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# Accountable care organizations, the patient-centered medical home, and health care reform: What does it all mean?

#### ABSTRACT

Medical care in the United States is plagued by extremely high costs, poor quality, and fragmented delivery. In response, new concepts of integrated health care delivery have developed, including patient-centered medical homes and accountable care organizations (ACOs). This article reviews these concepts and includes a detailed discussion of the Centers for Medicare and Medicaid Services' ACO and Shared Savings Proposed Rule.

#### **KEY POINTS**

Compared with other developed countries, health care in the United States is among the costliest and has poor quality measures.

The patient-centered medical home is an increasingly popular model that emphasizes continuous coordinated patient care. It has been shown to lower costs while improving health care outcomes.

Patient-centered medical homes are at the heart of ACOs, which establish a team approach to health care delivery systems that includes doctors and hospitals.

Applications are now being accepted for participation in the Centers for Medicare and Medicaid Services' ACO Proposed Rule. The 3-year minimum contract specifies numerous details regarding structure, governance, and management, and may or may not involve risk—as well as savings—according to the plan chosen.

The us health care system cannot continue with "business as usual." The current model is broken: it does not deliver the kind of care we want for our patients, ourselves, our families, and our communities. It is our role as professionals to help drive change and make medical care more cost-effective and of higher quality, with better satisfaction for patients as well as for providers.

Central to efforts to reform the system are two concepts. One is the "patient-centered medical home," in which a single provider is responsible for coordinating care for individual patients. The other is "accountable care organizations," a new way of organizing care along a continuum from doctor to hospital, mandated by the new health care reform law (technically known as the Patient Protection and Affordable Care Act).

## CURRENT STATE OF HEALTH CARE: HIGH COST AND POOR QUALITY

Since health care reform was initially proposed in the 1990s, trends in the United States have grown steadily worse. Escalating health care costs have outstripped inflation, consuming an increasing percentage of the gross domestic product (GDP) at an unsustainable rate. Despite increased spending, quality outcomes are suboptimal. In addition, with the emergence of specialization and technology, care is increasingly fragmented and poorly coordinated, with multiple providers and poorly managed resources.

Over the last 15 years, the United States has far surpassed most countries in the developed world for total health care expenditures per capita.<sup>1,2</sup> In 2009, we spent 17.4% of our

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TABLE 1		
<b>Patient-</b>	centered medical homes:	
New 201	11 National Committee for	r Ouality Assurance standard

STANDARD	MUST-PASS ELEMENT
Enhance access continuity	Access during office hours
Identify and manage patient populations	Use data for population management
Plan and manage care	Manage care
Provide self-care support and community support	Support self-care process
Track and coordinate care	Track referrals and follow-up
Measure and improve performance	Implement continuous quality improvemen

GDP on health care, translating to \$7,960 per capita, while Japan spent only 8.5% of its GDP, averaging \$2,878 per capita.<sup>2</sup> At the current rate, health care spending in the United States will increase from \$2.5 trillion in 2009 to over \$4.6 trillion in 2020.<sup>3</sup>

Paradoxically, costlier care is often of poorer quality. Many countries that spend far less per capita on health care achieve far better outcomes. Even within the United States, greater Medicare spending on a state and regional basis tends to correlate with poorer quality of care.<sup>4</sup> Spending among Medicare beneficiaries is not standardized and varies widely throughout the country.<sup>5</sup> The amount of care a patient receives also varies dramatically by region. The number of specialists involved in care during the last year of life is steadily increasing in many regions of the country, indicating poor care coordination.<sup>6</sup>

care system cannot continue with 'business as usual'

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## ■ PATIENT-CENTERED MEDICAL HOMES: A POSITIVE TREND

The problems of high cost, poor quality, and poor coordination of care have led to the emergence of the concept of the patient-centered medical home. Originally proposed in 1967 by the American Academy of Pediatrics in response to the need for care coordination by a single physician, the idea did not really take root until the early 1990s. In 2002, the American Academy of Family Medicine embraced the concept and moved it forward.

According to the National Committee for Quality Assurance (NCQA), a nonprofit organization that provides voluntary certification for medical organizations, the patient-centered medical home is a model of care in which "patients have a direct relationship with a provider who coordinates a cooperative team of healthcare professionals, takes collective responsibility for the care provided to the patient, and arranges for appropriate care with other qualified providers as needed."<sup>7</sup>

Patient-centered medical homes are supposed to improve quality outcomes and lower costs. In addition, they can compete for public or private incentives that reward this model of care and, as we will see later, are at the heart of ACO readiness.

