The 2009 ACR Forum: Health Care Payment Models

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The 2009 ACR Forum addressed health care payment models, the strengths and weaknesses of different models under consideration, their implications for radiology, and the role radiologists should play in the debate.

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Proposed models for future physician payment and their implications for radiology were the topics of the 2009 ACR Forum. The ACR Forum is an annual planning activity that focuses on a specific topic of long-range importance to radiology. Prior topics have included molecular imaging (2001), strategic planning (2002), quality and safety (2003), imaging screening (2004), disruptive technologies (2005), cardiovascular imaging (2006), leadership (2007), and radiology practice models (2008).

The 2009 ACR Forum was premised on the conviction that radiologists should be leading participants in the analysis, creation, and implementation of payment system changes. Organizers convened a diverse group of participants, including community and academic radiologists, nonradiologist physicians, health care economists, health policy experts, consultants, representatives of the federal government, and members of the ACR staff. The group reviewed relevant reading materials, then met in June 2009 to discuss the forces shaping future payment models, how these forces are changing, the potential benefits and problems for patients and the American health care delivery system, and how radiologists can most effectively respond to them.

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Although devising a new system of health care payment represents a daunting challenge, participants agreed that the current system needs substantial modification to meet the needs of the American people. For example, the current fee-for-service system seems to harbor inadvertent incentives for the overutilization of some only marginally beneficial health care services and the underutilization of others whose benefits are clearer. It tends to reward quantity of health care while taking little account of quality. Key questions need to be addressed. Do proposed changes in payment enhance quality of care? Do they provide value to patients? Will it suffice to make incremental changes in the current system, or is a complete overhaul necessary?

This article is organized according to the discussion sessions at the Forum. Payment models included fee for service, pay for performance, episodes of care with payment bundling, and medical home with modified capitation. Each model was described in detail and then discussed by Forum participants from the perspective of its impact on radiology, as well as refinements that might be necessary for implementation in the larger health care system. The Forum concluded with a panel session at which a select group of participants commented on the future of health care reform and provided strategic advice to the radiology community. On the basis of these sessions, the participants convened to make specific recommendations for the ACR Board of Chancellors.

FEE FOR SERVICE

Fee for service, the traditional basis for physician payment in the United States, financially rewards providers for each service performed. The system is quite familiar to physicians and entails relatively little risk for them. The most pressing problem with fee for service in the

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current environment is that it is inherently inflationary. The more services physicians provide, the more revenue they generate. Most patients want physicians to address their medical problems, but physicians are being paid to provide the particular services they offer. Often the interests of patients and physicians converge to produce an increase in the quantity and cost of care provided.

A related concern with fee for service is the current system's dearth of rewards for quality, so that a poorly performed procedure is reimbursed equally with the best. The equipment used may be outdated or state of the art. Likewise, the physician may be a neophyte or a world authority. From a payment point of view, however, the reimbursement is the same. Many also believe that the current system provides inadequate payment for evaluation and management services, compared with procedures. Some important evaluation and management services are often not reimbursed at all. For example, communication between patients and physicians via e-mail or phone is generally not reimbursed, nor is meeting with family members to discuss end-of-life issues, nor is arranging a patient's transfer from the hospital to a long-term care facility. In each of these cases, the care provided may be crucial to the patient, but there is no current mechanism to compensate the physician. In harried environments such as emergency departments or primary care offices, this may cause diagnostic imaging to be substituted for more time-intensive patient encounters.

Many factors are involved in the dearth of medical students entering primary care, but the discrepancy in compensation in the current fee-for-service system between primary care physicians and specialists is clearly an important factor. The shortage of primary care physicians is one of the most pressing issues on the minds of legislators and policymakers and is driving much of the debate over payment system reform. The sense of urgency is sufficiently great that Congress may simply institute higher payments for primary care, sidestepping deeper imbalances in the current incentive system.

