Physician Professionalism and Accountability: The Role of Collaborative Improvement Networks
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abstract

The medical profession is facing an imperative to deliver more patient-centered care, improve quality, and reduce unnecessary costs and waste. With significant unexplained variation in resource use and outcomes, even physicians and health care organizations with “the best” reputations cannot assume they always deliver the best care possible. Going forward, physicians will need to demonstrate professionalism and accountability in a different way: to their peers, to society in general, and to individual patients. The new accountability includes quality and clinical outcomes but also resource utilization, appropriateness and patient-centeredness of recommended care, and the responsibility to help improve systems of care. The pediatric collaborative improvement network model represents an important framework for helping transform health care. For individual physicians, participation in a multisite network offers the opportunity to demonstrate accountability by measuring and improving care as part of an approach that addresses the problems of small sample size, attribution, and unnecessary variation in care by pooling patients from individual practices and requiring standardization of care to participate. For patients and families, the model helps ensure that they are likely to receive the current best evidence-based recommendation. Finally, this model aligns with payers’ goals of purchasing value-based care, rewarding quality and improvement, and reducing unnecessary variation around current best evidenced-based, effective, and efficient care. In addition, within the profession, the American Board of Pediatrics recognizes participation in a multisite quality improvement network as one of the most rigorous and meaningful approaches for a diplomate to meet practice performance maintenance of certification requirements. Pediatrics 2013;131:S204–S209

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KEY WORDS

physician professionalism, maintenance of certification, collaborative improvement networks

ABBREVIATIONS

ABP—American Board of Pediatrics
CMS—Centers for Medicare and Medicaid Services
FFS—fee-for-service
MOC—Maintenance of Certification
QI—quality improvement

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The medical profession is at the heart of a health care system that is undergoing a profound transformation with the imperative to deliver more patient-centered care to individuals and populations, improve quality, and reduce unnecessary costs and waste. Within the profession, the obligation and opportunities to improve this system extend from leadership to individual physicians. Practicing physicians are challenged extrinsically by a growing demand for accountability from purchasers, private payers, and the public through public reporting requirements such as the Centers for Medicare and Medicaid Services’ (CMS) incentive-linked Physician Quality Reporting System and associated public rating site1 and the Blue Cross Blue Shield Physician Group Incentive Program. However, the more profound challenge to physicians is intrinsic and derives from the foundation of medicine as a profession and the resulting social contract that grants a degree of self-regulation in return for accountability: first and foremost to good patient care but also to the judicious use of resources and other domains of professional behavior.2

Historically, a physician’s first obligation was to “do no harm,” and most physicians were assumed by the public and by themselves to be delivering quality care. Variation in care was acknowledged but was felt to be part of the art of medicine necessary to deliver care appropriate to each individual patient. Attempts to standardize care or systematically measure outcomes were often met with resistance as “cookbook” medicine rather than as an effort to reduce unnecessary variation and enhance the reliability of care. Physicians did not routinely measure their outcomes nor did they have the skills or infrastructure to do so.

Over the past 3 decades, dramatic changes have occurred with the documentation by a growing cadre of researchers, led by Jack Wennberg, of significant unexplained variation in the quality and volume of care even among the “best” institutions and physicians.3,4 The advent of evidence-based medicine has demonstrated that much of the variation is related to failure to deliver recommended care, resulting in under- and overuse or in delivering needed care in a suboptimal manner.5 We are now in the midst of a revolution focused on patient-centered, outcomes-based, and efficient health care. Even the physicians and health care organizations with the reputation of being “the best” are no longer assuming they always deliver the best care possible. Rather, they are asking tough questions such as, “If we recommend a procedure or other intervention, how well do we know, and how well can we explain to this patient, the likely costs, risks, as well as possible benefits to them? If the benefits do not clearly exceed the risks to the patient, should we also weigh the costs to others? If there are measured gaps in quality and safety, how can care be improved? If the decision is to intervene, how do we deliver the best care in the most cost-effective way?” These developments represent a profound change in how medicine will be practiced and how health care will be delivered in the future. Physicians will be required to demonstrate professionalism and accountability, to their peers, to society in general, and to individual patients, in a different way. The new accountability includes not only quality and clinical outcomes but also resource utilization, appropriateness of recommended care, the responsibility to help improve systems of care, and ensuring care is patient-centered.

WHAT IS THE UNIT OF PHYSICIAN ACCOUNTABILITY?

Is physician accountability an individual responsibility or a group responsibility? The answer is both; the physician must be accountable as an individual but also as a participant in practices and teams, systems, and health care organizations that are responsible for population management (Fig 1). The delivery of better quality with less waste and unnecessary costs requires a change in both individual physician behavior as well as a change in systems of care to foster interdisciplinary teamwork and care redesign. The American Board of Medical Specialties6 and the Accreditation Council for Graduate Medical Education,7 responding to these challenges, have endorsed the concept of lifelong continuous professional development for individual physicians, focused on 6 core physician competencies necessary to deliver quality care. From the time physicians begin their careers until they leave medicine, they are expected to demonstrate through various assessments the progress of their ongoing individual professional development. This approach represents a major change in both the scope and degree of monitoring of accountability of physicians within their own profession.

