Meet the RUC: The Little-Known Committee Shaping Physician Reimbursement

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Medicare is the United States' largest single payer for physician services, and its administrative physician fee schedule serves as a guide for private payers and Medicaid. Since 1992, the Medicare physician fee schedule has been based on Relative Value Units (RVUs). Each physician service is assigned RVUs for work, practice expense, and liability, which are then multiplied by a geographically corrected conversion factor to calculate a payment in dollars.

While the Center for Medicare and Medicaid Services (CMS) makes the final RVU assignment for each physician service, these assignments are based largely on the RVU recommendations made by the RVU Update Committee (RUC). The RUC is organized and run by the American Medical Association (AMA), and CMS accepts nearly all of the RUC's recommendations. Clearly, the RUC wields great power in determining physician payment.

The RUC has 29 members, mostly representing various medical and surgical subspecialties. Of these, only five members (from internal medicine, family medicine, geriatrics, pediatrics, and osteopathic medicine) represent physicians whose main practice is primary care. In 2007, an additional primary care seat on the RUC was proposed, but the existing RUC members voted down this proposal.

The RUC meets three times per year to recommend work RVUs for new physician services and to update RVUs for existing services. RUC meetings—as well as transcripts and other detailed records of RUC deliberations—are not open to the general public. However, those interested in attending meetings may request permission from the RUC chairman. SGIM is not a member of the RUC (SGIM does not belong to the AMA's House of Delegates) but has sent observers to the last several RUC meetings as guests of the American College of Physicians.

At its February 2008 meeting, the RUC considered two matters especially pertinent to the future of primary care. First, in response to external pressure, the RUC initiated an effort to address procedures likely to be overvalued. These procedures include those for which the main location has changed from hospital to office and for which volume has rapidly increased. As advances in technology reduce the quantity of physician work required to perform procedural services (e.g., by enabling shorter procedure times), the RVUs for these services should decrease.

Reducing the RVUs for overvalued procedures is important because, under Medicare's spending cap for physician services, excessive payments for some services detract from payments for other services (like the evaluation and management services important to primary care). Overvalued payments for high-volume procedures drive the income gap between procedurists and non-procedurists, a key contributor to declining interest in primary care careers among US medical graduates. Whether the RUC will be able to recommend appropriate decreases in procedural RVUs remains to be seen.

Second, CMS asked the RUC to assist with the development of the Medicare's Medical Home Demonstration project (MHD). The RUC will: 1) recommend RVU valuations for medical home services, and 2) define the criteria that will qualify practices for medical home payments. The Medicare MHD will begin in 2009 and may actively involve many SGIM members in a variety of roles. The RUC has been given wide latitude in defining the medical home and is not required to follow the medical home definitions developed by primary care professional organizations. The RUC's work group for the Medicare MHD includes both generalists and procedural specialists.

> Primary care physicians should closely monitor the RUC's influence on the Medicare MHD and pursue efforts to fundamentally reform physician payment.

Efforts to increase the number of primary care physicians on the RUC have failed, and it seems unlikely that the procedurist/non-procedurist income gap will be meaningfully reduced within the existing payment framework. Fundamental payment system reforms have been discussed outside the RUC: replacing fee-for-service with alternative payment models, introducing separate spending caps for cognitive vs. procedural (and imaging) services, or even including some notion of patient benefit in payment calculations. However, CMS's reliance on the RUC to define the Medicare Medical Home—seen by many as a vehicle for reforming primary care payment—is concerning. Primary care physicians should closely monitor the RUC's influence on the Medicare MHD and pursue efforts to fundamentally reform physician payment.

SGIM's Health Policy Committee is actively involved in physician payment policy. Interested members are encouraged to contact Dr. John Goodson (jgoodson1@partners.org), chair of the Clinical Practice Subcommittee, for information on how to participate. SGIM

To provide comments or feedback about Policy Corner, please contact Laura Sessums at laura.sessums@us.army.mil.

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EDITORIAL

The Bundling Nemesis within E/M Coding: We Need Payment Reform Now!

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I was busy this week. I saw 60 patients as an 80% clinician, all members of the "village" of 1,500 or so who see me as their doctor.

