





Paying a Fair Share for Health Coverage and Care



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I. Introduction

Questions about paying for health insurance and for health care can direct discussions down many paths. The ultimate goal is to structure contributions in a manner that ensures access to necessary and appropriate care and is also sustainable for individuals, families, insurers, other payers, and government. Choices about when and how much individuals and families should pay shape decisions about how those payments need to be structured. Comprehensive expansion of health coverage in the United States will mean augmenting, reorganizing, or creating new systems to administer payments for health coverage. The ability of administrative systems to implement reforms effectively needs to be factored into evaluating coverage expansions. Deciding how to structure payments will, however, also involve broader considerations of resources, incentives, and values.

This paper provides a framework for considering the implications of different ways that people can pay for health coverage and care, drawing on research evidence as well as illustrations from existing private and public sector programs and the health care systems of other industrialized nations. The focus here is on two broad categories of health care costs borne by individuals and families. The first is paying for coverage, generally through premiums or taxes. The second is cost sharing for health services or supplies, generally consisting of deductibles, fixed copayments, or coinsurance (calculated as a fixed percentage of cost), often with limits on total annual out-of-pocket costs capped at a specific level, or different levels for different types of health care. Each category of costs can be structured in different ways, varying in amount covered, scope of benefits affected, special protections for vulnerable populations, and other design features. The number of permutations possible when different cost requirement are combined in insurance plans is practically infinite.

There are major differences among alternative approaches to administering payments for coverage or health costs. People can pay for insurance or for health care through publicly

¹ Lifetime dollar limits coverage are also sometimes included in some discussions of cost-sharing (for example a Bureau of Labor Statistics overview of cost sharing posted in 2004 (Baker 2004).

administered systems, generally taxes or fees; through privately administered systems, such as payroll contributions to employer-sponsored health insurance; or direct payments to insurers, intermediaries, or health care providers. When they use health services or supplies, they can pay via combinations of insurance (sometime multiple insurance programs) and various out-of-pocket payments for covered or uncovered health services or supplies. This complexity makes it very difficult to determine how particular types of costs to individuals or families affect access to, or use of, health care. Nevertheless, current approaches to structuring premium payments and cost sharing in both private and public programs can provide some useful insights for policymakers considering comprehensive coverage expansions.

What people pay for health care encompasses several forms of costs, including those discussed here as "cost sharing." The term refers to specific components of health spending when applied by researchers (or actuaries), but it is also sometimes used to describe how all spending for health care is allocated among different payers. Cost sharing is usually defined as the amount that people pay out-of-pocket when they use health care. But there appears to be a growing tendency, particularly in policy discussions, to also use the term to capture enrollees' out-of-pocket "share" of the full costs of coverage. For example, some Bureau of Labor Statistics analyses counts contributions to employment-based insurance premiums paid by employees as a component of cost sharing (Baker, 2004). Similarly, subsidies to low income families to help them pay for insurance are sometimes discussed as a form of cost sharing, as in "government and enrollees sharing the costs of coverage." To further confound discourse on the topic, tax surcharges for higher premiums or coinsurance for high-income people are sometimes called "means testing," a term that has historically been used when discussing welfare programs for people meeting some definition of poverty (Hacker and Marmor, 2003).

Differences in the scope of the terms "cost sharing" or "income-related" are more than semantic – they reflect different perspectives on the basic goals of policies setting out what people should pay for health care. To illustrate the substantive differences that can emerge when viewing options for structuring health coverage reforms from different perspectives,

consider three distinct goals associated with structuring health costs for individuals or families (hereafter referred to as "people"):

- designing payments that will contribute enough revenue for sustainable health coverage for a population;
- employing payment design to promote appropriate and efficient use of health care; and
- using health coverage and payments to contribute to broader social and political policies.

Focusing on each of these goals could lead to different assessments regarding the structure and administrative systems that would be most effective in comprehensive coverage expansions. The goals are, however, not independent. Without sufficient financing, comprehensive coverage expansions are not possible. Paying for coverage and services in a health care delivery system that lacks incentives to promote efficiency may not be sustainable for any financing mechanism. Health payments that increase, or decrease, access to health coverage or health services for those with greater health risks, which will affect the effectiveness of medical care and overall health costs. The priority of the goals is debatable. But the substance of debate about paying for health coverage could hinge on people's understanding of the underlying goals of reform – those discussed here, or other goals espoused by policymakers.

Generating revenue to pay for health coverage and care. Comprehensive health coverage will require a sustainable source of revenue. All other things being equal, having people pay more for health care reduces costs for other payers, and vice versa. Other things are not, of course equal. Some things, such as the tax treatment of health insurance, or shifts in enrollment between public and private coverage (often induced by plan changes in the scope of benefits or structure of cost sharing) also affect public and private revenue streams for health care. Nevertheless, how much of the bill is paid by "people" directly, rather than by third party payers, is a major point of contention.

Overall, the increase in health care costs over the past three decades has been associated with a general shift in the proportion of health care costs covered by insurance (public and private). As illustrated in Figure 1, between 1985 and 2005 alone the share of personal health care expenditures paid by people out-of-pocket decreased from 26 percent to 15 percent CBO [b] (Figure 1). This decline has led some analysts to focus on whether people are "overinsured" and perhaps should, or must, take on a larger proportion of costs over time.

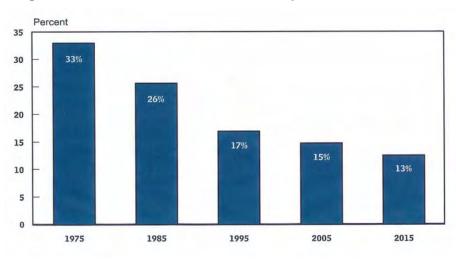


Figure 1: Share of Personal Health Care Expenditures Paid Out of Pocket

Source: Congressional Budget Office based on the Centers for Medicare and Medicaid Services' data on national health expenditures.

Note: Spending on personal health care excludes administrative costs for health insurance, public and private spending for medical research and construction of facilities, and government spending for public health agencies, such as the Centers for Disease Control and Prevention and state health departments.

The significance of the decline in the proportion of health costs paid out-of-pocket is, however, distorted by the magnitude of increases in health costs. Personal health care costs, including costs of insurance premiums, have risen faster than wages or inflation (Kaiser/HRET, 2007). Health insurance premiums and out-of-pocket spending for health care are a large component of family budgets and a burden to a growing proportion of working Americans (Figure 2) (Rowland 2007; Banthin and Bernard, 2006).

Figure 2: Nonelderly persons with family out-of-pocket financial burdens for health care (including premiums) greater than 10% and 20% of disposable income, 1996 and 2003

	Persons with total family burden > 10% of disposable income	Persons with total family burden > 20% of disposable income
Total Nonelderly Population		
1996	15.8%	5.5%
2003	19.2%	7.3%
With private employment-based insurance		
1996	14.2%	3.3%
2003	18.2%	5.5%

National Medical Expenditures Panel Survey, reported in Banthin, J. and Bernard, D., "Changes in Financial Burdens for Health Care: National Estimates for the Population Younger than 65 years, 1996 to 2003," *JAMA* 13(296): December 2006: 2712-2719.

Note: Disposable income is defined as family after-tax income.

Public and private payers are asking insured populations to pay more for coverage and the costs of care. Increasing premiums for high-income beneficiaries for Medicare Part B, or increasing premiums for state insurance assistance programs for low-income families and low-wage workers generate revenue. States have introduced copayments or income-related premiums into Medicaid and State Children's Health Insurance Programs (SCHIP), in part to generate program savings (Artiga and O'Malley, 2005). Employers faced with rapidly increasing health insurance costs have shifted some of these costs to employees through increased premiums and increased cost sharing.² Despite these shifts, employers have continued to pay a large proportion of the premium costs; without the shifts, revenues devoted to employee health insurance would have been far greater. Employers have also restructured cost sharing by increasing annual deductibles and out-of-pocket maximums to slow the growth of their health insurance bills.

When evaluating alternative approaches to structuring how people pay for coverage, both employers and taxing authorities need to weigh implementation and administration costs against potential revenue gains. These costs can involve more than direct financial costs. Administering complex cost sharing systems could entail significant personnel and systems

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² Data from the Bureau of Labor Statistics show, for example, that between 1992-3 and 2003, among full time workers in private industry, average premiums for family coverage for participants in health plans who were required to contribute to the plans increased from \$131 per month to \$228, about 75 percent. During this same period, the consumer price index for medical care rose by about 50 percent (Baker, 2004).

costs, particularly for small organizations. The need for accountability in public programs could also lead to rules and procedures that appear inflexible or arbitrary. Frustration with complex rules, limits on coverage, or inadequate financial protection from medical costs can exact a political cost, and undermine the goal of expanding coverage, if it increases already high levels of distrust in either public or market-based approaches.

Promoting efficiency in health care. There is a growing body of research as well as a variety of strongly held beliefs focused on how people pay for health care affects *if*, *when*, *how much*, in *what form*, and *where* they get care. A wide array of methods designed to influence health care providers, including the application of performance measures that reflect levels of compliance with evidence-based practice standards, are beyond the scope of this review. Methods of linking evidence-based practice standards to what people pay for health care, however, are fundamentally important for the discussion here. The question is how to structure financial incentives so that people use health services efficiently. This includes discouraging inappropriate or unnecessary care, but also encouraging people to get the right care, at the right time, in the right place.

One version of the policy discussion focuses on the importance of people understanding how much health care really costs, and exposing them to more of those costs. This should, the theory goes, create incentives for people to become more informed consumers. This is sometimes referred to making sure people have some "skin in the game." Another version is to expect people to take on more responsibility for their own health, and in particular for health problems that are a result of lifestyle choices, such as smoking, or becoming obese. In addition to directly shifting costs to some people (e.g., higher premiums for smokers), the increased cost sharing or higher premiums might create greater demand for effective prevention and health care management programs.

