

Part III: Understanding the debate about reducing health care costs
By Kip Sullivan
September 2017

“[M]ost of today’s health cost strategies aim to reduce the volume of tests, procedures, and hospitals days.... Very few aim at the price of health services.” That is how Drew Altman, CEO of the Kaiser Family Foundation, summed up the American approach to cost containment in an op-ed in the *Wall Street Journal*. [1] That is an accurate description of the policies endorsed by the US Congress and the Minnesota legislature over the last half-century. Those policies have sought to reduce health care costs by reducing the quantity rather than the price of medical care. Those policies fall into two categories: Strategies aimed at altering the behavior of *providers* (mainly doctors, but in recent decades hospitals), and strategies aimed at altering the behavior of *patients*.

Since the mid-1980s, the strategies or tactics aimed at providers have been collectively referred to as “managed care.” Managed care advocates believe overuse, not excessive price, is the problem, and that doctors cause overuse by caving in to the incentive to order unnecessary services created by the fee-for-service method of payment. According to managed care proponents, the solution to all this doctor-induced overuse is to replace the fee-for-service method with methods that force doctors to bear insurance risk (that is, the risk of losing money) and to subject doctors to supervision by insurers (private insurers, self-insured employers, and Medicare). Obviously these tactics – subjecting providers to financial incentives to reduce services, and micromanaging them – do nothing to reduce the price at which physicians, hospitals, drug companies etc. sell their goods and services. These tactics are aimed squarely and exclusively at quantity.

There is no label analogous to “managed care” that is widely used to describe the methods proposed by those who claim that overuse is the problem and *patients* cause it. [2] I will refer to these methods collectively as high-deductible policies (although vouchers, tax credits, and report cards allegedly revealing the price and quality of medical services often accompany high deductibles in proposals put forth by high-deductible advocates).

In the late 1980s a third movement arose that, unlike the managed care and high-deductible movements, did not promote overuse as the root cause of the health care crisis. This movement’s solution was dubbed “single-payer” within a few years of movement’s formation. The single-payer movement has focused on price as opposed to quantity. But as Altman’s comment above suggests, the single-payer movement has been nowhere near as influential with Congress and state legislatures as the other two movements.

To facilitate my description of the managed care, high-deductible, and single-payer strategies, I will begin by offering a brief history of the movements that arose in the 1970s to promote these strategies. Because the managed care movement has been much more influential than the high-deductible and single-payer movements, I will start with the managed care movement.

A short history of the managed care movement

The movement was born in the early 1970s with the invention of the “health maintenance organization” and the enactment of the HMO Act of 1973 with the support of Republican president Richard Nixon and members of both parties in Congress. It reached its maximum support in Congress and among employers in the mid-1990s (it was never popular with the public), then lost support during the late 1990s as inflation soared and the “HMO backlash” excoriated the most visible managed care tactics – limited choice of doctor and “utilization review” by insurance companies. Managed care was repackaged slightly in the early 2000s. This form of managed care, which I will call Managed Care 2.0, was elevated to the status of national health policy with the enactment of the Affordable Care Act in 2010 (with exclusively Democratic support) and the Medicare Access and CHIP Reauthorization Act of 2015 (endorsed by huge majorities of both parties). The ACA’s and MACRA’s cost containment provisions are based almost entirely on managed care in its post-2000 guise, including “accountable care organizations” (ACOs) and “pay for performance” (punishing and rewarding doctors and hospitals according to their grades on report cards). Managed Care 2.0 has worked no better than Managed Care 1.0: It has failed to cut costs, and may have raised costs.

To those outside the managed care movement, it would seem that a half-century of failure should be enough to inflict terminal damage on the credibility of managed care proposals. That has not happened. At this date, it is difficult to make a clear assessment of the level of support for managed care because the attention of lawmakers, the media and the public has been focused on the debate in Congress about the fate of the ACA, and that debate has been superficial. That debate has done nothing to help the public or policy-makers sort through the evidence on whether the managed care provisions in the ACA are working. All the signs at this date are that influential managed care proponents remain convinced that managed care can work if it is given even more time. In short, it appears managed care retains its top-dog position in the health care reform debate despite a half-century of failure.

A short history of the high-deductible movement

Unlike the managed care movement, which began with bipartisan support in the 1970s and retains it to this day, the high-deductible solution to the health care crisis has attracted primarily conservative support. As was the case with managed care, the high-deductible movement was born in the early ‘70s in response to the surge of inflation which occurred in the late 1960s. Just as the managed care movement was invented by a tiny handful of policy entrepreneurs, so the high-deductible movement was begun by a few conservative economists. As was the case with managed care, the early proponents of high deductibles based their diagnosis on a single unproven but fundamental assumption – patients are “overinsured” and this in turn causes overuse. Those who promoted this diagnosis naturally gravitated to solutions that forced patients to incur high out-of-pocket costs. In those days insurance policies that guaranteed that patients would pay large sums out of pocket were called “catastrophic” policies.

As was the case with the managed care movement’s overuse diagnosis, there was a small kernel of truth to the high-deductible movement’s claim that insurance induces overuse. Some overuse does occur. There is no empirical evidence that the overuse that occurs is caused by insurance, but common sense tells us at least some of that overuse is *facilitated* by insurance if not caused by it. Insurance effectively lowers the price of any covered service. For example, if the total cost

of a colonoscopy is \$3,000, and insurance covers \$2,500 of that cost, the price to the patient is \$500, far below the true cost. The issue is not whether insurance lowers the effective price paid by patients. It does. *The issue is whether patients respond to reductions in medical prices the way we all respond to price cuts in other goods and services*, for example, food. They don't. I will discuss this issue in more detail in a moment.

Unlike managed care, high deductibles did not attract widespread support until Republicans took control of Congress in 1994. That year Republicans began to promote “medical savings accounts” (MSAs), which are insurance policies with high deductibles coupled with tax advantages. Just as managed care had been the center-piece of every major health policy reform bill in the 1992-1993 Congress, so medical savings accounts were the center-piece of every Republican health care bill in the next session. As one newspaper reported at the time, by 1994 the MSA was part of “[a]ll the leading Republican health system reform proposals.”[3] Republicans succeeded in enacting a law authorizing MSAs in 1997. Legislation enacted in 2003 (the same law that created drug coverage for Medicare) repealed the MSA legislation and replaced it with legislation authorizing more attractive policies called “health savings accounts” (HSAs). In 2016 the minimum deductible that an HSA policy had to have in order to enjoy tax advantages was \$1,300 for an individual and \$2,600 for a family. Today 20 million people are insured through HSAs. [4]

Twenty million Americans is a small fraction of the 2016 US population of 323 million. However, thanks to the relentless increase in health care inflation over the last two decades, tens of millions of Americans who don't own HSAs are now exposed to deductibles much higher than those required to qualify as HSAs. For example, the cheapest policy available on the Obamacare exchanges (“bronze” policies) in the fall of 2016 imposed deductibles of \$6,000 for individuals and \$12,000 for families. For the next-least expensive policy (“silver”), the average deductible was \$3,600 and \$7,500 for individuals and families respectively.