So how much did I earn by doing my work? Here are the calculations. Let's assume that each patient was submitted at a 99214 level of E/M billing. (This is close to exact since there were a couple of short follow ups and one new patient.) I generated 85.2 RVUs, calculated at 1.42 work RVUs per visit. This is the work component of Medicare payment. There is a separate practice expense component, which covers part of my office overhead.

With the current Medicare conversion factor of around $37, this would mean an income of $3,252 for my week of work. For this income I spent 26 hours with my patients in face-to-face time. I spent an equal amount of time with 200 or so non-face-to-face encounters (reviewing labs, consult notes, answering calls from others "villagers"). So this equals 52 total hours. My fringe benefit rate is 30%, so my weekly "salary" was $2,207. This works out to $105,936 for a 52-week year (assuming a two-week vacation and another two weeks of holidays in the hospital schedule).

By comparison, the top take home salary for an adult nurse practitioner at my hospital is $145,000, after fringe. The nursing "market forces" in Boston have driven up the compensation for all nurses and nurse practitioners.

What has happened to the general internist? Why is it that I am paid so poorly compared to my specialty peers for each face-to-face encounter?

The CPT manual, a proprietary AMA product used by CMS as the official source of service code descriptions, stipulates what I must do and document to fulfill the requirements for the 99214 visit. It reads as follows: An "office or other outpatient visit for the evaluation and management of an established patient...requires at least 2 of these 3 key

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components: a detailed history; a detailed examination; medical decision making of moderate complexity." The CPT also stipulates that on average I spend 25 minutes in "intra-visit" (face-to-face) time, 5 minutes in pre-visit time, and 10 minutes in post-visit time. These are the current "bundling" assumptions for the 99214 service code.

So there it is. I worked my 52 hours and got paid for 40 (60 visits @ 40 minutes a visit).

Virtually all the CPT service codes used by physicians have pre-, intra-, and post-visit times that are similarly bundled. For the radiologist, the total "visit" time with a single view chest x-ray is five minutes (for a minute's work); for a colonoscopist, it is 75 minutes (for maybe 30 minutes of work). For a surgeon doing an open splenectomy, it is 15 minutes for "dress, scrub and wait," 120 minutes of skin-to-skin time, and 193 minutes of post-op hospital time after the day of surgery—a whopping 7 hours and 22 minutes. These official CPT times are based on suspect and unsound data that have been sequestered by the AMA. The AMA's Resource-based Relative Value Update Committee (the RUC) is the invisible force that has sustained this system. CMS, the government agency with ultimate responsibility for monitoring the rules of physician compensation, has been complicit.

We generalists are at a profound disadvantage. Most if not all of our specialty colleagues have learned or chosen to reduce the time spent in all the separate activities bundled with each CPT service code. We have chosen (or been chosen) to struggle with the formulary prior approvals, phone messages, organizing and reviewing multiple sets of data, managing consultation notes, and more. As a consequence, our service times have grown.

We are plagued by the biases built into the current RBRVS system. We are forever confined by absolutely absurd bundling assumptions for our E/M service codes.

We need a compensation formula the reflects the current reality: There is more work associated with each visit (the tests and consults that come from our medically necessary efforts to closely manage many concurrent active problems), and there is more work associated with the management of each patient over time (the availability to answer non-visit-related care needs, manage formularies, ensure that the patient's electronic record is accurate, and more).

As generalists, we are compelled to act. We must demand a more equitable system of MD compensation. First, the value of the current CPT E/M codes used in outpatient primary care practice by primary care doctors needs to increase by around 50% to cover the increased post-visit "bundled" responsibilities of generalists. Second, a care management fee needs to be created in order to cover not only the professional work required to maintain useful and reliable medical information, manage medications, provide emergency care, and pay for office infrastructure, including personnel and hardware.

For general internal medicine to survive, we must have income parity with our specialty colleagues. Roughly 75% of total compensation should be based on face-to-face care and 25% on care management. Both are necessary due to the episodic care needs that emerge from each encounter and care management needs that are implied by each patient in our "village," regardless of how often they require face-to-face care.

Political forces to reform health care will be building over the months ahead. We within SGIM must consistently and strongly support a hybrid model for Medicare reimbursement that includes an enhanced RBRVS payment and a new and substantial care management payment adjusted according to clinically relevant patient characteristics.