Other approaches seek to integrate evidence regarding the effectiveness of medical care and treatment alternatives into consumer decision-making. This can be done in a variety of ways, such as adjusting coinsurance for different services to reflect "value" (based on calculations of relative benefits and cost), or assigning health plans to different tiers that offer different levels

of cost sharing, based on efficiency and other performance measures. The policy goal is not only to use financial incentives to drive consumers to use the right sorts of care, but to use the market to drive providers to compete for patients based on their performance.

Contributing to broader social and political change. Restructuring the way that people pay for health care in America could also affect the political dynamics of government and its role in ensuring the well being and security of its citizens. Mechanisms for collecting payments for premiums or cost sharing can expand or reduce the roles of government, employers, or the private insurance market. Policy reforms will define responsibilities for administering program requirements such as eligibility, collecting revenues, organizing enrollee choice of plans or specific benefit options, or even designing the structure of cost sharing itself.³

Some approaches would build on social insurance principles. Income-related premiums or cost sharing tied to income can be structured to increase vertical equity, that is, allocate a greater share of health care costs to those who can afford it. Cost sharing can also be designed to promote horizontal equity, if it links standard cost-sharing protections across plan options that are available to everyone (Rice and Thorpe, 1993; Mossialos and Thomson, 2004). Conversely, reforms could set the stage for wider application of market-based approaches to providing insurance coverage, with greater emphasis on consumer choice and personal responsibility for health and health care.

II. Paying for health insurance coverage

The general framework described here begins with paying for insurance coverage, then turns to mechanisms for structuring cost sharing. For each, the options have been divided into a set of broad categories that are intended not to cover every possible approach, or even to be mutually exclusive, but rather to illustrate the implications of alternative approaches for

³ Detailed information about the administrative features of a variety of existing and proposed health coverage expansions is included in a report prepared for the National Academy of Social Insurance and the National Academy of Public Administration by C. Eugene Steuerle and Paul N. Van de Water, *Administering Health Insurance Mandates* (Draft report, 2007).

achieving policy objectives focused on resources, efficiency, and social or political change. Figure 3 illustrates the general framework and summarizes main points in the discussion developed in the next sections.

Figure 3: Evaluating Examples of Approaches to Paying for Health Coverage and Health Care

	Sustainable Revenue	Administrative costs/ burden	Health system efficiency	Broader social or political change
Paying for coverage				
Public programs				
Social insurance models: payroll or income tax	Significant potential to generate revenue	Low	Potential linkage to value-based premiums	Generally redistributes resources from higher to lower income people
Income tax credits	Will not generate new revenue without other tax changes to offset costs	Moderate	Potential linkage to value- based premiums	Progressive if credits are fully refundable
Means-tested premium assistance	Additional costs to government, possible offsets from other public programs	Moderate to high, depending on eligibility rules	Potential linkage to value- based premiums	Redistributes resources to low-income people
Employer-sponsored	insurance			
Fixed contributions/ price competition	Limited potential to generate savings for insurers/ employers	Low to moderate	Low to moderate, depending on scope of benefits, beneficiary characteristics	Generally regressive , more so if risk selection shifts costs to less healthy
Wage-related premiums	Low to moderate potential o generate savings for insurers/ employers	Low to moderate	Low, but compatible with other reforms	Redistributes resources to low-income families
Tiered premiums	Limited to moderate potential for insurers/ employer savings	Moderate	Significant potential over long term	Potential gains for all populations groups; dangers without adjustment to protect high cost/ risk groups
Cost Sharing			'	<u> </u>
Copayments and coin	nsurance			
+ Protections for vulnerable populations (e.g. (subsidies)	Revenue loss to government, possible offsets from reduced need for other public programs	Moderate to high	Potential linkage to value- based cost sharing	Redistributes resources to low-income people
+ Value-based copayments/ coinsurance	Mixed evidence regarding savings to insurers/ employers in short term	Moderate to high	Significant potential so savings over the long term	Potential gains for all populations groups; dangers without adjustment to protect high cost/ risk groups
Boundaries for cost				
- Deductibles	Moderate savings on premium costs for purchasers	Low	Limited potential to drive efficient use of services	Greater burden for low- income people
- High-deductible health plans	Mixed evidence regarding health spending; tax revenue loss to government under current law	Low to moderate	Somewhat greater potential linkage to value-based reforms due to greater amount "at risk"	Greater risk of increased costs to people in poor health; regressive under current tax rules
- Out-of- pocket maximums	Low to moderate increase in purchasers' insurance costs	Low to moderate	Potential linkage to value- based cost sharing	Limited protection for people in poor health, generally regressive (if not income-related)
- Benefit caps	Low to moderate decrease in purchasers' insurance costs	Low to moderate	Minimal potential to drive efficient use of services	Greater burden for low- income and people in poor health

Collecting the revenues to pay for coverage can be administered through public mechanisms, the private market, or a combination of the two.

Public programs

A variety of public systems collect, or oversee the collection of, premiums, fees or revenues for earmarked for programs that provide or pay for health care coverage. This discussion can be divided into three parts for the purposes here: social insurance models, income tax credits, and means-tested premium assistance.

Social insurance models

There are several ways that individual (or family) contributions to pay for health coverage are structured in public social insurance programs. In its simplest form, people pay taxes, such as a payroll tax, health tax, general income tax, or some form of excise tax. The revenues are applied to the costs of health coverage. In many public systems that provide universal coverage primarily through taxes, there is no insurance premium *per se*. In Israel, for example, premiums for health insurance were formally replaced in 1995 by a payroll-based health tax (Rosen et al., 2003). Some systems, however, such as Medicare in the United States, or the newly reorganized insurance system in the Netherlands, require people to pay both premium contributions for insurance and taxes earmarked for health coverage. Medicare enrollees pay premiums for the Supplementary Medical Insurance and prescription drug coverage, (Medicare Parts B and D) and people enrolled in the Medicare Advantage plans (Medicare Part C) also pay plan-specific monthly premiums.

Because they are universal and mandatory, social insurance programs can, in theory, raise significant revenue. How much depends on how the tax is integrated into the wider array of taxes. In the Netherlands, people pay what is referred to as "a nominal premium", designed to cover half the actual insurance costs; the other half is paid by employment-based social insurance revenue and special government subsidies to offset especially expensive cases. In the United States, payroll taxes for Medicare (1.45 percent of workers' pay) and Social Security (6.2 percent of the first \$102,000 of pay in 2008) amounted to more than federal income tax liability for about two thirds of taxpayers (individuals or households filing jointly)

(Burman and Leiserson, 2007). Premiums can also generate significant revenue. Medicare Part B premiums are structured to pay for a quarter of Medicare Part B costs.

Collecting revenues to pay for health coverage for a larger portion of the population in the United States could be relatively simple if it were integrated into existing payroll and tax systems. Coverage expansions could also draw on existing systems. Social Security has systems in place to coordinate with the Internal Revenue Service, and the Treasury Department. The complicated Medicare Part D system was up and running, and making progress toward meeting many of its administrative in a very short period (Kocot, 2007). But complexity of the Medicare reforms also illustrates potential administrative problems. Obtaining accurate information and processing the correct premium deductions has proved difficult. Initial glitches resulted in incorrect or missing Part D premium deductions from Social Security checks for about 500,000 Medicare beneficiaries (of 4.7 million who enrolled) (Appleby, 2007).

There is, however, no "off-the-shelf" equivalent of monthly Social Security checks from which premium deductions could be made if a Medicare-like system were used to expand coverage to working Americans. Some refinements to existing systems for withholding taxes, or tax credits (discussed below) would need to be put in place. If premium contributions were administered through the tax system, there would also be some administrative costs related to collecting premiums for the people who would need special payment options, such as people who do not need to file tax returns. This would be analogous to current efforts to process enrollment and payments from people who voluntarily enroll in Medicare.⁴

Structuring contributions (health taxes or premiums) in social insurance models provides an opportunity to achieve greater equity in access to insurance, and to health care. Specific design characteristics are, however, important. Because the payroll tax for Medicare is not capped, high income people contribute more, relative to lower-income workers, than they do

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⁴ Medicare and Social Security coordinate the process of enrolling and collecting premiums from individuals who are not otherwise entitled to participate in Medicare and enroll voluntarily, such as individuals who did not contribute to Medicare during their working lives. These program participants pay a monthly premium (standard premium of \$410 per month in 2006) to participate. Revenues from voluntary participants totaled about \$2.6 billion in 2006 (Trustees Report 2007).

for Social Security. But payroll taxes also place a greater burden on lower-paid workers, and fixed premiums can take a big bite out of small budgets. Other features of social insurance models contribute to horizontal equity, because they generally prescribing a standard premium for all enrollees. In Medicare, for example, the program equalizes premium costs for Part B coverage across markets that might otherwise vary significantly. This equalization can mean that people in high cost markets pay lower premiums than they would otherwise, but it also means that low-income people in poor or underserved areas have the same coverage as everyone else. This may help equalize access to care across urban and rural areas, and wealthy and poor market areas.

The tax system can also be used to augment revenues for insurance programs through special fees or tax levies or adjustments to premiums that target higher income taxpayers. Social Security and Medicare both employ tax surcharges for higher-income beneficiaries. Up to 85 percent of Social Security benefits of individuals, or couples with incomes exceeding certain levels beginning at \$25,000 for individuals and \$32,000 for couples filing jointly, are subject to taxation. Although the tax affects over one- third of all Social Security recipients, the bulk of the revenue comes from recipients with incomes over \$50,000, and even among those subject to the highest taxation formula the tax represents less than one-fourth of social security benefits (Ways and Means Green Book, 2004). Consequently, the revenues, which are divided among Social Security and Medicare Trust Funds, are modest. In 2006, Medicare's share of this revenue was \$10.6 billion⁵, about 5 percent of Part A income (Trustees, 2007).

