Chapter 11
Healthcare Policy

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Introduction

The design and implementation of health policies drive the manner in which we deliver healthcare. Although these policies strive to balance quality and expense, in 2000, the World Health Organization ranked the United States healthcare system 31st for quality and 1st for expenditure [1]. The discrepancy between spending and quality of care in the United States is a persistent subject of political debate, leading to a number of reforms and reform proposals. Before discussing the current state of health policy in this country, however, it is important to understand the context and the history from which it has evolved.

A History of Healthcare in the United States

Prior to 1929, medical care in the United States was financed entirely out-of-pocket, save for injuries suffered on the job. In the early twentieth century, healthcare costs began to increase beyond what an individual could afford. This, combined with the unpredictability of the need for future care, was an impetus to design a system in which Americans could insure their medical costs. Health insurance was first offered

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in the United States in 1929, with the conception of Blue Cross by Justin F. Kimball to insure teachers against hospital care costs at Baylor University Hospital [2]. Soon, the plans spread to other single-hospital systems, and then expanded to cover multiple hospitals. Eventually, Blue Shield was developed by the California Medical Association to begin covering physician fees as well.

During the Second World War, wage freezes left employers struggling to find ways to attract employees outside of salary increases. Around that same time, the Internal Revenue Code was amended to allow deduction of employer-paid health insurance, creating a tax incentive to implement such programs. As a result, employer-issued health insurance became an increasingly large portion of coverage by the end of the war. Over the next two decades, the US government became concerned with the large numbers of both the poor and the elderly who lacked health insurance coverage. By 1965, President Lyndon Johnson implemented the Medicare program to cover health expenditures for citizens older than the age of 65, as well as the Medicaid program to do the same for those below certain income thresholds. While Medicare became financed and implemented on a federal level, the operation of Medicaid was left to the states.

After the enactment of those programs, healthcare expenditures ballooned. In the 5 years between 1966 and 1971, national health expenditures climbed to nearly triple the rate of the consumer price index (a common measure of inflation) [3]. In response, Congress passed the Health Maintenance Organizations Act of 1973, centering US health policy on the managed care model. The act greatly expanded the number of Health Maintenance Organizations (HMOs), which gained popularity for the way they shifted physician reimbursements away from the fee-for-service model. The implications of this shift in principles were far-reaching and will be explored later in this chapter.

Financing Healthcare in the United States

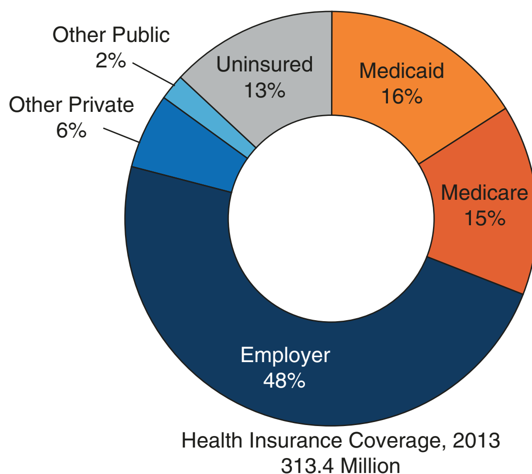
Why Health Insurance?

Why is it that to pay for healthcare, consumers demand insurance? Insurance allows individuals to forego income today in order to shield themselves from expenditures at a later date. It is the uncertainty about the future that creates a desire for that protection. Thus, individuals pool money together by paying insurance premiums such that one entity (i.e., the insurance company) is able to bear the brunt of the cost when an unexpected medical expense occurs for a beneficiary.

To fully appreciate the complexities of the US healthcare system, it is important to understand the economics of health insurance. If we think like economists for a moment and assume that people act rationally, there is no incentive for an individual to invest more money (via insurance premiums) into their health insurance than his or her average annual expenditure. Although it is difficult for an individual to predict his or her average annual expenditure, insurance actuaries are able to predict these expenditures for an entire beneficiary pool. Economic principles predict that the

market would bid premiums down to equal the aggregate average annual expenditure for the entire beneficiary pool. If this occurred, the insurance company's profits would be zero. Given the profits generated by insurance companies, these economic principles are not born out, largely due to individual attitudes toward risk. In general, the magnitude of "happiness" gained from receiving a dollar of income is smaller than the magnitude of "unhappiness" lost from losing a dollar of income. This concept is referred to as "risk aversion." As an example, imagine a coin flip game in which the outcome of "heads" wins $100, whereas the outcome of "tails" loses $100. The average, or expected, outcome of this game is walking away with nothing, yet due to risk aversion, the average person would pay to avoid playing this game. In the context of insurance, beneficiaries are effectively paying a surcharge to the insurance company to avoid the bad outcome of losing money to a large medical expenditure; this imbalance generates profit for the insurance company. Furthermore, insurance plans enable individuals to pool their own individual risk for medical expenditure, reducing the effect of outlier events among all beneficiaries.

Ultimately, this fear of uncertainty and aversion to risk drives the existence of a market for insuring health. In the United States, this market is comprised of these main categories: Medicare, Medicaid, employer-provided private insurance, consumer-purchased private insurance, and other public programs (State Children's Health Insurance Program, Veteran's Health Administration, Indian Health Service, etc.) (Fig. 11.1). Beyond this, there are 29 million Americans who are uninsured [4] and have been the target of recent reform efforts.



SOURCE: Kaiser Family Foundation estimates based on the Census Bureau's March 2014 Current Population Survey (CPS:Annual Social and Economic Supplements).http://kff.org/other/state-indicator/total-population/.

Fig. 11.1 Types of insurance coverage in the United States [5]. Breakdown, by percentage of Americans covered, of the different types of health insurance coverage in the United States. "Other Public" refers to governmental insurance programs other than Medicare and Medicaid, such as the State Children's Health Insurance Program (CHIP) or the Indian Health Service. "Other Private" refers to any insurance purchased by the beneficiary, rather than his/her employer, from private companies. (Reprinted from Ref. [5])

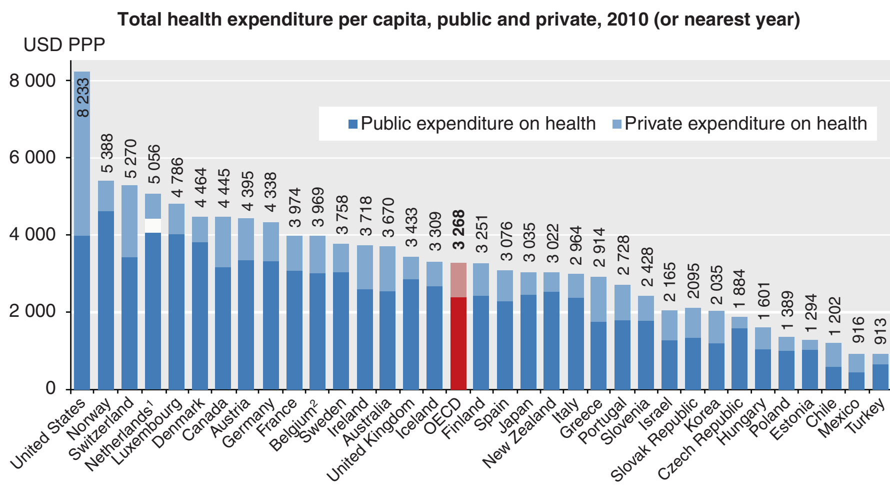
Healthcare Reform

Impetus for Healthcare Reform

In 2010, the United States spent 18% of its Gross Domestic Product (GDP) on healthcare. That translates to a per capita spend of $8233, the highest among countries within the Organization for Economic Co-operation and Development (OECD) (Fig. 11.2). This increased expenditure is not necessarily associated with higher quality of care: In fact, a 2006 study found a negative correlation between increased Medicare spending and 1-year survival after myocardial infarction [6]. The World Health Organization ranks the United States 31st in life expectancy, 44th in infant mortality, and 44th in mortality rates for noncommunicable diseases, despite the high national health expenditure [7]. In addition, one out of every six nonelderly Americans remained uninsured in 2010 [8]. These statistics provide the context for healthcare reform during Barack Obama's first term.