SGIM

Fundamental Reform of Payment for Adult Primary Care: Comprehensive Payment for Comprehensive Care

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Primary care is essential to the effective and efficient functioning of health care delivery systems, yet there is an impending crisis in the field due in part to a dysfunctional payment system. We present a fundamentally new model of payment for primary care, replacing encounter-based imbursement with comprehensive payment for comprehensive care. Unlike former iterations of primary care capitation (which simply bundled inadequate fee-for-service payments), our comprehensive payment model represents new investment in adult primary care, with substantial increases in payment over current levels. The comprehensive payment is directed to practices to include support for the modern systems and teams essential to the delivery of comprehensive, coordinated care. Income to primary physicians is increased commensurate with the high level of responsibility expected. To ensure optimal allocation of resources and the rewarding of desired outcomes, the comprehensive payment is needs/risk-adjusted and performance-based. Our model establishes a new social contract with the primary care community, substantially increasing payment in return for achieving important societal health system goals, including improved accessibility, quality, safety, and efficiency. Attainment of these goals should help offset and justify the costs of the investment. Field tests of this and other new models of payment for primary care are urgently needed.

KEY WORDS: primary care; comprehensive payment; capitation; resource-based relative value scale (RBRVS); compensation.
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INTRODUCTION

Ironically, at the very time definitive data are confirming primary care's essential contributions to health care (i.e., health status is improved and costs are reduced),[1,2] adult primary care in the United States finds itself on the brink of crisis.[3] Practicing primary care physicians are demoralized, retiring early, and advising others not to go into the field.[3–5] The percentage of recent U.S. medical school graduates and residents planning to enter primary care practice is plummeting to levels that will lead to serious physician shortages.[6–11] The reasons for this decline are multifactorial,[3–5,7,9,11–23] but a central factor has been a succession of dysfunctional payment systems that discourage proper delivery of primary care.[3–5,12,16–18,23–28] We propose a new payment model for primary care that realigns incentives and makes possible the establishment and operation of accountable, modern primary care practices capable of providing the personalized, coordinated, comprehensive care essential to a well-functioning health care system.

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FEATURES OF THE MODEL

A risk/needs-adjusted comprehensive payment would be made to the primary care practice for the comprehensive care of each patient. It would replace all encounter-based payments made to the primary care physician under the resource-based relative-value scale (RBRVS) system.[29] The payment would be directed to cover all practice expenses and salaries related to operating a robust, modern primary care practice (Table 1), one that would qualify as an "advanced medical home" for adults, a practice structure that enables efficient provision of comprehensive, coordinated, patient-centered care.[30–32] Included would be monies for essential infrastructures and systems, most importantly, an interoperable electronic health record with decision support.[33–37] Unlike primary care capitation systems, which also provided an aggregate payment (Table 2),[38,39] our model's comprehensive payment would represent a net investment in primary care practices, not just the actuarially determined consolidation of inadequate RBRVS visit payments, as typically occurred under capitation.[24,25,38,39] Total practice revenue would markedly increase compared to that under RBRVS; over two-thirds would be designated for the teams and systems essential to improving care (Table 1). Physician payment would also increase, commensurate with the responsibility assumed and value created (Table 3).

To encourage quality, safety, efficiency, and patient-centered care, we propose that a substantial proportion of the comprehensive payment (e.g., 15–25%) be performance/outcomes-based and paid as a bonus for achieving valued outcomes. Determination of the performance bonus would require consensus goals and use of validated process and outcome measures agreed upon by payers and the profession (e.g., the Starter Set recommended by the National Committee on Quality Assurance).[40]

Both the comprehensive payment and the performance goals for the bonus would need to be risk- and needs-adjusted

Table 1. Sample allocation formula for comprehensive payment system for adult primary care practice*

