# The Medicare Physician Fee Schedule Likely To Serve as Foundation for Alternative Payment Models

Many experts believe piecemeal, volume-based fee-for-service (FFS) payments to physicians contribute to fragmented and inefficient care delivery that leads to higher costs and worse patient outcomes. How physicians are paid matters because research shows that payment influences—for better or worse—what services and other care patients receive. In 1992, amid concerns about rapidly rising costs and in an effort to pay physician more accurately and fairly, Medicare moved away from paying physicians based on their historical charges for thousands of different services by adopting a fee schedule based on estimates of the resources involved—both in terms of physician work and practice expenses—to provide medical services. Prompted by the 25<sup>th</sup> anniversary of the Medicare physician fee schedule, the USC-Brookings Schaeffer Initiative for Health Policy and the Urban Institute with support from the Commonwealth Fund convened experts on September, 26, 2017, to examine the role of the Medicare physician fee schedule has played in improving payment and its importance to success of alternative payment models that move away from FFS and encourage physicians to be more accountable for the quality and cost of care.

Medicare spends about \$90 billion on physician services annually, but the Medicare fee schedule's impact is much broader because many additional payers use the relative value scale component of the fee schedule and because physician prescribing decisions drive a large share of the overall \$3.2 trillion spent annually on U.S. health care.¹ Evidence also indicates that inadequate updating of the Medicare fee schedule has created payment distortions that favor surgical services and other procedures at the expense of office visits and primary care services—the same distortions that in part prompted adoption of the fee schedule in the first place. Despite these flaws, many experts predicted that the physician fee schedule will play an integral in developing alternative payment models, serving as the foundation for population-based payment methods that put providers at greater financial risk for patient outcomes and the total cost of care. If so, investments to improve the accuracy of the Medicare physician fee schedule will be vital to developing sound alternative payment models, or policymakers will run the risk of perpetuating distortions in physician payments that work at cross purposes to achieving high-quality, affordable, patient-centered care.

## Physician Fee Schedule Origins

Before the advent of the Medicare physician fee schedule in 1992, Medicare reimbursed physicians based on the "customary, prevailing, and reasonable charge" system—a practice that attracted scrutiny in the 1980s when Medicare spending for physician services per beneficiary was growing at almost twice the rate of the overall economy.<sup>2</sup> The charge-based system also resulted in wide variation in payments for the same services and concerns that distorted payment

levels encouraged provision of surgical services and other procedures at the expense of office visits and primary care services, according to Paul B. Ginsburg, Ph.D., director of the USC-Brookings Schaeffer Initiative for Health Policy.

At the time, Congress, especially the Senate, also believed distorted Medicare physician payments shortchanged rural areas relative to urban areas. Coupled with these congressional concerns, the Reagan administration in the 1980s' era of deficit reduction was anxious about the growing volume of physician services and wanted to make "Medicare spending a more predictable part of the budget and get some control over not just prices but overall spending," he said. The seeds of the fee schedule were sown in the Consolidated Omnibus Budget Reconciliation Act of 1985, which directed the Department of Health and Human Services (HHS) to study and report to Congress on a resource-based relative value scale system to determine Medicare physician fees. Known as the RBRVS, such a system, in contrast to a charge- or cost-based payment system, uses a common scale to value each service based on the resources needed to provide the service. The law also created the Physician Payment Review Commission (PPRC)—Ginsburg served as the first PPRC executive director—to advise Congress on Medicare physician payment issues.

Building on the work of Harvard economist William Hsiao, the PPRC recommended adoption of an RBRVS-based Medicare physician fee schedule, which Congress authorized in the Omnibus Budget Reconciliation Act of 1989<sup>4</sup> for implementation in 1992. The law specified three relative-value resource categories—physician work, practice expense, and malpractice expense. The fee schedule allowance for a service equals the sum of the three rankings, expressed as relative value units (RVUs), adjusted for payment locality cost differences and multiplied by a national conversion factor that translates RVUs into dollars. The RVUs for physician work—the physician's own time and effort and the intensity of the service—were implemented in 1992. RVUs for practice expenses—direct costs such as non-physician labor, medical equipment and medical supplies needed for each service and indirect expenses such as the cost of office space—were initiated in 1999, with malpractice liability RVUs added to the fee schedule in 2000.