The Overhaul

When Obama took office in 2008, he made clear that health reform would be a major focus of his administration. Taking lessons from a failed healthcare reform effort during the administration of Bill Clinton, he enlisted White House Chief of



1. In the Netherland, it is not possible to clearly distinguish the public and private share related to investments.
2. Total expenditure excluding investments.
Information on data for Israel: http://dx.doi.org/10.1787/888932315602.

Source: OECD Health Data 2012.

Fig. 11.2 Per capita spending on health expenditures, the United States compared to countries in the OECD, 2012 [9]. Public expenditure refers to spending by the government, while private expenditure refers to spending by citizens. The United States has a similar per capita public expenditure, while its private expenditure is significantly higher. (Reprinted from Kane [9])

Staff Rahm Emanuel to unify the houses of Congress behind a comprehensive healthcare reform bill. Jonathan Gruber, a health economist from MIT who designed Massachusetts' health reform legislation under then-governor Mitt Romney 2 years prior, was a key advisor to Obama's reform effort, and included many of the provisions that had been successful in Massachusetts. Interest groups, too, were brought into the discussions this time, leading to support of health reform from Pharmaceutical Research and Manufacturers of America (PhRMA), the American Medical Association (AMA), and the American Hospital Association (AHA). After a number of contentious committee battles, the Affordable Care Act (ACA) passed the House of Representatives 220–207 and the Senate 56–43, and was signed into law by President Obama on March 30, 2010.

Key Provisions

The Exchanges

The ACA introduced government-run health insurance exchange markets over the Internet in all 50 states. States are allowed to manage their own exchanges, but if they decline, the federal government will operate it. These exchanges were designed to be competitive marketplaces for insurance plans to be bought and sold. The government's rationale for such a marketplace is that a competitive marketplace would create pressure for premiums to be bid downward. The online interface has the additional advantage of displaying pricing and plan benefits in a format that is easy for the user to understand and compare.

Coverage

After passage of the ACA, there were new coverage requirements for all health insurance plans offered. There are currently 12 categories of required services and benefits (Table 11.1). Of these, the category of "preventative and wellness services" is to be

Table 11.1 Required coverage of services and benefits by insurance plans post-ACA

Ambulatory patient services
Emergency services
Hospitalization
Pregnancy, maternity, and newborn care
Mental health and substance use disorder services
Prescription drugs
Rehabilitative and habilitative services and devices
Laboratory services
Preventative and wellness services and chronic disease management
Pediatric services, including oral and vision care
Birth control coverage
Breastfeeding coverage

provided with no cost-sharing mechanisms on the side of the consumer. This was implemented to incentivize beneficiaries to engage in preventative care without the concern for financial barriers, in order to attempt to control long-term healthcare costs.

Another significant coverage change was that insurers can no longer deny coverage to an individual with a preexisting condition, nor can they raise premiums or cancel coverage because of claims made. The only health status question that can affect the rates charged is smoking status. In addition, the law implemented a medical loss provision dictating that insurance plans had to keep their "medical loss ratios" above 80%. The medical loss ratio is the percentage of premiums collected that are actually paid toward claims. In 2011, insurers paid over a billion dollars in rebates to beneficiaries in order to comply with this provision [10].

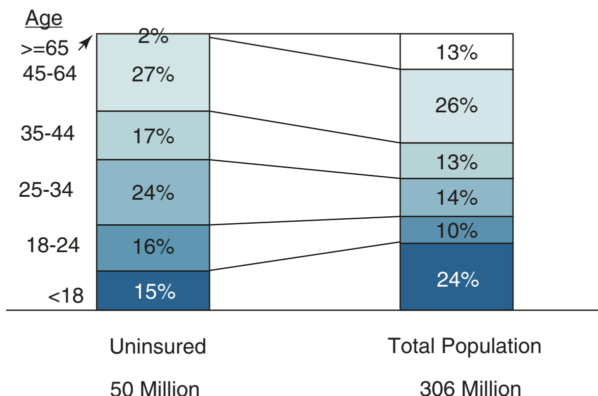
These provisions sparked a number of controversies in the years following passage of the ACA. Most of them centered on the coverage requirements. In 2011, the US Preventative Service Task Force (USPSTF) announced what preventative services were to be included in the "preventative and wellness services" category. Religious groups opposed the inclusion of contraceptive coverage in those benefit requirements. This led to an exemption for religious organizations providing coverage for their employees, through which they could opt out of providing contraceptive benefits.

There has also been debate around the requirement for minimum benefits across all beneficiaries. For example, males and postmenopausal women are still covered for "Pregnancy, maternity, and newborn care." Opponents argue that individuals should be able to select the benefits that they desire in their plans to reduce their individual premiums. Proponents of the current setup maintain that women of reproductive age should not be penalized in their premiums, the same way that those with preexisting conditions are not penalized.

Insuring the 17%

One of the key goals of the healthcare reform effort was to insure the 17% of Americans that remained uninsured in 2010 [8]. Not only were reformers attempting to increase access to healthcare for all Americans, but it was also noted that of those 50 million uninsured, there was a disproportionate number of young adults aged 18–34. Forty percent of the uninsured represented this age demographic, despite them making up 25% of the population (Fig. 11.3). Now, one might argue that these individuals, being healthier and therefore less likely to utilize their health insurance, do not always need to carry coverage. However, this instigates a commonly understood economic problem in the insurance market known as *adverse selection*.

If we take a step back to a more fundamental understanding of how insurance works, we can see how this problem arises. To simplify, suppose that the only cost to a beneficiary to purchase insurance is the premium. Insurance actuaries model and predict the average healthcare expenditure for an individual, build in a markup for risk aversion, and charge that amount as a premium. Suppose that amount is $1000; for this example, we will ignore the markup for risk aversion. This should



Note: Totals may not sum to 100% due to rounding.
Source: U.S. Census Bureau, *Income Poverty and Health Insurance Coverage in the United States: 2010, 2011.*

Fig. 11.3 Profile of the uninsured vs. total population by age, 2010 [11]. (Reprinted from [11])

result in a break-even for insurance companies, regardless of the number of individuals that enroll in the plan. An issue arises, though, from the fact that there is an asymmetry of information between the insurance company and the beneficiary. The beneficiaries know more about their own health status, and their own propensity to incur medical expenses, than the insurance company does. Thus, only those individuals who expect to incur more annual expenditure than the premium – more than $1000 – would enroll, which means that to cover these expenditures, the insurance company would need to raise the premium above the average individual expenditure for the entire population, say to $1500. But this would cause the individuals who expect to incur between $1000 and $1500 to decline purchasing the plan, and the insurance company is left with only a pool of individuals expecting to incur at least $1500. As this continues, premiums rise, while the insurance pool narrows to only the costliest of beneficiaries. This is the problem of adverse selection.

