Editorial

Regarding “Committee Representation and Medicare Reimbursements: An Examination of the Resource-Based Relative Value Scale”

Yihe Nina Gao’s nuanced and rich paper in this issue of (Gao 2018) *Health Services Research* exploits the rotating membership on a committee that advises Medicare on its administered pricing system for physician services in Medicare Part B. Politics—rather than evidence or expertise alone—plays a big role in determining Medicare fees. Given that the traditional fee-for-service Medicare program depends heavily on administered prices, it is important to pay closer attention to the underlying factors driving prices. The process Gao explores shapes the relative value of physician services within the twenty percent of US health expenditures on physician services, since changes in Medicare prices are routinely adopted by private payers (Clemens and Gottlieb 2017).

Gao’s article studies a quasi-official “advisory” committee called the Specialty Society Relative Value Scale Update Committee (RUC). RUC is a committee coordinated by the American Medical Association (AMA), which recommends relative value unit levels to the Centers for Medicare & Medicaid Services (CMS). Since around 2007, physicians have pointed to an undervaluation in evaluation and management office visits, which are billed more frequently (but not exclusively) by primary care and internal medicine physicians (Bodenheimer, Berenson, and Rudolf 2007; Goodson 2007; Kumetz and Goodson 2013).

While common sense suggests that a committee of physician representatives will encourage higher payments for themselves, empirically testing this proposition is less straightforward. For much of its history, RUC’s confidential decision making process has made analysis of the process challenging.

Fortunately, researchers have benefitted from more publicly available information (see Robeznieks 2013). Using publicly available data and membership lists, Gao shows how prices are influenced by the movement of medical societies on and off the RUC committee at different times. In addition to data availability, RUC's process itself is complex. Participants in the RUC attest to a long learning curve in terms of understanding its folkways and unwritten rules, along with the unique vocabulary of RUC (Laugesen 2016). Gao overcomes these challenges and shows how services end up misvalued. The paper provides a much-needed perspective on *why* the United States has flawed prices for many physician services.

PRIOR RESEARCH ON DISTORTIONS IN PRICING

The payments physicians receive are heavily influenced by the underlying “work” relative value units (RVUs) used by CMS in the resource-based relative value scale (RBRVS). Work RVUs are multiplied by dollars and account for half of the RVU used for payment (the others being proxies for professional liability insurance and practice expenses). Work RVUs reflect physician “work”—that is, the time and complexity associated with providing the service. The AMA maintains that work RVUs are reflective of the time and complexity of physician work.

Evaluations of the RBRVS compare the time and complexity estimated by RUC and CMS with actual medical practice or alternative models of practice. Research using multiple methods and different data sources suggests that prices paid using the Medicare Fee Schedule are not reflective of resource use. In short, the Medicare Fee Schedule is inaccurate. Since 90 percent of RUC decisions are adopted by CMS (Laugesen, Wada, and Chen 2012), the Committee is largely setting policy on the relative value of different services. Inaccuracies have a direct impact on payments to physicians. RUC's influence also extends outside of Part B: Medicare Advantage benchmarks are based on expenditures in FFS Medicare.

If payments should reflect the time and complexity associated with providing a service, physician time is arguably the more measurable component of physician work. For over a decade, we have known that time is poorly

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estimated by RUC (McCall, Cromwell, and Braun 2006; Cromwell et al. 2010; Braun and McCall 2011). In this journal, researchers found evidence to support those earlier studies: On average, the time it takes to perform surgery is less than Medicare estimates in 78 percent of the procedures studied (Burgette et al. 2017). Other recent studies show that RUC's recommendations overstate the time it takes to perform a procedure (Government Accountability Office [GAO] 2015, Wynn et al. 2015; Shah et al. 2014; Zuckerman et al. 2016) and that physician time estimates recommended by RUC and adopted by Medicare are not reliable. In short, on average, payments do not reflect actual resource inputs required to deliver services.

While RUC estimates of time used by CMS to develop payment rates are not reliable proxies of the time physicians take to provide services, the disjunction between inputs and payments becomes even more troubling when we dig beneath the averages and consider the evaluation of different kinds of work in the fee schedule. Discrepancies between payments and inputs vary, and researchers have found that some services are consistently overpriced, while others are more likely to be undervalued. Specifically, the distortions are larger for surgical and procedural (as well as imaging) services (Sinsky and Dugdale 2013; Shah et al. 2014). Differentially inflated time and work values ultimately lead to "inconsistently inaccurate payment rates for physician services" (Zuckerman et al. 2016). Such distributional differences have profound implications for the provision of services and the choice of residencies by medical students (Goodson 2007).

