

The Evolving Role of Subspecialties in Population Health Management and New Healthcare Delivery Models

Dhruv Khullar, MD, MPP; Sandhya K. Rao, MD; Sreekanth K. Chaguturu, MD; and Rahul Rajkumar, MD, JD

ew healthcare delivery models, including accountable care organizations (ACOs) and patient-centered medical homes (PCMHs), emphasize a more robust role for primary care to coordinate, integrate, and streamline medical care to promote better population health. However, it is less clear how the roles and responsibilities of subspecialists should change as we enter a new paradigm of alternative payment models.

Reinvigorating primary care and solidifying its central role in population health management is important but insufficient for correcting health system inefficiencies, fragmented care, and underlying cost growth. In the United States, unlike most developed countries, specialists outnumber primary care physicians (PCPs) by 26%. By themselves, PCPs account for only 6% of healthcare expenditures, although their decisions may have important implications for downstream spending. The average PCP coordinates care with 229 physicians in 117 practices; the average Medicare beneficiary sees 7 physicians—including 5 subspecialists—in 4 practices every year. 3.4

Defining the Role of Subspecialists

Health systems seeking to better manage population health and control costs will need a clearer understanding of how best to incorporate subspecialty practitioners: What is a subspecialist's role? How does it vary by subspecialty? How should they be compensated? The answers depend on the nature of the specialty, as well as the type, length, and intensity of services provided. Specialty care can either be episodic or longitudinal—and if longitudinal, it may be performed in increasing degrees of patient care responsibility or "ownership," ranging from providing periodic input for specific clinical questions to co-managing patients alongside PCPs and assuming principal care responsibility for patients (Table).

Each specialty may find itself at different points on the spectrum of patient "ownership" depending on the disease, patient comorbidities, and services required. For example, a

ABSTRACT

New healthcare delivery models, including accountable care organizations (ACOs) and patient-centered medical homes, emphasize a more robust role for primary care. However, it is less clear how the roles and responsibilities of subspecialists should change as we enter a new paradigm of alternative payment models. Health systems seeking to better manage population health and control costs will need a clearer understanding of how best to incorporate subspecialty practitioners: What is a subspecialist's role? How does it vary by subspecialty? How should they be compensated? We argue that subspecialist compensation in ACOs and other new care delivery models should recognize the range of ways in which specialists can provide value to patients across a population—which varies depending on the provider's role in a patient's care. Only by more thoughtfully engaging, equipping, and compensating subspecialty practitioners can we achieve reform's central goal of better population health at a lower cost.

Am J Manag Care. 2016;22(6):e192-e195

gastroenterologist may perform a screening colonoscopy on some patients—acting in a consulting capacity—while co-managing others with inflammatory bowel disease and even transitioning care entirely, depending on disease severity and patient comorbidities (eg, end-stage liver disease).

Subspecialty Care Along the Patient Care Spectrum

Traditional Relative Value Unit-based compensation does little to reflect the differential value of subspecialty services to an ACO or to promote the efficiency and quality of those services. Subspecialist compensation in ACOs and other new care delivery models should recognize the range of ways in which specialists can provide value to patients across a population—which varies depending on the provider's role in a patient's care. The Figure depicts varying subspecialist patient care roles and possible reimbursement schemes.

Episodic care. Although ACOs are charged with managing patients over time, many specialists—especially proceduralists—provide largely episodic care. For these services, ACOs may choose to contract with physician groups or employ physicians directly. Wider adoption of value-based purchasing will create a greater need for

Take-Away Points

- New healthcare delivery models, including accountable care organizations (ACOs) and patient-centered medical homes, emphasize a more robust role for primary care.
- It less clear how the roles and responsibilities of subspecialists should change as we enter a new paradigm of alternative payment models.
- We argue that subspecialist compensation in ACOs and other new care delivery models should recognize the range of ways in which specialists can provide value to patients across a population—which varies depending on the provider's role in a patient's care.