Together, adverse selection and the desire to increase access to healthcare prompted the ACA's individual mandate. Under this provision, individuals would be required to carry health insurance or pay a tax penalty. Once fully phased in, this penalty will equal the greater of $695 or 2.5% of taxable income. Such a requirement was included in the failed reform efforts by President Clinton, and was also a big feature of the Romneycare plan in Massachusetts. The individual mandate became a focal point of debate around the ACA when 25 states, along with the National Federation of Independent Businesses, filed a lawsuit against the Department of Health and Human Services in 2011. The suit argued that under the Commerce Clause of the US Constitution, individuals could not be made to purchase a good or service by the federal government. *National Federation of Independent Businesses v. Sebelius* rose to the US Supreme Court, who in a 5–4 landmark decision, ruled that the penalties implemented by the individual mandate were a valid exercise of Congress' taxing power.

There were a number of provisions designed to make this individual mandate more attainable. First, in a bid to increase the number of insured young adults, the ACA required insurance plans to allow coverage of children up to the age of 26 under their parents' plans. Prior to its passage, most plans stopped covering dependent children after the age of 21. This provision immediately insured over 700,000 young adults [12]. Second, for those purchasing insurance on the exchanges with incomes between 133% and 400% of the Federal Poverty Level (FPL), the government provided subsidies to offset the costs of premiums on a sliding scale. Third, for those with incomes below 133% of the FPL, the federal government expanded state Medicaid programs to cover all such individuals. This topic was the second piece debated in the Supreme Court's hearing on *National Federation of Independent Businesses v. Sebelius*, and will be discussed in more thorough detail later in this chapter. Lastly, the ACA expanded employer-based insurance coverage through an employer mandate.

The ACA enacted a requirement for businesses with 50 or more full-time employees to offer health insurance as an employment benefit or face a penalty. These plans must cover a minimum of 60% of the cost of services, and be available for less than 9.5% of the employee's annual income. The law defines full-time employees as those working for at least 120 days/year and at least 30 hours/week. For small businesses with less than 50 employees, the government offers tax credits to subsidize the cost of insuring their employees, along with a separate health insurance exchange program for them to pool their employees together and negotiate better rates. Opponents of these employer provisions argue that for small businesses, premiums can become expensive because the pool of employees is smaller. A smaller pool means less sharing of risk, and thus a riskier and more expensive package of employees to cover. Others argued that the full-time employee definition would lead to manipulation by employers to fall beneath those thresholds by involuntarily changing full-time employees to part-time. Whether or not labor practices have changed as a result of the ACA has remained questionable [13].

The Future of the ACA and Healthcare Reform

Almost immediately after its signing, the ACA received strong backlash from Republican lawmakers calling for its repeal and filing bills to do so as soon as the very next day. Opposition to the ACA led to at least 60 more votes to repeal, a number of drawn-out legal battles, and a governmental shutdown in 2013. Never has the prospect of repeal been more real than after the election of Donald Trump. His campaign vowed to repeal the reform bill within the first 100 days of taking office. As of this writing, the administration's intention remains unclear on whether that will occur. But along with Republican lawmakers controlling both houses of Congress and a Supreme Court soon to sway the same way, changes are imminent. Rather than attempt to summarize the many proposed alternatives to the ACA, the remainder of this section will attempt to address a number of provisions that

characterize the Republican alternatives to the ACA. All proposed alternatives would repeal at least part of the ACA, with near consensus on repeal of the individual mandate. In the following sections, we discuss provisions that are often included in Republican-sponsored health reform bills.

Tax Credits for Insurance Premiums

Republican lawmakers agree that financial assistance from the government is required to make health insurance affordable. Where the ACA provides individuals with subsidies to fund health insurance premiums, Republican plans incorporate tax credits. The main difference is that the ACA subsidies are tied to an individual's income, such that the financial benefits decrease as income rises. This gives relatively more support to lower income individuals to purchase insurance. The tax credits included in Republican plans would provide flat tax benefits regardless of income level. These are controversial due to the higher dollar amount of the benefit given to those in higher tax brackets, along with the fact that those who do not have an income would receive no assistance at all. It is estimated that such tax credits would lead to an increase in the number of the uninsured by 15.6 million, despite decreases in the uninsured rate for high-income individuals [14].

Health Savings Accounts

A Health Savings Account (HSA) is an account in which individuals can deposit funds to be used for medical expenses. These accounts are offered alongside "high-deductible health plans" (HDHPs). HDHPs offer lower premiums to beneficiaries in exchange for higher *deductibles* – the amount of total healthcare expenditures that the beneficiary must pay before any insurance payments kick in. HSAs are not subject to tax liabilities, and neither are the payments made from them. They are designed to encourage individuals to save a portion of their income for their own medical expenses, similar to the intended function of insurance premiums. The funds distributed into an HSA roll over from year-to-year, unlike related Flexible Savings Accounts (FSAs). A number of Republican healthcare plans advocate expansion of HSAs by allowing larger contributions and extending what types of payments can be covered through an HSA. They contend that HSAs allow individuals more freedom in determining how much they pay for their care. In addition, having the beneficiary bear more of the cost of care might reduce the incentive to overutilize care. Opponents argue that HSAs disproportionately benefit the young and healthy, shifting the burden of cost on the rest of the population. Furthermore, there is concern that while HSAs may prevent overutilization of services, they may go too far by leading individuals to delay necessary care. While some individuals might reduce their spending by switching from brand name drugs to generics, others might instead avoid critical care [15].

Medicaid Block Grants

Some health reform proposals promote the use of block grants as an alternative to the current Medicaid structure. Rather than a joint financial effort by state and federal governments to support Medicaid, block grants would distribute the federal funds directly to states for them to run their Medicaid programs as they see fit. Medicaid remains a state-operated program, and states have already begun to experiment with a variety of implementations. A large portion of this experimentation has been with the managed care model of healthcare delivery, described in detail later in this chapter. States have been contracting with private managed care organizations, which employ a variety of cost-cutting strategies, to operate their Medicaid programs. Medicaid managed care has become quite popular – since the turn of the millennium, the percentage of Medicaid enrollees covered by a managed care plan increased from 56% to 74% [16]. Replacement of expanded Medicaid programs with block grants would likely further popularize the use of the managed care model to operate Medicaid among the states. Supporters believe that these changes would significantly reduce overall Medicaid costs and allow states more freedom to conduct their programs. However, this would likely lead to cuts in eligibility and levels of care for the Medicaid population.

High-Risk Pooling

Prior to the ACA, individuals with preexisting conditions were often turned away from traditional health insurance plans. To combat this, 35 states had implemented *high-risk pools* to fill the gap. These states' governments would finance policies for these individuals who were deemed "high-risk," and thus expensive to cover. Passage of the ACA made these pools obsolete by preventing insurance companies from denying coverage due to preexisting conditions. A repeal of the ACA, though, would reintroduce that gap in care. While some alternative plans do maintain the provision that those with preexisting conditions not be turned away, they are less feasible without an individual mandate to balance adverse selection with healthy individuals.