Beginning in 2007, single Medicare beneficiaries with incomes of \$80,000 or more and couples with incomes above \$160,000 pay more than the standard Part B premiums. Premiums are adjusted upwards across five income brackets. Over a three-year period, the additional assessment will increase the percentage of the Part B premium paid by high income beneficiaries from the 25 percent of program costs that applies to other beneficiaries, to as

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⁵ The remaining revenues from the benefits tax went to the retirement trust fund (\$15.6 billion) and disability trust fund (\$1.2 billion).

much as 80 percent.⁶ The Part B income-related adjustment to premiums is expected to affect about 1.65 million beneficiaries enrolled in Part B in 2007 (4 percent). The incomerelated premiums are expected to generate about \$7.7 billion between fiscal years 2007 and 2011 (GAO 2006), less than one percent of the projected total Part B income for that period (about \$1.043 trillion) (Trustees, 2007).⁷

Administering these income-related premium contributions is relatively inexpensive, because much of the infrastructure is already in place. The Social Security Administration estimated, for example, that implementing income-related premiums would cost the agency an additional \$200 million in administrative expenses between fiscal years 2006 and 2010. This includes the costs of educating beneficiaries about the premium provisions, working with IRS to identify the people who will be required to pay the additional premiums, devising and implementing procedures for beneficiaries who request changes to their adjustment due to changes in financial circumstances, appeals, and so on (GAO, 2006). The process for requesting adjustments involves filling out an IRS form (Form 8821) that appears similar to other tax withholding forms.

The amount of revenue that can be generated through taxes that target only high income earners, such as the Medicare income-related premium, is limited, however, because income distribution is quite skewed. Unless the "high-income" definition is set somewhere in the range most people would think of as "middle income", or the tax rates are set very high, the tax does not affect enough people to generate a significant amount of revenue. These incomerelated premium contributions are technically progressive, but if they are applied to premium costs, the redistributive contribution is limited. If the rates are bracketed, the very highest

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⁶ For example, in 2009, a single beneficiary with an income under \$80,000 would pay \$93.50 per month, one with an income of over \$200,000 would pay \$\$299.00 per month (GAO, 2006).

⁷ The Congressional Budget Office has included a proposal to increase the fraction of beneficiaries who pay income-related premiums for Medicare Part B in its annual report on options for reducing federal spending. The proposal calls for eliminating inflation adjustments included in the current law, or reducing the income thresholds. CBO estimates these changes would reduce Medicare outlays by an additional \$3.3 -\$8.2 billion in the 2008-2012 budget window (CBO [b],2007). The Administration's 2008 Medicare budget proposal included a provision to eliminate annual indexing of the Part B income-related premiums, with projected savings of \$7.! billion over five years (2008-12), and also for establishing income-related Part D premiums using the same income categories, with estimated five-year savings of \$3.2 billion (HHS, 2007).

income taxpayers would not pay more than the merely very high income taxpayers. And, even at a one hundred percent tax rate, the additional liability for high income taxpayers is capped at the "official" value of the premium.

Social insurance taxes or income-related premium surcharges do not, unless tied to other reforms, provide an obvious means of promoting greater efficiency in the health care system. Even if people with high incomes use health care more inefficiently, it does not necessarily follow that increasing their premium costs would change their preferences. Theoretically, tax rates that effectively eliminate the federal subsidy for a social insurance program like Medicare could, rather, lead to a demand on the part of high income people to exit the program altogether. That could in turn lead to market segmentation, and resulting inefficiencies. This is unlikely, however, if there are no real alternatives for obtaining coverage, as is currently the case for Medicare beneficiaries in the United States.

Social insurance models can, however, integrate approaches that provide an impetus for greater health system efficiency. The Medicare Advantage (MA) program provides an example of using competition, including premium prices, to focus consumers on plan costs and benefits, and to stimulate health plans' focus on efficiency or quality of care. Assessing whether this particular example has in fact been successful is difficult, in part because it is difficult to sort out issues of risk selection and variations in benefits. In the Netherlands, everyone selects insurance plans in the private market. Insurers can offer somewhat different packages of optional benefits, fees and levels of deductibles, and can negotiate reimbursement rates with health care providers (Knottnerus, et al., 2007). The premium costs vary little across plans. One listing indicates the monthly premiums for competing plans in 2006 ranged from EUR 82.50 to EUR 89 (I Amsterdam, 2006). All the basic health plans are required to provide a comprehensive benefits package of services that meets established criteria of "demonstrable efficacy, cost effectiveness, and the need for collective financing." (Netherlands, Ministry of Health, Welfare and Sport, 2006). In the Dutch system premium

⁸ In additional to the basic insurance plan they select, people can also purchase supplemental policies to cover types of care or services not included in the Dutch standard benefit package. Private supplemental insurers are permitted to underwrite. In the first year of the reformed system (2006), no insurers chose to offer supplemental coverage (van Ginneken, 2006).

competition is explicitly intended to offer consumers choice "at the margins" and to promote efficiency in the management of insurance functions, rather than in health care delivery.

Whether premium competition provides a real impetus to greater efficiency may depend on whether the scope of benefits and out-of-pocket liability is addressed effectively. Differences in benefit design have the potential to allow healthier people (who may be less concerned about out-of-pocket risk) to sort themselves into low-premium plans. This would leave people with greater health risks in higher cost plans. Low cost plans would have financial incentives to dissuade potentially high-cost patients from enrolling in order to keep their costs down and market advantage in place; high-cost plans can be caught in a spiral of sicker enrollees needing more care, leading to even higher premiums.

Income tax credits

Tax credits become part of the health care cost equation when they are applied to purchasing insurance or paying for out-of-pocket health costs. The main focus here is on tax credits for individual taxpayers to use for buying insurance, rather than credits for employers to induce them to provide coverage. Different variants of tax credits can be applied directly to the purchase of public or private insurance in either group (employer-based) or individual insurance markets.

One example of a system already in place is the federal Health Coverage Tax Credit (HCTC) created for older workers who lost coverage as a result of international trade agreements that triggered job dislocations and reductions in benefits in affected industries. The credit pays 65 percent of the costs of health insurance premiums for eligible individuals enrolling in qualified plans. The credits are paid in full to everyone who qualifies and are fully refundable. Individuals can have the credits advanced to insurers monthly, before they file their tax returns (or claim the credit when they file their tax returns if they prefer). Initially touted as a model for larger scale efforts to expand health coverage (Pear, 2004), HCTC has had limited success. Just over one in ten eligible workers used the credit in 2007 (Dorn [c], 2007). As a model, however, the program is instructive.

In terms of revenue, HCTC is very small, because participation is low. An estimated 21,700-26,000 beneficiaries received the credits in 2005 (Dorn [d], 2006). The amount of the subsidies for 2005 (\$110 million) was 29 percent of what had been estimated when the legislation establishing the program was passed. Projections by OMB show that use of the credits is now expected to remain much lower than original estimates. The dollar value of the credits is critically important. One the one hand, the credits represents a seemingly large revenue outlay per eligible recipient (roughly \$4,600 per recipient in 2005) On the other hand, the single most important factor limiting the use of the credits, according to recent studies, is that coverage is still unaffordable for many workers, even with a 65 percent subsidy (Dorn [d], 2006).

Tax credits involve complicated administrative and regulatory issues. For HCTC, much of the administrative work involved in setting up the program, including coordination between the Internal Revenue Service and Treasury Department appears to have been efficient. However the application process is, according to recent reports, complicated and time-consuming, involving three or more public and private organizations. To be eligible to apply for the tax credit, workers must establish eligibility as "displaced" by foreign trade as defined in the legislation establishing the tax credit program. Although this is an issue specific to HCTC, it illustrates the difficulties that may emerge in new reforms that tie eligibility for participation to qualifications for other federal programs (Dorn [c], 2007). As discussed below, simpler application and enrollment processes that could be designed to administer tax credits are being developed in other programs, notably Medicaid. These systems would make greater use of computerized information maintained by the federal government or states, employers, and health plans (Etheredge, et al., 2007).

The systems that have to be put in place in HCTC to provide advance funding, so that people can get the money they need to actually enroll in health plans, proved to be burdensome. Individuals are required to pay premiums in full before obtaining a determination of eligibility, before advance payment begins. Some states cover this gap, using funds from Department of Labor grants; obtaining the grants and dispensing the assistance to applicants involves yet another set of administrative processes (Etheredge, 2007).

In part, administrative costs for tax credits reflect the starting up of new systems. But operational and administrative costs in the HCTC program remained high even after the program was in place for several years. An analysis of administrative issues in coverage expansions reported that the amount of information that had to be obtained, processed, coordinated, etc. in the administration HCTC, particularly for advance payments, led to IRS administrative costs for the program that are 88 percent higher than federal administrative costs for Medicaid/SCHIP (Etheredge et al., 2007).

Tax credits for health insurance also involve consideration of standards for health plans receiving premium payments funded by the credits. In the case of HCTC, payments must be applied to premiums for qualified plans, defined as employment-related plans that meet federal standards for continuing post-employment coverage, or state-qualified health plans. The structures for certifying plans are therefore those already in place. State insurance regulations vary significantly, and also differ from requirements for employer-sponsored plans subject to federal rather than state regulation. The plans that qualify for HCTC differ a great deal with respect to requirements for benefits offerings and medical underwriting (adjusting premiums to reflect risk factors such as age, gender, or health status). Some state-qualified plans offer only limited benefit packages. Many require high deductibles (\$1,000 or more), and many have strict limits on maternity care, mental health care, preventive care, or prescription drugs. Underwriting can also lead to premiums that are unaffordable for people who need insurance. For example, in one state, in 2004, the 35 percent portion of premium to be paid by a 55 year old woman with health problems was over \$4,000 (Dorn [c], 2007).

Tax credits could be integrated into reforms that promote more effective health care delivery (discussed below). The vehicles would be standards for the participating plans, and/or adjusting the amount of the credits to provide incentives to enroll in efficient plans. Conversely, without provisions to encourage plans to provide appropriate, effective services, affordability would be the dominant factor driving consumers, as it is in the HCTC model.

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⁹ According to one study, "During FY 2007, an estimated 13 percent of federal funding related to HCTC advance payment will be spent for health plan administration, 21 percent will pay IRS administrative costs, and 66 percent will purchase health care (Dorn [a], 2007)."

Like any other tax policy, credits can be structured to be progressive or regressive. The refundable federal Earned Income Tax Credit and Child Tax Credit slightly lowered the tax burden for low income families (Furman, et al., 2007). Refundable tax credits, because they do not depend on tax liability, are more progressive than taxl deductions (Burman et al., 2007; Antos, 2006).