For the 154 million Americans insured through an employer as of 2015, deductibles are not as large as they are for those who purchase on the exchanges, but the average deductible is still higher than the minimum required for HSAs. Beginning circa 2000, which is when employers realized en masse that managed care had failed, employers began shifting costs to their employees by raising deductibles and requiring employees to pay a rising share of premiums. As the Commonwealth Fund put it in a report issued in 2016, “High deductibles are the norm in employer plans. Nationally, the average single-person plan deductible was \$1,541 in 2015, more than double the average of \$714 in 2006.”

<http://www.commonwealthfund.org/publications/issue-briefs/2016/oct/slowdown-in-employer-insurance-cost-growth> Deductibles have soared for family coverage as well.

It might seem that the rapid spread of high deductibles indicates the high-deductible movement has succeeded and that high deductibles are now national policy. But that is not accurate. Even advocates of MSAs and HSAs never argued, overtly at least, for unaffordable out-of-pocket costs. Even conservatives have criticized the high deductibles in bronze and silver policies sold on the ACA exchanges. Moreover, the evidence indicates the spread of high deductibles has not reduced health care inflation in the US compared with other countries (it is not clear whether high deductibles, as opposed to the Great Recession, had a role in the inflation slowdown that

occurred between 2008 and 2013), but it has caused many Americans to cut back on necessary care. We should view the spread of high deductibles, with and without tax advantages, as simply an unplanned consequence of the rapid increase in health care costs, which is in turn the result of the chronic failure of managed care strategies to work.

A short history of the single-payer movement

Prior to the popularization of the phrase “single payer” starting in 1989, universal health insurance was referred to as “national health insurance.” Thus, when Senator Ted Kennedy and Rep. Martha Griffiths introduced a bill in 1970 to authorize the federal government to insure all Americans that would today be called a single-payer bill, it was called “national health insurance.” But when President Nixon responded in 1971 with legislation requiring employers to buy health insurance from insurance companies for their employees, it became clear that a new set of labels was needed to distinguish between “national health insurance” in which the federal government reimbursed doctors and hospitals (as it does under the traditional Medicare program) and “national health insurance” in which multiple insurance companies reimburse doctors and hospitals.

When Physicians for a National Health Program proposed “national health insurance” administered by one federal agency (but implemented at the state or regional level) in a paper published in the *New England Journal of Medicine* http://www.pnhp.org/publications/NEJM1_12_89.htm in 1989, the proposal was quickly dubbed “single payer” to distinguish it from other proposals for universal coverage that funneled tax dollars through multiple payers (insurance companies, public programs like Medicare, and self-insured employers). The original PNHP proposal remains unchanged nearly three decades later: All Americans would be covered for all necessary services, including long-term care; the national program (the single payer) would negotiate fee schedules with doctors, prices with drug companies and equipment manufacturers, and budgets with hospitals. Hospital budgets would be broken into operating and capital budgets. Since the invention of the label “single payer,” single-payer legislation has been introduced in several states (starting with Ohio in 1990) and Congress (starting in the US House of Representatives in 1991).

Single-payer legislation obviously addresses price primarily, not quantity. However, because single-payer legislation gives the government agency control over prices and control over capital expenditures, it also gives the agency some influence over utilization. If, for example, a single-payer agency were to reduce the price of C-sections and/or raise the price of vaginal deliveries, it could induce less use of C-sections. To take another example, control over capital spending by hospitals and other institutions could result in more or fewer MRIs, which in turn could result in more or less utilization of MRIs.

Single-payer legislation has passed at least one house of several state legislatures since 1990, but it has never been seriously considered by either house of Congress. Support for the single-payer solution has risen rapidly in the last two years, thanks in part to the failure of the Affordable Care Act to reduce health care inflation (which in turn reflects the failure of the two movements that focus on quantity – managed care and high deductibles), and in part to the surprising success of single-payer proponent Bernie Sanders’ in the Democratic 2016 primary race.

In the remainder of this paper I will describe in more detail the managed care, high-deductible, and single-payer proposals and characterize the research on them. It is, of course, not possible to review five decades of research on three approaches to health care reform thoroughly in a short paper. I will instead examine only a few of the most influential papers.

A brief review of the evidence on managed care: 1970-2000

In this section I will offer a summary description of what managed care advocates and most experts mean by the term “managed care,” and then summarize the evidence on the three most important or overarching managed care proposals set forth over the last half-century – HMOs, ACOs, and pay-for-performance (P4P). The HMO was the first and most important of the managed care proposals that dominated the cost containment debate between 1970 and 2000, and ACOs and P4P (also often called “value based care”) are the most important or overarching elements of the post-2000 version of managed care (I will refer to this version as Managed Care 2.0).

Managed care assumptions and proposals are difficult to understand (for experts and laypeople alike) not just because they have been presented without evidence, but because they are so vague. This is not true of high-deductible proposals. The assumptions and proposals presented by high-deductible advocates have also been presented without evidence, but they are concrete and understandable. To reassure readers that any difficulties they may experience trying to comprehend managed care has nothing to do with their intelligence but is due rather to the vagueness of the terms managed care advocates use, I will quote from two books about managed care, and then describe the deliberate decision by the inventors of the HMO concept to describe the HMO in the vaguest terms possible.

Rick Mayes and Robert Berenson, two experts widely recognized within the health policy community, offered this definition of “managed care” in 2006:

The term managed care is problematic For the purposes of this book ... we mean by managed care a payment model that is distinct from the traditional ... health insurance by virtue of the fact that it attempts to influence the way health care is provided and often even restricts patients’ access to and choice of medical provider. (*Medicare Prospective Payment and the Shaping of US Health Care* 2006, Johns Hopkins University Press, pp 7-8)

These experts are almost tongue-tied. All they can say is that managed care refers to “attempts” to influence “the way” medical care is provided.

Here is how two authors of a book on the history of the Blue Cross Blue Shield companies defined managed care: “[M]anaged care ... [is] the ... piecemeal, incremental cost disciplines of the 1970s and 1980s [that] created widening opportunities to apply in new ways the principles underlying the HMO....” (Robert Cunningham III and Robert M. Cunningham, Jr. *The Blues: A*

History of the Blue Cross and Blue Shield System, 1997, Northern Illinois University Press, pp. 209-210)

Can it get much vaguer than that?

The vagueness of managed care terminology has been a hallmark of the managed care movement since its inception. Vagueness was deliberately adopted by Paul Ellwood, the Minnesota physician who invented the label “health maintenance organization,” and the Nixon Administration as a method of selling the HMO concept. At a meeting in February 1970 at which Ellwood first presented his HMO proposal to three representatives of the Nixon administration, the group deliberately decided not to describe what it was HMOs were supposed to do. Here is how one of Nixon’s representatives, Lewis Butler, an assistant secretary of what was then called the Department of Health, Education and Welfare, described their “logic” a few years later:

Why should we specify how to put it together? Let the doctors – let everybody do it, figure out how to put it together. *Let’s specify what we want it to do.* And we don’t give a damn how they put it together.... Let’s describe the thing by what we want it to do, not how it’s formed. (emphasis added) [5]

The rationale for defining HMOs by “what we want it to do” was political. By leaving the details of how HMOs would work to each group of doctors and hospitals and insurers that would come together to form an HMO, HMO proponents could argue that Nixon’s HMO legislation would not produce another large federal program like Medicare but would, rather, serve as a mere catalyst to “the market” to take steps to cut costs.