Thus, many proposed alternative plans advocate reintroduction of high-risk pooling. Such pooling would reduce premium amounts for those outside of the pools, since healthy individuals' premiums would no longer be used to subsidize those with preexisting conditions. However, prospects for those in the pool would likely be poor. Data from those 35 states prior to the ACA show that despite charging premiums of nearly 250% more, the solvency of the programs was still questionable. Furthermore, deductibles in those pools reached as high as $25,000 with coverage limits as low as $75,000 [17]. This type of coverage was unaffordable for many with preexisting conditions, was generally inadequate coverage, and cost the system more overall. There is concern that reverting to high-risk pools would bring back many of these consequences.

Interstate Health Insurance Marketplace

One of the consequences of the health insurance marketplace has been heavy consolidation in the industry that has left consumers with few firms to choose from. Fundamental economic theory indicates that as the number of firms decreases, prices for their products increase. Some portion of currently high premium rates may, in fact, be due to a lack of firm-level competition in insurance marketplaces. Indeed, this year 32% of US counties have been left with just one insurer on the exchanges [18]. Republican health plans argue that allowing insurance plans to be purchased across state and county lines would increase competition and drive down premium costs. The danger with such a proposal would be the inevitable race for insurers to establish themselves in the least regulated state. This would lead to a complete loss in states' ability to effectively regulate the insurance market, and coverage quality would likely suffer.

Tort Reform

One criticism of the ACA was that, contrary to expectations, it did not directly address medical malpractice reform. Most Republican health reform alternatives include provisions to address malpractice tort reform. Tort reform proposals are discussed in the Medical Malpractice section at the end of this chapter.

Medicare

Bringing Care to the Elderly: A History

The roots of Medicare lie within Franklin D. Roosevelt's post-Depression New Deal. In the original iterations of the Social Security Act (SSA), which was officially signed in 1935, there were provisions including a national federal health insurance program. Opposition from physician groups led to its removal before the SSA was signed into law. That opposition again prevented similar legislation from being passed under President Harry Truman in the 1940s. As an homage, President Lyndon B. Johnson flew to Truman's hometown of Independence, Missouri, in 1965 to sign the bill enacting Medicare into law as an amendment to the SSA. This insured the nation's elderly, defined by the law as those older than the age of 65.

A number of other groups have been extended Medicare coverage since its passage. In 1972, individuals with permanent disabilities along with those with end-stage renal disease were added to the program. In 2001, those suffering from amyotrophic lateral sclerosis were covered as well. Today, roughly 55 million people receive insurance coverage through the Medicare program, 84% of whom are elderly [19].

The Program

As it stands today, the Medicare program consists of four parts, aptly named Part A, Part B, Part C, and Part D. Medicare Part A insures services performed during a hospital stay, save for "physician services." While there is no premium for elderly patients, they are responsible for a deductible before the Part A coverage kicks in, which is currently $1316. The plan will then cover 60 days of inpatient stay, with an additional 30 days available for a copay currently priced at $322 per day. There are also 60 "lifetime reserve" days available throughout the patient's lifetime that are available at a copay of currently $658 per day. Beyond those days, the patient bears all costs. Part A also covers skilled nursing facility costs, if there is a specific medical need, for 20 days. An additional 80 days are available for a current copay of $164.50 per day. Finally, the Social Security Act was amended in 1982 for Medicare Part A to cover hospice care for patients with a life expectancy of 6 months or less.

Medicare Part B covers outpatient services, as well as inpatient physician services. This includes physical therapy, outpatient surgery, and drugs that must be administered by a physician, such as chemotherapy or immunizations. It also covers some Durable Medical Equipment, including walkers and prosthetics. Part B is a voluntary addition to the Medicare plan, with a premium of around $100 deducted from the individual's social security check, which most elderly beneficiaries elect to do.

In terms of reimbursements from Part B, physicians have a choice on how they prefer to be paid by Medicare. They can either "participate" or "not participate" in the Medicare assignment, which refers to the allowable fees that Medicare sets for services. If the physician participates, he or she will set fees at that level as payment in full. Medicare will then reimburse the doctor directly for 80% of the fee amount, and the remaining 20% is borne by the patient as coinsurance. If the physician does not participate, he or she can charge a fee higher than the allowable fees, up to a maximum of 115% the allowable amount. The patient then becomes responsible for the full amount of the physician's fee, and Medicare will instead reimburse the *patient* 80% of the allowable fee amount. Approximately, 50% of physicians choose not to accept the Medicare assignment, perhaps motivated by the fact that Medicare reimburses on average 2/3 of what private insurance does [20].

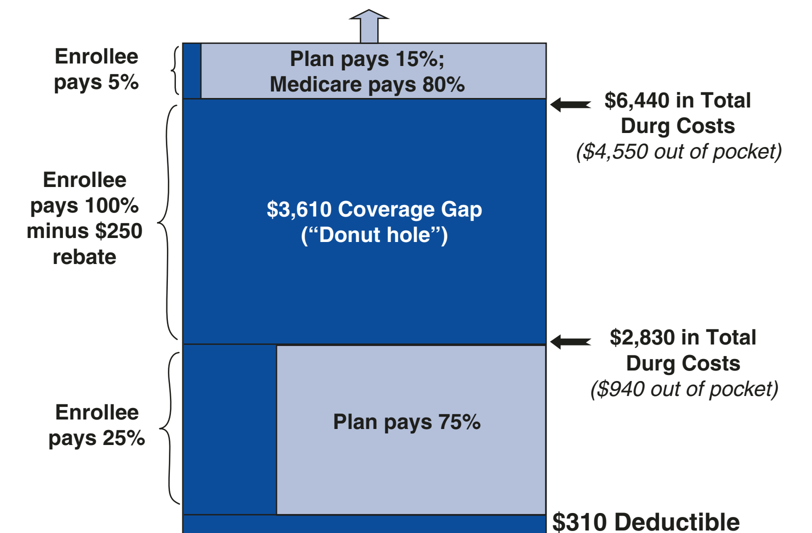
Medicare Part C encompasses the Medicare Advantage Plans, which provide private insurance in a managed care model (explained further later in this chapter). The component was initiated with the passage of the Balanced Budget Act of 1997 to address the increasing cost of Medicare. The plans are available to beneficiaries who are already enrolled in Parts A and B, but through managed care mechanisms often realize cost savings that are partly passed on to the consumer. This is often achieved, though, by making available a smaller network of physicians covered to treat the beneficiary.

In 2006, Medicare Part D was implemented to provide beneficiaries insurance against prescription drug costs. However, citing rapidly increasing drug costs, politicians were concerned with letting the government bear the entire financing of the Part D plan. This led the prescription drug component of Medicare to be funded by

both the public, through taxes, and privately by beneficiaries, through deductibles and coinsurance. As a result, Medicare Part D plans are offered by private insurance companies, the argument being that choices among the amount and type of coverage offered creates competition to control some of the costs.

Other than a deductible, which is currently capped at $400, beneficiaries of Medicare Part D are responsible for coinsurance. Part D plans will pay 25% of annual drug costs for their beneficiaries up to $3700 annually, with the beneficiary responsible for the remaining 75%. Once annual prescription drug costs exceed $4950, however, the beneficiary becomes eligible for *catastrophic coverage*. This allows him or her to pay very small copays for prescriptions, with the plan covering nearly all of the cost. Between $3700 and $4950, however, there is a clear coverage gap, known as the "donut hole." Figure 11.4 shows what the donut hole looked like prior to the ACA in 2010. The ACA did include provisions to shrink this coverage gap, and today Medicare Part D will cover 60% of the cost of brand name drugs and 49% of the cost of generic drugs within the coverage gap.