Along with a mandate that payment adjustments within the fee schedule be budget neutral, the law included a beneficiary protection measure supported by AARP to limit balance billing—or charging patients the difference between the allowed Medicare payment and physicians' charges. Other provisions included establishment of volume performance standards to track changes in the volume and intensity of Medicare services and a process to update the RVUs periodically to reflect changes in medical practice and the cost of resource inputs.

The goal of the RBRVS-based fee schedule was to use a "science-based" approach to simulate a hypothetical market to determine equitable physician payment rates, according to Ginsburg, who added, "This was not an approach based on how much more should a surgeon earn than a primary care physician. This was an attempt to use science to determine what the relative values [of different services] should be."

To gain the support of the American Medical Association (AMA), the law specified that the AMA would convene specialty societies to update the physician work and practice expense RVUs periodically through the Relative Value Update Committee, known as the RUC. Congress "envisioned the specialty societies working within the AMA rather than the specialty societies coming to [what is now the Centers for Medicare & Medicaid Services (CMS)] or Congress and lobbying," Ginsburg said. "I think what might have been lost in the process was that by working this out within the AMA, the staff at CMS did not perceive it had a job to do, which it would have had to do, if they were making the decisions in an environment of direct lobbying."

According to Ginsburg, MedPAC analysis of changes from 1991 to 1997 showed that the new fee schedule generated "substantial shifts in resources away from procedures toward visits, away from procedural specialists and surgeons toward primary care and other specialties where much of their work involves visits with patients.<sup>8</sup> In my perception, the shift was undone by an inadequate updating process over a period of 25 years."

In the ensuing years, private insurers and state Medicaid programs widely adopted the Medicare physician fee schedule, albeit with different conversion factors, so changes in relative values can drastically affect physician revenues across the health care system today.

Panelist Chip Kahn, president and CEO of the Federation of American Hospitals, worked on Medicare physician fee schedule legislation when he was both minority and majority staff director of the House Ways and Means Subcommittee on Health. During the 1980s, there was a "reform imperative" driving major changes to Medicare payment methods for both hospitals and physicians, he recalled, adding that he wondered at the time whether such a major overhaul of physician payment methodologies was the best approach.

"There were, myself and two other people who will go unnamed, who pled with members to think, well, gee, do we really need to do this? If this is really all about the imbalances, then we've been arbitrary in other things, why can't we just be arbitrary in some of these codes and then see how it plays out rather than moving to an entire system which is based on these RVUs...," Kahn said. "So, we questioned the whole notion, but frankly no one listened."

#### Coding: The Foundation of Physician Payment

The foundation of the Medicare physician fee schedule rests on codes—thousands and thousands of codes that define the allocation of RVUs across the spectrum of medical practice, according to Barbara Levy, M.D., vice president at the American Congress of Obstetricians

and Gynecologists, who chaired the RUC from 2009 to 2015. More than 7,000 Current Procedural Terminology, or CPT, codes describe "what" services physicians provide to patients, while more than 68,000 International Classification of Disease-Version 10 codes define "why you did what you did," she said.

First convened by the AMA in 1992, the RUC "was never supposed to be a panel equally representing the world," Levy said. "It was supposed to be a panel of specialty societies that could in a zero-sum game sit around a table, and some would win and some would lose, but that using

#### PAYMENT RATES INFLUENCE PATIENT TREATMENT

Conventional wisdom holds that higher payment rates for physician services will increase volume of those services, and conversely, if payment rates decline, volume will follow. Empirical evidence, however, shows that while fee changes certainly affect what services are provided, the direction of those changes don't always track the direction of the fee change, according to Joseph Newhouse, Ph.D., a Harvard professor and former PPRC commissioner.