In an eight-page paper that he wrote for the Nixon administration within a month after the February 1970 meeting, and which he published a year later in *Medical Care*, Ellwood faithfully executed his agreement with the Nixon administration to define the HMO only in aspirational terms. In the first four pages of that paper (a paper totally devoid of footnotes), Ellwood denounced fee-for-service, price controls, any attempt by government to determine the distribution of hospitals and other capital equipment, and “national health insurance.” In the last four pages, he offered only these vague descriptions of the HMO:

- HMOs “take responsibility for defined populations on an enrolled or geographic basis” (p. 292),
- the HMO somehow encourages “self regulation” by “providing economic and professional incentives directed toward maintaining health rather than merely providing services when illness occurs” (p. 295), and
- the HMO “agrees to provide comprehensive health maintenance services to its enrollees in exchange for a fixed annual fee [aka a premium]” (p. 295). [6]

Ellwood claimed that report cards on HMOs (documents that would presumably contain scores on both HMO premiums and HMO quality of care for tens of thousands of medical goods and services) would facilitate competition, and competition would in turn guarantee HMOs would not short-change their enrollees. Here is how Ellwood put it: “The health maintenance policy advocates minimal interference in the internal arrangement of health maintenance organizations,

relying instead on performance-reporting for consumer protection and on competition to control costs....” [7] Ellwood did not say who would produce these report cards, what information would be in them, nor what they would cost, and he cited no evidence to support his claim that the production of report cards on all or most of the nation’s doctors and hospitals was either financially or technologically feasible.

Thus, the clearest statement one could make about HMOs in the early 1970s is that they would limit patient choice of doctor and expose doctors to financial incentives to deny care, and someone somewhere would publish report cards describing the cost and quality of care HMO doctors provided. At no time did HMO advocates estimate the administrative costs HMOs would create for the insurance industry and providers, nor did they estimate the cost of report cards. By the 1980s it was clear that in addition to limiting choice and exposing doctors to financial incentives HMOs used “utilization review” to control costs. Utilization review means someone in the insurance company second guesses doctors. By the late 1980s, utilization review was used by nearly all insurance companies, even those that were not formally called HMOs because they still did not limit patient choice of doctor.

During the 1970s and 1980s managed care advocates invented new phrases that seemed to the uninitiated to suggest that experts knew what HMOs were doing. But these new phrases, the most common of which were “coordinating care” and “integrating care,” were rarely defined and, when they were, the definitions were vague and circular. To this day it is not clear who “coordinates” or “integrates” care (is it insurance companies, hospitals, doctors, groups of clinics and hospitals?), and what exactly is coordinated (is it services, is it people?). These and other phrases turned out to be merely more vague expressions of the aspirations of HMO proponents.

This strategy of defining HMOs according to what HMO proponents hoped they would accomplish – “take responsibility,” “maintain health,” cut costs, “coordinate care” – worked politically but never as a policy. Despite the lack of evidence supporting HMOs, and despite the vague definition of HMOs, Congress enacted legislation in 1972 permitting HMOs to participate in Medicare, and in 1973 authorizing subsidies for the formation of HMOs. HMOs eventually insured 30 million Americans (that was their peak enrollment in 2000), but they were unable to cut costs or improve quality for the average enrollee (as opposed to some enrollees at the expense of others), and they generated hostility so widespread that by the mid-1990s the phenomenon came to be called the “HMO backlash.”

Despite public hostility to HMO tactics, HMO enrollment grew to 30 million by 2000 for one or both of these reasons: (1) HMO premiums eventually dropped 5 to 10 percent below those of traditional insurers (this happened at some point in the 1980s); (2) their employers gave them no choice. The evidence does not support the claim that HMO premiums were lower because of managed care tactics (limited choice, financial incentives aimed at doctors, and utilization review). In 1993, nearly a quarter century after the HMO label was invented, the US General Accounting Office (now the Government Accountability Office) reported there was still no evidence supporting the claim that managed care tactics save money. “Although many employers believe, in principle, managed care plans save money, little empirical evidence exists on the cost savings of managed care....” stated the GAO. [8]

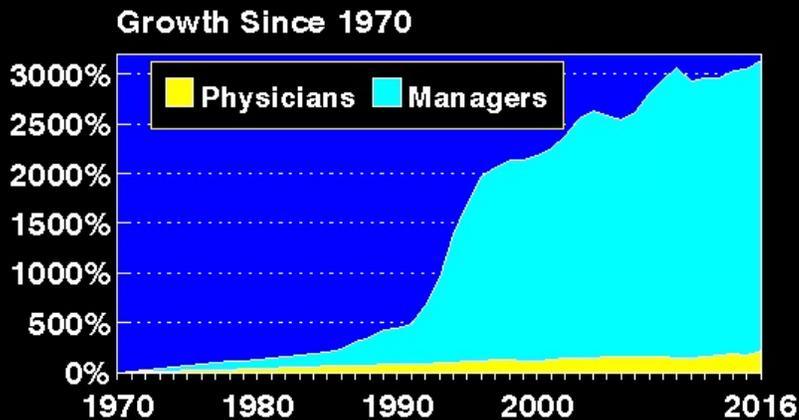
Research on the impact of managed care on Medicare's costs demonstrated that managed care either saved no money or raised total costs. [9] Perhaps the most convincing evidence that HMOs raise costs appeared in dozens of papers published during the 1980s and 1990s demonstrating that HMOs that participated in Medicare were raising, not lowering, Medicare's costs.

So if limited choice, utilization review and financial incentives are not what allowed HMOs to lower their premiums, what did? Contrary to folklore, it was not that HMOs provided more preventive services. The reason they didn't is two-fold. First, preventive services actually cost more to provide than they save in medical costs. [10] Second, even if preventive services did save money, the beneficial effect of prevention often takes years to materialize and by then many patients have left the HMO, which means the HMO doesn't reap the savings from the preventive services it delivered.

The evidence indicates HMOs were able to reduce their premiums below those of traditional insurers because they benefited from three advantages traditional insurers didn't have: Healthier enrollees (sicker people were less likely to want to give up choice of doctor) [11]; many enrollees seek care outside of the HMO [12]; and perhaps most importantly, HMOs used their control over large groups of patients to extract enormous discounts from doctors and hospitals that traditional insurers were unable to extract. [13] As traditional insurers lost customers to HMOs, they raced to adopt HMO tactics, including buying or contracting with clinics and hospitals and getting big by any means possible. By about 1990, traditional insurance was almost extinct and consolidation of the entire health care system was beginning to accelerate.

The spread of HMOs, and then of HMO tactics to non-HMOs, put upward pressure on prices not just because the industry began to consolidate, but because administrative costs at both the insurer and provider level exploded. As Figure 1 indicates, the ratio of administrators in the American system to doctors soared in the mid-1980s, which is precisely when HMO enrollment shot up and HMO tactics spread rapidly to the remainder of the insurance industry.