Finally, as noted above, there is still a great deal of medical expenditure that Medicare beneficiaries are responsible for. For this reason, many elect to purchase additional insurance coverage for these expenses, commonly known as Medigap or Medicare supplementary insurance. Approximately, 20% of Medicare beneficiaries choose to purchase these plans [22].



SOURCE: Kaiser Family Foundation illustration of standard Medicare drug benefit for 2010 (standard benefit parameter update from Centers for Medicare & Medicaid Services, April 2009).

Fig. 11.4 Standard Medicare prescription drug benefit, 2010 [21]. The "Donut hole" represents the range in which a beneficiary's drug costs are too high to qualify for plan benefits, but too low to qualify for Medicare catastrophic coverage. Thus, the beneficiary bears 100% of the drug costs. (Reprinted from Ref. [21])

Current Debate

Much of the debate surrounding Medicare is focused on the toll it takes on national expenditures. The program costs over $500 billion annually, representing 14.6% of federal outlays, and is projected to double by 2026 (Fig. 11.5). As the Baby Boomer generation continues to age and the relative proportion of working adults shrinks, the program's sustainability has been called into question. There have been a number of proposals to attempt to curb the rising costs of Medicare. The most common focuses on increasing the age of eligibility for the program in order to shrink the pool that the government supports. Others suggest increasing the amount of cost that beneficiaries must share, through increased premiums, deductibles, or coinsurance rates. Others still propose increasing the Medicare tax that funds the program; the Congressional Budget Office estimates that a 1% increase in the Medicare payroll tax would bring in additional revenues of $823 billion by 2026 and fund the program for decades [23].

Another issue of debate regarding Medicare is centered on the Part D component. The legislation that implemented it prevents the Centers for Medicare & Medicaid Services (CMS) from negotiating drug prices with pharmaceutical companies, despite the fact that it is by far the largest volume purchaser. This is contrary to the abilities granted to other domestic health insurance programs, such as the Veterans Affairs system (who traditionally pays 40–60% less than Medicare for prescription drugs [25]), and nearly every other foreign public health insurance system. The literature estimates this as costing taxpayers $50 billion annually [26].

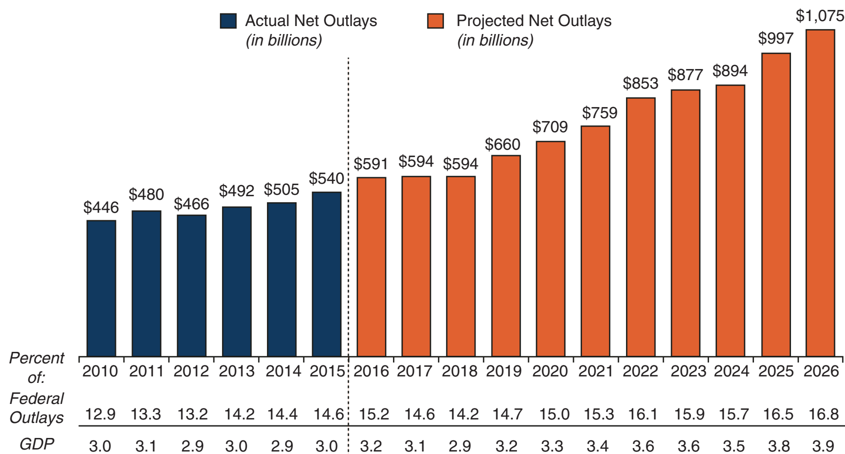


Fig. 11.5 Actual and projected net Medicare spending, 2010–2026 [24]. (Reprinted from Cubanski and Neuman [24])

There is also discussion around how Medicare calculates reimbursement to physicians. Prior to 1992, Medicare Part B would simply reimburse 80% of what it referred to as the "usual, reasonable, and customary charge (UCR)," which was the weighted average of fees that other physicians in the community were charging for the same service. Citing concern that the UCRs were somewhat arbitrary, Congress attempted to design a fee schedule that was more directly related to the resources used to render services. This led to the creation of the Resource-Based Relative Value Scale (RBRVS), which ties fees to resources used, measured by Relative Value Units (RVUs). Controversy around this system has centered on primarily two issues. First, the system tends to favor procedure-based specialties over primary care. This was especially true when the program was initially implemented, as it had reimbursed procedural RVUs more than those involved in evaluation and management [25]. Since then, CMS has increased management and evaluation reimbursements and decreased procedural reimbursements. Second, the RBRVS system has effectively given Medicare, the largest insurer in the nation, the unilateral ability to set reimbursement rates, with many commercial insurers now using Medicare fee schedules as a reference point for contract negotiation. This has reduced physician reimbursement and has been seen as a substantial shift in power over physician compensation.

Medicaid

To insure the nation's poor, Medicaid was established at the same time as Medicare in 1965 with a similar amendment to the SSA. Unlike Medicare, however, the administration of Medicaid has been delegated to the states, each of which does so differently. The federal government instead issues per capita, income-adjusted federal funds to aid in the financing of the programs. On average, the federal government subsidizes 60% of the cost, with the states covering the remainder [27]. The subsidies increase as per capita income in a state decreases. Today, the program covers 74 million Americans, making it the largest insurance program by number of beneficiaries [28].

The Beneficiaries

Medicaid eligibility is dependent upon income levels. The federal poverty level (FPL), defined as the basic level of income, tracks the consumer price index (CPI), a measure of inflation. Today, it sits at $11,880 for an individual, plus $4140 for each dependent. Thus, for a family of 4, the FPL is $24,300. There are certain mandatory groups, including children, adults living with children, and pregnant women, that are to be covered once their incomes fall below 133% of the FPL ($15,800 for an individual and $32,319 for a family of 4). States can also cover

these groups, along with a number of "optional groups," under the federal subsidy guidelines up to a maximum of 250% of the FPL ($29,700 for an individual and $60,750 for a family of 4). Childless adults are an optional group that, prior to the ACA, was almost never covered. The ACA specifically targeted this group in its provision to expand Medicaid, which will be discussed further in this section. Prior to the ACA, 49 million individuals were enrolled in the Medicaid program (Fig. 11.6).

The ACA's Bid to Expand Medicaid

Passage of the ACA included a provision that pushed expansion of state Medicaid programs to all individuals, including childless adults, and increased the floor from 133% to 138% of the FPL. This was the reason why subsidies on the exchanges were only offered beginning at 133% of the FPL, rather than making them available to the poor. To account for the costs of expansion, the federal government would increase its federal subsidies to states to manage 100% of the cost, phasing down to a steady level of 90% by 2020.