Newhouse outlined the findings of several studies looking at changes in fee levels, including a 1993 PPRC review that found a decline in fees increased volume for certain procedures<sup>5</sup> and a 2010 study that looked at the effect of large Medicare payment reductions for certain chemotherapy drugs, which constituted a large part of oncologists' revenue at the time.<sup>6</sup> Rather than a reduction in chemotherapy for lung cancer patients, chemotherapy increased but drugs used changed, shifting from drugs with the largest cuts in profitability, carboplatin and paclitaxel, to other high-margin drugs, like docetaxel. Similarly, another study<sup>7</sup> found that Medicare higher fees related to redrawn geographic areas in 1997 sparked increased delivery of services.

"So, those are three pretty clean—in my view—natural experiments on fees," he said. "All of them show that fee changes matter to what is delivered. They do vary in the direction of the signal. The first two, fees go down, procedures go up. The third one, fees go down, procedures go down—or services go down I should say, not procedures."

their expertise in medicine and the science of medicine could adjudicate the allocation of RVUs." The reality, however, was that the RUC paid little attention to assessing whether relative values kept pace with changes in medical practice, trends in physician productivity, and shifts in practice expenses. Instead, the group focused primarily on increasing RVUs that were perceived as undervalued or allocating RVUs to new codes. In effect, relative values often "defied gravity—going up or staying the same but rarely coming down." As Levy described, "Occasionally a private payer would recognize that a set of services was overvalued, but in general what would medical specialty societies do? They would fight for codes that were undervalued in the system, but no specialty society would make a comment to CMS to say please reduce the payment for me and my members for this particular code."

In the same vein, Karen Fisher, J.D., chief public policy officer at the Association of American Medical Colleges and former senior health counsel to the Senate Finance Committee, recalled her disappointment about the fixation on the valuation of individual codes when she was on the Hill and meeting with specialty societies. "I thought: Boy, it would be great—there's really smart people here in this room—if we could have a broader discussion based on your on-the-ground experience about the health care delivery system, and how do you think it can be changed," Fisher said. "But that code was so critical to them and what the payment was for that code. And if you start to go in and looking at that, I think what it would evolve into again would be this food fight about looking at individual codes."

#### Only So Many Slices of the Medicare Pie

In a budget-neutral world, increases in relative values for some physician services or the introduction of new codes must be offset by decreases in relative values for other services.

As panelist Mark Miller, executive director of the Medicare Payment Advisory Commission (MedPAC) said, "The new code would be created, it would get a high value, but then it wouldn't necessarily be reevaluated over time as efficiencies were gained."

Changes in physician payment rates matter because research shows that payment influences what services and other care patients receive (see Payment Rates Influence Patient Treatment on page 3). Over time, failure to update the information underlying the relative values—for example, accurately measuring the time physicians actually take to complete a surgery or interpret a CT scan and accurately estimating direct practice expenses—also contributed to distorted relative values, according to Miller. A growing body of evidence shows inaccurate estimates of physician time to provide services and inaccurate underlying data used to calculate practice expenses have generated significant distortions in the fee schedule (see Distorted Physician Time Estimates and Practice Expenses Skew Fee Schedule on page 5). Still more distortion results from higher practice expense payments when physicians perform a service in a hospital setting vs. an office-based setting—often times the only difference is that a hospital bought a community-based physician-owned practice that is now designated as hospital-based. Using a hypothetical example, Levy said, "Last year I was in private practice, this year my practice is owned by a hospital, and the payment is \$130 more for the same service."

In the real world, this has resulted in eroding payment rates for evaluation and management services—or office visits—provided most often by primary care physicians and other so-called cognitive specialists like endocrinologists and psychiatrists. At the same time, relative values for procedure-based services, especially involving high-tech equipment such as advanced imaging, stayed the same or increased. Essentially, because of the distortions, the Medicare physician fee schedule has sent strong signals to physicians that financial reward lies with doing things to

patients rather than talking to them. Today, there is a significant compensation gap between cognitive and procedural specialists, with, for example, endocrinologists' average annual compensation at \$220,000, radiologists' at \$396,000 and orthopedic surgeons' at \$489,000, according to the Medscape Physician Compensation Report 2017.<sup>10</sup>

"Medicare payments for primary care physicians have not kept up with inflation," said Simeon Schwartz, M.D., CEO of Westmed Practice Partners. "New physicians are coming out with major debt; they're shunning primary care because you'd have to be nuts to take a job that pays half the price of what your education costs. The facility differential means that you can't possibly practice in your own office when the hospital's getting twice the amount for the same procedure."