Means-tested premium assistance

Most national health insurance system integrate some elements of social welfare protection for low-income people by subsidizing or waiving premiums (or health taxes) for low-income or other protected classes of people, such as people who are retired, unemployed, or disabled. In the Netherlands, low-income individuals receive premium subsidies based on level of need, and the government covers the cost of all premiums for children under the age of 18 (Gress et al., 2007); in Israel there are exemptions and discounts on health taxes for pensioners and low-income people eligible for income assistance (Rosen, 2003). Two sets of programs in the United State illustrate important aspects of this approach:

The largest is the complicated set of Medicare Savings Programs (MSP) that work with the federal/state Medicaid program to subsidize premiums (and sometimes cost sharing) for various categories of low-income Medicare beneficiaries. Federal law directs Medicaid to cover the cost of Medicare Part B premiums, and all Medicare deductibles and coinsurance, for Medicare beneficiaries who are eligible for full Medicaid coverage, and for some additional low-income beneficiaries. Another category of MSP pays just the Part B premium for people with incomes below 120 percent of poverty who do not qualified for the other programs. A separate program provides premium subsidies for the Medicare Part D benefit for low-income beneficiaries. About 7 million beneficiaries are dually eligible for Medicare and Medicaid (including those eligible for any of the Medicare Savings Programs).

Other examples are found among the growing number of state-based programs that provide subsidies to low income people to help them buy health insurance. Some provide subsidies directly to employers, some to individuals to apply to premium payments. The programs providing assistance directly to people for the purpose of buying coverage generally draw on

federal Medicaid or SCHIP funds under waivers designed to promote coverage expansions. ¹⁰ Premium assistance programs of some sort have been put in place in more than a dozen states, including Iowa, Illinois, New Jersey, Oregon, Pennsylvania, Rhode Island, Utah, Maine, Vermont, Washington, Oklahoma, and Massachusetts, and others are under development (State Health Initiatives, 2004; NGA, 2007). Enrollment in many of these programs has been small, with less than one percent of the relevant Medicaid or SCHIP populations enrolled (Alker, 2005). New programs, however, including Maine's Dirigo health reforms, and, most notably the Massachusetts program, are broader in scope. In Massachusetts, Medicaid expansions and the state's Commonwealth Care program initially provided premium subsidies covering 135,000 of the lowest income uninsured residents. The state recently announced plans to expand the premium subsidies so that individuals earning up to \$15,000 per year (families of four up to \$31,000) pay no premium; this was expected to include another 52,000 people (Dember [a], 2007).

In terms of revenue, premium subsidies in the United States currently represent a small proportion of government's health care outlays. Medicaid expenditures for Medicare premiums, including MSP programs, represented about 5 percent of Medicaid spending for dual eligibles in 2003 (Kaiser Commission, 2005). Premium assistance leveraged through Medicaid or SCHIP waivers for state-based programs is by design "budget neutral" because it is only permitted under federal law if expected costs would not exceed the costs of coverage for mandated benefits under the federal programs. Programs such as Massachusetts', however, do represent new spending. By November 2007, the state projected that enrollment in the Commonwealth Care premium subsidy program could reach 180,000 by June 2008, which would exceed budgeted revenues by \$147 million by the end of the fiscal year (Dember, 2007 [b]).

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¹⁰ Current law gives states the option of using the waiver process to subsidize the purchase of private group insurance plans for Medicaid beneficiaries and family members if the expected cost of buying the insurance would be less than the cost of paying premiums and cost sharing for them through Medicaid. SCHIP funds can also be used to purchase coverage for children, if the costs are not greater than the costs of them through SCHIP. States can use Medicaid and SCHIP funds to subsidize premiums for private insurance without waivers, if they ensure that the benefits and cost sharing do not fall below the standards required for the federal programs (Alker, 2005).

Premium assistance programs involve more administrative costs, oversight, and burden on participants than purely tax-based systems. Identifying people who may be qualified for the benefits, processing applications, verifying eligibility over time, adjusting subsidies due to changes in people's financial or family circumstances, and ensuring that the subsidies end up in the right place requires staff and data resources.

Many means-tested programs include both income and assets in determining eligibility. The MSP programs, for example, have resource limits as well as income limits. The low-income subsidy for Part D drug benefits also includes resource limits (these differ, however, from the resource limits for MSP). The costs involved in determining eligibility for premium assistance are often measured in terms of processing time. Studies in two states found that it took approximately 4 hours of staff time to process initial Medicaid applications (Summer and Friedland, 2002). Arizona eliminated the asset test for MSP in 2001, after a study they conducted found that the costs of documenting assets was roughly the same as the costs providing benefits to additional program participants enrolled as a result of not verifying assets (Summer and Thompson, 2004). A recent analysis of reform options conducted for New Mexico, estimated, based on information provided by state agencies responsible for administering five federal and state means tested programs, that program administration costs were \$125 per applicant in 2007 (Chollet et al., 2007).

In addition to inefficiencies created by multiple systems often spanning multiple agencies (issues that could be addressed) means tested premium assistance, by definition, involves obtaining and verifying information from people with limited resources. This characteristically results in gaps in participation in eligible populations. Estimates from the Government Accountability Office and the Congressional Budget Office indicate that less than half of seniors eligible for Medicaid are enrolled, and that less than one third eligible for premium assistance through the other MSP programs are enrolled in the programs (KFF, June

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¹¹ The Medicare drug benefit low-income subsidy applies a national standard for eligibility nationwide. The types of resources counted when determining asset levels also differ among the programs. The MSP programs are state-administered, and the states may apply more liberal standards than those set out as a baseline standard in federal statute to determine eligibility for MSP or for full Medicaid coverage. Four states, for example, disregard all resources for MSP (Nemore, et al., 2006). The Medicare Payment Advisory Commission has recommended that the criteria for eligibility for low-income assistance for Part D and for MSP programs be standardized, so that the Social Security Administration could identify and enroll people in both programs.

2005). About 70 percent of Medicare beneficiaries eligible for the low income subsidy for Part D drug coverage were receiving the subsidy in January 2007 (Kaiser Family Foundation, 2007). This higher participation rate reflects intensive efforts involving to identify eligible beneficiaries on the part of the Social Security Administration, CMS, the U.S. Administration on Aging, the states, and a large number of advocacy organizations, but also computer-assisted "auto-enrollment" of Medicaid recipients into the plans (Dorn [b], August 2007).

Efforts to improve program participation in Medicaid (and the Food Stamp Program) have demonstrated the effectiveness of systems that include greater use of electronic information systems in identifying people eligible for assistance, as well as obtaining and verifying applications and enrollment data). Simplified application forms, internet-based applications, and linkages among data systems that can instantly verify information could lead to greater efficiency in the administration of any means-tested or income-related system for providing or supplementing premiums. A serious obstacle, however, may be the lack of consistency across programs and localities in eligibility criteria (Dorn. [b]. 2007; Etheredge et al., 2007).

Premium subsidies tied to enrollment in efficient health care plans can provide a mechanism for driving health system performance. A growing number of states, including Maine, Oregon, and Pennsylvania, have combined premium assistance reforms with comprehensive efforts to improve quality and efficiency in the health delivery system. In Washington, comprehensive system reforms enacted in 2007 created sliding scale premium subsidies for individuals who earn less than 200 percent of the federal poverty level, while other reforms established requirements that plans contracting with the state incorporate specific types of benefits designed to promote better care and improved care management (NGA, 2007). Other states would prefer to take a very different approach, based on the view that efforts to move more low income people into private coverage would benefit from more flexibility in benefit design and the structure of enrollee cost sharing. Greater market competition would, in this view, increase system efficiency (NGA, 2006).

Premium assistance is designed to redistribute resources to low-income people. The extent to which premium assistance results in equalizing access to coverage depends on the scope of

benefits. Subsidizing premiums for a standard benefit, such as Medicare Part B, clearly redistributes resources to low income beneficiaries. Subsidies to purchase coverage with more limited benefits than are available through public programs, or limiting subsidies to a level that relegates low income people to a range of "second tier" plans is rather different.¹²

Employer-sponsored insurance

The private insurance market is divided among the employer-based large group market, the small group market, and the individual market. The employer-based market provides the great majority of private coverage, and many of the innovative strategies for structuring how people can contribute to the costs of coverage have originated in the large group market. Efforts to bolster the small group and individual markets, however, also provide some lessons for possible reforms.

Fixed contributions

Most employment-based insurance involves fixed contributions by employees to cover some proportion of health insurance premiums arranged for their employees. There are, however, ways that employers can adjust premium contributions by employees to reduce their organizations' insurance costs, promote better health and more efficient health care for their workers, or address goals related to attracting and retaining the workers they need.

The goals of employer efforts to structure premium contributions are not precisely the same as those of public programs. Employers clearly want to find ways to control the growth of their health insurance costs, and like public programs, they can do that by shifting costs to employees, or by creating financial incentives to use services more efficiently. But they also want to attract and retain a productive workforce. Health insurance as a percent of total compensation has increased over the past decade (National Center for Health Statistics, 2006).

¹² Discussion about "crowd-out" -- when people opt out of private health coverage to enroll in public programs designed to expand coverage to uninsured populations – often fail to address how the scope of coverage and benefits offered by employers or in the individual market compares to public coverage.

As a result of this balancing act, as noted earlier, while employees are paying more, the percentage of premiums costs that employers pay has been fairly stable (Kaiser/HRET, 2007).

The most obvious use of variable premiums by employers is exposing employees to some level of price competition – employees pay more to enroll in a higher cost health plan. Most firms –87 percent in 2007–however, offer only one type of health plan. About half (49 percent) of covered workers were employed in firms that offer more than one plan (Kaiser/HRET, 2007).¹³

Wage-related contributions

Although the practice is not widespread, some private as well as public sector employers require higher wage employees to contribute more toward health insurance premiums. In 2005, the Kaiser/HRET Survey of Employer-Sponsored Health Benefits found that about one in ten workers covered by employer-sponsored health insurance were in firms that adjusted premiums by wage rate¹⁴ (Figure 4). Several state governments, including West Virginia, Hawaii, New Mexico, Massachusetts, and Illinois vary premiums by wage level (NCSL, 2007; Illinois CMS, 2007; Hunt, et al., 2006) as does the California State University system for its more than 40,000 employees.