Formula for comprehensive payment for adult primary care
· 25%—Physician reimbursement: (250K before bonus and fringe) PCP reimbursement (all care)
· 60%—Staff, fringe, rent, office expense (assumes hiring of multidisciplinary office team charged with timely delivery of personalized comprehensive care): (600K)
Nurse practitioner 100K
Nurse 90K
.5 FTE Nutritionist 35K
.5 FTE Social worker 35K
Receptionist 60K
Medical assistant 50K
Rent 40K
Office expenses 50K
Insurance 50K
Physician fringe 75–90K
· 10% —Information technology/patient safety/quality monitoring (100K)
Purchase/lease/setup of electronic health record and quality monitoring system 35K
Data manager 65K
· 5%—Performance bonus, annual meeting mutually established goals (50k)

**Example assumes an average comprehensive payment of $500/yr/pt, an average panel size of 2,000 patients/full time primary care physician and team, 30% fringe benefit unless otherwise specified, and gross revenue of $1.00 M/full time equivalent primary care physician and team. Other models possible (see Table 2).*

so as not to penalize practices for taking on the care of high-risk or psychosocially disadvantaged patients. The adjustments would depend on validated formulas, such as those using principal diagnoses in determining risk for ambulatory care[41–44] and those taking into account behaviors, psychosocial factors, and social environment to estimate need.[45] These formulas would also allow for objective audit to ensure accuracy of the payment adjustment and discourage abuse. The expected manifold differences in actuarially determined care burdens would be reflected in correspondingly scaled payments; variation might be 10-fold or more between the highest and lowest risk/needs categories.

Payment would be made monthly to help smooth cash flow and enable patients to conveniently change primary care practices. A monthly payment schedule would also underscore the shift from piece-work reimbursement to 24/7 physician practice responsibility for patients. Patient copayments for primary care services could remain, but also might switch from per-visit payments to an actuarially determined cost-sharing component of the comprehensive payment, paid as part of the insurance premium.

The payment reform proposed requires concurrent practice transformation (i.e., establishment of the "advanced medical home") to achieve the necessary savings and improvements in care. Participation in the comprehensive payment system would be dependent on demonstration of the requisite structural and organizational changes. Organizations such as The National Committee for Quality Assurance are developing standards and measures for office practices[46] that might be used to determine eligibility for the comprehensive payment. Participating practices would be expected to agree to periodic audit of standards such as these.

Payment for hospital and specialist services and ancillaries such as medications, laboratory tests, and imaging studies would remain the responsibility of payers and not the practices (unlike many prior iterations of primary care capitation, which placed primary care practices at unacceptable financial risk.[23–27] Minimizing under- and overutilization of such services can be achieved by 1) incorporating evidence-based guidelines for best practices into the practice's decision-support systems,[33–36] and 2) by factoring into the pay-for-performance bonus calculation the attainment of consensus goals for cost-effectiveness, efficiency, health outcomes, and patient-centered care. Savings would be stimulated by encouraging best practices and achievement of validated cost-efficiency standards, but not by putting the practice at immediate financial risk for ordering specific tests on a particular patient or for the expenditures of other physicians and providers.

An adjustment to the comprehensive payment might need to be considered when some or all of the responsibility for comprehensive care is transferred to a specialist, as might occur in end-stage renal disease or cancer. Under such circumstances, the specialist might share in or receive the entire payment. Physicians with a specialty who wish to provide comprehensive primary care could participate in the new model if their practices meet advanced medical home standards. Such participating specialists who also perform unique procedural or other services that make a referral unnecessary might be paid an additional reduced fee-for-service payment under selected circumstances. Similarly, primary care physicians might be eligible for fee-for-service reimbursements for some services typically performed by specialists (e.g., skin biopsy).

Table 2. Comparison of Comprehensive Payment System with other Modes of Payment for Primary Care

	Comprehensive primary care payment	FFS	FFS+ P4P	Capitation	Capitation+ P4P	FFS+monthly coordination fee
Monthly payment includes all primary care services	+	–	–	+	+	–
Payment for individual encounters	–	+	+	–	–	+
Primary care practice at risk for services delivered by others	–	–	–	+ (usually)	+	–
Measurement of performance (technical and patient experience)	+	–	+	–	+	–
Obligate probably reporting of performance	+	–	–	–	–	–
Expect total costs of care to decrease	+	–	–	+	+	±
Incentive to limit practice size	+	–	–	–	–	–
Incentive to treat complex patients	+	–	–	–	–	+

