Unintended Consequences of Resource-Based Relative Value Scale Reimbursement

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Medicine’s generalist base is disappearing as a consequence of the reimbursement system crafted to save it—the resource-based relative value scale. The US physician workforce is unique among developed economies of the world. Virtually all European countries have a broad generalist foundation comprising 70% to 80% of practicing physicians. The United States is the opposite. Starfield has summarized the benefits of a generalist workforce as access to health service for relatively deprived populations; care equal to specialists in most situations (recognizing the invaluable contribution of the specialist physicians but acknowledging that the diffusion of knowledge increases the ability of the non-specialist to provide up-to-date care); improved preventive service delivery; efficient management of multiple simultaneous medical, surgical, and mental health problems in active and fully functional patients; provision of continuity in the health care experience, advice, and counsel where appropriate and access to appropriate diagnostic, consultative, and specialty services; and, in conjunction, reduced unnecessary specialty testing and consultation.

Over the last 4 decades, medical and surgical practice has transformed from a reactive profession to a proactive profession. Evidence from numerous clinical investigations in many different settings shows that patients with any of the 3 most common conditions—hypertension, diabetes, hypercholesterolemia—benefit from early treatment. Conversely, failure to diagnose and treat increases the likelihood of poor outcomes.

Well-designed studies have shown that the early and active treatment of disease in the asymptomatic phase has profound lifetime benefits. For instance, the Hypertension Detection and Follow-up Program demonstrated the reduced mortality derived from the early identification and treatment of hypertension with benefits occurring in those managed closely with inexpensive therapies. The Diabetes Control and Complications Trial showed that early and effective management of blood glucose levels for patients with type 1 diabetes reduced long-term risk for neuropathy, retinopathy, and nephropathy. The West of Scotland Study showed that patients with coronary heart disease and risk factors had lower mortality if their low-density lipoprotein cholesterol levels were managed actively. Targets for secondary prevention decreased with successive clinical studies, and targets for primary prevention of heart disease followed suit.

The seventh Joint National Committee on the Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7) specifies that even the patient with normal blood pressure should be counseled about lifestyle modification to avoid later life development of high blood pressure. The JNC 7 urges clinician empathy for a patient who generally feels well. The implication is that some physicians will convince a patient with a silent disease to change dietary and exercise habits and perhaps take daily medications.

The ever-expanding repertoire of interventions, screening, tests, vaccines, and devices has dramatically increased the work of patient care for all physician specialties. As an indicator of this ever-expanding content, the total resource-based relative value units per Medicare beneficiary increased by 45% from 1992 to 2002. For the generalist physician, this increase has been especially intense. Providing all recommended preventive services to a panel of 2500 patients could require up to 7 1/2 hours a day of physician time. Generalist physicians report that roughly 4 separate problems are addressed at each office visit for patients older than 65 years and even more issues are addressed for patients with chronic illnesses such as diabetes. For a hypothetical 79-year-old woman with 5 medical conditions, current clinical practice guidelines would support the use of 12 medications.

Attaining the expected health benefits from early and effective treatment of symptomatic and asymptomatic illness will not be achievable without increasing the number of generalists. The United States is now served by highly trained but limited-scope practitioners, at the very time skillful and well-supported primary care physicians are needed. The overall workload is overwhelming the capacity for generalist care if not the individual clinicians.

This problem will only be resolved with full recognition of its origins. Because physician decision making profoundly influences health care expenditures, the forces that affect these decisions must be addressed. Practice type and physician specialty are critical factors; both are associated with higher rates of test ordering and hospitalization. Generalist physicians are critical to the prevention and treatment of chronic disease. The economic value of clinical activity is determined by the patient outcomes associated with that activity. Patients with chronic conditions require comprehensive care delivered by generalists. Therefore, the proper role of primary care physicians is the provision of adequate clinical care, as well as the efficient coordination of care across traditional boundaries.

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eralists with long, continuous clinical relationships with patients tend to generate lower health care costs for their patients. Current reimbursement incentives substantially favor procedures and technical interventions and offer financial advantages for expensive care, thereby encouraging specialty services. The Medicare experience illustrates the paradoxical health consequences of this economic pattern. States with higher Medicare spending have lower quality of care. As a consequence of many economic forces, compensation for generalist physicians is roughly half or less than half the compensation for nearly all specialists.

The Centers for Medicaid & Medicare Services (CMS) determines the relative payment rates for virtually all federally reimbursed professional services. The resource-based relative value scale was intended to rationalize physician reimbursement and to reduce federal payment disparities among clinicians by assigning relative value units (RVUs) to all physician activities and expenses. Medicare reimbursement is determined for each service code by adding the work RVU, the practice expense RVU, and the liability RVU and multiplying each by separate payment units, or “conversion factors.” All the RVU conversion factors are geographically adjusted. On average, the work RVU represents slightly more than half of the total; the practice expense RVU, slightly less than half; and the liability RVU, a small portion. The work RVU values issued by CMS have a profound effect on all professional reimbursement because most private indemnity insurance companies use the actual CMS RVU values or some derivative.

The American Medical Association (AMA) sponsors the resource-based relative value scale update committee (RUC) both as an exercise of “its First Amendment rights to petition the Federal Government” and for “monitoring economic trends . . . related to the CPT [Current Procedural Terminology] development process.” Functionally, the RUC is the primary advisor to CMS for all work RVU decisions.