These wage-related approaches vary in design. One large nonprofit association set up a system that divides the workforce into six income brackets. Pretax payroll deductions for health premiums for employees in the lowest wage bracket (less than \$35,000 annual salary) cover about 9 percent of the cost of the premium for the four plan offerings. Employees with salaries over \$100,000 pay about 30 percent of the total premium cost. The University of California system uses four income tiers (less than \$40,000, \$40-80,000, \$80-120,000, and

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¹³ As noted by the authors of the Kaiser/HRET Survey of Employer Sponsored Health Benefits, firms that offer more than one plan do not necessarily offer all plans to all employees. Therefore it possible that the 49 percent figure reported in the Kaiser/HRET 2007 survey overestimates the percent of employees actually able to choose among two or more plans.

¹⁴ Data from the Bureau of Labor Statistics National Compensation Survey, which includes only private sector establishments, show lower rates of employees whose contributions vary by wage rate. The National Compensation Survey data for March 2007 show that 5 percent of employees with single coverage and 4 percent with family coverage were in plans that vary premium contributions by characteristics including wage rate, length of service, or age (BLS, 2007). These statistics have been stable over the past three surveys (2005-2007).

over \$120,000 (Hunt, et al., 2006). The University of Rochester recently changed its premium assessment formula, requiring employees with salaries over \$100,000 to pay a higher proportion of premiums, while lowering the contributions for employees earning less than \$40,000. The formula was designed to result in university employees paying approximately 20 percent of premiums. Prior to the change, all employees contributed a flat 18 percent of total premium costs for the plan they selected (University of Rochester, 2007).

The fact that some employers have opted to adjust premium contributions from pretax wages is noteworthy. There are clear tax advantages to employers and employees to structure compensation in the form of benefits rather than wages, because benefits are not subject to payroll taxes (for employers or employees). Assuming (as many analysts do) that benefits are not additions to income, but are traded off against cash income, then effectively reducing benefits to higher income employees increases employers' payroll tax liability, and increases the proportion of employees' compensation subject to both payroll and income taxes. But because the premiums are deducted from pretax income, higher income taxpayers can take advantage of the rules to offset some of their increased premium costs.

Tiered premiums

Employers also use premiums as incentives for employees to choose particular types of coverage, or to change their health behaviors. A growing number of employers are offering premium incentives to employees who enroll in wellness programs, or plans that offer particular programs designed to manage ongoing health problems (Figure 4).

In 2007, the Kaiser/HRET survey found that six percent of covered workers were employed in firms that vary premiums based on participation in wellness programs, twice as much as in 2005. The increase was entirely among workers employed in larger firms with 200 or more workers.

Figure 4: Percentage of covered workers in forms of employer-sponsored insurance that vary premium contributions by wage level or by participation in wellness programs, by firm size and region, 2007

Firm Size	Percent of firms that vary worker contributions by wage level	Percent of firms that vary worker contributions by participation in a wellness program
All small firms (3-199 workers)	2%*	1%*
200-999 workers	10%	7%
1,000-4,999 workers	15%*	10%*
5,000-or more workers	16%*	9%*
Region		
Northeast	18%*	9%
Midwest	8%	7%
South	10%	5%
West	5%*	5%
All firms and all regions	10%*	6%

^{*} Distribution is statistically different from all firm sizes and regions at p<.05.

Source: Kaiser/HRET Survey of Employer-Sponsored Health Benefits, 2007, Exhibit 6.18.

Employers, often in collaboration with broader private and public/private initiatives, are also devising systems that link premium contributions to enrollment in health plans deemed to be more efficient.

An example is the State of Wisconsin Group Health Insurance program, administered by the state's Department of Employee Trust Funds. The largest purchaser of health coverage in the state, the program is responsible for coverage for more than 250,000 active state and local government employees and 115,000 retirees and their dependents (Silow-Carroll [a], 2007). The Department assigns plans that qualify for participation to one of three tiers, based on the relative efficiency of the plans in delivering a standard set of benefits defined by the state. In addition, the plans are graded on measures of quality, patient safety, and customer satisfaction. Premiums for the highest -rated tier (Tier 1) are significantly lower than lower tiers. Most plans qualified as Tier 1 plans in 2007 (Wisconsin, 2007). The employee share for most family coverage under Tier 1 plans, for example was \$68.00 per month; for Tier 2, \$150.00; the single Tier 3 "Standard" plan cost active employees \$358.00 per month for family coverage.

Whether premium-based incentives can generate significant savings for employers remains unclear. Even when the incentives are large, as in the Wisconsin state employee program, and people choose to enroll in more efficient plans, employers are still responsible for paying the bulk of premium costs.

Analysis of savings suggest that the slower rate of increase in insurance premium costs in the three years after the program was put in place may not have differed significantly from the slower rate of premium growth nationally (Silow-Carroll [a], 2007).

There are also potentially difficult issues related to the administration of some of the more sophisticated approaches to structuring premium contributions. Simply adjusting contributions by wage level is straightforward and inexpensive. Employers have expressed concerns, however, that complications arise if couples work at the same company (Hunt 2007).

Designing systems that include the evaluation

BOX 1

Research examining premiums costs has focused on price sensitivity, that is, among people who have the opportunity to select plans, how do people make decisions that involve trading off price against other plan characteristics, such as out-of-pocket liability or coverage of particular services? Within this literature, there are several fairly consistent findings that are particularly relevant:

- Premium increases are associated with reductions in insurance coverage among non-elderly Americans (Chernew et al., 2005).
- Given the opportunity to choose among plan alternatives, premium costs are a significant factor affecting plan choice (Abraham et al., 2006; Buchmueller, 2000). However, older people, people with health care problems, and people who want access to particular provider networks are less price sensitive (Florence et al., 2006).
- Some employees, particularly young, low-income workers, will opt not to enroll in health coverage even if it is heavily subsidized. (Royalty, 2005; Marquis, 2004; Cooper al., 2003; Chernew et al., 1997).
- Even relatively modest increases in premiums can result in significant reductions in enrollment in plans designed for low-income populations. (Artiga and O'Malley, 2005; Ku and Wachino, 2005).

of complex health care cost and quality information requires an ongoing commitment of professional and technical resources. Helping employees understand plan options -- what to look for, what the measures of quality mean, and so on, can also require considerable resources.

Health care providers, researchers and employers alike believe that incentives geared to driving enrollment to more efficient plans can lead to more effective care management and prevention of illness (Hunt, et al.; Hewitt LLC, 2007; Braithwaite, and Rosen, 2007; Fendrick and Chernew, 2006). These improvements are difficult to measure, and might take a long time to materialize (Orszag, 2007).

Varying premiums rates can also raise issues of fairness. Requiring higher-income employees to pay a larger share of their health insurance premiums is progressive, but this progressivity is diluted by treatment of health benefits as pretax income. In addition, the contribution rate is based on an individual employee's wage rate, not family income, and assets are not considered at all. Lower wage workers with higher-wage spouses could receive a windfall.¹⁵

Other forms of adjusting premiums also raise some equity concerns. Relating premiums to behavior, e.g., requiring higher contributions from employees who do not want to participate in wellness, disease management, or smoking cessation programs, etc., could be viewed as a form of "cherry picking," that is, a way to single out and possibly drive less healthy people from the workforce, and out of the employer-sponsored insurance market.

III. Cost sharing for health care services

Cost sharing may be divided in two parts: crafting designs for copayments and coinsurance; and establishing boundaries for financial liability, through deductibles, caps on out-of-pocket payments, or insurance protection (or lack thereof) from very high medical costs. In reality, these are interconnected, and intertwined with coverage and benefit design. That is, how much one has to pay depends on what is covered, under what circumstances, and how much is covered. A brief overview of the two aspects of cost sharing techniques illustrates some salient issues. The policy implications are then considered together, in the broader context of people's overall exposure to health care costs.

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¹⁵ One state university system recently decided against moving to income-related premiums, in large part because of the problem of perceived fairness associated with basing the premium on only the employee's wage.

Some cautions are necessary before venturing through the minefield of cost sharing.

First, discussions about the structure of health insurance coverage and benefits in the United States generally use employer-sponsored insurance as a benchmark. Most private insurance is provided the large group market. It is important to keep in mind, however, that there is a great deal of variation in cost sharing within the employer-sponsored market. Overall, small employers have more limited resources and fewer options for obtaining coverage for employees, and the coverage they can obtain tends to be more expensive than what can be purchased at the group rates available to large employers. Employees in small firms therefore, on average, pay higher premiums for coverage that requires more cost sharing (Kaiser/HRET, 2007).

Second, health insurance that is available in the small group and individual markets is usually less generous and more expensive than coverage in the employer-based group market (Gabel, 2002; Gencarelli, 2005). Similarly, health insurance programs created to help people who cannot buy insurance in the private market often include relatively limited benefits, and higher premiums compared to insurance available in the large group market (Chollet, 2002; Pollitz, 2005). The illustrations here do not provide a complete picture of cost sharing, just some examples that introduce issues that might inform future deliberations.

Copayments and coinsurance

At the simplest level, coinsurance or copayments are supposed to do two things: increase the percentage of insurance costs paid by the insured person, and counter "moral hazard." As defined colloquially by Mark Pauly, moral hazard manifests itself when patients show up in the doctor's office saying "That's OK, doc, the insurance will pay for it" (Pauly, 2007). ¹⁶

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¹⁶ The more formal definition offered by Pauly is, "Moral hazard in insurance occurs when expected loss from an adverse event increases as insurance coverage increases." (Pauly, 2007).