#### Medical homes meet certification standards

NCQA first formally licensed patient-centered medical homes in 2008, based on nine standards and six key elements. A scoring system was used to rank the level of certification from level 1 (the lowest) to level 3. From 2008 to the end of 2010, the number of certified homes grew from 28 to 1,506. New York has the largest number of medical homes.

In January 2011, NCQA instituted certification standards that are more stringent, with six standards and a number of key elements in each standard. Each standard has one "must-pass" element (TABLE 1). NCQA has built on previous standards but with increased emphasis on patient-centeredness, including a stron-

ger focus on integrating behavioral health and chronic disease management and involving patients and families in quality improvement with the use of patient surveys. Also, starting in January 2012, a new standardized patient experience survey will be required, known as the Consumer Assessment of Healthcare Providers and Systems (CAHPS).

The new elements in the NCQA program align more closely with federal programs that are designed to drive quality, including the Centers for Medicare and Medicaid Services program to encourage the use of the electronic medical record, and with federal rule-making this last spring designed to implement accountable care organizations (ACOs).

Same-day access is now emphasized, as is managing patient populations—rather than just individual patients—with certain chronic diseases, such as diabetes and congestive heart failure. The requirements for tracking and coordinating care have profound implications about how resources are allocated. Ideally, coordinators of chronic disease management are embedded within practices to help manage high-risk patients, although the current reimbursement mechanism does not support this model. Population management may not be feasible for institutions that still rely on paperbased medical records.

#### Medical homes lower costs, improve quality

Integrated delivery system models such as patient-centered medical homes have demonstrated cost-savings while improving quality of care.<sup>8,9</sup> Reducing hospital admissions and visits to the emergency department shows the greatest cost-savings in these models. Several projects have shown significant cost-savings<sup>10</sup>:

The Group Health Cooperative of Puget Sound reduced total costs by \$10 per member per month (from \$498 to \$488, P = 0.76), with a 16% reduction in hospital admissions (P < .001) and a 29% reduction in emergency department visits (P < .001).

The Geisinger Health System Proven-Health Navigator in Pennsylvania reduced readmissions by 18% (P < .01). They also had a 7% reduction in total costs per member per month relative to a matched control group also in the Geisinger system but not in a medical home, although this difference did not

reach statistical significance. Private payer demonstration projects of patient-centered medical homes have also shown cost-savings.

Blue Cross Blue Shield of South Carolina randomized patients to participate in either a patient-centered medical home or their standard system. The patient-centered medical home group had 36% fewer hospital days, 12.4% fewer emergency department visits, and a 6.5% reduction in total medical and pharmacy costs compared with controls.

Finally, the use of chronic care coordinators in a patient-centered medical home has been shown to be cost-effective and can lower the overall cost of care despite the investment to hire them. Johns Hopkins Guided Care program demonstrated a 24% reduction in hospital days, 15% fewer emergency department visits, and a 37% reduction in days in a skilled nursing facility. The annual net Medicare savings was \$75,000 per coordinator nurse hired.

#### ACCOUNTABLE CARE ORGANIZATIONS: A NEW SYSTEM OF HEALTH CARE DELIVERY

While the patient-centered medical home is designed to improve the coordination of care Paradoxically, among physicians, ACOs have the broader costlier care goal of coordinating care across the entire continuum of health care, from physicians to hospitals to other clinicians. The concept of **poorer quality** ACOs was spawned in 2006 by Elliott S. Fisher, MD, MPH, of the Dartmouth Institute for Health Policy and Clinical Practice. The idea is that, by improving care coordination within an ACO and reducing fragmented care, costs can be controlled and outcomes improved. Of course, the devil is in the details.

As part of its health care reform initiative, the state of Massachusetts' Special Commission on the Health Care Payment System defined ACOs as health care delivery systems composed of hospitals, physicians, and other clinician and nonclinician providers that manage care across the entire spectrum of care. An ACO could be a real (incorporated) or virtual (contractually networked) organization, for example, a large physician organization that would contract with one or more hospitals and ancillary providers. 11

In a 2009 report to Congress, the Medicare

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Payment Advisory Committee (MedPac) similarly defined ACOs for the Medicare population. But MedPac also introduced the concept of financial risk: providers in the ACO would share in efficiency gains from improved care coordination and could be subjected to financial penalties for poor performance, depending on the structure of the ACO.<sup>12</sup>

But what has placed ACOs at center stage is the new health care reform law, which encourages the formation of ACOs. On March 31, 2011, the Centers for Medicare and Medicaid Services published proposed rules to implement ACOs for Medicare patients (they appeared in the Federal Register on April 7, 2011). <sup>13,14</sup> Comments on the 129-page proposed rules were due by June 6, 2011. Final rules are supposed to be published later this year.