Growth of Physicians and Administrators 1970-2016



Source: Bureau of Labor Statistics; NCHS; and Himmelstein/Woolhandler analysis of CPS
Note - Managers shown as moving average of current year and 2 previous years

By the late 1990s, thanks to the return of inflation and the “HMO backlash,” managed care’s reputation was at an all-time low. Exploding administrative costs and accelerating consolidation had sabotaged any good effect managed care might have had on health care inflation. In the late 1990s and early 2000s, experts made statements such as “HMOs are dead,” “the end of an era” <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1360889/> and “managed care is in retreat.” Here is how the former editor of the *Journal of the American Medical Association* put it in an interview with the *Los Angeles Times* in 2000:

Managed care is basically over. People hate it, and it’s no longer controlling costs. Health care inflation is now back in the double digits. So if it’s not saving money, then why should we have it? But like an unembalmed corpse decomposing, dismantling managed care is going to be very messy and very smelly, and take awhile. (George Lundberg in Linda Marsa, “Former JAMA editor laments the state of medical care,” *Los Angeles Times*, March 26, 2001)

A brief review of the evidence on Managed Care 2.0: Introduction

Managed care proponents responded to the revolt against managed care in the 1990s (1) by downplaying the most common HMO tactics (financial incentives and utilization review) and emphasizing something called “pay for performance” or “value-based purchasing,” and (2) by inventing two variations on the HMO, the “accountable care organization” and the “medical home.” Pay-for-performance emerged between 2000 and 2003, and by about 2004 was discussed so frequently in the health policy literature it was shortened to P4P. The term “accountable care organization” was invented in 2006, and the term “medical home” was invented in 2007 (some would say the “medical home” was invented in the 1960s and only popularized in the late

2000s). These proposals were merely new versions of well established managed care tactics. They were based on the same diagnosis that was used to justify the HMO – overuse due to the fee-for-service method. In inventing these new bottles for old wine, managed care proponents continued their practice of advocating managed care based on vague aspirational definitions and opinion as opposed to evidence. Managed care advocates also continued their practice of never estimating the cost of their proposals. In the next two sections I examine two elements of Managed Care 2.0 – P4P and ACOs.

Pay for performance

You recall from the last section that Ellwood proposed “performance reports” for HMOs in his seminal 1971 paper. Ellwood did not, however, propose that cost be measured (he proposed only that quality be measured), and he did not propose that the “scores” or “grades” on the performance reports be linked with financial carrots and sticks. [14] He thought performance reports, or “report cards” as they came to be called in the 1990s, should simply do for purchasers of insurance what *Consumer Reports* does for purchasers of toasters – give them accurate information about the quality of insurance companies that consumers could use in deciding which insurance company to buy from. Ellwood was a huge fan of competition. He thought the publication of report cards on HMOs and other insurers would cause the bad insurers (the non-HMOs in Ellwood’s worldview) to lose market share.

Despite Ellwood’s endorsement of report cards, report cards remained non-existent until the 1990s, and when they appeared, the vast majority focused on providers (doctors and hospitals) rather than insurance companies, and on quality rather than cost. [15] By the late 1990s, it was apparent to report card proponents that patients were ignoring them. Rather than abandon the notion that the quality of medical care can be measured accurately at a cost the country can afford, managed care advocates doubled down: They proposed that if patients weren’t going to use report cards to reward “good” providers and punish the “bad,” purchasers (insurance companies, self-insured employers, and public insurance programs like Medicare) should. And, moreover, purchasers should measure “value,” that is, cost as well as quality, not just quality. Thus P4P was born. Within a decade managed care advocates had invented yet another term to describe P4P – “value-based purchasing” (VBP). As if P4P weren’t vague enough, VBP has come to refer to both P4P as well as contracts between insurers and ACOs and “medical homes.”

Between 2000 and 2003, P4P was endorsed by leading business groups, the Medicare Payment Advisory Commission (MedPAC), and prominent individual supporters of managed care. For example, in a 2003 paper <http://content.healthaffairs.org/content/22/6/8.full> in *Health Affairs* entitled “Paying for performance,” Donald Berwick, Paul Ellwood, Alain Enthoven and other leading lights of the managed care movement recommended that the Centers for Medicare and Medicaid Services (CMS), the agency that runs Medicare and Medicaid, “take the lead” in subjecting providers to P4P. MedPAC made the same recommendation to Congress in reports issued in 2003 and 2005. As was the case with the HMO proposal, the P4P proposal was set forth on the basis of hope, not evidence. None of the three documents I just cited – the *Health Affairs* paper by Berwick et al. and the two reports by MedPAC – cited any evidence for their claim that P4P was effective (it would make doctors and hospitals practice better medicine at lower costs)

and safe (it would not have destructive side effects). MedPAC merely noted that insurance companies and self-insured employers were doing it, so CMS should too.

The reason P4P proponents had to rely on hope rather than evidence was that there was no evidence to cite. As the three guest editors put it in a 2006 edition of *Medical Care Research and Review* devoted entirely to P4P, “P4P programs are being implemented in a near-scientific vacuum.” [16] In the same edition of that journal, Glenn Hackbarth, a former HMO executive who chaired MedPAC for many years, offered this explanation for why MedPAC endorsed P4P in such a vacuum:

Why is MedPAC confident that P4P is the proper thing to do, especially given the limited amount of hard evidence on its impact? Two reasons. First, there is overwhelming research documenting the poor performance of our health care system.... The status quo is unacceptable.... Second, there is abundant evidence that health care providers respond to incentives. For people with substantial experience in health care delivery and policy, like the MedPAC commissioners, it does not seem like much of a leap to conclude that P4P is a step in the right direction. (Glenn Hackbarth, “Commentary,” *Medical Research and Review*, Supplement Feb. 2006;63:118S)

Hackbarth’s justification for endorsing P4P boiled down to (1) doctors and hospitals are doing a terrible job now so any intervention no matter how untested, no matter how costly, is worth imposing on the entire country, and (2) “doctors and hospitals respond to financial incentives,” so “experts” can jump to the conclusion that “P4P is a step in the right direction.”

In the decade that has elapsed since Hackbarth offered this faith-based rationale in 2006, a large body of research has demonstrated that P4P is not working. [17] As a literature review <http://annals.org/aim/article/2596395/effects-pay-performance-programs-health-health-care-use-processes-care> published in 2017 put it, “consistently positive associations with improved health outcomes have not been demonstrated in any setting.” It has, however, punished providers who treat sicker and poorer patients [18], contributed to a rapid increase in burnout among doctors, and has added to the nation’s administrative costs.

If you recall my discussion in Part II of this series on the two conditions necessary for competition to work, you should be able to recite the reasons why P4P has to fail. I noted that buyers must have accurate information on cost and quality for competition to work, and that there are four barriers to accurate information on the “value” (the cost and quality) of medical care and insurance. I labeled those four barriers *complexity* (unlike toasters, human beings are very complex), *control* (providers don’t have control over all factors that contribute to high or low scores on report cards), *attribution* (for most services and patients report card publishers have no way to determine rationally or accurately which patients “belong” to which clinic or hospital), and *cost* (measuring the cost and quality of treatment for the 15,000 diseases listed in the old International Classification of Diseases, or the 68,000 in the current ICD, for all or most US providers will cost an immense sum of money that no one has estimated). It is conceivable that all four barriers could be surmounted for a handful of simpler services. It is inconceivable that all four barriers can be surmounted for all or even most services for all or most providers.