The key external manifestation of the competencies and ongoing professional development is the quality and parsimonious use of resources for the care a physician and their care team delivers. However, although some aspects of quality are an individual physician’s responsibility, the major determinants of good outcomes and efficient care are related to systems of care and teamwork. Given the ever-increasing complexity of patient care, a physician’s abilities to function well in an interdisciplinary team, collaborate across teams, and play a meaningful role in improving systems are
new competencies for the medical profession that are essential to the transformation and improvement of care.

With the development of quality improvement (QI) science, physicians are being challenged to accept responsibility for measuring, improving, and sharing their professional development and their outcomes of care publicly on a continuous basis. In some situations, good individual clinical performance may not lead to improved care. For example, a physician may select and write a prescription for the most appropriate medication for a specific patient, but patient behaviors, as well as cultural and social issues, may influence the outcome of care far more than the selection of the most appropriate medication. In most cases, however, it is difficult to even assess individual physician clinical performance in environments such as ICUs and surgical teams in which multiple physicians and other care providers all play a critical role in outcomes of an individual case over time.

**FACILITATING PHYSICIAN ACCOUNTABILITY**

The American Board of Medical Specialties Maintenance of Certification (MOC) effort represents a major commitment to self-regulation from the profession. Within that framework, the American Board of Pediatrics’ (ABP’s) MOC program for pediatricians, with requirements for continuous knowledge acquisition and self-assessment coordinated with newly redesigned medical education programs from societies and other sources, helps pediatricians demonstrate ongoing acquisition of medical knowledge, communication skills, and professional behavior. Demonstrating practice performance has been more challenging. Real-time clinical data and outcomes are difficult to obtain in the current paper-based record system, and although adoption of electronic health records, health information systems, clinical decision support, and clinical registries is increasing, significant gaps remain. Even with access to real-time clinical performance data, “measurement is not improvement,” so it is essential that physicians acquire competency in QI science to be able to systematically use measurement to improve practice performance. Collaborative improvement networks, as defined in this supplement, that combine QI science, quality measurement, and change in practice behavior, represent a significant opportunity for physicians and payers to address clinical accountability, improve outcomes, and reduce unnecessary care and waste.

**ADVANTAGE OF COLLABORATIVE IMPROVEMENT NETWORKS FOR PARTICIPATING PHYSICIANS**

Participating in a collaborative improvement network provides a number of benefits for participating physicians. First, it allows peer-to-peer comparison and benchmarking on “best” results within the group. It may also be able to provide a sufficient number of patients with a given condition to help answer the question of “How do I determine whether what I do works in practice?” given that for nearly all conditions, the sample size...
for any 1 physician is insufficient to answer the question of effectiveness in actual practice. Given continued gaps in comparative effectiveness research, networks also provide an opportunity to test in a formal way what does and doesn’t work and to spread the result quickly within the network, thus speeding the ability to improve. Because collaborative improvement networks encourage reporting data at a group level, they often foster or even require teamwork. This helps participating physicians and their care teams deliver evidence-based medicine derived both from published data at all points within a practice, and to obtain evidence on effectiveness of care across multiple practices. Finally, a collaborative improvement network is likely to provide access to coaching from physicians and others with special expertise in QI.9

**ADVANTAGE OF COLLABORATIVE IMPROVEMENT NETWORKS FOR PATIENTS**

Networks greatly enhance the ability of patients and their families of finding a high-performing practice, because networks are likely to spread best practices across all participating practices. One of the first steps practices take in creating or joining a collaborative improvement network is to assess the variation in process and outcome related to how the practices currently deliver care and to systematically determine which processes result in the best outcomes of care. Thus, networks help reduce unnecessary variation within and between practices and increase both the effectiveness (adopting best practices) and the reliability of care within and between participants. Moreover, given the advantage of larger numbers of patients and practices, a network can also generate and reliably report a much more robust set of measures. As collaborative improvement networks continually conduct tests of changes to care and rapidly incorporate new knowledge, parents can be more confident that not only will their child receive the best current standard of care but that care will be applied in a consistent and reliable manner, and new innovations will be spread rapidly to their child’s care.

Most pediatric improvement networks assess the patient’s experience and involve patients and parents in shared decision-making so patients and their families are more likely to receive care that is a patient-centered, positive experience. Finally, in some networks the opportunity exists to enroll in clinical studies and to contribute to the development of the next advance in care.