The proposed new rule has a three-part aim:

- Better care for individuals, as described by all six dimensions of quality in the Institute of Medicine report "Crossing the Quality Chasm"<sup>15</sup>: safety, effectiveness, patient-centeredness, timeliness, efficiency, and equity
- Better health for populations, with respect to educating beneficiaries about the major causes of ill health—poor nutrition, physical inactivity, substance abuse, and poverty—as well as about the importance of preventive services such as an annual physical examination and annual influenza vaccination
- Lower growth in expenditures by eliminating waste and inefficiencies while not withholding any needed care that helps beneficiaries.

#### DETAILS OF THE PROPOSED ACO RULE

Here are some of the highlights of the proposed ACO rule.

#### Two shared-savings options

Although the program could start as soon as January 1, 2012, the application process is formidable, so this timeline may not be realistic. Moreover, a final rule is pending.

The proposed rule requires at least a 3-year contract, and primary care physicians

must be included. Shared savings will be available and will depend on an ACO's ability to manage costs and to achieve quality target performances. Two shared-savings options will be available: one with no risk until the third year and the other with risk during all 3 years but greater potential benefit. In the one-sided model with no risk until year 3, an ACO would begin to accrue shared savings at a rate of 50% after an initial 2% of savings compared with a risk-adjusted per capita benchmark based on performance during the previous 3 years. In the second plan, an ACO would immediately realize shared savings at a rate of 60% as long as savings were achieved compared with prior benchmark performance. However, in this second model, the ACO would be at risk to repay a share of all losses that were more than 2% higher than the benchmark expenditures, with loss caps of 5%, 7.5%, and 10% above benchmark in years 1, 2, and 3, respectively.

#### Structure of an ACO

Under the proposed rule, the minimum population size of Medicare beneficiaries is 5,000 patients, with some exceptions in rural or other shortage areas, or areas with critical access hospitals. ACO founders can be primary care physicians, primary care independent practice associations, or employee groups. Participants may include hospitals, critical access hospitals, specialists, and other providers. The ACO must be a legal entity with its own tax identification number and its own governance and management structure.

Concerns have been expressed that, in some markets, certain groups may come together and achieve market dominance with more than half of the population. Proposed ACOs with less than 30% of the market share will be exempt from antitrust concerns, and those with greater than 50% of market share will undergo detailed review.

#### Patient assignment

Patients will be assigned to an ACO retrospectively, at the end of the 3 years. The Centers for Medicare and Medicaid Services argues that retrospective assignment will encourage the ACO to design a system to help all patients, not just those assigned to the ACO.

The annual net savings to Medicare was \$75,000 per nurse coordinator hired

#### TABLE 2

# Required aspects of patient-centered care in a Medicare accountable care organization

Beneficiary involvement in governance

Process for beneficiary engagement in decision-making

Population needs assessment

Individual care plans for high-risk patients

Mechanisms for care coordination

Clear patient-provider communication

Written access standards

Measure of physician and clinical service performance

Surveys of beneficiaries to assess satisfaction with care

Patients may not opt out of being counted against ACO performance measures. Although Medicare will share beneficiaries' data with the ACO retrospectively so that it can learn more about costs per patient, patients may opt out of this data-sharing. Patients also retain unrestricted choice to see other providers, with attribution of costs incurred to the ACO.

The goal is to keep people well and out of the hospital, rather than to bring them in and do procedures

#### **Quality and reporting**

The proposed rule has 65 equally weighted quality measures, many of which are not presently reported by most health care organizations. The measures fall within five broad categories: patient and caregiver experience, care coordination, patient safety, preventive health, and managing at-risk populations, including the frail elderly. Bonus payments for cost-savings will be adjusted based on meeting the quality measures.

#### **Governance and management**

Under the proposed rule, an ACO must meet stringent governance requirements. It must be a distinct legal entity as governed by state law. There must be proportional representation of all participants (eg, hospitals, community organizations, providers), comprising at least 75% of its Board of Trustees. These members must have authority to execute statutory functions of the ACO. Medicare beneficiaries and

community stakeholder organizations must also be represented on the Board.