The American Medical Association Specialty Society Relative Value Update Committee has attempted to address these inequities, with varying degrees of success. There is growing concern that the Medicare fee schedule relative value update process is inefficient. In some cases, particularly when work values need to be increased, the Relative Value Update Committee has done a good job of updating relative values, but some observers feel that the committee tends to underperform in proposing reductions in work values as they are made appropriate by changes in the practice of medicine. The result is that updated relative values tend to go up and rarely come down.

Another widely debated issue with the current fee-for-service system, as it relates to radiology, is the practice expense side of reimbursement, often known in radiology as the "technical component." The high practice expense payments associated with radiology services have made them attractive as sources of additional income to nonradiologists. They are among the most important reasons that radiologists face competition in the provision of imaging services. Substantial profits are possible for those who provide technical component services and subcontract the professional component to radiologists. Although these practice expenses are grounded in sound evidence, there is concern that they are driving inappropriate, economically motivated utilization.

An overriding concern behind reforming the current payment system is the desire to reduce health care costs, or at least to decrease the rate at which health care costs are increasing. One seemingly straightforward way to reduce utilization in a fee-for-service system is to reduce the per-procedure payment. This might, for example, reduce the incentive for many nonradiologists to provide imaging services and thereby reduce imaging utilization rates. However, this approach will not reduce the utilization rate of imaging by the majority of referring physicians who have no economic self-interest in imaging and may perversely increase imaging utilization rates among referring physicians with such financial interests in imaging. Simply reducing per-procedure reimbursement effectively punishes not only overutilizers but also those who are providing strictly appropriate services. And arbitrarily driving per-unit payments below actual cost may drive too many providers out of the market, leaving patients with poor access to needed imaging services.

A more practical and logical approach to this problem would be to provide better decision support tools and advice to ordering physicians caring for patients in particular clinical situations, including 1) whether imaging is indicated; 2) the likely benefits associated with different imaging options, especially which imaging study is likely to be most beneficial; and 3) the relative costs, risks, and radiation exposures associated with different imaging options. Such tools already exist and seem to make a difference.

Despite the shortcomings of the current payment system, fee-for-service payments are unlikely to disappear in the short term. Even if a different payment mechanism were to be implemented, fee for service will have a transitional role to play in moving toward any other system. There are thorny methodologic issues in abandoning fee for service, and an abrupt shift would engender excessive instability and physician and hospital resistance.

PAY FOR PERFORMANCE

The first thing to be said about pay for performance is that it is really not an alternative payment model but a

possible component of any system. Many observers feel that quality needs to be taken into account, and pay for performance represents an effort to do so. In most economic markets, such as those for hotel lodging and automobiles, quality is a key component of pricing. People who want higher quality pay more for it. In health care, however, this has typically not been the case. Health care providers have usually been paid at the same rate by insurers, regardless of the quality of the care they deliver. For example, examinations performed by licensed technologists on state-of-the-art equipment receive the same payment as ones performed by part-time office assistants on outmoded or lower quality imaging equipment. Efforts to develop pay-for-performance incentives have attempted to reward both quality and efficiency.

Currently, many physician quality incentives are oriented toward process metrics rather than outcomes. This is unfortunate, not primarily because processes are unimportant but because the jury is still out on the value of strict adherence to prescribed processes. Mere adherence to guidelines is as likely to undermine outcomes as improve them, if the guidelines are not well grounded in evidence. In short, although there are specific examples of pay for performance positively affecting patient care (such as aspirin for heart attacks), we do not really know if pay for performance works on a large scale as a basis for physician payment. In fact, we may never know unless we shift some resources away from evaluating drugs and devices and toward determining what ultimately produces better care.

Another problem with pay for performance is the fact that the data on which such systems are based are often relatively thin. In general, the evidence behind pay for performance tends to be more robust for hospitals than physicians. Another source of physician frustration with pay for performance has been the panoply of pay-for-performance programs introduced by different insurers. Each has its own set of parameters, and monitoring and documenting them can be extremely costly, particularly to small physician practices. In most programs, physicians get paid for documenting their practice rather than how such initiatives affect patients. The incentive payment is rarely sufficient to make participation in pay-for-performance programs worthwhile, and most programs are voluntary.