To be fair, not all of the discrepancies are caused by RUC: For example, when a new service is introduced, doctors may take time to learn how to provide it; yet, time estimates used for payments are based on the time estimated when the service is first introduced. After a procedure is more established in practice and doctors are familiar with the technology, it takes physicians less time. Accordingly, these factors led to changes made in the Affordable Care Act (2010) that required more frequent re-evaluation of services by CMS and RUC, particularly those that use new technology or procedures and services perceived as misvalued.

Unfortunately, systemic problems in the structure of the committee (see, e.g., Feldman, Dowd, and Coulam 2015) may make accurate valuations challenging. For example, there is a tendency for specialty societies presenting to RUC and RUC itself to "cherry pick" data that support more favorable reimbursement (Laugesen 2016). Committee members themselves point to specific strategies (such as reducing codes that are not very important to the specialty) as a way to appear to be responding to perceived pressures to reduce

RVUs (Laugesen 2016). Finally, even if prior RUC decisions are reviewed twice, this is only as effective as regulators' attention to the specific strategies used by specialty societies to increase their payments and ongoing oversight of the RUC (see Laugesen 2016).

REPRESENTATION AND THE GAME OF CODES: REWARDS TO NICHE SERVICES

Even if we increasingly understand that participants actively circumvent and game the process, Gao's analysis provides a new perspective on deficiencies in the process. The results challenge the argument proposed by the AMA in defense of the RUC, which is that the committee is operating independently from, or without influence of, the specialty affiliation of the specialties represented and that the members of the committee do not benefit from serving on the committee (see American Medical Association 2018). Gao's paper deserves consideration by policy makers, because it provides fresh evidence showing that the RUC does not provide objective information, which impacts CMS decisions determining Medicare fees.

Addressing methodological and empirical challenges of linking RVUs to the composition of the specialties who sit on the committee, Gao exploits an interesting feature of the RUC: A limited number of seats on the RUC are open to nonpermanent members, who serve limited terms. Essentially, while the membership of the committee is relatively stable, some specialty societies "rotate" on and off the RUC. The innovation of Gao's analysis is that she uses temporary representation to estimate the impact of RUC membership on the relative values that determine physician payments. Exploiting the *variation* in timing of holding a seat on the RUC allows Gao to consider quite directly whether representation helps a specialty.

The paper matches RUC membership records between 1994 and 2013 to relative value unit and Medicare expenditure data. Gao estimates the effect of RUC membership on Medicare expenditures for different specialties. The hypothesis of her paper is that RUC membership should precede disproportionate increases in reimbursement, but especially for services performed by fewer physician specialties.

On average, she finds that a RUC membership is associated with a 3–5 percent increase in Medicare expenditures for codes billed to that specialty—per year of committee membership. Gao uses gastroenterology as an example. To put this in perspective, if (as in 2007) Medicare paid 1.5 billion dollars to

gastroenterologists, a three percent annual increase “would represent a 45 million dollar increase in Medicare annual payments to gastroenterologists as a result of a single year of RUC membership” (Gao 2018). By my estimates, assuming this increase accrued to eleven thousand gastroenterologists providing patient care at that time, the increase from 1 year of representation would result in an additional \$4,100 per gastroenterologist in annual gross billings to Medicare (Association of American Medical Colleges 2018). The effect of such a change over the longer term remains unclear; however, any increase in pricing can reverberate in unobserved or unintended ways for years to come, including unobserved subsequent spillover effects to other services and other specialties as services might be used by other specialties longer term. In fact, the impact over multiple years may be larger than Gao’s estimates.

Gao’s analysis explores the interesting question of how the benefits that accrue to temporary members of the RUC might vary between specialties. The analysis therefore considers the income impact of the RUC over and above the specialty/primary care issue or the average return to service on the committee. As Gao suggests, it is important to go deeper than overall categories of services (e.g., imaging compared with surgical services), especially to consider how many specialties associated with RUC have an interest in obtaining a fee increase.

The paper therefore illuminates one feature of the RUC and the constellation of societies clustered around it that is subtle but often overlooked, and that is that services vary in economic returns. Although a service could be billed by 93 different physician-specific specialties designated by CMS, in practice some services are provided by only one or two subspecialties, which Gao suggests influences the likelihood of favorable payment. To demonstrate this, Gao develops an index of specialization, which reveals that where there are fewer specialties providing a service, the specialty obtains higher returns from serving on the committee. Gao therefore demonstrates that the number of specialties billing a service is inversely related to RVUs. The returns to membership of the RUC are heightened as the concentration of specialties supplying the service increases. This is counterintuitive, perhaps, because we might expect a “majority wins” incentive, whereby those who have common interests are more successful in increasing reimbursement. This paper suggests the opposite that specialties that provide “niche” services see the biggest payoff from representation on the RUC. Gao also tests these findings against practice expense and malpractice RVUs, which are influenced by the RUC, but much less directly. This is an effective and novel indicator for testing the work of the RUC.