However, this provision of the ACA mandated that states expand their Medicaid programs or lose the federal funding already allotted to their programs. This became controversial, because although every state did implement a Medicaid program, the original language of the amendment to the SSA technically indicated Medicaid as a *voluntary* program. This debate was included in the *National Federation of Independent Businesses v. Sebelius* hearing that reached the Supreme Court. Though the Supreme Court upheld the individual mandate portion of that case, they ruled that Congress had

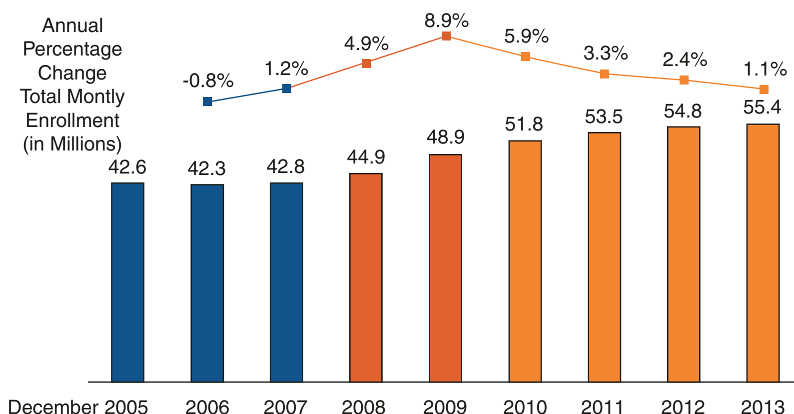
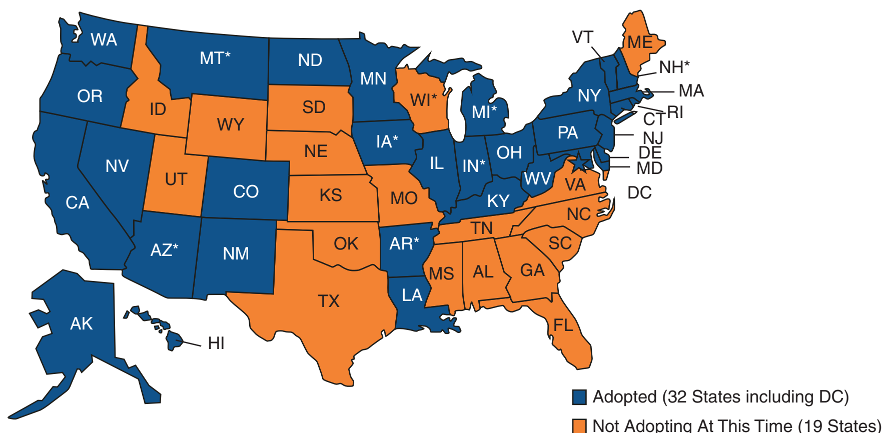


Fig. 11.6 Annual change in total Medicaid enrollment, December 2005–December 2013 [29]. (Reprinted from Snyder and Rudowitz [29])



NOTES: Current status for each state is based on KCMU tracking analysis of state executive activity. *AR, AZ, IA, IN, MI, MT, and NH have approved Section 1115 waivers. WI covers adults up to 100% FPL in Medicaid, but did not adopt the ACA expansion.
SOURCE: “Status of State Action on the Medicaid Expansion Decision,” KFF State Health Facts, updated January1, 2017.
http://kff.org/health-reform/state-indicator/state-activity-around-expanding-medicaid-under-the-affordable-care-act/

Fig. 11.7 Status of state Medicaid expansion decisions, 2017 [31]. *AR, AZ, IA, IN, MI, MT, and NH have applied Section 1115 Waivers that allow changes in eligibility, benefit, cost sharing, and/or provider payment requirements. Though Wisconsin has not adopted the ACA's Medicaid expansion, it has chosen to cover adults up to 100% (rather than 138%) of the FPL. (Reprinted from Ref. [31])

exceeded its spending power in coercing states to expand their Medicaid programs without funding it in its entirety. Thus, Medicaid expansion became an optional, state-decided provision of the ACA, and to this day only 32 states and the District of Columbia have chosen to expand (Fig. 11.7). Wisconsin, though not officially expanding its program, is the only other state to extend Medicaid coverage to childless adults, albeit only for those below 100% of the FPL rather than 138% [30].

In addition to expanding the Medicaid program, the ACA created the CMS Innovation Center within CMS. This organization was given funding to distribute grants to state governments and private entities to experiment with novel healthcare delivery systems. To date, the Innovation Center has funded 39 models, and the Congressional Budget Office forecasts it saving the federal government $34 billion in healthcare expenditures by 2026 [32]. It is through the Innovation Center that the Comprehensive Care for Joint Replacement program was conceived, which now reimburses joint replacement surgery from Medicare on a strictly bundled payment structure in certain geographies (explained in detail later in this chapter).

Oregon's Rare Experiment

Much of the argument in support of Medicaid expansion, and in support of increased access to health insurance in general, rests on the assumption that insured individuals should be more likely to use cheaper, more preventative health measures rather than costlier emergency care. In 2008, just prior to passage of the ACA, Oregon

took steps to expand its own Medicaid program. In doing so, however, the state saw a unique opportunity to conduct a rare randomized-controlled trial in health policy – by randomizing potential enrollees into a lottery that determined whether or not they would gain access to the program. Though it set its threshold for eligibility at below 100% of the FPL, rather than the ACA's 138%, states have used the study in evaluating the decision of whether or not to expand Medicaid.

Oregon found that in the 2 years that it conducted the trial, enrollment in Medicaid did not have any statistically significant impact on measures of health status such as blood pressure or markers of diabetes management, except for reducing the prevalence of depression. It was associated, though, with higher self-reported mental and physical health. Not surprisingly, expansion did increase healthcare utilization, including outpatient visits, hospital admissions, and prescription drug use. Though preventative care visits were more utilized, such as yearly mammograms, the study did have the unexpected and controversial outcome showing an increase in the use of the emergency department by 20% [33].

Opponents of Medicaid expansion often cite this study as evidence that Medicaid does not achieve what it is intended to, and could increase healthcare costs in the long run. Proponents respond with a number of limitations regarding the trial. Generalizability of the results beyond one state has been called into question, as has the potential effect of using a 138% threshold instead of 100%. But perhaps most debatable is the 2-year timeline of the study, which proponents of Medicaid expansion argue is simply not long enough to determine the long-term behavioral changes that insurance coverage is supposed to drive.

Effects of Expanding

States that chose to expand their Medicaid programs expectedly saw increased spending to implement the expansion. In the 29 states that had expanded Medicaid by 2015, spending increased by 17.7% on average, compared to a 6.1% increase in nonexpansion states. Also not surprisingly, expansion states saw increases in insurance coverage of their populace. In those same 29 states, enrollment in Medicaid increased 18% on average, compared to 5.1% in the remaining states [34]. Whether or not this increased enrollment leads to better "access to care" is still in question. Some studies have shown significant increases in access to a personal physician or to necessary medications in expansion states [35]. The literature, however, does not show a consensus that Medicaid expansion does necessarily improve measures of healthcare accessibility [36].

It does appear that expansion of Medicaid increases healthcare utilization, at least as measured by overnight hospitalizations and physician visits. There has also been improvement in the rates of diagnosis of chronic diseases, such as diabetes and hypercholesterolemia, among the Medicaid population. Interestingly, there has not been an increase in emergency department utilization as the Oregon study may have suggested [36]. Economically, results have been positive. Expansion

states have actually realized revenue gains, budget savings, and overall economic growth [37].

The Managed Care Model

Managed care is an umbrella term that refers to a number of techniques, employed by Managed Care Organizations (MCOs), to control the process of healthcare delivery, from financing to providing, in order to reduce cost. MCOs act both as insurers, by negotiating and collecting premiums from its members, and as providers of care, by arranging for the patient to be seen by more limited networks of physicians. The model of managed care relies on the concept that choice is costly, and that one way to manage cost is to limit choice.

MCOs further innovated by shifting reimbursement structures away from the fee-for-service (FFS) model, attempting to tie financial incentives toward outcomes. This led to a number of different approaches to attempt to "pay-for-performance (PFP)." The argument for financially rewarding favorable outcome metrics is twofold. First, the traditional FFS model has the unfortunate incentive that rewards additional care, regardless of necessity. While the question of whether this actually incentivizes physicians to overutilize services is up for debate, it certainly does not penalize it. Second, tying incentives to clinically desirable outcome measures theoretically has the potential to improve quality of care overall.