ACO operations must be managed by an executive director, manager, or general partner, who may or may not be a physician. A board-certified physician who is licensed in the state in which the ACO is domiciled must serve on location as the full-time, senior-level medical director, overseeing and managing clinical operations. A leadership team must be able to influence clinical practice, and a physician-directed process-improvement and quality-assurance committee is required.

#### Infrastructure and policies

The proposed rule outlines a number of infrastructure and policy requirements that must be addressed in the application process. These include:

- Written performance standards for quality and efficiency
- Evidence-based practice guidelines
- Tools to collect, evaluate, and share data to influence decision-making at the point of care
- Processes to identify and correct poor performance
- Description of how shared savings will be used to further improve care.

The concept of patient-centered care is a critical focus of the proposed ACO rule, and it includes involving the beneficiaries in governance as well as plans to assess and care for the needs of the patient population (TABLE 2).

### CONCERNS ABOUT THE PROPOSED NEW ACO RULE

While there is broad consensus in the health care community that the current system of care delivery fails to achieve the desired outcomes and is financially unsustainable and in need of reform, many concerns have been expressed about the proposed new ACO rule.

The regulations are too detailed. The regulations are highly prescriptive with detailed application, reporting, and regulatory requirements that create significant administrative burdens. Small medical groups are unlikely to have the administrative infrastructure to become involved.

Potential savings are inadequate. The shared savings concept has modest upside gain when modeled with holdback. Moreover, a recent analysis from the University Health System Consortium suggested that 50% of ACOs with 5,000 or more attributed lives would sustain unwarranted penalties as a result of random fluctuation of expenditures in the population. To

Participation involves a big investment. Participation requires significant resource investment, such as hiring chronic-disease managers and, in some practices, creating a whole new concept of managing wellness and continuity of care.

Retrospective beneficiary assignment is unpopular. Groups would generally prefer to know beforehand for whom they are responsible financially. A prospective assignment model was considered for the proposed rule but was ultimately rejected.

The patient assignment system is too risky. The plurality rule requires only a single visit with the ACO in order to be responsible for a patient for the entire year. In addition, the fact that the patient has the freedom to choose care elsewhere with expense assigned to the ACO confers significant financial risk.

There are too many quality measures. The high number of quality metrics—65—required to be measured and reported is onerous for most organizations.

Advertising is micromanaged. All marketing materials that are sent to patients about the ACO and any subsequent revisions must first be approved by Medicare, a potentially burdensome and time-consuming requirement.

**Specialists are excluded.** Using only generalists could actually be less cost-effective for some patients, such as those with human immunodeficiency virus, end-stage renal disease, certain malignancies, or advanced congestive heart failure.

**Provider replacement is prohibited.** Providers cannot be replaced over the 3 years of the demonstration, but the departing physician's patients are still the responsibility of the plan. This would be especially problematic for small practices.

#### PREDICTING ACO READINESS

I believe there are five core competencies that are required to be an ACO:

- Operational excellence in care delivery
- Ability to deliver care across the continuum
- Cultural alignment among participating organizations
- Technical and informatics support to manage individual and population data
- Physician alignment around the concept of the ACO.

Certain strategies will increase the chances of success of an ACO:

Reduce emergency department usage and hospitalization. Cost-savings in patient-centered medical homes have been greatest by reducing hospitalizations, rehospitalizations, and emergency department visits.

Develop a high-quality, efficient primary care network. Have enough of a share in the primary care physician network to deliver effective primary care. Make sure there is good access to care and effective communication between patients and the primary care network. Deliver comprehensive services and have good care coordination. Aggressively manage communication, care coordination, and "hand-offs" across the care continuum population of and with specialists.

Create an effective patient-centered medical home. The current reimbursement climate fails to incentivize all of the necessary elements, which ultimately need to include chronic-care coordinators for medically complex patients, pharmacy support for patient medication management, adequate support staff to optimize efficiency, and a culture of wellness and necessary resources to support wellness.

The minimum population of an ACO is 5,000 Medicare beneficiaries, with some exceptions

#### PHYSICIANS NEED TO DRIVE SOLUTIONS

Soaring health care costs in the United States, poor quality outcomes, and increasing fragmentation of care are the major drivers of health care reform. The Patient Centered Medical Home is a key component to the solution and has already been shown to improve outcomes and lower costs. Further refinement of this concept and implementation should be priorities for primary care physicians and health care organizations.