FFS=fee for service
PFP=pay for performance

Table 3. Examples of Possible Comprehensive Payments, Panel Sizes, and Allocations for Participating Adult Primary Care Practices*

	Panel size and level of need/risk		
	2,000 low–medium (average)	1,250 medium (above average)	1,500 low–medium (average)
Ave. risk-adjusted comprehensive payment/ patient	500/yr	800/yr	500/yr
MD reimbursement	250K	250K	200K
Team and office staff salaries	Total=600K Nurse practitioner 100K Nurse 90K .5 FTE nutritionist 35K .5 FTE Social worker 35K Receptionist 60K Medical assistant 50K Rent 40K Office expenses 50K Insurance 50K Physician fringe 75–90K	Total=600K Nurse practitioner 100K Nurse 90K .5 FTE nutritionist 35K .5 FTE Social worker 35K Receptionist 60K Medical assistant 50K Rent 40K Office expenses 50K Insurance 50K Physician fringe 75–90K	Total=425K 0.5 Nurse practitioner 50K 0.5 Nurse 45K Medical assistant 50K Receptionist 60K Rent 40K Office expenses 50K Insurance 50K Physician fringe 65–80K
Information technology	Total=100K Information technology/patient safety/quality monitoring: Purchase/lease/setup of electronic health record and quality monitoring system 35K Data manager 65K	Total=100K Information technology/patient safety/quality monitoring: Purchase/lease/ setup of electronic health record and quality monitoring system 35K Data manager 65K	Total=90K Information technology/patient safety/quality monitoring: Purchase/lease/setup of electronic health record and quality monitoring system 35K .85 Data manager 55K
Annual physician performance bonus for meeting mutually established goals	50k	50k	35k

**The authors are not proposing a specific formula but rather putting forth the principle that it is possible to design many global compensation models that would provide adequate resources to ensure comprehensive, coordinated care to patients.*

As alluded to earlier, installation and operation of an interoperable electronic health record (EHR) would be an essential requirement for practices desiring to participate in the comprehensive payment system, given the EHR's central role in transforming primary care practice[30,33–37] and in facilitating auditing of care and outcomes. The costs of installation and operation of such a system are considered a legitimate and important component of the comprehensive payment (Table 1).

TESTING AND IMPLEMENTING THE MODEL

Pilot studies conducted in a variety of practice settings and involving a wide spectrum of patients will be needed to validate the proposed model. These investigations will require the collaborative efforts of the physician community, payers, purchasers, and patients, and should utilize an independent research group for data collection, monitoring, and analysis of clinical and economic outcomes. Medicare, as the largest payer and the one whose RBRVS system has been emulated by most other payers, should take the lead and, ideally, collaborate with other large payers to permit a true test of the new payment model.

Demonstration studies will need to address panel size, case mix, and levels of staffing, factors which affect the amount of time available and required for patient care activities (whether office visits, phone calls, record review, or team meetings), key determinants of patient and professional satisfaction.[21,47] A range of panel sizes, cases mixes, payment levels, and staffing levels are possible (see Table 3). No single formula is likely to suffice for all settings and populations, but the common denominator needs to be adequate resources to support a comprehensive primary care effort.

There will be formidable research design issues, especially for controlled trials. The first studies might simply test feasibility. These would provide basic observational data comparing financial and patient outcomes pre and post change in reimbursement and relating those outcomes to the various practice models and patterns chosen by participating physicians.

Assuming that pilot studies of the model show promise, the subsequent challenge will be implementation. Most primary care practices do not have the necessary teams or systems in place;

new monies will be needed to establish them. The proposed comprehensive payment makes available the financial resources for "tooling-up." Those primary care practices unsure of being able to make the transition directly to the comprehensive payment system might prefer more evolutionary steps (see below).

STRENGTHS, WEAKNESSES, AND IMPLICATIONS

This payment reform proposal represents an attempt to realign compensation with the primary care mission, providing comprehensive payment for comprehensive care. It frees practices from the growing inadequacy, irrationality, and administrative burdens of the existing RBRVS-based payment system,[3,23,28,49–51] uncoupling primary care compensation from that of proceduralists, eliminating the zero-sum budgeting game, and overcoming the constraints of a payment system favoring procedure-based care. The model makes possible new payment rules better tailored to the primary care mission and more enabling of practice transformation. It has the potential to establish a new social contract, correcting chronic underpayment in return for accountability and achieving important health outcomes. It acknowledges in explicit financial terms the value primary care can create when properly organized and delivered, an obviously important factor in attracting new physicians to the field and stimulating practice transformation.