The Health Maintenance Organization

Where we left off in the first section of this chapter, managed care was slowly beginning to take center stage in healthcare administration, namely, in the form of the Health Maintenance Organization (HMO). Of all MCOs, the HMO is the most limiting in terms of choice. Like other MCOs, there is a defined network of physicians that the organization has negotiated with to provide care. This network can come in a number of different ways. From most restrictive to least, the network can be literally employed by the HMO, such as with Kaiser Permanente's model, the HMO can contract with a single extant group practice or hospital, or the HMO can contract individually with a number of groups or solo practices. The Independent Practice Association model, which really is just a subtype of the HMO, chooses an intermediary organization to contract out physicians on its behalf. Whatever the defined network, the patient must be treated by a physician that is "in" the network under the plan.

Part of the HMO's strategy is heavy utilization of the "gatekeeper" concept. This setup puts the primary care physician in charge of coordinating all of the health services that a patient needs. All specialty care requires referral from the gatekeeper primary care physician in an attempt to reduce overutilization of more costly care.

It also works to emphasize more preventative care measures through better utilizing the primary care physician. An emphasis on preventative care became a technique to try to reduce long-term costs.

Physician reimbursement in the HMO follows a capitation model. Capitation pays physicians a set annual fee per patient that the physician is responsible for caring for. This is a PFP design in which the performance metric is cost. If the physician is able to care for the patient utilizing less in financial resources than the fee he or she receives, he or she makes a profit. If, however, the costs of care rise above the fee paid, the physician eats the loss.

The Preferred Provider Organization

The HMO's strict restrictiveness with regard to its network of physicians led it to fall out of favor in the 1990s. Patients laid blame onto their HMOs when they could not see the physician they wanted to or when treatments were denied, leading to a feeling that administrators were getting too involved in actual patient care. This led to the development of the Preferred Provider Organization (PPO), which implemented an additional layer of choice onto the HMO model. PPOs allow their members to visit "out-of-network" physicians, but at a higher copayment fee than those who were "in-network." They also less frequently utilize the gatekeeper structure.

Rather than work off of capitation, the PPO model usually negotiates discounts from its in-network physicians. These discounts generally range between 25% and 35% [38].

The Accountable Care Organization

The ACA's answer to managed care was the Accountable Care Organization (ACO), which forms a sort of hybrid between the HMO and PPO. Though there is an ACO "network," members are not limited to seeking care from within the network. Any and all costs incurred by the patient, in or out of network, though, are "accountable" to the ACO. These organizations emphasize care quality metrics and seek to provide integrated care that encompasses all of the patient's needs. ACOs were given an official designation under the ACA, provided they meet a set of requirements, including having a minimum patient base of 5000 that it manages for at least 3 years. The organizations make extensive use of PFP reimbursement structures to attempt to incentivize both quality and cost efficiency. Many ACOs continue to employ a modified FFS in which providers share cost savings with the ACO. More controversial is the bundled payment reimbursement structure, which has been increasing in popularity and recently became Medicare's standard reimbursement model for joint replacement surgery.

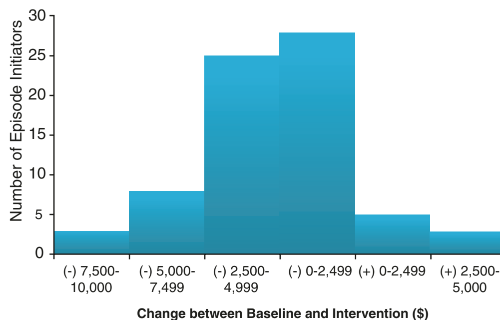
Bundled Payments

Bundled payments have been proposed as a middle ground between the traditional FFS reimbursement structure and the capitation payment model of the HMO years. It retains the concept of flat fees that characterized capitation reimbursements in order to share cost savings with providers, but does so on a procedural, rather than per patient, basis. The idea stems from the Diagnosis-Related Group (DRG) system that Medicare began employing in the 1980s to reimburse physicians flat fees for treatment of a "diagnosis" that a patient received. It, too, was designed to shift cost risks over to providers in an attempt to incentivize cost reduction. However, critics claimed that it might have inadvertently incentivized providers to seek earlier discharge for their patients. In responding to that criticism, bundled payments combine both the inpatient treatment and the posthospital outcomes together in an "episode of care." This translates to costs incurred for a defined period after discharge still being covered by the fixed umbrella payment for that episode. Analysis of the potential savings of bundled payment initiatives has been promising – a study of the 17 most costly procedures benchmarked to costs of the 50th percentile shows potential savings of $4.7 billion annually [39].

In 2006, a bundled payment package was introduced by Geisinger Health System targeted at coronary artery bypass surgery. ProvenCare established a fixed payment to coronary surgeons for preoperative care, operative care, and 90 days of postoperative care. The program led to decreased lengths of stay, higher rates of discharge to home, and lower readmissions [40]. In 2011, Medicare announced a pilot bundled payment program dubbed the Bundled Payments for Care Improvement (BPCI) initiative. It is a voluntary program that uses bundled payments to reimburse 48 different DRGs that providers can choose from, spanning from myocardial infarction to joint replacement surgery to sepsis. The program is currently in its second phase, in which nearly 1400 groups have chosen to participate for at least one of the episodes [41].

While the full results of the pilot have not yet been released, preliminary data show mixed results. So far, most of the clinical episodes have *not* shown reduced costs since the implementation of BPCI. Orthopedic surgery episodes, composed primarily of hip and knee arthroplasties, however, have achieved positive results. Specifically for orthopedic episodes, 89% of groups saw declines in payments, and on average, total standardized allowed payments declined by $2137 (Fig. 11.8). The decline was attributed to changes in post-acute care during the 90-day postoperative episode duration. The percentage of patients discharged to home increased from 36% to 43%, and average length of stay at a skilled nursing facility was 1.3 days shorter for the BPCI episodes. For nearly all quality metrics, however, including readmission rates, emergency room visits, and mortality rates, there has been no statistically significant difference for BPCI episodes [42].

Within the last year, the same CMS Innovation Center that implemented the BPCI designed and executed the Comprehensive Care for Joint Replacement (CJR) model. This time an involuntary program, CJR, altered Medicare reimbursement



Note: Baseline is defined as episodes that began Q4 2011 through Q3 2012. Intervention is defined as episodes that began Q4 2013 through Q2 2014

Source: Lewin analysis of Medicare claims and enrollment data for episodes that began Q4 2011 through Q2 2014 for BPCI providers.

Fig. 11.8 Distribution of the average change in total standardized allowed payments for orthopedic surgery episodes after initiation of bundled payments [43]. These payments represent payments to Medicare Parts A and B services. The timeline of payments extends from the anchor hospitalization to 90 days postoperatively. (Reprinted from Dummit et al. [43])

policy for DRGs 469 and 470 (knee and hip arthroplasties) to be done as bundled payments. The episode of care has been defined as the duration from admission to the hospital up until 90 days after discharge. The model applies on a mandatory basis to approximately 800 hospitals in 67 defined geographic regions across the country. The impact of this change is uncertain, but opponents are concerned about the level of risk being shifted onto providers with these changes. Further, CMS denied a request to adjust the bundled payments based on the risk pool of patients treated, leading to additional controversy. What is certain is that the movement toward pay-for-performance will continue a focus of healthcare reform in the modern day, and orthopedic surgery has become a primary target on which to trial these techniques.