Accountable care organizations

The “accountable care organization” (ACO) was invented in 2006 at a MedPAC meeting, and was catapulted to fame within months of that meeting by MedPAC’s endorsement as well as a series of papers in *Health Affairs* by the “father of the ACO,” Elliot Fisher http://tdi-webapps.dartmouth.edu/downloads/Director/Elliott_Fisher_Interview_2-11-15.pdf, and others. Although the ACO is simply a warmed over version of the HMO, it was not deliberately invented as a substitute for the HMO. Its invention occurred as a result of MedPAC’s effort to respond to a law enacted by Congress in 2005 (the Deficit Reduction Act) instructing MedPAC to come up with a method of reducing Part B medical spending (the part of Medicare that reimburses doctors). The then-current method, the Sustainable Growth Rate (SGR), enacted in 1997, focused exclusively on quantity. The SGR was just a simple lid on total Part B spending that doctors could only influence by cutting back on services to their patients. Predictably, that didn’t happen.

The SGR failed to induce doctors to reduce volume because it applied to all 700,000 US physicians who treated Medicare patients. It was not in the financial interest of any one of those doctors to cut the volume of services applied to their patients. MedPAC’s search for alternatives to the SGR, therefore, focused exclusively on one issue: How to reduce the pool of 700,000 doctors to much smaller pools that could be subjected to mini-SGRs and micromanagement by third parties. The thinking was that once doctors were divided up into small pools, they would see that it was in their interest to reduce services to their patients, and it would be easier for third parties to micromanage them. Of course, these very assumptions had been tried and found wanting in the case of the HMO.

At the November 2006 meeting of the 17 MedPAC commissioners, Elliott Fisher, a professor of medicine at Dartmouth, proposed the “accountable care organization.” MedPAC accepted his proposal, and Fisher and several colleagues published several papers on the concept over the next two years. In its June 2009 report to Congress http://www.medpac.gov/docs/default-source/reports/Jun09_EntireReport.pdf, MedPAC recommended Congress authorize CMS to use ACOs to cut Medicare’s total costs (not just Part B costs). In that report to Congress, MedPAC made it clear they were basing their support for ACOs on the same diagnosis invented by HMO proponents four decades earlier – overuse is the problem, not price, and overuse is caused by the fee-for-service method. “The ACO’s role is to create a set of incentives strong enough to overcome the incentives in the FFS system to drive up volume without improving quality,” the commission wrote. “The degree to which ACOs will succeed in counterbalancing the current incentive for volume growth is uncertain. However, there is no uncertainty in the need to create a new set of incentives. The current unrestrained FFS payment system has created a rate of *volume* growth that is unsustainable.”(Emphasis added) (p. 42) Note how similar this justification was to MedPAC chairman Hackbarth’s justification for P4P: MedPAC had no evidence to support its ACO recommendation nor its condemnation of FFS, but things are so bad any intervention is worth inflicting on the entire health care system right away. Note as well the phrase “volume growth.” ACOs, like HMOs, were supposed to reduce volume, not price.

By the summer of 2009 the ACO’s star had risen so high that it was included in all three of the bills introduced in Congress by then (one in the House, two in the Senate) that would become the Affordable Care Act. Provisions authorizing ACOs within Medicare became the law of the land

when President Obama signed the ACA in March 2010. In 2012, under the authority granted it by the ACA, CMS implemented two ACO programs for Medicare – the Pioneer ACO demonstration and the Medicare Shared Savings Program.

So how did Fisher and other ACO proponents define the ACO? They used the same tactic HMO proponents used – they defined the ACO by what they wanted it to do. Here is how Fisher and colleagues described the ACO in a 2010 paper for *Health Affairs*:

ACOs consist of providers who are jointly held accountable for achieving measured quality improvements and reductions in the rate of spending growth. Our definition emphasizes that these cost and quality improvements must achieve overall, per capita improvements in quality and cost, and that ACOs should have at least limited accountability for achieving these improvements while caring for a defined population of patients. ACOs may involve a variety of provider configurations, ranging from integrated delivery systems and primary care medical groups to hospital-based systems and virtual networks of physicians such as independent practice associations. (Mark McClellan et al., “A national strategy to put accountable care into practice,” *Health Affairs* 2010; 29: 982-983. <http://content.healthaffairs.org/content/29/5/982.abstract>)

Note how similar this “definition” is to the “definition” of HMO adopted by Ellwood and the Nixon administration. It defined the ACO by what Fisher et al. hoped it would do – it would be “held accountable” by unnamed parties by unspecified means at unspecified costs, and it would react to being “held accountable” by lowering costs and improving quality by unspecified means at an unknown cost. As Ellwood et al. refused even to hint at what an HMO might look like, so Fisher et al. refused to say what an ACO might look like. It might consist of hospitals, it might not; it might include doctors, it might not; it might consist of a real group of doctors, or it might be “virtual.” All we can say for sure is what we could say for sure about HMOs: ACOs will bear insurance risk, they will use financial incentives to encourage doctors to reduce the quantity of medical services they order, and some third party will prepare report cards that will allegedly measure quality. [19] The one new wrinkle is that the report cards will also measure cost, and insurers will use this report card to punish and reward ACOs and the ACOs will use these report cards (or report cards the ACOs generate for themselves) to reward and punish their doctors.

The aspirational definition of the ACO created the same problems the aspirational definition of the HMO did – it made rational, evidence-based debate about ACOs impossible. If we don’t know what HMOs or ACOs are supposed to do, how do we set up a test to see if they’re doing whatever it is they’re supposed to do? Here is how the second-year evaluation of the Pioneer ACO demonstration (one of two Medicare ACO programs CMS set up in 2012) described ACOs: “The ACO ‘treatment’ under investigation is not a prescribed set of activities or interventions. Rather, it is a financial arrangement in which provider organizations attempt to reduce expenditures below a set target while maintaining high quality metrics in exchange for bearing risk for reducing expenditures.” Is it possible to be any vaguer? What is “a financial arrangement” in which “organizations attempt” to do something? All we know about ACOs is that ACOs, like HMOs, are supposed to subject their providers to financial incentives to cut volume and score well on a few dozen “quality” measures out of tens of thousands that might have been selected.

What little we know at this date about the ability of ACOs to cut costs comes almost entirely from research on three Medicare ACO programs – a demonstration of the ACO concept that ran

from 2005 to 2010 called the Physician Group Practice Demonstration (this demo was ordered by Congress in 2005), and the two ACO programs CMS started in 2012 (the Pioneer ACO demonstration which ran through 2016, and the Medicare Shared Savings Program, which is a permanent program). Not counting the costs to the ACOs of attempting to achieve savings, the Physician Group Practice Demonstration raised Medicare spending by 1.3 percent; the Pioneer program cut Medicare spending by an average of about two-tenths of a percent; and the Medicare Shared Savings Program raised Medicare's costs by \$216 million between 2012 and 2015, which translates to a few tenths of a percent; <https://blogs.sph.harvard.edu/ashish-jha/2016/08/30/aco-winners-and-losers-a-quick-take/> If we take into account the cost to the ACOs of the interventions they employed in an attempt to achieve savings, which are on the order of at least 1 to 2 percent of spending, all three programs lost money. The extremely rare papers on private-sector ACOs report the same results: ACOs either save no money or raise costs.