# DISTORTED PHYSICIAN TIME ESTIMATES AND PRACTICE EXPENSES SKEW FEE SCHEDULE

Among the most important factors that go into allocating physician work RVUs is the time a physician needs to provide the service, and if the time measures are inaccurate and the inaccuracies are not random, then the time errors will compound errors in both physician work RVUs and how indirect practice expenses are allocated across services, according to Stephen Zuckerman, Ph.D., senior fellow and co-director of the Health Policy Center at the Urban Institute.

"If there are errors in that time measurement and if they're not random—now remember, if everything is inflated by 10 percent in a relative value scale, that doesn't matter," Zuckerman said. "But if for some fees time is inflated by 10 percent, others 30 percent, and others by 100 percent, then that's going to lead to errors in both the work RVUs as well as the practice expense RVUs."

Research confirms that the fee schedule overestimates physician time for services in nonrandom ways with the following results, according to Zuckerman:

- The empirical data show that time is not measured accurately across all services and likely results in errors in work RVUs.
- Service definitions also contribute to errors in work RVUs, either at the CPT level or the global period for surgery.
- Building alternative payment models on top of these errors in RBRVS will simply perpetuate them.

Turning to practice expenses, Peter Hussey, Ph.D., a senior policy researcher at the Rand Corporation, pointed out that little research has been done to validate the accuracy of the underlying cost inputs. Information about direct costs are obtained for reference services from various specialty societies while indirect costs are based on the decade-old AMA Physician Practice Information Survey.

"In terms of the importance of practice expense, it's serious money, it's almost half of the fee schedule payments—over \$30 billion a year...that's just Medicare Part B. It spreads throughout the health system in the United States, so really we're talking about something that's a significant driver of everything from specialty choice to investments in facilities and service lines. So it's important to get this right," Hussey said.

Possible policy responses to improve the accuracy of practice expenses include updating the input costs through new surveys or a sample of practices; revising the differential practice expense payment for facility-based services; and reengineering and simplifying the valuation process, perhaps by looking at the valuation methodology used for hospital outpatient departments that are based on hospital cost accounting through cost reports and claims analysis.

#### Zero-Sum Game Sparks a Ruckus in the RUC

In 2005, after clashing with surgical groups that opposed raising relative values for office visits, primary care societies considered abandoning the RUC, but ultimately the group reached a compromise to raise payments for office visits. However, much of the increase never materialized because of budget-neutrality requirements<sup>11</sup> and ongoing pressure from the sustainable growth rate, or SGR, formula that in 1997 replaced the original volume performance standards and tied payment rates to historical growth in the overall economy. In 2002, the SGR triggered a 4.8 percent payment rate reduction, and Congress for more than a decade applied annual patchwork fixes that kept Medicare physician fees stagnant.<sup>12</sup>

As criticism of the RUC process intensified, the AMA and the RUC in the late 2000s began the onerous task of identifying misvalued services and reallocating relative values across services. "Over the years, 1,700 out of the 7,000 services have been assessed as potentially misvalued, 1,300 of them have been reviewed...," Levy said, adding, "It was a contentious process, it continues to be a difficult process. The specialty societies, and I represent one, are not happy about having to resurvey codes that are nicely paid and take cuts, but that's what's been happening over many years."

Nonetheless, Miller believes HHS and CMS need to take much more responsibility for updating the Medicare fee schedule, saying, "We do believe there is a role for the RUC, but the RUC should be advisory. The responsibility for the fee schedule very much lies with the Secretary, with HHS, and should be managed by HHS."

More recent modifications to the fee schedule include the creation of new codes to reflect care coordination activities to support the shift to team-based care of complex patients with chronic conditions and shore up primary care. And for a brief period, Congress authorized add-on payments for certain primary care services. MedPAC also has recommended that CMS pay a standing sample of physician practices to collect data "on the time the physician works, the services provided, which services are provided, and the volume of those services," Miller said. Then, using statistical analysis, CMS could identify services where the time distortion is high and administratively reduce the value or recommend that the RUC review the identified services, he said.