The ACO concept attempts to further improve quality and lower costs. The proposed ACO rule released by the Centers for Medicare and Medicaid Services on March 31, 2011, has generated significant controversy in the health care community. In its current form, few health care systems are likely to participate. A revised rule is awaited in the coming months. In the meantime, the Centers for Medicare and Medicaid Services has released a request for application for a Pioneer ACO model, which offers up

#### REFERENCES

- The Concord Coalition. Escalating Health Care Costs and the Federal Budget. April 2, 2009. http://www.concordcoalition.org/files/uploaded\_for\_nodes/docs/lowa\_Handout\_final.pdf. Accessed August 8, 2011.
- The Henry J. Kaiser Family Foundation. Snapshots: Health Care Costs. Health Care Spending in the United States and OECD Countries. April 2011. http://www.kff.org/insurance/ snapshot/OECD042111.cfm. Accessed August 8, 2011.
- Centers for Medicare and Medicaid Services. National health expenditure projections 2010–2020. http://www. cms.gov/NationalHealthExpendData/downloads/proj2010. pdf. Accessed August 8, 2011.
- The Commonwealth Fund. Performance snapshots, 2006. http://www.cmwf.org/snapshots. Accessed August 8, 2011.
- Fisher E, Goodman D, Skinner J, Bronner K. Health care spending, quality, and outcomes. More isn't always better. The Dartmouth Atlas of Health Care. The Dartmouth Institute for Health Policy and Clinical Practice, 2009. http://www.dartmouthatlas.org/downloads/reports/Spending\_Brief\_022709.pdf. Accessed August 8, 2011.
- Goodman DC, Esty AR, Fisher ES, Chang C-H. Trends and variation in end-of-life care for Medicare beneficiaries with severe chronic illness. The Dartmouth Atlas of Health Care. The Dartmouth Institute for Health Policy and Clinical Practice, 2011. http://www.dartmouthatlas.org/ downloads/reports/EOL\_Trend\_Report\_0411.pdf. Accessed August 8, 2011.
- National Committee for Quality Assurance (NCQA).
   Leveraging health IT to achieve ambulatory quality: the
   patient-centered medical home (PCMH). www.ncqa.org/
   Portals/0/Public%20Policy/HIMSS\_NCQA\_PCMH\_Factsheet.
   pdf. Accessed August 8, 2011.
- Bodenheimer T. Lessons from the trenches—a high-functioning primary care clinic. N Eng J Med 2011; 365:5–8.
- Gabbay RA, Bailit MH, Mauger DT, Wagner EH, Siminerio
   L. Multipayer patient-centered medical home implemen-

to 30 organizations the opportunity to participate in an ACO pilot that allows for prospective patient assignment and greater shared savings.

Whether ACOs as proposed achieve widespread implementation remains to be seen. However, the current system of health care delivery in this country is broken. Physicians and health care systems need to drive solutions to the challenges we face about quality, cost, access, care coordination, and outcomes.

- tation guided by the chronic care model. Jt Comm J Qual Patient Saf 2011; 37:265–273.
- Grumbach K, Grundy P. Outcomes of implementing Patient Centered Medical Home interventions: a review of the evidence from prospective evaluation studies in the United States. Patient-Centered Primary Care Collaborative. November 16, 2010. http://www.pcpcc.net/files/evidence\_outcomes\_in\_pcmh.pdf. Accessed August 8, 2011.
- Kirwan LA, Iselin S. Recommendations of the Special Commission on the Health Care Payment System. Commonwealth of Massachusetts, July 16, 2009. http://www. mass.gov/Eeohhs2/docs/dhcfp/pc/Final\_Report/Final\_Report.pdf. Accessed August 8, 2011.
- Medicare Payment Advisory Commission. Report to the Congress. Improving incentives in the Medicare Program. http://www.medpac.gov/documents/jun09\_entirereport. pdf. Accessed August 8, 2011.
- National Archives and Records Administration. Federal Register Volume 76, Number 67, Thursday, April 7, 2011. http://edocket.access.gpo.gov/2011/pdf/2011-7880.pdf. Accessed August 8, 2011.
- Berwick DM. Launching accountable care organizations—the proposed rule for the Medicare Shared Savings Program. N Engl J Med 2011; 364:e32.
- Institute of Medicine. Crossing the Quality Chasm. Washington, DC: National Academy Press; 2001.
- Fitch K, Mirkin D, Murphy-Barron C, Parke R, Pyenson B.
   A first look at ACOs' risky business: quality is not enough.
   Seattle, WA: Millman, Inc; 2011. http://publications.
   milliman.com/publications/healthreform/pdfs/at-first-look-acos.pdf. Accessed August 10, 2011.
- University HealthSystem Consortium. Accountable care organizations: a measured view for academic medical centers. May 2011.

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