ACOs are failing for the same reasons HMOs failed (managed care tactics don't cut medical costs enough to offset increased administrative costs) [20] plus one other: Patient and doctor turnover is very high. According to the final evaluation of the 23 ACOs that participated in the Pioneer demonstration during the first three years of the demonstration (2012-2014), the average ACO lost two-thirds of their doctors and patients over those three years. [21]

A brief review of the evidence on high-deductible proposals

Like managed care advocates, high-deductible advocates base their proposals on the belief that financial incentives cause overuse. However, the financial incentives high-deductible proponents worry about are those they believe influence *patients*, not doctors. High-deductible proponents believe overuse is caused by "overinsured" patients. They argue that the true price of *insurance* is hidden from the consumer because the nation's tax laws subsidize (lower the price of) insurance, and they argue that the "excessive" insurance that consumers buy as a result of the tax subsidies hides the true price of *medical care* from patients (because insurance subsidizes – lowers the price of – medical care). The net effect of this double layer of subsidies, they claim, is to lower the price of medical far below its true cost, and this in turn induces overuse by patients.

There can be no question that our tax laws lower the price of insurance and that insurance lowers the price of medical care. The issue is whether buyers of health insurance and medical care respond to price reductions the way buyers of food, appliances, and thousands of other goods and services respond to price reductions. Isn't medical care different from, for example, restaurant meals, ceiling fans and movie tickets? Common sense and research tell us the answer is yes. But high-deductible proponents say no.

I quote three of the most prominent proponents of high deductibles on this issue, Mark Pauly, an economist, and John Goodman (the "father of the medical savings account" <http://www.modernhealthcare.com/article/20060619/NEWS/606190337>) and Gerald Musgrave, authors of the book *Patient Power*. Here is Pauly in an influential paper published in 1968:

The effect of an insurance which indemnifies against all medical care expenses is to reduce the price charged to the individual at the point of service from the market price to zero. (p. 533)... The response of seeking more medical care with insurance than in its absence is ... rational economic behavior. Since the cost of the individual's excess usage is spread over all other purchasers of that insurance, the individual is not prompted to

restrain his usage of care. (p. 535) (“The economics of moral hazard: Comment,”
American Economic Review 1968;58: 531-537)

Here we have the overuse argument in its baldest form. But is Pauly correct? Is it really true that patients buy too many colonoscopies, for example, because “the cost of the patient’s excess usage of colonoscopies is spread over all other purchasers of insurance?”

Here are two excerpts from *Patient Power* by Goodman and Musgrave:

The United States is the only country in the world where people can consume medical care almost without limit, unconstrained by market prices or by government rationing. (p. viii)

The potential demand for health care is virtually unlimited. Even if there were a limit to what medical science can do (which, over time, there isn’t), there is an almost endless list of ailments that can motivate our desire to spend.... Even when the illnesses are not real, our minds have incredible power to convince that they are. (p. ix) (*Patient Power: The Free-Enterprise Alternative to Clinton’s Health Plan*, Cato Institute, Washington, DC, 1994)

According to Goodman and Musgrave, overuse is far worse in the US than in any other country because neither “market prices” nor “rationing” restrain our voracious appetite for colonoscopies, amputations, radiation, and other medical goods and services.

High-deductible proponents are absolutely correct when they say tax laws reduce the price of insurance and insurance reduces the price of medical care. That’s not the issue. The question is whether patients respond to reduced medical prices as they do to reductions in the prices of other consumer goods and services. The research I reviewed in Parts I and II indicates they don’t. We saw in Part II that Americans use about as much medical care as residents of other countries with much lower costs. We saw in Part I that underuse is at epidemic levels, and there are several reasons for that: Patient aversion to medicine, cost, and insufficient time on the part of physicians. In short, the high-deductible movement’s most fundamental assumptions – that overuse drives health care inflation, and overuse is caused by “overinsurance” – are not consistent with a large body of research on the role that price plays in patient demand for medical services.

If you accept the evidence presented in the first two parts of this series that (1) high price, not high volume, is the primary reason US costs are high, (2) overuse is dwarfed by underuse, and (3) research has documented overuse of only a tiny handful of the thousands of medical goods and services sold today, you will not be surprised to learn that a large body of research has demonstrated that large out-of-pocket-payments, and for lower-income people out-of-pocket payments of any size, aggravate underuse. As the authors of a recent paper <http://www.nber.org/digest/dec15/w21632.html> entitled “What does a deductible do?” put it, “[T]extbook models of rational consumer behavior do not apply to demand for health care.” Research indicates that deductibles and other forms of out-of-pocket payments cause patients to forgo both necessary and unnecessary care.

The damage high deductibles do to access is not the only defect in the high-deductible proposal. There are others, including disproportionate benefits for wealthier people, limited impact on

costs, and higher administrative costs. I will discuss these three problems in the remainder of this section.

HSA benefit upper income taxpayers. High-deductible policies have an unequal impact on lower- and upper-income people for two reasons: Lower-income people are more likely to cut back on necessary services when exposed to out-of-pocket payments, and upper-income people are more likely to benefit from the tax savings authorized by the legislation that created the “health savings account,” the current iteration of what used to be called “catastrophic coverage.” The HSA consists of a high-deductible policy coupled with a savings account within which the policy holder can shelter income from the federal personal income tax as long as the income is used for medical services. (Employers can also make contributions to employees’ savings accounts. In that event, the contribution is exempt from both income and payroll taxes.) Because the federal income tax is progressive (it takes a rising percent of income as income rises), the tax shelter benefits upper-income people more than it does middle- and lower-income people. For this reason, upper-income people are far more likely to buy an HSA than lower-income people.

HSA have a limited impact on total spending. To understand why HSAs have such a limited impact on total national spending, you need to know the “twenty-eighty rule” – the sickest 20 percent of us account for 80 percent of total health care spending. This sickest 20 percent spends far more per person on medical care than the typical HSA deductible, which means of course the deductible loses its power to induce policy holders to self-ration. Researchers at the Urban Institute http://webarchive.urban.org/UploadedPDF/1000678_TaxFacts_081604.pdf concluded, “[M]ore than 95 percent of medical expenditures by insured working aged households were made by those who spent above the HSA deductibles. As a result, even if HSAs were to eventually cover all working-aged households, they would have little effect on medical spending.” [22]

More administrative costs. The last major defect in the HSA proposal I will discuss here is the administrative costs associated with HSAs. The proposal drives administrative costs up at least three ways: Preparing accurate report cards on numerous medical goods and services; adjusting deductibles for income; and tracking patients’ share of medical bills and reminding them to pay their share. I have already discussed the high cost of creating accurate report cards on both cost and quality (see Part II). Many, perhaps most, advocates of HSAs propose that lower-income people receive larger subsidies than upper-income people. It is well established that determining income for purposes of determining premium subsidies (as in the case of the Affordable Care Act) or program eligibility (as is the case with Medicaid) drives up administrative costs. Finally, the savings accounts that HSA holders have to open with banks and insurance companies require annual payments to those institutions.

To sum up: The high-deductible proposal has much in common with managed care: It is based on an inaccurate diagnosis (overuse); it aggravates underuse (primarily for those whose annual expenditures are under their deductible); and it cannot cut costs without substantially aggravating underuse.

A brief review of the evidence on single-payer systems

In the first two parts of this series, I reviewed evidence on the debate about why US health care costs are high relative to other countries. The evidence indicates our prices are high. The

evidence does not support the diagnosis shared by the managed care and high-deductible movements – overuse or excessive quantity. In the preceding sections of this third part, I have reviewed the history of the managed care and high-deductible movements and the reasons why the proposals advocated by those movements have failed. The most fundamental reason they have failed is that they address the wrong problem: The problem the US and Minnesota must address is primarily high prices, not excessive quantity. A second and perhaps equally important reason is that the solutions promulgated by managed care and high-deductible proponents have negative effects on cost and quality. Managed care in particular generates new costs so high they offset, and perhaps more than offset, the savings achieved in the form of reduced use of medical goods and services.