# Fee Schedule a Help or Hindrance in Move to Alternative Payment?

The price distortions in the Medicare physician fee schedule already are hampering efforts on the ground to develop value-based payment models that incorporate cost and quality into the equation, according to several panelists. Yet, it's unclear how to bridge the gap between fee-for-service payments and either episode-based or capitated—fixed per member, per month—payments.

"The consequence of the price distortions is that it distorts the labor market and limits what you can do to reallocate resources," said Mai Pham, M.D., vice president of provider alignment solutions at Anthem and former chief innovation officer at the Center for Medicare & Medicaid Innovation. "And it frankly keeps our attention focused on, I would say, the illusion that we are measuring true input costs with a very, very false sense of precision, and from my perspective, a tremendous waste of time and energy chasing that false precision to reassure ourselves that

we're doing something meaningful instead of allowing us to shift our attention, frankly, to what we can afford."

Nevertheless, many panelists predicted that the RBRVS-based fee schedule will be difficult to scrap for no other reason than emerging alternative payment models are not far enough along to determine their effectiveness. "We've got to have something to replace fee for service that we're confident will work. And I don't believe we're there yet," said Alan Lazoroff, M.D., a geriatrician and current RUC member. Similarly, Robert Berenson, M.D., of the Urban Institute said, "We do not have any consensus, as far as I can tell, as to what direction we should be going with alternative payment models. We have strong advocates for episodes, we have other advocates for ACOs [accountable care organizations] with shared savings ultimately going to significant risk bearing, but I don't think we are close. So, fee for service is going to be here by default for a lot of the health care system."

Another panelist, Frank Opelka, M.D., of the American College of Surgeons, spoke strongly in favor of moving in the direction of episode-based payment that would provide a fixed payment to care for a patient's heart attack or broken leg. To that end, the College of Surgeons has taken about 85 percent of total Medicare Part A and Part B expenditures and defined 1,200 episodes of care. The approach would both encourage and support team-based care by moving away from piecemeal fee-for-service payment and encourage more focus on patient-reported outcomes. "So, if the patient does well and the costs are low, the team shares the reward, but if the patient does poorly and the costs are high, the team shares the penalty," he said.

Similarly, Grace Terrell, M.D., an internist and member of the Physician-Focused Payment Model Technical Advisory Committee, an HHS advisory group known as PTAC, said that alternatives to the physician fee schedule first need to focus on patient needs and effective care delivery models and then build payment mechanisms that can support the care delivery models. "If we start with patients and what might be the best model of care for patients and start with the delivery models and the care models and then come around to the payment models that are associated with helping patients, we might get the best outcomes. That's the conversation we ought to have," she said.

Terrell also cautioned that alternative payment models aren't needed for everything, saying, "If you're in urgent care and you're relatively healthy and you have an independent condition, then the most efficient thing that you can have is fee for service that is based on evidence-based quality parameters of some sort because it's a transactional interaction....That's a very different set of parameters than what you might need for somebody who has cancer, somebody who's a geriatric patient, who's frail at the end of life. All the types of things you would need for that care model are different."

## Fixing the Fee Schedule to Get Rid of It

Given the conundrum of almost universal agreement that the fee schedule's inaccuracies create real problems and the reality that the fee schedule likely will serve as the "chassis" for alternative payment models, panelists were conflicted about how much time, effort, money and political capital should be invested in improving the fee schedule.

For Gail Wilensky, Ph.D., a senior fellow at Project Hope who ran the Medicare program in the early 1990s, the very nature of the fee schedule as an input-based system operating at the micro-

level of thousands of different services inherently works at cross purposes of moving toward payment based on cost and patient outcomes. "The persistent focus on inputs and the costs of a particular input, as opposed to what you get for that input, put you in an undesirable position in terms of trying to acknowledge that there frequently are, can, and should be different ways of getting to a health outcome," she said.