Medical Malpractice

By the age 65, 88.5% of medical doctors and 98.4% of surgeons will face a malpractice claim [44]. Medical malpractice is a type of *tort*, or civil wrongdoing (in contrast to a criminal one). Tort law is designed to protect individuals from wrongdoing that is not necessarily a crime. Malpractice claims allow the courts to financially rectify harms suffered by patients. Tort reform with respect to medical malpractice has also entered into health policy reform discussions. Advocates of tort reform argue that lax tort laws both drive up the costs of malpractice insurance and lead to the practice of defensive medicine – a costly consequence whereby physicians order sometimes unnecessary tests in order to reduce the likelihood of missing something

that could lead to a lawsuit down the road. In addition, it has been noted that the current tort system does not deter medical errors or encourage adverse event reporting, and that injured patients receive less than half of the total expenditure on malpractice insurance [45]. Conservative estimates of the costs of defensive medicine are about $50 billion annually [46]. While this only represents 2% of total healthcare expenditures, malpractice premium shocks of up to 30% at the turn of the millennium led to serious pushes for tort reform [47].

Tort Reform Proposals

Malpractice Caps

A commonly employed tort reform technique is to limit the potentially high payouts of malpractice claims. Less costly claims make it less risky to insure those claims, and in theory should reduce malpractice insurance premiums. When employed, caps on malpractice suit payouts are placed on the "noneconomic damages" of the claim. When a malpractice suit is filed, there are two categories of damages that a plaintiff can lay claim to economic and noneconomic damages. Economic damages refer to those harms that can be directly tied to monetary losses, such as medical bills, lost income/earning capacity, and household services required. They are often relatively easy to quantify in the lawsuit. Noneconomic damages, on the other hand, refer to everything else. States vary in their definitions of noneconomic damages, but they often include compensation for things like pain and suffering, humiliation, or reputational damage. Though much harder to quantify than economic damages, when awarded they are often significantly costlier.

Currently, there are 32 states that employ caps on noneconomic damages for malpractice suits, ranging from $250,000 up to $2,250,000 (Fig. 11.9). These caps do appear to at least achieve the goal of reduced malpractice insurance premiums; in comparing states with caps to states without caps, premium increases in 2001 were 72% lower [48]. Whether or not these caps have any effect on defensive medicine practices is inconclusive in the literature [49].

Tribunal Panels

An issue that has been raised in cases of medical malpractice is that, stemming from the relative complexity of medical decision-making, a lay jury or judge might not be qualified to render a verdict. To address this, some have advocated for the use of professional tribunals in malpractice suits. This would modify the way in which malpractice cases are ruled upon, using instead a panel of judges with specific medical expertise that would enable them to appropriately assess the case. This was experimented with in Massachusetts, who currently offers Medical

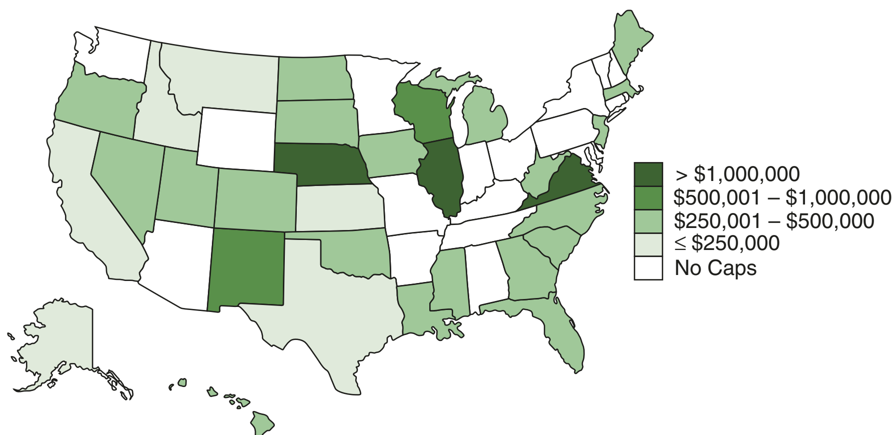


Fig. 11.9 State caps on noneconomic damages for malpractice suits, 2016

Malpractice Tribunals at the request of the defendant. An early evaluation of the program showed that roughly two-thirds of cases presented before the tribunal are thrown out as merely an "unfortunate medical result" [50].

Disclosure-and-Offer Programs

Though not a formal legal reform, disclosure-and-offer programs are an interesting way for providers to take charge in reducing litigation on their own. These are programs, often implemented at large hospitals or groups, in which physicians immediately disclose adverse events to patients and offer compensation if appropriate. While the patient retains the right to file a lawsuit, these programs have been shown to significantly reduce the chance of that happening. The University of Michigan found that after implementing a disclosure-and-offer program, the rate of lawsuits fell from 2.3 per 100,000 physicians to just 0.75. The duration of the process became shorter as well, and costs decreased overall [51]. Disclosure-and-offer programs are also interesting in that they often involve an apology when errors occur.

Apologies have been shown in the literature to reduce the number of lawsuits filed by 50–65%, and to substantially reduce the financial payouts from those suits [52]. There is some controversy regarding apologizing during a disclosure of medical error, however, considering state environments regarding their legal definitions. States differ on whether or not they permit apologies, which could be as simple as an expression of sympathy, or disclosures to be admissible in court as admissions of fault. Currently, 34 states have "apology laws" preventing physician apologies from being used as evidence of liability. Nine states have similar laws for any kind of disclosure of medical error (Table 11.2) [53]. Lawyers, therefore, have given conflicting advice on the subject of whether or not to include an apology with a disclosure of medical error from a medicolegal standpoint. Apology laws have been

Table 11.2 Overview of state apology and disclosure laws

Both disclosure and apology laws	Apology laws only	Disclosure laws only	Neither
California	Arizona	Nevada	Alabama
Florida	Colorado	New Jersey	Alaska
Oregon	Connecticut	Pennsylvania	Arkansas
Tennessee	Delaware		Illinois
Vermont	Georgia		Kansas
Washington	Hawaii		Kentucky
	Idaho		Michigan
	Indiana		Minnesota
	Iowa		Mississippi
	Louisiana		New Mexico
	Maine		New York
	Maryland		Rhode Island
	Massachusetts		Wisconsin
	Missouri		
	Montana		
	Nebraska		
	New Hampshire		
	North Carolina		
	North Dakota		
	Ohio		
	Oklahoma		
	South Carolina		
	South Dakota		
	Texas		
	Utah		
	Virginia		
	West Virginia		
	Wyoming		

shown to be associated with reduced average settlement payments as well as fewer cases involving minor injury, and as such have developed their own discussion in the tort reform debate [54].

Safe Harbor Laws

Another proposed reform to the malpractice system is the implementation of a safe harbor to protect from liability physicians who have adhered to an evidence-based practice guideline. Proponents argue that if a physician has followed such a guideline, such a case should be and would be ruled in his or her favor anyways. A safe harbor would protect from frivolous lawsuits, as well as outlier cases in which physicians are held liable for errors that result from following accepted practice

guidelines. Some physicians are wary, however, of conceding that much power over the nuances of the practice of medicine to guidelines, and of the ambiguity of what is considered "scientific evidence."

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