There are other potential limitations of pay for performance. In establishing such programs, insurers have often neglected to provide a seat at the table for physicians, with the result that some pay-for-performance programs seem inefficient or even nonsensical from the providers' point of view. Pay for performance may also be wielded as a substitute for fee schedule updates, so that quality ends up taking a back seat to cost reduction. There is concern that financially strong institutions will be more capable of establishing the information technology, staffing, and processes necessary to receive extra payments, which may widen their gap with less affluent institutions that already serve a disproportionate share of indigent patients. Finally, some physicians feel insulted at being paid to do what they feel all physicians should be attempting to do anyway; namely, deliver high-quality care to their patients.

From the standpoint of radiology, pay for performance is problematic, in part because it has proved difficult to define outcomes metrics for radiology. It is relatively straightforward to evaluate image quality or "miss rates" in interpretation, but what is the ultimate effect of the work of radiologists on patient outcomes and health care costs? This is not so easy to determine. Moreover, some radiologists privately express the suspicion that pay-for-performance programs are really just games that must be played to get paid, but really do not mean anything.

If such systems are to be successful, it is important that radiologists take them seriously and make sincere efforts to collaborate with public and private insurers, hospitals, and especially other specialists to develop appropriate standards. Many nonradiologists do not want radiologists telling them what to order, so it is also important that both radiologists and nonradiologists play a role in developing appropriateness criteria for imaging.

Finally, many quality improvements may be possible without touching the physician payment system at all. One of the best recent examples of quality improvement without pay adjustment in radiology has been the Mammography Quality Standards Act. Another example would be the time saved and reduced error rates made possible by computerized order entry and decision support systems.

EPISODES OF CARE WITH PAYMENT BUNDLING

Payment by episodes of care is an approach that aims to bundle payment for related services during a course of illness and treatment. For example, a single payment would be made to all providers for all services involved in caring for an elderly patient who presents with a hip fracture. This would include the hospital, the orthopedic surgeon, the radiologist, and the rehabilitation facility, among others. The same approach could be taken to chronic diseases, such as diabetes or congestive heart failure, though in such cases, it would be necessary to provide payment according to a specified unit of time, such as a month or year of care. Of course, as the number of comorbidities mounts, such a system becomes progressively more difficult to design and implement.

In a bundled payment scenario, all services can be viewed as a cost, in contrast with the current system, in which each service produces revenue. If a system of hospitals and physicians provides care for less than they are paid, they make a profit. If costs exceed payment, the system, and its constituent doctors and facilities, loses money. In theory, cost savings would be realized by providing incentive for the provision of appropriate levels of care and eliminating waste and duplication.

Complaints about the high degree of fragmentation of US health care are common, and episodes of care with payment bundling represents an attempt to achieve a greater degree of integration. It attempts to provide hospitals and physicians with incentives to cooperate in keeping costs in line. This approach may become increasingly feasible as more and more physicians become hospital employees. This higher degree of integration could also be used to provide incentive for quality, by providing higher payments to high-performing systems. Of course, to make it work, it would be necessary to provide providers with relevant feedback on the features that characterize high-performing systems.

One of the challenges with the episodes-of-care approach is that it would work well only within relatively highly integrated health care delivery systems. A key consideration is determining which entity in the system receives the payment. If the payment comes to the hospital, physicians may find themselves playing the economically disadvantageous role of subcontractors. Furthermore, dividing the payment among providers could be challenging, as each specialty might seek to claim the largest possible share. The default position, at least initially, might be to use translational models that allocate payment according to the relative amounts that providers have traditionally received under fee for service.

The episodes-of-care approach could place radiologists at a severe disadvantage. For one thing, it tends to shift radiology from a revenue center to a cost center, whereby every imaging examination performed reduces the system's margin. This in turn could reduce the demand for imaging services and lower the compensation of radiologists. On the other hand, providing imaging services could become considerably less attractive to nonradiologists. This would be particularly true if nonradiologists were unable to provide imaging services in an efficient and cost-effective manner.