Proposing a comprehensive, aggregate payment is likely to evoke memories of primary care capitation with its pejorative connotations; however, there are important differences (Table 2), which lead us to avoid using the term "capitation" to describe our system. The most important differences are risk/needs-adjustment, paying for performance to guard against underservice, and budgeting sufficient monies to support teams and infrastructures. These features are essential to avoiding the withholding of necessary care and the shunning of complex patients that too often occurred under the capitation initiatives of the past decade.[25–27] In the new model, the gatekeeping of capitation is replaced by coordination and advocacy. Financial risk is borne predominantly by payers, who have the requisite actuarial and capital resources. Nonetheless, practices remain financially accountable, having to work within a global budget, adhere to professional standards of care and referral, and eliminate waste and inefficiency.

This model has some similarities and important differences with salaried models (Table 2). Like salaried models, there is no incentive to inflate the volume of face-to-face visits, but salaried models often have lacked the element of a social contract between the personal physician and the patient, supported in our model by a patient contribution to the retainer. In salaried environments, physicians tend to consider the organization as having the principal accountability to the patient; this has been reflected in lower patient trust of the individual physician.[52–54]

Risk adjustment is a key element of our payment model, both for determining the size of the aggregate monthly payment and for setting pay-for-performance goals. The first operational models of risk/needs adjustment (referred to as "case-mix adjustments") were diagnosis-based and validated for ambulatory care.[55] Because primary care consists largely of ambulatory services, risk adjustment based on diagnoses is likely to be a reasonable approach to predicting the subsequent need for primary care services. Further iterations of risk adjustment by diagnosis have been operational for modifying payments at the health plan level[56] and, if modified for application to the practice level, they should facilitate matching payment to care burden. Existing models based on diagnoses [57–59] would seem a good fit for the payment system we have outlined. As noted earlier, a validated risk-adjustment framework that incorporates the full spectrum of important risk determinants, including those accounting for patient behaviors[45] will be needed.

In a cost-conscious society, it is unlikely that the new payment model will be adopted widely if it is viewed as a giveaway to primary care physicians/practices. Conversely, primary care physicians are likely to reject the model if it appears to be yet another attempt to use them as gatekeepers or insurance companies. Our model tries to avoid both pitfalls by assigning most of the financial/actuarial risk to insurers while recognizing the responsibility of primary care practices to be financially and clinically accountable.

To put the financial challenge posed by the model in perspective, it is useful to consider the changes in total health spending that might result from implementation of our payment system and the savings that would be needed to offset them. Physician services currently constitute approximately 25% of all national spending for personal health services; of that amount, depending on the demographics of the population served, a quarter to a third constitutes payment for primary care services[60]. Thus, only 6–8% of total spending for personal health services currently represents payments to primary care physicians. If we propose a modest comprehensive payment schedule (e.g., an average of $500 per patient per year; see Table 1), it would immediately increase total spending by 2–3%, necessitating a 3%+ reduction in the remaining 88–90% of personal health care spending to offset the increase.

Current estimates of wasteful spending are as high as 30% of total expenditures.[61] Studies of electronic medical record systems with decision-support capacity (an essential feature of our payment/practice reform model) have demonstrated substantial savings from reductions in medical errors, pharmacy costs, adverse drug events, unnecessary radiology and laboratory utilization, and avoidable hospital admissions.[33–36] Additional cost savings in care of the frail elderly are a reasonable expectation from improvements in coordination of care,[30–32] particularly among the 30% of Medicare beneficiaries who have 4 or more chronic conditions and account for almost 80% of annual program spending.[62] Even if our transformed primary care practices eventually achieve only a small fraction of the potential savings, that amount should offset the 2–3% projected increase in costs. Determining financial impact is a critical reason to test the model in pilot study.