If Gao helps us understand the nature of financial returns that accrue to specialties as their representatives rotate on and off the RUC, it is interesting to consider the role of RUC-specific knowledge that a specialty might accrue that also contributes to the bump in RVUs. As said, the process is complex, so such expertise is highly valued, and specialty societies appear to benefit from having long-serving members, who are groomed for these positions for years, first in an advocacy role (Laugesen 2016). Indeed one possible reason that societies with rotating memberships benefit from their participation is that they leverage the knowledge acquired through that participation to make their requests for changes more compelling to the committee after they leave the committee. Second, if a service is performed by a small number of physicians, it also might be more challenging for others to evaluate it, since fewer people understand the service. That in turn might lead to more deference to a society presenting, a subspecialty service as opposed to a service more commonly provided. Societies accrue informational advantages by virtue of their experience on RUC, and this could be accentuated if the specialty is one of the only specialties performing that service.

CONCLUSION

In her innovative study of Medical societies' temporary membership of the RUC, Gao finds a statistically significant relationship between a society's membership on the RUC and the RUC's decisions to increase work RVUs performed by the services the society proposes. At the same time, Gao also finds that services that are highly specialized or provided by a small number of specialties receive greater gains than those provided by a larger number of specialties.

These findings are troubling, because they draw a direct link between temporary or rotating membership on the RUC and the magnitude of RVUs that influence physician fees for physicians in that specialty. Ideally, if the RUC process is an objective process, representation on the RUC should not have any impact, or at least a miniscule impact, on RVUs. This reinforces existing concerns that RVUs used by Medicare and the private sector are not reflective of the resources associated with each service. Furthermore, while acknowledging that there are many contributing factors influencing primary care income, Gao suggests that such differential changes "may exacerbate existing reimbursement discrepancies between generalist and specialist

practitioners.” The findings also suggest the biggest income gains from the RUC process occur for physicians who strategically develop procedure niches.

The findings create a policy conundrum that is a classic case of unintended policy consequences. In theory, CMS shifts relative value units depending on the anticipated budgetary impacts of changing a service. CMS is required to ensure changes in RVUs are not so large that Part B Medicare expenditure is impacted. That implies that services that are broadly provided by physicians will experience relative declines over time. The result might be that physicians may inadvertently encourage a balkanization of the fee schedule into finely grained categories, in order to benefit from a smaller range of procedures. Unfortunately, this means services provided by many or all physicians, such as office visits, are disadvantaged. Indeed, this is a key lesson of Gao’s analysis, which is that RUC presents challenges not only for the specialty/primary care divide but also may disadvantage specialists operating outside of subspecialty niches.

This likely incentivizes medical societies to attempt to develop their own service niches to avoid meeting the threshold set by the law. When the RBRVS was put into law by Congress, this was unlikely to have crossed their minds. In addition, most people involved anticipated greater regulatory oversight by government, not the direct involvement of a committee established and coordinated by the AMA. If changes to RVUs continue to be done this way, fees will not reflect the actual time and complexity associated with providing the service, which was the original stated goal of the RBRVS.

Addressing the problems identified by Gao requires CMS to consider the way that highly differentiated services are priced, compared to services provided by a broader range of physicians that might be just as necessary but may be penalized.

The analysis points to significant problems in the AMA’s position that representation is not correlated with benefits from higher fees. The AMA argues that members exercise their independent judgment and that they do not advocate for their specialty (AMA 2018). Reading this paper gives us a deeper understanding of the RUC and its decision making process. Policy makers, researchers, legislators, and the public should be concerned that physician groups can extract “rents” from their service on the committee.

The key question is not so much whether these returns are intentional and/or represent some bias, but that the differences exist at all. If the independence and expertise of the RUC provide the justification for its role in payment policy, Gao’s analysis undermines that justification, because greater

familiarity with the process, among those serving for a short period apparently increases their leverage over the process. The independence of the committee is likely overstated by those supporting the RUC. As I have argued, it might be more accurate to view the RUC as an example of regulatory capture found in other areas of the economy, whereby interest group preferences are dominant in the decisions of regulators, to the detriment of consumers (Laugesen 2016).

Policy makers appear committed to changing Medicare payments toward value-based models, but there is a need to continue to pay close attention to how RVUs are set. Even post-ACA efforts to review misvalued services, however well-intentioned, are unlikely to address systemic problems within the RUC decision making process. If, as Gao's analysis suggests, initial valuations are influenced by the composition of the people at the table, any efforts to revise them may also replicate those errors. Gao's paper adds a unique perspective on the conundrum of RUC that health services researchers can and should explore further.

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