Nominal fees, such as \$10 per visit to a health plan primary care provider, are not (at least in the United States¹⁷) commonly viewed an effective means of dealing with moral hazard. Copayments are, nevertheless, the most common form of cost sharing for visits to in-network physicians for people with employer-sponsored insurance. The copayments might best be viewed as fees that cover some of the administrative costs for visits, such as scheduling and record keeping. For out-of-network physician visits, coinsurance is the most common form of cost sharing in employer-sponsored plans. The coinsurance rates may, moreover, be quite steep. In 2007, the average coinsurance rate for out-of-network office visits was 33 percent. This approach provides clear incentives for people to choose in-network physicians.

Although coinsurance is generally more common in the employer-based group market, health plans sometimes include significant copayments for hospital admissions or outpatient surgery; copayments for emergency room or urgent care services are common (Kaiser/HRET, 2007). MA plans also employ a variety of both copayment and coinsurance cost-sharing designs for different Medicare-covered services such as durable medical equipment, physical therapy services, and emergency and urgent care as well as for hospital care and physician visits.¹⁸

There are two areas where refinements to cost sharing that may be particularly salient when considering reform strategies: protecting vulnerable populations, and linking cost sharing to improved "value."

Protecting vulnerable populations

Most national health systems that utilize cost sharing waive some of all cost sharing for some segments of the population, as they do for premiums In addition to people below some designated income level, including beneficiaries eligible for Medicaid or several other low-income groups covered by the Medicare Savings programs, some systems reduce or waive

¹⁷ The National Health Insurance universal health care system introduced in Taiwan in 1995 included the imposition of a \$5 copayment for outpatient visits to clinics and \$8 copayment for hospital outpatient clinic visits. There is no copayment for preventive services, and low income people are exempt from the copayments. From the perspective of two researchers evaluating the Taiwanese reforms, "The introduction of cost-sharing provisions might have reduced the utilization rates of previously insured people who had smaller copayments before the NHI." (Lu and Hsiao, 2003).

¹⁸ See the Medicare Payment Advisory Commission, Report to the Congress: Benefit Design and Cost Sharing in Medicare Advantage Plans, December 2004.

cost sharing for additional populations, including elderly or retired persons, people who are unemployed or those who have serious health problems.

Taiwan exempts poor households from all copayments and coinsurance (Lu and Hsiao, 2003). Israel exempts welfare recipients from copayments for physician visits, and sets quarterly ceiling on copayments at the household level, with a separate ceiling for the elderly set at 50 percent of the national ceiling (Rosen, 2003). In France, patients with a wide range of debilitating or serious conditions, including diabetes, AIDS, cancer, and psychiatric illnesses are exempted from paying inpatient hospital copayments as well as the 30 percent coinsurance normally paid for physician care. In addition, the French system exempts people from copayments for maternity care, care for serious accidents at work, and for very high-cost hospitalizations (Rodwin and Sandier, 2007). France also provides a variation of supplemental insurance coverage to low-income people that covers most cost sharing. About eight percent of the French population is eligible for this coverage (Buchmueller and Couffinhal, 2004).

Establishing limits on cost sharing in insurance plans (discussed below), when focused in particular on plans that serve low-income populations, provides another policy option. The Massachusetts Commonwealth Choice program offers three tiers of insurance products designed to ensure that options are available to people who did not have coverage previously, and, as discussed above, provides subsidies to help low-income people pay for coverage. The level of cost sharing varies across three tiers of plans, but the state also sets limits on the total amount of cost sharing (to become effective in 2009) for all products (Felland et al., 2007). People receiving subsidized insurance through the Commonwealth Care program are limited to health plans with low cost sharing.

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¹⁹ Thirty illnesses qualify patients for exemptions from copayments. A so-called thirty first illness, defined as degenerative disease not included in the thirty designated conditions, can also qualify for exemption. There is a a process for applying for exemption status for the 31st illness and for other illnesses as well (Rodwin and Sandier, 2007).

²⁰ Bronze" plans require a deductible and copayments (drug coverage is optional), while "Silver" plans have moderate copayments, no deductible, drug coverage, and "Gold" plans have lower copayments and no deductible (drug coverage is required). Premiums vary among the plans in each tier, but Bronze plans are generally the least expensive, and Gold plans most expensive (Felland et al., 2007).

Approaches designed to link cost sharing directly to income have been proposed (see Rice and Thorpe, 1993; Gruber, 2006; Furman, 2007). In government-run programs, the tax

system provides a ready mechanism for relating health expenditures to income. Under current tax rules, Americans can deduct the amount of unreimbursed medical and dental expenses that exceed 7.5 percent of adjusted gross income. An infrastructure for reporting medical expenses and for adjusting taxable income based on this information is therefore already in place. Various proposals have outlined ways that health care expenses could be integrated into tax calculations, using some form of deductible base amount, or tax credit, with higher-income people eligible to apply smaller offsets. The complexities of coverage in the current health care environment could, however, make the process of tracking covered versus uncovered expenses difficult for individuals, providers, and insurers (Merlis, 2007).

Promoting value

Varying cost sharing to improve efficiency or quality of health care can take a variety of forms. Some plans reduce or eliminate cost sharing for services they want enrollees to use. One large employer, for example, devised an approach to reduce

BOX 2

Medicare's fee-for-service cost-sharing design could be described as "when good cost sharing goes bad." In 2007, Medicare required an inpatient deductible (\$992), coinsurance for lengthy hospital days (\$248 per day after 60 days, \$496 per day for days 91-150); skilled nursing home days (\$124 per day after day 20); coinsurance of 20 percent for most Part B services (physician and outpatient and laboratory services, ambulatory surgery, equipment); and 50 percent coinsurance for outpatient mental health services. Inpatient coverage ends after a total lifetime limit is reached. Some preventive services require no coinsurance. Because beneficiaries face high out-ofpocket costs if they experience even a single serious illness or injury, most obtain supplemental coverage, mostly through employer-sponsored retiree benefits, individually purchased Medigap policies, or Medicaid. Less than ten percent of beneficiaries have no supplemental coverage.

Beneficiaries with only Medicare coverage are more likely to report problems getting health care, including urgent health care. Those with supplemental coverage use more health care, including both Medicare and uncovered services and supplies than those without supplemental coverage (MedPAC, 2007). Some recent research suggests that even relatively modest cost sharing can affect how beneficiaries with chronic health problems use physician care and prescription drugs. If so, some of the savings that might be attributable to cost sharing on the outpatient side may be offset by the costs of avoidable inpatient care. Most of these costs would accrue to Medicare, rather than supplemental insurers (Chandra et al., 2007).

the likelihood that its new high deductible plan would keep employees from using preventive services. While deductibles as well as cost sharing for many services, including physician visits increased, most preventive services were exempted from cost sharing. Initial analyses indicated that the use of preventive services did not decline after the new policy was put in place (Busch et al., 2006).²¹

Tiered cost sharing applies the same concepts and many of the same methods as tiered premiums programs such as the Wisconsin model. In Minnesota, the Department of Employee Relations (DOER), which buys insurance for about 120,000 state employees and their families, worked with an alliance of health care and professional organizations as well as business groups to craft a "value-driven" benefits plan called Minnesota Advantage. The system uses detailed information on quality and performance to assign primary care clinics into tiers. Copayments and coinsurance are lower for the higher-rated clinics. There are also reduced copayments for members who participate in a health assessment²² (Silow-Carroll and Alteras [b], 2007).

Sophisticated clinical applications of value-based cost sharing are also being implemented, including programs that reduce copayments for specific drugs used to manage serious chronic conditions including diabetes, asthma, and hypertension. A program at the University of Michigan focused on diabetes care extends the concept of tiers by directly link information on clinical effectiveness to cost sharing to individual patients. Using specialized data applications, the program created differential copayments based on patients' characteristics, reducing copayments for specific treatments that have the highest value for individual patients (Chernew et al., 2007).

Setting boundaries for cost sharing

While specific copayment or coinsurance designs create incentives related to using particular health care services, the way that costs add up creates another layer of incentives. This can be

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²¹ Many health plans (particularly HMOs) do not require people to reach their deductibles before covering preventive services, but cost-sharing may be required.

²² Employees are not required to take any action subsequent to the assessment.

exceedingly difficult to sort out. Deductibles create the lower bounds of what people (individuals or family units) have to pay for particular services, classes of services, or overall, before insurance kicks in. Out-of-pocket limits create the upper bounds of what people have to pay out-of-pocket for health care. Maximum benefit limits place upper bounds on what insurance will pay for a particular service, types of services, or altogether, for a year, or for a lifetime.²³

Deductibles

In general, deductibles are used to reduce the total amount of risk covered by insurance. Deductibles provide a means of "buying down" the amount of coverage. The Netherlands offers a simple illustration: people can choose the "risk amount" they want in their insurance policy, either none, or EUR 100, 200, 300, 400 or 500' the higher the risk amount, the lower the premium. The use of deductibles in the United States has evolved and taken on new roles in different insurance products. Deductibles are most common in loosely-structured arrangements such as preferred provider organizations (PPOs), where they are used in a manner very much like coinsurance, tailored to create incentives targeted to different types of services. Some health plans have separate deductibles for hospital care or outpatient surgery rather than copayments (Kaiser/HRET, 2007). Almost half (47 percent) of workers in private industry are in plans that have different deductibles for inside versus out-of-network care (BLS 2007). In the same vein, insurers may cover some services without patients having to reach the deductible, e.g. preventive services, prescription drugs, or physician office visits, to remove potential barriers to patients seeking appropriate care (Kaiser/HRET, 2007).

Deductibles have become larger over time. For example, among workers in PPOs who had a general deductible, the percentage with deductibles of less than \$500 dropped from 86 percent in 2000 to 64 percent in 2007, while the percentage with deductibles of \$1,000-\$2,000

²³ The Bureau of Labor Statistics National Compensation Survey report Employee Benefits in Private Industry in 2005 (published in 2007) includes 40 tables on health benefits, including 11 itemizing the prevalence of various forms of limits on coverage in indemnity plans (deductible limits, out-of-plan coinsurance limits, maximum out-of-pocket coverage limits, maximum insurance coverage limits) and more tables on limits on prescription drug coverage, substance abuse and mental health, and dental care limits. The Kaiser/HRET Employer Health Benefits 2007 Annual Survey includes 18 tables that describe various characteristics of deductibles for various types of services, and seven that describe the structure and prevalence of out-of-pocket maximum designs.

increased from 1 percent to 10 percent (Kaiser/HRET, 2007).²⁴ This is parallel to, but distinct from, the development of officially-designated "high-deductible" plans.