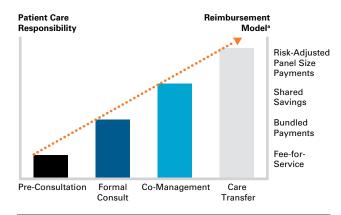
specialists providing episodic care to prove the value of particular interventions and demonstrate quality based on outcomes data and complication rates. To increase productivity for select procedures (eg, cataract surgery), ACOs may find fee-for-service payments tied to quality metrics an effective compensation scheme. For more involved procedures (eg, total knee replacements), bundled payments may lead specialists to assume greater perioperative risk and responsibility.

Longitudinal care. Many specialists provide longitudinal care—with varying degrees of ongoing involvement with the patient. There are, for example, consultants who provide periodic expert advice on complex conditions, such as nephrologists consulting on patients with chronic kidney disease or endocrinologists on patients with

■ Table. Evolving Trends in Population Health Management by Class of Subspecialty Care

Specialty Care	Examples	Evolving Trends and Management Levers
Episodic		
	Orthopedics: total knee replacement Gastroenterology: colonoscopy Ophthalmology: cataract surgery	Emphasis on proving value and appropriateness of procedure Must demonstrate performance on quality and efficiency metrics and patient-reported outcomes Increased use of bundled payments and peri-procedure responsibility for patients
Longitudinal		
Intermittent expert advice	Infectious disease: prosthetic joint infection Endocrine: Graves' disease Dermatology: psoriasis	ACOs may narrow their referral networks to trusted consultants (through exclusive contracting and preferred referrals) Increased need to demonstrate value of referral, given the associated costs Ample room for disruptive innovation including pre-consultation, eReferrals, and telemedicine
Co-management	Infectious disease: HIV Psychiatry: schizophrenia Rheumatology: rheumatoid arthritis management	ACOs may choose to subcontract with providers through per-patient payments that reward non-visit-based collaborative follow-up care Increased use of financial incentives tied to population-based quality metrics that relate to specialty care provided
Principal care	Oncology: new cancer Cardiology: advanced heart failure Nephrology: end-stage renal disease	Potentially greater need for specialists providing principal care, given increasing complex, specialized therapies May require retooling of clinical practices to support care coordination and team-based disease management Participation in shared savings and risk-adjusted panel size payments
ACO indicates accountable care organization.		

■ Figure. Levels of Patient Care Responsibility and Potential Reimbursement Models



^aReimbursement models are not mutually exclusive.

Graves' disease. Here, the dominant responsibility for patient care continues to reside with the PCP, and specialists act in a consulting capacity. Through preferred referrals and exclusive contracting, ACOs may choose to rely on a narrower set of trusted consultants who demonstrate value, as specialists are often a gateway to additional high-cost tests, procedures, and specialty medications.

This class of primary care—specialty interaction is rapidly evolving, with several forms of technological disruption, including pre-consultations, eReferrals, and telemedicine, making consultations potentially more convenient and more efficient. Pre-consultation, for example, is an emerging model of specialty care in which providers discuss the necessity of a consult and assess patient readiness before a formal consultation appointment occurs (eg, ordering necessary lab tests and imaging beforehand). These interactions have not traditionally been reimbursed, but specialists who offer these pre-consultation services will be increasingly valued by ACOs seeking to improve referral appropriateness, timeliness, and overall clinical efficiency.

A recent study at the San Francisco General Hospital found that 14% of hepatology referrals could be managed with pre-consultation as opposed to a formal office visit.⁵ Other work suggests that eReferral programs—in which consult requests and relevant patient data are entered online and screened for urgency and appropriateness—can reduce wait times, accelerate diagnostic workups, and ensure high-risk patients enter specialty care earlier in their disease course.⁶⁸

Specialty co-management. Depending on their degree of involvement, some specialists may opt to co-manage patients alongside PCPs (eg, infectious disease specialists caring for patients with HIV or rheumatologists caring for patients with rheumatoid arthritis) or even assume

principle responsibility for patient care (eg, oncologists for patients with new or terminal cancer or cardiologists for patients with advanced heart failure). Specialists comanaging patients with PCPs should receive per-member payments that encourage non-visit-based collaborative care and other incentives tied to performance on quality, efficiency, and patient experience metrics as they become increasingly available in the various subspecialties.