The RUC has 30 members (the chair only votes in case of a tie) with 23 of its members appointed by “national medical specialty societies.” Meetings are closed to outside observation except by invitation of the chair. Only 3 of the seats rotate on a 2-year basis. Other members have no term limits. Seventeen of the permanent seats on the RUC are assigned to a variety of AMA-recognized specialty societies including those that account for a very small portion of all professional Medicare billing, such as neurosurgery, plastic surgery, pathology, and otolaryngology. Proceedings are proprietary and therefore are not publicly available for review. Traditionally, more than 90% of the RUC’s recommendations are accepted and enacted by CMS (http://www.ama-assn.org/ama1/pub/upload/mm/380/rvs_booklet_07.pdf). As the catalog of billing opportunities expands, the total number and, importantly, the type of RVUs delivered each year have increased. From 1992 to 2002, the number of evaluation and management services as measured by RVUs increased 18% while the number of nonmajor procedures increased 21%, and the number of imaging services increased 70%.

The resource-based relative value scale system “defies gravity” with the upward movement of nearly all codes. In 2006, based on RUC recommendations, CMS increased RVUs for 227 services and decreased them for 26.

Until 2007, CMS depended on historical survey data collected by the AMA and specialty societies that were heavily influenced by previous practice patterns and payment biases to determine practice expense. The 2007 Medicare Payment Advisory Commission report outlined reimbursement “distortions” that emerged from this model through the overvaluations of practice expenses that incentivized certain procedures, the undervaluations that made certain professional work financially unattractive, and mismevaluations that led to “unwise” expenditures by Medicare. Ginsburg and Berenson calculated that failure of CMS to accurately adjust practice expense RVUs to reflect true equipment use and financing costs, acceptance of revised practice expense RVUs for 8 specialty societies, and congressionally mandated budget neutrality requirements reduced the January 1, 2007, increase in evaluation and management reimbursement from 20% to 6.5%.

The CMS intends to initiate a new method to more accurately calculate practice expenses, and there will likely be a modest shift in practice expense RVUs from procedures to evaluation and management services. However, new distortions of practice expense may replace those of the past because the new practice expense RVUs are determined in part by work RVUs. The inaccuracies of one relative value system are carried into another. The enormous practice expenses related to the matching of medications to formularies required by Medicare Part D largely falls on the generalist practitioners, but the increased office expenses have yet to be included in the practice expense discussions.

The RUC has powerfully influenced CMS decision making and, as a result, is a powerful force in the US medical economy. Furthermore, by creating and maintaining incentives for more and more specialty care and by failing to accurately and continuously assess the practice expense RVUs, the decisions of CMS have fueled health care inflation. Doing so has affected the competitiveness of US corporations in the global market by contributing to years of double-digit health care inflation that have consistently increased the costs of manufacturing and business in the United States over the last decades.

The continued and sustained incentives for medical graduates to choose higher-paying specialty careers and for those physicians in specialty careers to increase income through highly compensated professional activities have been associated with the dwindling of the generalist workforce. The lack of incentives for medical graduates to choose generalist careers in internal medicine, family medicine, and pediatrics has had a profound effect on the workforce mix and, ultimately, US health care expenditures.

Residents are choosing not to enter the generalist fields. For instance, among first-year internal medicine residents, less than...
20% have interest in pursuing careers in general internal medicine.21 Past trends indicate that only slightly more than half of these residents continue this commitment to general internal medicine to the completion of residency.22 If this continues, as few as 10% of those training in internal medicine will to work as general internists.

Other factors contribute to the decline of the generalist workforce including the increase in administrative expectations from new quality improvement initiatives, record keeping inefficiencies, inadequately compensated disease management, and liability concerns.23 As a result of the economic forces and the practice challenges, medical student and resident interest level will likely not sustain the generalist base beyond the next decade or so.

The generalist workforce crisis demands a system for reimbursement that reflects the dynamic and changing nature of medical practice. Physicians and payers have important roles. The relative value of clinical services should be determined by physicians, but they must accept federal oversight and accountability mandated by statute. The CMS should continually assess financial aspects of practice so expenses accurately reflect the true costs of changing clinical practice patterns and do not create undue incentives for overutilization or underutilization. The current mechanism fails to provide sufficient checks and balances and is skewed and dysfunctional.

The Medicare Payment Advisory Commission, a nonpartisan advisory panel to Congress, has identified the 4 dimensions of the professional services health care economy as physician reimbursement, workforce composition, expenditure management, and clinical effectiveness and quality.24 Without a robust, well-supported, appropriately compensated, and self-sustaining generalist workforce, the majority of the US population will not be able to benefit from the powerfully effective interventions for the asymptomatic patients whose only contact with the health care system is through generalists. Furthermore, broad and affordable universal access to health care will not be possible without a solid base of generalists who can deliver care and organize appropriate referrals.25

The medical profession needs to reformulate the way the value of clinical services and the infrastructure expenses of practice are determined, needs to make the process open and accountable, and needs to solicit input and oversight from those who have the health of individuals, the nation, and the economy as their highest priorities. The resource-based relative value scale system originally developed to achieve full value for cognitive services currently threatens the sustainability of the generalist base. As a result, a large portion of the population will lose access to the continuous and personalized care provided by generalist physicians whose repertoire of clinical skills and interventions coupled with access to specialty and diagnostic services are essential for ensuring efficient and effective health care delivery.

Financial Disclosures: None reported.

REFERENCES