Employer-sponsored coverage and individuals can, under current law, organize coverage that is built on a framework of high deductibles, coupled with a savings plan that allows people to set aside pre-tax money to pay for health care until the deductible has been reached.²⁵ The plans can be offered with Health Savings Accounts (HSAs), or health reimbursement arrangements (HRAs).²⁶ In 2007, HDHPs are required to have minimum annual deductibles of \$1,050 for self-only coverage (\$2,100 for family coverage). HDHPs may provide preventive benefits without a deductible, or at a lower deductible than the HDHP general deductible. People can contribute to HSAs so the savings accounts cover the costs of the deductibles, up to limits specified in law (\$2,700 for single coverage, \$5,450 for family coverage). Another version of these plans can be offered by employers, or established through financial institutions by self-employed individuals and some employees of small employers (called Archer MSAs).

The Kaiser/HRET 2007 survey found that ten percent of firms offered health benefits under HDHP/HRA or HSA arrangements. Five percent of workers with health coverage were in these plans. The average general deductible for single coverage in HSA–qualified HDHP plans was \$1,923, and the average aggregate deductive for family coverage in HSA-qualified HDHP plans was \$3,883. An estimated 3.2 million policyholders and dependents were covered by HDHP/HSAs in 2006 (Kaiser/HRET, 2007).

²⁴ In 2007, the average deductible for single coverage was \$401 for HMOs, \$461 for PPOs, and \$621 for point-of-service (POS) plans. The average aggregate deductible amount under family coverage was \$759 for HMOs, \$1,040 for PPOs, and \$1,359 for POS plans (Kaiser/HRET, 2007).

²⁵ The Dutch reforms introduced a variant on HSAs called "no claim" amounts. The premiums include a set-aside of EUR 255. Any unclaimed portion of this amount is refunded by the insurance carrier at the end of the year. A mandatory 150 euro deductible replaces the no-claim amount in 2008.

²⁶ HRAs are funded entirely by employers. Funds are set aside for employees to use to pay for premiums or

²⁶ HRAs are funded entirely by employers. Funds are set aside for employees to use to pay for premiums or medical expenses. Unspent funds can generally be carried over from year to year, but if the employee leaves, the funds do not come with them. There is no legal requirement for minimum deductibles in health plans offered with a HRA.

Out-of-pocket maximums

Most employer-sponsored coverage includes some form of cap on out-of-pocket costs. Close to 70 percent of employees are in plans that have some form of cap on out-of-pocket liability. The design of these caps varies. The out-of-pocket limits may not include all out-of-pocket costs, such as deductibles, office visit coinsurance, or prescription drug coinsurance, and out-of-pocket limits are more common in some types of health plans than others. HMOs and PPOs are less likely to require general deductibles, and also less likely to have out-of-pocket maximum amounts (Kaiser/HRET, 2007). In other words, plans that require less cost sharing up front may be less likely to have out-of-pocket maximums.

Generally, the maximum amounts for single coverage in employer-sponsored insurance range from \$1,000 - \$3,000. About a fifth of workers with single coverage have out-of-pocket limits set at amounts greater than \$3,000. Out-of-pocket maximums for family coverage are about twice as the limits for single coverage, with most set at \$2,000-\$6,000, and close to one in five at some amount greater than \$6,000. The statutory requirements for HDHP plans set maximums for annual out-of-pocket expenses at \$5,500 for single coverage and \$11,000 for family coverage (Kaiser/HRET 2007).

The largest single national health plan, Medicare does not have out-of-pocket caps. If a beneficiary remains in the hospital for more than 90 days, and also uses up the "lifetime reserve" days, or stays in a skilled nursing facility more than 100 days, Medicare coverage ends. Beneficiaries are wholly responsible for these costs (which is another reason most seek supplemental coverage). There are no ceilings on Part B coinsurance, and while Part D pays 95 percent of prescription drug costs after beneficiaries reach the limits of the "coverage gap" (requiring \$3,850 in out-of-pocket spending in 2007), total liability thereafter is not capped.

Out-of-pocket maximums can play an important role in the balancing the positive effects that cost sharing incentives can have, i.e., moderating the unnecessary or inappropriate use of health services, with the negative consequences it can have, i.e., creating barriers to appropriate care. The Medicare program asks participating MA plans to include out-of-pocket cost limits in their benefit designs. Plans that set the maximums at the or below the amount recommended by CMS are given greater latitude in the design of cost sharing for individual covered services (see Box 3).²⁷

Benefit caps

From the perspective of insurance theory, the most important reason to have health insurance is to obtain protection from potentially catastrophic, unpredictable medical costs. Health insurance in the United

BOX 3

The Medicare Advantage program provides an illustration of how hard it can be to get cost sharing "right." MA plans must cover the basic Medicare package, but plans have flexibility in designing additional benefits and cost sharing for basic as well as and additional benefits. The total amount of cost sharing for plan enrollees as a group cannot exceed the average level (actuarial amount) of cost sharing in feefor- service Medicare. Plans can reorganize cost sharing requirements as long as they meet statutory and regulatory requirements that prohibit structuring benefits or cost sharing in ways that intentionally deny, limit or condition coverage or benefits to discriminate against enrollees based on their health care needs, or affect beneficiaries' decisions to enroll or disenroll. The review process includes a detailed benefit-bybenefit assessment of whether each plan meets requirements for benefits, cost sharing, and beneficiary protection.

Despite these protections, cost sharing in the plans has raised concerns. An analysis completed in 2004 found that estimated cost sharing in three different MA plans (surgery, outpatient procedures, office visits, lab costs, and chemotherapy) for a beneficiary newly diagnosed with stage III colon cancer ranged from \$1,990 to \$7,100 for one year (MedPAC 2004). Medicare subsequently intensified its review of costsharing for chemotherapy, as well as other services used disproportionately by people with serious health problems. More recent analysis found that cost sharing can still result in significant exposure to out-of-pocket costs in some MA plans (Biles, 2006). Beneficiaries who find themselves facing high cost sharing cannot change plans until the next open enrollment period. Enrollees in MA plans cannot purchase Medigap policies.

States addresses this potential risk, but with limits. If comprehensive coverage expansions are implemented, some consideration will need to be given to how to deal with catastrophically large health expenses. Federal labor and disability protections set out in law and regulations prohibit insurers from applying caps on coverage that are directed at an individual based on his or her health condition. Plans can, however, place dollar limits, as well as limits on utilization, on particular types of care, or treatment of particular conditions, as long as the

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²⁷ The recommended out-of-pocket maximum amount for Medicare-covered services for MA plans in 2008 has been set at \$3,250 (Block, 2007).

provisions are applied uniformly to all plan participants. The limits can be a dollar maximum per day of care, or dollar ceilings on benefits for particular services, such as extended care, home health care, hospice care, or mental health or substance abuse services. In addition, employer-sponsored coverage often includes a lifetime maximum, that is, a dollar amount beyond which benefits end. More than half of workers were in plans with lifetime limits in 2007. The majority of limits were set at one million dollars or more (Kaiser/HRET, 2007). Lifetime limits can be significantly lower in small group or individual market insurance products.²⁸

The most direct way to deal with catastrophic health care bills is for government to assume the costs. In France, the government pays coinsurance for people with very high costs for an illness or accident. In the United States, a provision in Medicaid allows states to establish medically needy programs designed to cover people whose medical expenses are very high but whose incomes are above the level that would otherwise qualify them for assistance. This includes people facing very high recurring expenses related to a disability or serious chronic illness, a catastrophic illness or accident. Not all states have medically needy programs, however, and eligibility standards vary from state to state. In 2003, total enrollment in Medicaid medically needy programs was about 3.5 million people, and total spending for the programs nationally was about \$27.4 billion (Crowley, 2003; Kaiser State Health Facts, 2007). The Veterans Health Administration also takes on the costs of care for veterans unable to afford out-of-pocket costs required from other providers, including a large number of veterans enrolled in Medicare who have no other form of supplemental coverage (Hynes et al., 2007).

²⁸ In some of the high risk pools set up by states to help otherwise uninsurable people coverage, the caps are often lower. In three states, risk pool coverage included lifetime caps of \$200,000 (Chollet, 2002).

Risk pools and reinsurance schemes designed to stabilize the small employer or individual markets can be designed so that they offer some protection to people with high medical expenses. ²⁹ The Healthy New York program provides access to coverage for employers of

low-to-middle income employees, sole proprietors, and individuals. The state contracts with HMOs directly, and provides reinsurance for the people who enroll. Employers and employees, or individuals, pay a community-rated premium and enrollees have a standard benefit package with cost sharing. After the costs of care, including required cost sharing reaches a specified level, the reinsurance kicks in.

This design would not, however, be easily transferable. First, the state pays for the reinsurance.³⁰ Second, New York requires all insurers to offer individual coverage to everyone, at the same cost, without regard to health

BOX 4

Much of the discussion about cost sharing centers on economic theory and the results of the most sophisticated effort to test theories about cost sharing, the Rand Health Insurance Experiment. Syntheses and reviews of the existing research on cost sharing, including recent work by CBO (2006) Davis (2004), Gruber (2006), Pauly (2007), and Braithwaite and Rosen (2007), generally come to similar conclusions, following Gruber's presentation, as follows:

- Cost sharing –coinsurance or copayments affects utilization and expenditures for health care. Higher coinsurance reduces overall use of services.
- People who respond to financial incentives (higher cost sharing) by reducing their use of services are for the most part just as likely to forego types of health care that are "essential" or "effective" as services that are "ineffective" or "discretionary."
- Higher coinsurance rates do not appear to have significant health consequences for average (in terms of income and overall health status) people;
- Cost sharing that is not adjusted for income can lead to negative consequences for people who are poor or in poor health. People who are both poor and in poor health are particularly likely to experience negative health outcomes if they do not get care.