If you accept these conclusions, the following statement of the solution logically follows: (1) Reducing health care inflation will require reducing the price at which medical goods and services are sold; (2) price reductions cannot be achieved by competition, but must be achieved by government negotiating regulated prices with providers and suppliers (as Medicare does with doctors and hospitals now); and (3) the price reductions that can be achieved without worsening underuse will be greater if administrative costs are reduced at the same time and consolidation is stopped or reversed.

Research on how much the US could save by controlling prices as opposed to volume is limited to research on single-payer systems (as opposed to multiple-payer systems such as Germany's and Switzerland's which also regulate prices). The research indicates that the implementation of a single-payer system at either the US or state level could cut our administrative costs in half, and total costs by 10 to 30 percent, and these savings would match or exceed the additional cost of insuring everyone. [23] This research typically relies on Medicare or Canadian data to determine how far administrative costs would drop. For example, a 1991 study <http://archive.gao.gov/d20t9/144039.pdf> of the Canadian system by what was then called the US General Accounting Office concluded: “[T]he short-term administrative savings alone [of a US single-payer system] are more than adequate to cover any reasonable cost estimate of extending health care to everyone.” (p. 71)

No research exists, much less a sizable body of research analogous to the research on single-payer systems, demonstrating that managed care methods of cost containment or high-deductible methods could cut costs sufficiently to achieve universal health insurance at the same or lower level of current spending. The research on legislation that expands coverage and relies on *managed care tactics* has consistently shown that such legislation will add to America's already high health care costs. Research on legislation that expands coverage and relies on *high-deductible policies* is non-existent for the simple reason that high-deductible advocates have never proposed universal health insurance. They simply propose HSAs or some other iteration of high-deductible policies.

Summary and conclusion

I began this three-part series restating the obvious: Total spending in any sector of the economy, including health care, is a product of quantity times price. I then went on to demonstrate in Parts I and II that high prices, not excessive utilization, is the primary reason US per capita spending on health care is so high compared with other countries. At the beginning of this last part (Part

III) I quoted Drew Altman to the effect that American health policy has focused for the last half-century almost exclusively on lowering the quantity of medical care used.

Should we be surprised that our approach to lowering costs over the last half-century – attacking quantity when we should have focused on price – has not worked? If we don't diagnose a problem correctly, we can't solve it. If your car won't start because your fuel line is clogged, but you assume your car won't start because the battery is dead, you will never solve your problem. You can replace your battery 50 times but your car still won't start.

Similarly, if we continue to tell ourselves America's high costs are caused by overuse (either because greedy doctors order too many services or "overinsured" patients demand too many services), we guarantee we won't solve our problem. In fact, the evidence suggests that both managed care and high-deductible approaches aggravate the health care crisis. A reasonable reading of the evidence leaves us with just one choice: We must focus on price and the factors that contribute to high prices, mainly high administrative costs and rising consolidation.

[1] Drew Altman, "How to think about higher growth in health care spending," *Wall Street Journal*, July 30, 2015.

[2] The phrase "consumer-driven policies" was invented 15 years ago to refer to high-deductible policies, but because this phrase is misleading (high deductibles do not "empower consumers" to "drive" anything), and because the phrase is not used universally, I will not use it.

[3] Harris Meyer, "GOP reformers push medical IRA plans," *American Medical News*, January 3, 1994, p. 1.

[4] The insurance industry trade group, America's Health Insurance Plans, reported in 2016, "Since the introduction of HSAs in 2004, enrollment has grown steadily. Over the last decade, HSA participation has grown from just 3.2 million in 2006 to 20.2 million in 2016." "Health Savings Accounts continue to grow in popularity," <https://www.ahip.org/health-savings-accounts-continue-to-grow-in-popularity/>

[5] Joseph Falkson, *HMOs and the Politics of Health Systems Reform*, 1979, p. 31.

[6] Paul M. Ellwood et al., "Health maintenance strategy," *Medical Care* 1972;9:291-298.

[7] *Ibid*, p. 297.

[8] US General Accounting Office, *Managed Health Care: Effect on Employers' Costs Difficult to Measure*, 1993, p. 3.

[9] For example, in a 2012 report, the Congressional Budget Office concluded that "coordination" and "disease management" (the labels for the activities HMOs were alleged to engage in because they were "prepaid") either saved no money or raised Medicare's costs. Here is an excerpt:

This paper summarizes the results of Medicare demonstrations of disease management and care coordination programs. Such programs seek to improve the health care of people who have chronic conditions or whose health care is expected to be particularly costly, and they seek to reduce the costs of providing health care to those people. In six major demonstrations over the past decade, Medicare's administrators have paid 34 programs to provide disease management or care coordination services to beneficiaries in Medicare's fee-for-service sector. All of the programs in those demonstrations sought to reduce hospital admissions by maintaining or improving beneficiaries' health.... On average, the 34 programs had no effect on hospital admissions or regular Medicare expenditures (that is, expenditures before accounting for the programs' fees).... After accounting for the fees that Medicare paid to the

programs, however, Medicare spending was either unchanged or increased in nearly all of the programs. (Lyle Nelson, *Lessons from Medicare's Demonstration Projects on Disease Management and Care Coordination*, 2012, Congressional Budget Office, Working Paper 2012-01).

[10] A review of the literature on prevention reached this conclusion: "Although some preventive services do save money, the vast majority reviewed in the health economics literature do not." (Joshua T. Cohen et al., "Does preventive care save money? Health economics and the presidential candidates," *New England Journal of Medicine* 2008;358:661-663.)

There are three reasons why most preventive services cost as much or more than the medical costs they prevented. First, preventive services cost money and have to be administered to millions of patients in order to prevent disease in a few of them. Second, like all medical services, preventive services are not 100 percent effective (flu shots, for example, are effective in about half the people who receive them). Third, some preventive services turn up diseases that require treatment. Colonoscopies and mammograms are examples; if they reveal cancer, patients receive surgery, chemotherapy and radiation, all of which in turn have side effects that can trigger more treatment.

[11] The literature demonstrating that HMOs and insurance companies that use HMO tactics benefited (and still benefit) from favorable selection is extensive and nearly unanimous. Here is a quote from one of many studies I could have listed: "This review concludes that all health plans which restrict an enrollee's choice of provider ... enjoy favorable selection among both the nonelderly and elderly populations." (Fred J. Hellinger, "Selection bias in HMOs and PPOs: A review of the evidence," *Inquiry* 1995;32:135-142).

[12] An enormous body of anecdotal evidence and numerous studies indicate a substantial minority of the enrollees of insurance companies which restrict choice seek care outside of the "preferred network." A recent paper in *Health Services Research* <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3681248/> reported that eight percent of enrollees in plans that restrict choice used an out-of-network physician. Out-of-network use in some of the early HMOs was much higher. Research on disenrollment from Medicare Advantage plans indicates the disenrollees are sicker than the average enrollee. This phenomenon partially explains how it is HMOs could have slightly lower premiums and yet not lower system-wide costs. High administrative costs and accelerating consolidation are other factors.