The accountable care organization is a method of implementing bundled payments, based either on an episode of care basis or global payments. It too relies on integrated delivery and seeks to encourage the integration of care through a supportive payment system. Adverse experiences with such systems in the past have left many patients unwilling to tie themselves to a particular delivery system. However, if an improved form of capitation can be devised, it could be possible, at least theoretically, to pay organizations with the ability to provide integrated care for doing so. This would provide multidisciplinary groups the opportunity to be profitable by keeping the unnecessary (or even necessary) utilization of services in line. One of the biggest challenges to such systems would be the necessity to prevent "leakage." Leakage occurs when patients or physicians select providers outside the accountable care organization, thus saddling it with unbudgeted costs.

If health care payment moves in the direction of bundling, it will be important for radiologists to pay close attention to the proportion of their work that gets bundled, as well as how the bundling is done and what rules govern it. Bundling creates incentives not only to eliminate unnecessary and marginal care but also to underprovide appropriate care, and patients could suffer. Another pitfall of bundling is the potential for self-dealing, by providing marginal or unnecessary episodes of care for conditions such as back pain that are very common and notoriously difficult to document objectively.

MEDICAL HOME WITH MODIFIED CAPITATION

The medical home concept aims to respond to the current system's fragmentation, shortcomings for patients with multiple and chronic medical problems, and poor integration of care. It seeks to pay for previously uncompensated coordination of health care services, when such coordination promotes the interests of patients. This would be achieved by designating a medical home for each patient. Primary care practices would need to create or install systems infrastructure to coordinate the care of patients with chronic illnesses. Such practices would need to be integrated clinically and economically with specialists, and the combined entity would receive fixed payments for each unit of time a patient is under its care. Services that are difficult to provide in this system might be paid for adjunctively on a fee-for-service basis.

In principle, this approach has the advantage of incentivizing providers to take greater responsibility for managing their patients' overall care. It also addresses the increasingly common phenomenon of physicians who choose not to care for patients 24 hours a day, instead telling patients on nights and weekends to go to (high-cost) hospital emergency departments. The inherent incentive to contain costs would likely result in a shift of many patient management functions, such as ensuring that patients get routine preventive care, from physicians to nonphysician providers, who would likely be employed by medical practices.

Medical home is oriented primarily to primary care and seeks to address some of the shortcomings of fee for

service, such as its difficulty in accounting for transaction costs, the time devoted to documentation, and the problems associated with moral hazard, the fact that patients tend to want more care when they bear little or no responsibility for its cost. This approach could place small practices and health care systems at a disadvantage, forcing them into mergers. To implement it fairly, it would be necessary to address the risk for adverse selection and reward practices for going to all the time, trouble, and expense of qualifying as a medical home. Many small group practices simply could not afford to hire the interdisciplinary care managers who would be required.

Moreover, the criteria used to determine which systems qualify as medical homes could be difficult to specify. As with all modified capitation systems, the integrated medical home approach would be impossible to implement fairly in the absence of a robust system for adjusting payment to account for different patients' underlying health statuses. Although the medical home approach does not relate directly to radiologists, it would tend to highlight opportunities to help referring physicians use imaging services effectively and efficiently.

CONCLUSIONS

At a theoretical level, it would be desirable for health professionals managing and providing care not to have a direct financial incentive to provide either more or fewer services (depending on the system) to improve their financial bottom line. None of the newer approaches discussed here is ready for broad implementation, and it seems clear that fee for service in some form will be around for many years to come. Even many of the capitated approaches rely in part on a fee-for-service model to ensure that some appropriate services continue to be provided. Therefore, one means of addressing the cost problem would be to try to restore fee for service to a less inflationary form. Considerable effort and creativity would be necessary to achieve this.