"I would summarize my position by saying, if it doesn't cost too much, it doesn't deflect too much from where I think the focus really needs to be, which is on trying to move more to an outcomes focus and to an agreed-upon set of quality and efficiency metrics, and you are not exhausting all of your political capital which, you may have noticed, is actually in quite scarce supply right now, then it's hard to say, no, it would be bad to have a more accurate fee schedule," Wilensky said

Most alternative payment models attempt to use larger units of care as the basis for payment, such as an episode of care, for example, of a heart attack or hip replacement, or full capitation where providers assume financial risk for the care of a defined population of patients for a defined period of time. The thinking is that creating payment methods based on larger units of care, coupled with quality performance measures to ensure patients get appropriate care, will give clinicians flexibility to design new care delivery models that actually meet patients' needs.

For Berenson, the existing fee schedule payment distortions, where specialists' incomes are two and three times the incomes of primary care physicians, pose a formidable obstacle to promoting development of multispecialty group practices that can provide team-based care and manage not just care for a population of patients but also be at risk for the cost and quality of that care. "If you have a cardiologist who can make \$600,000 in fee for service, how are you going to get them to work for \$400,000 or \$350,000 in a multispecialty group?" he said.

"So, my argument is, by correcting some of those distortions in fee for service—not having everybody paid the same, but by reducing the disparities somewhat, I think it supports the development of organizations that ultimately will be in a position to either manage episode-based payment or, where I would prefer, a move toward capitated type payment," Berenson said.

#### What About the Patients...

As Medicare experiments with alternative payment models, a seemingly intractable issue is balancing beneficiaries' freedom to choose providers with the need to get their buy-in and commitment to get all or most of their care through a provider arrangement like an ACO.

Jonathan Blum, executive vice president of CareFirst BlueCross BlueShield and former principal deputy CMS administrator, was pessimistic about overcoming that dilemma. Noting that neither Medicare nor private payers are comfortable dictating which providers patients use, Blum said, "Thinking about payment models that lock in people to given delivery systems for all their care, all their conditions, that's not how people choose to receive their care. And so for that reason I'm very skeptical that we'll ever see clinical bundles or other models that really capitate the care to one given system, one given ACO, or one given hospital system."

Blum also pointed out that what seems like clinically irrational use of resources, such as discharging a beneficiary from the hospital to a skilled-nursing facility (SNF) when her condition could be managed with home health care, actually makes sense from a human standpoint if the beneficiary can't get to the door to let the home health aide in.

"For that reason I am more confident than I was during my time at CMS that the fee-for-service structures will stay in place, we'll rely on them," he said. "We have to find the resources, we have to find the staff, the money, the contract dollars to make sure that we are paying accurately, because I will predict in 10 years from now that the fee-for-service system will still be in place 20 years from now, 30 years from now, unless we start being comfortable locking people into one system of care, and unless we start taking away the real clinical human judgment that goes into deciding when a patient needs SNF care, versus home care, versus rehab care, when it's not just the clinical need, but it's the clinical and the social circumstance that drive those decisions."

However, Wilensky countered that FFS payment can potentially stymie innovative ways of meeting patients' social needs and preventing potentially unnecessary and costly care because there's little flexibility to pay for a handrail that can keep a patient from falling at home or arranging transportation for someone in a remote area to get to a doctor's appointment instead of relying on an ambulance.

#### Parallel Bridges to More Effective Payment?

Caught between the inaccurate and overly prescriptive, micro-level physician fee schedule and mostly aspirational alternative payment models, perhaps, the answer is to shore up the existing fee schedule while pursuing a new and better fee schedule to support new payment approaches, said Eric Schneider, M.D., senior vice president at the Commonwealth Fund.

Using the construction of a new Tappan Zee Bridge across the Hudson River as an example, Schneider said, "The old bridge is still there, but there's a new bridge that they are building in parallel, and then once that one actually can hold traffic, they'll just demolish the old one."

Innovation also potentially can play a big role in changing care delivery in positive and productive ways and making sure the fee schedule isn't a barrier to innovation is important, Schneider said. "There are potential ways of delivering services that we can't even imagine today, that might be very real to us five years from now...So, I don't think we should underestimate the potential for innovation to really change the way the health care delivery system does its business," he said. "The physician fee schedule could be a powerful barrier to progress in that area, and so we should be looking hard at the ways in which it might be preventing that type of innovation."