[13] Research on the rates HMOs and other insurers pay providers is limited because insurance companies have long required providers to maintain secrecy about their contracts. What research we have indicates HMOs were extracting discounts on the order of 10 percent in the early 1980s, but by the early 1990s when the HMOs had taken over a large proportion of the market their discounts were in the 30- to 50-percent range. (Katherine Hiduchenko, "Do Health Maintenance Organizations control costs or shift costs?" *New England Journal of Medicine*, letter, 1993;328:971).

Two HMO executives who at one time worked together for HealthPartners in Minnesota conceded this point in a book ostensibly hailing HMOs. In a chapter describing "the ability and willingness of [HMOs] to use volume purchasing leverage to reduce the fees charged by providers," George Halvorson and George Isham wrote: "Those plans ... negotiated deep discounts – 30 to 50 percent discounts in many cases. These discounts cut health plan costs to the point that most plans could significantly underprice the old pre-HMO traditional insurance products." (*Epidemic of Care*, Jossey-Bass, 2003, p. 65)

[14] In 2017, roughly 15 years after P4P entered the lexicon and almost a half-century after Paul Ellwood recommended HMO "performance reports," managed care proponents and health services researchers have no idea what report cards (now P4P) cost. Here is how several experts described the problem in a recent paper http://jamanetwork.com/journals/jama/fullarticle/2653111?amp;utm_source=JAMAPublishAheadofPrint&utm_campaign=31-08-2017: "So how should quality measures be prioritized?" they asked. "Many factors are currently considered, including a measure's expected effect on patients and health care, potential for promoting improvement, scientific underpinnings, usability, and feasibility. But there is a major omission from this list: The cost of each measure. The cost of specific measures has received limited attention in discussions about global costs of quality measurement and is not formally considered when evaluating and selecting measures, in no small part because that cost is usually unknown." (Mark A. Schuster et al., "Measuring the cost of quality measurement: A missing link in quality strategy," *Journal of the American Medical Association*, 2017)

[15]] The first widely publicized report card was the one on hospitals published by the Health Care Financing Administration (HFCA), the old name for the agency that runs Medicare and Medicaid. This report card, first published in 1989, purported to measure hospital quality by measuring the percent of Medicare patients who died within 30 days of discharge. This report card was so crude and useless it was abandoned within a few years.

[16] Dan Berlowitz et al., “Introduction,” *Medical Care Research and Review*, 2006; 63 (Supplement) 11S.

[17] Here are just a few other papers demonstrating P4P does not work: Ashish K. Jha, “The long-term effect of Premier pay for performance on patient outcomes,” *New England Journal of Medicine*, 2012;366; Grace M. Lee et al., “Effect of nonpayment for preventable infections in US hospitals,” *New England Journal of Medicine* 2012;367; Andrew Ryan et al., “The early effects of Medicare’s mandatory hospital pay-for-performance program,” *Health Services Research* 2015;50; Brian Serumaga et al., “Effect of pay-for-performance on the management and outcomes of hypertension in the United Kingdom: Interrupted time series study,” *British Medical Journal* 2011;342:d108.

[18] The main reason P4P harms sicker and poorer patients is that report-card publishers have never developed a method of adjusting “grades” on report cards for differences in factors outside physician control, notably patient health and socioeconomic factors that affect health. Here is an excerpt from a paper that examined this question: “We simulated performance-based payments to Massachusetts practices serving higher and lower shares of patients from ... vulnerable communities in Massachusetts.” (p. 925) “We did not adjust for most potential confounders...” (p. 926) “Typical practices serving higher shares of vulnerable populations would receive less per practice compared to others, by estimated amounts of more than \$7,000.” (p. 925) (Mark Freidberg et al., “Paying for performance in primary care: Potential impact on practices and disparities,” *Health Affairs* 2010;29:925-932.)

[19] Fisher and other ACO proponents have made it clear they expect at least some ACOs will eventually bear total insurance risk. For example, in a 2010 paper <http://hcr.amerigroupcorp.com/wp-content/uploads/2011/02/HA-How-The-Center-For-Medicare-And-Medicaid-Innovation-Should-Test-ACOs-2010-7.pdf>, Steven Shortell, Mark McClellan (CMS administrator and FDA director under George W. Bush), and Fisher proposed that ACOs go through three stages of “growth” characterized by increasing exposure to the risk of financial loss and the promise of financial gain and by acceptance of more burdensome “quality” reporting requirements (see discussion of “tier three” ACOs at p. 1296). Tier three ACOs would be reimbursed by “full capitation,” which at the ACO or HMO level is synonymous with “premium.” When ACOs are paid premiums, they will be indistinguishable from HMOs.

[20] Even before CMS started the Pioneer and MSSP ACO programs, Lawton Burns and Mark Pauly reviewed the tools that HMOs used, offered the reasonable inference that ACOs would no choice but to use those same tools, and concluded ACOs would perform no better than HMOs had. “The evidence ... suggests that components of accountable care organizations have limited and uncertain impact, especially on cost savings, and thus provide little support for the [claim that] better care coordination will improve quality at any given cost, and ... the organizations will lower Medicare’s rate of spending growth,” they concluded (p. 2412) (Lawton Burns and Mark Pauly, “Accountable Care Organizations may have difficulty avoiding the failures of integrated delivery networks of the 1990s,” *Health Affairs*, 2012.)

[21] Here is how the final evaluation <https://innovation.cms.gov/Files/reports/pioneeraco-finalevalrpt.pdf> of the Pioneer ACO demonstration described *physician* churn: “Looking across 23 ACOs in all three performance years ..., 34 percent of Pioneer ACO providers (11,777 of 34,882) were affiliated in all three years.” (p. 25) And here is how L&M described *patient* churn: “Looking across all three performance years at the 23 Pioneer ACOs... , only 30 percent of aligned beneficiaries were aligned in all three years (352,421 of 1,173,843)...” (p. 29).

[22] The Health Care Cost Institute (HCCI), which is supported by Aetna, United Healthcare, and Humana, arrived at a similar estimate using a different method http://www.healthcostinstitute.org/files/Shoppable%20Services%20IB%203.2.16_0.pdf . They first defined what portion of medical spending by non-elderly Americans insured through an employer is “shoppable.” They defined a service as “shoppable” if it met these criteria: “[I]t must be a common health care service that can be researched (‘shopped’) in advance; multiple providers of that service must be available in a market (i.e., competition); and sufficient data about the prices and quality of services must be available.” Using liberal definitions of these terms, HCCI determined that 43 percent of total spending by this group is “shoppable.” (Given how little data we have on

the price and quality of medical services, and how consolidated the American health care system has become, 43 percent strikes me as very high. The HCCI authors offered this cryptic remark suggesting even they thought their definition of “shoppable” was optimistic: “That is not to say that shopping for each of these services would be practical for an individual, only that he or she could shop for the service.” The authors also noted that their estimates constitute “the upper bound” of what is “shoppable.”) The authors next determined that the portion of these allegedly “shoppable” services that patients paid for out of pocket (via deductibles, copayments, and co-insurance) amounted to 16 percent. By multiplying 16 percent times 43 percent, they determined that patients could influence a mere 7 percent of their medical expenditures by shopping.

[23] For a bibliography of studies estimating the savings a single-payer system could achieve in the US, see “How much would single payer cost?” <http://www.pnhp.org/facts/single-payer-system-cost>. Savings from a single-payer are likely to be higher at the federal than the state level, and higher for larger states than for smaller states.