**ADVANTAGE OF COLLABORATIVE IMPROVEMENT NETWORKS FOR PAYERS**

Collaborative improvement networks afford payers a wider and more efficient opportunity to positively influence the quality and efficiency of care for their members. A central responsibility of public and private purchasers and payers of care is to purchase on behalf of their participants the best quality of care possible at an affordable cost. One lever that purchaser/payers have is through aligning payment with the desired outcomes of quality and affordability. There is increasing evidence that the fee-for-service (FFS) reimbursement system creates disincentives to improving quality and efficiency, especially for population health. Significant efforts are underway by both public and private sector payers to develop alternative reimbursement to foster these aims. Pay for performance, which can be tied to either FFS or other payment models (discussed subsequently) is the most widely used, but questions have been raised to its overall effectiveness in fostering change.10 Beyond FFS, a variety of other payment models featuring payment for care coordination, bundled payments, or global budgeting are being tested, primarily in practices that are successfully implementing system changes such as those embodied in patient-centered medical homes or accountable care organizations. These payment mechanisms, focused as they are on broader population-based outcomes, could be used to support and foster more participation of practices in collaborative networks.

A collaborative improvement network almost by definition ensures that quality is measured, that feedback and benchmarking occur, and that valid efforts are made to improve outcomes. As we have noted, providing feedback through performance reports is a necessary, but insufficient, step to improve outcomes, because most physicians do not have the knowledge and skills to comprehensively improve their results. In a network, given more robust data, incentive payments could be based on how fast a practice improves or how much it improves, so the reward is for improvement, not just a comparative score. Networks represent an opportunity to encourage continual improvement in care and that aligns with payers fulfilling their fiduciary responsibility to purchase care that is of both high quality and high efficiency. With the added impetus of aligned payment, collaborative improvement networks could augment the effectiveness of patient-centered medical homes or even an accountable care organization model by fostering improvement in the care system across care sites, at the local, regional, or, ideally, national level.

Many insurer-purchasers seek to identify and purchase uniformly high-quality care across a large geographic or service area. Collaborative improvement networks are designed to help ensure high-quality, reliable care across multiple sites, which may facilitate purchaser-payers in being able to offer a consistently higher quality of care and, when coupled with changes in reimbursement, could result in elimination of considerable waste and inefficiency as well.
INCENTIVIZING PHYSICIAN INVOLVEMENT IN COLLABORATIVE IMPROVEMENT NETWORKS

A number of varied and compelling examples of the achievements of collaborative improvement networks in pediatric care are highlighted in this supplement, but although the number of high-functioning networks is increasing, the rate of spread needs to be dramatically accelerated. The ABP, a national leader in the profession, is working through its MOC program to make meaningful physician participation in assessing and improving quality of care. The ABP awards its highest level of MOC Part 4 credit to pediatricians participating in the type of QI efforts described in this supplement. In addition, the ABP is partnering with other national leaders in pediatrics such as the Children's Hospital Association, the American Academy of Pediatrics, and leading children's hospitals such as Cincinnati Children's Hospital Medical Center to promote well-functioning networks.11,12

Payers, including the CMS and private plans, are taking steps to encourage collaborative improvement and the model presented here. As a first step, payers are fostering QI, system redesign, and shared accountability through value-based purchasing and other incentive programs, direct technical support, and sharing of data with practices. Many of these programs, such as Anthem Blue Cross and Blue Shield's Quality-In Sights: Hospital Incentive Program15 and the CMS hospital value-based purchasing program,14,15 reward both improvement and overall achievement. Second, nearly all payers are now measuring performance and reporting back to providers and physicians at both the individual and group levels as well as sharing performance data with consumers. The goal of these programs is to incentivize improvement as well as to inform consumer choice. These programs have demonstrated improvement in the majority of measures.16

Going forward, payers will need to develop more patient-centered outcome measures and enable more sophisticated feedback mechanisms to providers. Third, payers are increasingly funding collaborative improvement efforts. Notable examples include Michigan Blue Cross and Blue Shield's funding of various patient safety initiatives carried out by hospital and physician groups over the past 10 years that has resulted in substantial, measurable improvements; the CMS Partnership for Patients initiative,17 with almost $1 billion in funding directed at reducing patient harm and readmissions; and the Quality Improvement Organization Learning and Action Networks,18 focused on collaborative improvement across the nation. Payers have a vested interest in fostering collaborative improvement efforts that deliver better health and better care at lower costs to the populations they serve.

The collaborative improvement network model represents an important framework for helping transform health care. The pediatric examples reported in this supplement have demonstrated results in meeting one or more of the goals of the Triple Aim concept of improving quality of care, reducing costs, and improving population health.19 For individual physicians, participation in a multisite improvement network offers the opportunity to demonstrate accountability by measuring and improving care as part of a prospective standardized approach to shared learning and sequential testing of what works. This approach addresses the problems of small sample size, attribution, and unnecessary variation in care by pooling patients from individual practices and requiring standardization of care to participate.

For patients, this model addresses the difficult issue of having to try to decide on site of care based on quality. Although some variation of care and quality will continue to exist within collaborative improvement networks, existing networks have demonstrated that quality can be improved and variation substantially reduced, thus ensuring patients that they are likely to receive the current best evidence-based recommendation. Finally, this model aligns with payers' goals of purchasing value-based care, rewarding both quality and improvement, and reducing unnecessary variation around current best evidenced-based, effective, and efficient care. In addition, within the profession, the ABP recognizes participation in a successful multisite QI network as among the most rigorous and meaningful approaches for a diplomate to meet MOC Part 4 requirements.

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