Two key elements are needed to both improve the existing fee schedule and advance new payment approaches that promote better patient outcomes and more affordable care, according to Schneider. The first is developing resource management systems that could both improve the accuracy of the physician fee schedule and help ACOs and other organizations understand the impact of new care delivery models on their bottom lines. The second is renewed investment in "novel and creative ways of measuring quality, patient-reported outcome measures and patient reported experience measures, and how to incorporate those into the physician fee schedule," Schneider said.

Parallel work on improving the existing fee schedule while moving forward with alternative payment models also could help develop hybrid payment systems—especially for primary care—that blend FFS payments with per-member, per-month care management payments to help physicians build the practice infrastructure needed for team-based care, Berenson said. Medicare already has launched a demonstration—Comprehensive Primary Care Plus—that takes such an

approach and adds incentive payments for practices based on how well they perform on patient experience measures, clinical quality measures, and utilization measures that drive total cost of care.

"I think where we want to wind up is hybrid payment models that attempt to neutralize financial incentives—not create strong financial incentives—balancing the incentives for stinting with the incentives for overproducing," he said.

#### **Endnotes**

<sup>1</sup> National Health Expenditures, 2015. Accessed at <a href="https://www.cms.gov/Research-Statistics-Data-and-systems/Statistics-Trends-and-">https://www.cms.gov/Research-Statistics-Data-and-systems/Statistics-Trends-and-systems/Statistics-Trends-and-systems/Statistics-Trends-and-systems/Statistics-Trends-and-systems/Statistics-Data-and-systems/Statist-Data-and-systems/Statist-Data-and-syste

Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html.

<sup>2</sup> U.S. General Accounting Office, Report to Congressional Committees, "Medicare: HCFA Can Improve Methods for Revising Physician Practice Expense Payments," Report No. GAO/HEHS-98-79, Washington, D.C. (February 1998).

<sup>3</sup> Sec. 9305(b), P.L. 99-272, 100 Stat. 82, 192, Apr. 7, 1986

<sup>4</sup> Sec. 6102, P.L. 101-239, 103 Stat. 2106, 2171, Dec. 19, 1989

<sup>5</sup> Physician Payment Review Commission, Annual Report to Congress 1993, p. 126.

<sup>6</sup> Jacobson, Mireille, et al., "How Medicare's Payment Cuts For Cancer Chemotherapy Drugs Changed Patterns Of Treatment," *Health Affairs*, Vol. 29, No. 7 (July 2010).

<sup>7</sup> Clemens, Jeffrey, and Joshua D. Gottlieb, "Do Physicians' Financial Incentives Affect Medical Treatment and Patient Health?" *American Economic Review*, Vol. 104, No. 4 (April 2014).

<sup>8</sup> Iglehart, John K., "Health Policy Report: The American Health Care System: Medicare," *New England Journal of Medicine*, Vol. 340, No. 4 (January 28, 1999).

<sup>9</sup> Ginsburg, Paul B., and Robert A. Berenson, "Revising Medicare's Physician Fee Schedule—Much Activity, Little Change," *New England Journal of Medicine*, Vol. 356, No. 12 (March 22, 2007).

<sup>10</sup> Accessed at <a href="https://www.medscape.com/slideshow/compensation-2017-overview-6008547?src=ban">https://www.medscape.com/slideshow/compensation-2017-overview-6008547?src=ban</a> comp2017 stm mscpmrk 330x150#4.

<sup>11</sup>Mathews, Anna Wilde, "Dividing the Medicare Pie Pits Doctor Against Doctor," *The Wall Street Journal* (April 7, 2011). Accessed at

https://www.wsj.com/articles/SB10001424052702303341904575576480649488148.

<sup>12</sup> The SGR was eliminated by the Medicare Access and CHIP Reauthorization Act of 2015, which created two new payment paths for physicians: The Merit-based Incentive Payment System (MIPS) and Advanced Alternative Payment Models (APMs).





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