In the short run, budget neutrality is unlikely and should not be expected, because upfront investments in practice reorganization and systems will take time to generate the expected savings. Nonetheless, the comprehensive payment model should provide readily apparent early benefits: First and foremost, patients (especially the elderly and the complexly ill) should notice improved access to care made possible by improvements in staffing, scheduling, and infrastructure (unlike concierge practices, which rely heavily on reducing panel size to improve access.[63,64] With team practice freeing up the primary physician to perform more thorough patient evaluations, there should be less resorting to otherwise unnecessary tests and referrals. Other early benefits should

include those mentioned earlier associated with implementation of the electronic health record.[35–37] Rapid improvement in care is possible, as suggested by results in the first year of implementing an ambitious pay-for-performance bonus program for British general practitioners.[65]

Administrative burden has been a major criticism of the RBRVS system.[28,49–51] Implementation of our model would eliminate claims billing and receiving as well as the onerous documentation and coding requirements associated with RBRVS, supplanting these purely administrative activities with more clinically relevant assessments of practice operations, patient panels, and clinical outcomes. By insisting on an electronic administrative/clinical infrastructure for practice participation in this payment reform, the model makes possible automated audits that should be less disruptive and lower in cost than the administrative demands of RBRVS. Despite the expected lessening of administrative burden, the benefits will not be realized until an electronic health record has been installed, which can be daunting for a small primary care practice, necessitating careful transition planning and budgeting for the changeover.

There is potential for abuses with this model, including misallocation of the comprehensive payment, gaming of the risk/needs-adjustment process, and "dumping" of care onto specialists. These require built-in countermeasures. Siphoning off payments targeted for team salaries and information infrastructure to enrich physician pay can be avoided by developing disbursement guidelines (e.g., Tables 1 and 3) and measures, which can be audited periodically. Use of validated objective measures of risk and need (e.g., principal diagnoses, ejection fraction, creatinine clearance, patterns of care utilization), and independent, random audits of the practice's electronic health record database should minimize chances of manipulating the risk-adjustment process. Dumping can be reduced by mandating sharing or outright transfer of the comprehensive payment when the specialist assumes most of the responsibility for care and by profiling the referral patterns of physicians, making payment adjustments where overreferrals are occurring. A payment that is adequately risk-adjusted is in itself a powerful disincentive to inappropriate transfer of patients to a specialist. Underutilization of referrals should be discouraged by the clinical outcomes and patient-experience components of our bonus payment determination.

An unintended consequence of this model's implementation might be practice downsizing. Practices that grew excessively large to meet expenses under fee for service might be tempted to "right-size" their panels to improve care and qualify for performance bonuses (see Table 2). If widely adopted, this could paradoxically reduce access for some[64] and trigger a temporary shortage of primary care physicians. Alternatively, the expanded primary care team made possible by our model provides a means of devoting more attention to patients without the need to downsize (which can be painful for both patients and physicians). Moreover, by eliminating the disincentive to care for the complexly ill and needy, we are likely to improve access for those who need it most. With income independent of visit volume, smart delivery strategies (e.g., team care, interoperable medical records, email access, group visits, web-based patient education) can be implemented to reduce individual physician and team workloads, leaving more time for high-value face-to-face encounters, even home visits. Any shortage of primary care physicians that results from initial implementation of our model should be short-lived, as medical school graduates are attracted to the field by the promise of a financially secure, professionally satisfying career and practice environment.

Debate over implementation strategies will be vigorous. The potential for practice and system disruptions from payment reform cause some to argue for incremental approaches, such as increasing the valuation of RBRVS evaluation and management codes or adding a supplemental case management payment for care of high-risk patients.[28,48] However, recent experience with capitation showed that if fee-for-service (e.g., under a modified form of RBRVS) continues, then even a comprehensive payment for some patients in a predominantly fee-for-service environment may not alter behavior; practices continue to reward "productivity" (as defined by number of patients seen and procedures performed) rather than develop other performance measures.[66–68] Adding pay-for-performance to fee-for-service might help counter this behavior, but comprehensive pay for comprehensive care has the potential to be a more straightforward and effective approach to achieving the desired outcomes. Comparative studies are needed.

Primary care in the United States stands at a crossroads. We believe taking the road to recovery requires fundamental reform. It is urgent that new models of payment and practice be developed, tested, and implemented.

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