed care organizations to ensure beneficiaries enrolled in such plans receive the same level of attention from the HCQIP as those covered by traditional fee-for-service Medicare. Task 4 directs the PROs to reduce payment errors for inpatient care. The Payment Error Prevention Program is designed to reduce the amount paid in error for inpatient PPS services reimbursed under Medicare, using the same improvement project techniques developed and tested under the HCQIP. Task 5 directs the PROs to investigate beneficiary complaints and to conduct specific types of medical record reviews required by statute and regulation to ensure quality oversight of beneficiary care. Task 6 is reserved for pilot projects and experimental topics for quality improvement.

Successes of the HCQIP, to date, include a growing acceptance of the partnership model between providers, PROs, the Federal Government, Medicare beneficiaries, and other stakeholders. The quality indicators and clinical abstraction data have gained increasing credibility in the provider community, resulting in an increased willingness among providers to analyze quality on the basis of statistical patterns of care.

FUTURE DIRECTIONS

Priorities for future development of the HCQIP involve identification of additional clinical areas for attention, improvements in the PRO program infrastructure, and broadening the provider settings of projects. Currently most projects are conducted in hospitals and doctors' offices. Pilot projects are underway to develop intervention programs to improve quality of care for beneficiaries in skilled nursing facilities and home health agencies. Attention to quality of care delivered in these settings can be expected to increase as the utilization of these services increases and as skilled nursing facilities and home health agencies, like acute care hospitals before them, move to a PPS reimbursement system.

Refinements in the information and indicator measurement infrastructures will allow more frequent assessment of quality indicator data than is currently practical. This will improve tracking of quality improvements, allow more rapid and effective feedback, and expedite evaluation of the PROs' performance.

Programmatically, emphasis will continue to be placed upon strengthening existing partnerships and increasing the number and types of partners. Expansion of the partnership base is motivated partly by HCFA's desire to involve all possible resources in its quest to improve quality of care for Medicare beneficiaries. The expansion is also driven by the understanding that the HCQIP partnerships promote improved care of all patients regardless of who reimburses the costs of their care. Finally, partnerships reduce the burden on providers by creating consistent expectations from all purchasers.

The evolution of the PRO program is an important part of HCFA's transition from a financing program to a value based purchaser

of health care. As quality improvement and quality management systems in health care continue to evolve, and as the health care industry and reimbursement structure change, all partners in the HCQIP remain committed to protecting the health care security of Medicare beneficiaries by protecting the trust funds from unnecessary depletion while ensuring that the care received by Medicare beneficiaries is appropriate, necessary, and of the highest quality.

ACKNOWLEDGMENTS

The authors wish to thank all our colleagues, advisors, and managers who helped us develop this understanding of the history, successes, mandates, and future directions of the quality review programs for Medicare. Special thanks to Tim Cuerdon and Susan Smith for writing and editorial assistance.

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