Policymakers are trying to develop an economic model that will reduce the amount of unnecessary and counterproductive economically motivated behavior in the health care system. In theory, the way to do this is to move toward global risk, so that all parties in the health care system share the risks associated with overutilization and underutilization. Yet, many of the principal players, and especially physicians and hospitals, are very reluctant to move in this direction. To manage risk effectively would require robust clinical and financial data and the ability to invest in the requisite information technology infrastructure. It would also require a strong clinical management structure and committed leadership. Above all, it would require developing a culture of teamwork dedicated to both high quality and the conservative use of resources. Rather than seeking a one-size-fits-all solution for the entire nation, one approach might be to reward local systems that work well.

One issue that receives less attention than it should is the patient's role in health care. It seems likely that any system that takes cost control seriously will need to address moral hazard. Patients and providers have tended to resist having patients bear a greater share of their health expenditures. Moreover, most discussions tend to focus on what the federal government can do to providers, but relatively little attention is paid to what health care consumers—patients—think would be best.

Some people who have observed the US health care system for decades find themselves thinking, "We have tried all of this before, and now we are going to try it again." Yet cynicism and fatalism are not the most productive attitudes, and there are steps that physicians, and especially radiologists, can take to make a difference. Radiology has already done more than most specialties though quality initiatives such as the Mammography Quality Standards Act, the standardization of information technology through Digital Imaging and Communications in Medicine, and the development of quality and safety programs such as the ACR Appropriateness Criteria®, ACR accreditation programs, ACR practice guidelines and technical standards, and the National Radiology Data Registry™.

Radiology can do more in the future by further refining existing, commercially available clinical decision support tools, integrating them into computerized order entry systems, and better defining and enhancing the appropriate use of imaging services. Ultimately, it is in radiology's interest to ensure that imaging is used in as effective and efficient a manner as possible. Radiologists and radiology organizations need to lead research to better understand and education to better disseminate the consequences of change, create methods to better adapt to changes and, most important, enable high-level participation in the design of future payment systems.

RECOMMENDATIONS TO THE ACR BOARD OF CHANCELLORS FROM THE ATTENDEES OF THE 2009 ACR FORUM ON PAYMENT MODELS

By conducting clinical trials and modeling high-quality existing data, the ACR should improve the quality of evidence for decisions concerning the appropriateness of medical imaging, with a view to reducing unnecessary imaging, enhancing appropriate utilization, and defending clinical malpractice cases.

Drawing on the ACR Appropriateness Criteria, the ACR should continue to advocate for universal installa-

tion of computerized physician order entry with embedded decision support and promote these systems to other physician specialties, particularly primary care, through a dedicated public relations campaign that raises awareness of the existence and value of such tools.

The ACR should advocate that radiologists be included in the process of determining how payments are distributed in capitated, bundled, and other novel payment systems.

The ACR should establish a fellowship or scholarship to support individuals who will further the development of evidence-based radiology.

The ACR should define outcomes of diagnostic imaging within the overall continuum of care, using the National Oncology PET Registry as a model.

The ACR should provide ongoing guidance, including courses and training programs, for radiologists and their practices to prepare them for changes in payment models.

The ACR should promote the adoption of its registries and promote wider participation in them.

Within 18 months, the ACR should study, develop, and promulgate criteria that payment systems should apply in determining when it is or is not appropriate to bundle radiology services into larger payment packages. The ACR should include in this evaluation an approach to preserving the current relative value of such bundled services.

The ACR should commit to the elimination of 100% of inappropriate imaging and support tracking and profiling of appropriate ordering by referring physicians.

The ACR should study the potential for radiology groups to take a leadership role in the formation of accountable care organizations.

The ACR should increase its ability to offer proactive education and expert advice to the Medicare Payment Advisory Commission in the process of transforming technical data into policy context.

Independent of the regulatory process, the ACR should expand its efforts to define and create meaningful performance measures.

The ACR should develop guidelines that would limit the potential for the inappropriate utilization of radiology services in bundled or capitated payment systems.

The ACR should produce a white paper on the history of risk sharing as it applies to radiology, with the objective of educating radiologists on how to succeed within various risk-sharing payment systems.

The ACR should work to preserve fee for service as the primary means of reimbursement of radiology services, wherever possible.

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