For some patients (eg, those with severe, complicated disease), it may make sense for patient care to be temporarily or permanently transitioned to the specialist. Here, PCPs serve as consultants instead of those responsible for the majority of patient care. Assuming greater patient ownership will require significant retooling in most specialty practices in order to perform the broad range of care coordination and case management services patients need. But ACOs— charged with managing population health and integrating medical care, as well as providing increasingly specialized and sophisticated treatments may find this arrangement particularly attractive. As specialists find themselves in the "principle care physician" role, their compensation should reflect, in part, the size and complexity of their patient panel, as opposed to the volume of visits and procedures they perform.

Conclusions

Building a stronger primary care base has been the dominant focus of healthcare delivery system reform, but only by engaging and equipping subspecialty practitioners more thoughtfully can we achieve reform's central goal of better population health at a lower cost. This will require creating—and compensating—new ways of sharing expertise and assessing patient appropriateness for subspecialty care, as well as developing more robust specialtyspecific performance metrics to understand the value that specialists provide. Because of the complexity and variety of services they deliver, many specialists will find themselves at different points on the patient care spectrum and they should be compensated accordingly. Recognizing the critical role of subspecialists in population health management is vital for ACOs hoping to more effectively and efficiently care for patients with a diverse set of primary care and subspecialty needs.

Author Affiliations: Department of Medicine, Massachusetts General Hospital (DK, SKR, SKC), Boston, MA; Population Health Management, Partners HealthCare (SKC), Boston, MA; Centers for Medicare & Medicaid Services (formerly) (RR), Washington, DC.

Source of Funding: None.

Author Disclosures: The authors report no relationship or financial interest with any entity that would pose a conflict of interest with the subject matter of this article.

Authorship Information: Concept and design (DK, SKR, SKC, RR); acquisition of data (DK); analysis and interpretation of data (DK); drafting of the manuscript (DK, SKR, SKC, RR); critical revision of the manuscript for important intellectual content (DK, SKR, SKC, RR); administrative, technical, or logistic support (SKC); and supervision (RR, SKC).

Address correspondence to: Dhruv Khullar, MD, MPP, Department of Medicine, Massachusetts General Hospital, 55 Fruit St, Boston, MA 02114. E-mail: dkhullar@partners.org.

REFERENCES

- 1. Hing E, Schappert SM. Generalist and specialty physicians: supply and access, 2009-2010. NCHS Data Brief. 2012;(105):1-8.
- 2. Huang X, Rosenthal MB.Transforming specialty practice—the patient-centered medical neighborhood. *N Engl J Med*. 2014;370(15):1376-1379. doi: 10.1056/NEJMp1315416.
- 3. Pham HH, O'Malley AS, Bach PB, Saiontz-Martinez C, Schrag D. Primary care physicians' links to other physicians through Medicare patients: the scope of care coordination. *Ann Intern Med.* 2009;150(4):236-242.

- 4. Pham HH, Schrag D, O'Malley AS, Wu B, Bach PB. Care patterns in Medicare and their implications for pay for performance. *N Engl J Med*. 2007;356(11):1130-1139.
- 5. Sewell JL, Guy J, Kwon A, Chen AH, Yee HF Jr. Preconsultation exchange for ambulatory hepatology consultations. *Am J Med*. 2013;126(6):523-528. doi: 10.1016/j.amjmed.2012.12.019.
- 6. Chen AH, Kushel MB, Grumbach K, Yee HF Jr. Practice profile. a safety-net system gains efficiencies through 'eReferrals' to specialists. *Health Aff (Millwood)*. 2010;29(5):969-971. doi: 10.1377/hlthaff.2010.0027.
- 7. Bergman J, Neuhausen K, Chamie K, et al. Building a medical neighborhood in the safety net: an innovative technology improves hematuria workups. *Urology*. 2013;82(6):1277-1282. doi: 10.1016/j. urology.2013.08.015.
- 8. Lee BJ, Forbes K.The role of specialists in managing the health of populations with chronic illness: the example of chronic kidney disease. *BMJ*. 2009;339:b2395. doi: 10.1136/bmj.b2395. ■

www.ajmc.com Full text and PDF