²⁹ Some state reinsurance programs, including ones in Massachusetts, Connecticut, and Idaho, allow insurers to reinsure any individual in the plan. Other models, such as the New Mexico Health Insurance Alliance, offer reinsurance coverage to individuals such as workers who have lost coverage involuntarily, as well as employees in small groups and self-employed workers (Chollet 2004). Because they are designed to support existing insurance markets, however, state reinsurance approaches are limited by the same factors that have constrained the small group and individual insurance markets generally (Blumberg, 2004). The insurance products that are available are often more expensive, with slimmer benefits. Because the risk cannot be spread broadly, reinsurance programs that attract higher-risk enrollees may be forced to charge premiums that become unaffordable to enrollees, or to government if it is subsidizing the reinsurance.

³⁰ About 5,500 people per month were enrolling in health plans through Healthy New York in 2004 (the total active enrollment was at that time about 67,000). More than half (59 percent) were enrolled as individuals. Healthy New York reimburses plans for 90 percent of claims between \$5,000 and \$75,000 for any member in a calendar year. It was estimated that Healthy New York reinsurance payments to the participating carriers would cost about \$12 million in 2003 (Chollet, 2004).

status. In addition to community rating, plans participating in Healthy New York are also required to set a single premium for all program enrollees – sole proprietors, individuals, or workers in small companies (Chollet, 2004). Few states require guaranteed issue or community rating in the small group or individual insurance markets.³¹

Achieving policy goals

If the goal of structuring how people pay for health care is to generate or steer resources to support comprehensive coverage, the available evidence presents a mixed message. Copayments, coinsurance, and deductibles can shift costs from public and private insurers to insured people. The introduction of cost sharing mechanisms such as high deductible plans and various forms of "consumer-directed" health plans would appear to raise the ante considerably.

But while there is a considerable body of research on how cost sharing affects health care costs and the use of health services (see Box 4), there is not enough evidence to conclude what the likely effects of major changes in the structure of cost sharing would be (CBO, 2006).³² In f act, because many health insurance plans already include substantial cost sharing, and consumer-directed plans (such as HDHP/MSA plans) include out-of-spending caps, it is not even clear that new approaches actually involve higher levels of cost sharing for the highest health spenders than employer-based coverage now do (Remler and Glied, 2007).

How much revenue can actually be captured by redesigning cost sharing appears to depend as much, if not more, on people's ability to share the costs than on the structure of cost sharing. Most health care spending is concentrated in a small portion of the population. The five percent of the population with the highest health expenses account for about half of total health care expenses; the lowest 50 percent of health spenders account for about 3 percent. This spending is mostly for the treatment of serious diseases, injuries and chronic illnesses.

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³¹ A tax-based universal health insurance system providing stop loss protection for individuals has also been proposed as a means of protecting individuals from catastrophic medical costs (Hacker, 2007)

³² For example, after a detailed analysis of the available research, the Congressional Budget Office concluded that it was while there have been some reports indicating that consumer-directed high-deductible plans resulted in savings, those results could reflect reduced costs for insurers rather than plan enrollees, or reductions in the overall value of coverage (CBO, 2007).

For more than half of those with the highest spending, the cost of deductibles, copayments, and services not covered by insurance added up to more than ten percent of family income (Stanton, 2005). Higher levels of cost sharing would not affect most people, because they don't use much health care, while many of those with the highest levels of spending are unable to afford much additional cost sharing.

Exposure to out-of-pocket costs can also build demand for secondary insurance. As discussed above, Medicare is a prime example. Supplemental insurance, particularly coverage that provides first dollar coverage, is generally assumed to reduce incentives to exercise caution when using health services. It also adds to administrative costs, by creating additional billing systems, creating the need to coordinate coverage and payments. The growth of private insurance in a large number of OECD nations is similar in some respects (OECD, 2004). The most extreme case is France, where coinsurance for physician services and out-of-pocket costs for some services (e.g. dental care) not fully covered under the national insurance scheme have contributed to the growth of a large private insurance system that provides supplemental coverage to most of the population.³³ With this additional coverage, people have very little, if any, out-of-pocket liability for most health care. This effectively neutralizes the coinsurance requirements that had been introduced to address perceived problems of overutilization, i.e., moral hazard (Buchmueller and Couffinhal, 2004).

More cost sharing could also increase the need for and costs of public programs that protect vulnerable populations. People could find that the coverage available to them is not worth the cost of the premiums. This could increase pressure on public programs to expand coverage, or increase subsidies for private coverage. When people are faced with high medical costs that are not covered by insurance, there is a limit to what most of them can actually pay before depleting all their resources. When that happens, the costs are absorbed by other payers one way or another.

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³³ Altogether, 92 percent of the French population is covered by either private or government-provided "complementary" coverage (OECD 2006). In 2002, about 7 percent of the population had government-provided complementary coverage.

The costs and administrative burdens associated with cost sharing are harder to estimate than costs related to premiums. Insurers have developed sophisticated systems for processing health insurance claims, including complex cost sharing provisions. Technologies including, the Internet, make it relatively easy to put together insurance packages with menus of cost-sharing options. Similarly, proposals to link cost sharing to income through the tax system should, in theory, be much like other special tax provisions (e.g. reporting various forms of income on 1099 forms, or itemizing health care costs on Schedule A). But while the basic structure is in place, including IRS rules for what is and is not a legitimate health expense, auditing, and revising cost-sharing information could be more complicated, and therefore more expensive, than administering income-related premiums. In addition, there is a layer of claims processing, appeals, and adjudication that is labor-intensive and also burdensome for both consumers and health care providers. Individuals and/or insurers have to determine what "counts" toward deductibles or out-of-pocket maximums. The administrative costs may, in fact, be greater in high-deductible plans, which are intended to reduce administrative burdens associated with insurance claims processing (see Merlis, 2007).

Value-based systems with tiered cost sharing involve the same sorts of start up costs, research, etc. as tiered premium systems, but, again, may involve additional costs. The expertise required to target specific medical conditions, rank specific treatment options, and explain them to patients is more difficult that sorting plans into tiers. In addition, stakeholders have expressed concerns about administrative costs related to preventing fraud or abuse and data privacy (Chernew et al., 2007).

Copayments or coinsurance may be effective means of shifting costs to people who use health care, but they are increasingly viewed as somewhat blunt tools for driving efficiency in the health care system. In Japan, while across-the-board increases in copayments appeared to reduce the service utilization and slow the rate of increase in medical costs, policymakers remained focused on the need to design more substantive reforms addressing efficiency and accountability in the health care system (Ikegami and Campbell, 2004).

³⁴ A new health insurance arrangement introduced by Wal-Mart in September, 2007 allows employees to pick from 50 combinations of premiums, deductibles, etc. (Barbaro, 2007).

There is some evidence to support the view that cost sharing can promote more effective health care delivery. The Minnesota state employees program was able to avoid any premium increase in 2006, and \$20 million in savings were returned to employees in the form of a 4.4 percent reduction in annual premiums. The program attributed the savings to lower-than expected claims resulting from financial incentives and health promotion and management strategies (Silow-Carroll, 2007 [b]). The value-based designs reviewed by Chernew (2007) however, were not expected to achieve savings. Copayments were reduced for high value services specifically to remove barriers to the appropriate use of these services. This results in more, and appropriate, use of some high cost services. Better care is not necessarily cheaper.

From one perspective, high deductible approaches promote horizontal equity. Everyone can use their money any way they want to pay for health care. As they are currently structured, however, high deductible plans with HSAs provide a tax advantage to higher income people, by shifting cost sharing to pretax income. Combined with the tax treatment of HSAs, high deductible plans could amplify the relative advantage of wealthier, healthier people in the insurance market (Bloche, 2007).

Without additional adjustments or public subsidies, cost sharing has been shown to have negative consequences for people who are poor or are in poor health. Recent studies of the effects on increased copayments in Medicaid have found that even relatively small copayments in Medicaid programs have been associated with adverse outcomes including failure to fill prescriptions, increase in hospitalizations and nursing home admissions, and emergency department visits (Ku and Wachino, 2005). Other research has linked increasing premiums and cost sharing in Medicaid and SCHIP to drops in enrollment from the programs, and to problems obtaining medical treatment (Artiga and O'Malley, 2005). Small increases in copayments (required by supplemental insurance) can also have a significant effect on Medicare beneficiaries' use of outpatient services and filling prescriptions. One study of retired public employees in California found that while increased copayments did not affect hospitalization rates for average beneficiaries, it was associated with more hospital admissions for chronically ill beneficiaries (Chandra et al., 2007).

Tiered cost sharing could remove barriers to high-value medical care for lower income people. Good care would be coupled with lower cost sharing. Approaches that assign providers to tiers based on efficiency and quality, however, could have negative consequence for some disadvantaged populations. At issue is whether the methods used to assess efficiency and quality of care are sufficiently sensitive to differences in patient health status and risk. In these approaches, providers are going to be assigned to tiers based on their success in achieving various goals related to prevention, health promotion, or managing care. There is a danger that they could be penalized for trying to manage the care of people who are less able to contribute to their own health care. If not done well, value-based systems could lead to a sort of medical underwriting, where people who can't make it to appointments, don't take their medications, etc., are undesirable to the plan (Casalino, 2006).

IV. Plotting a Course

Comprehensive reforms to expand health coverage in the United States will involve some changes in how, and how much, people pay for insurance coverage and out-of-pocket for health care.

Somewhat surprisingly, there is some
convergence in thinking about approaches to
structuring premiums and cost sharing here
and abroad. A growing number of reforms
(e.g., Netherlands, Switzerland, and reforms
now being refined and implemented in
Germany, see Box 5), as well as
comprehensive state coverage reforms in the
United States are in effect "hybrid" models
that draw on the strengths of different
approaches to structuring how people pay for care.

BOX 5

An overview of the new Dutch health insurance system described what the authors termed "a rather fascinating example of cross-country policy learning":

Some key features of the Dutch reform such as the introduction of a universal health insurance system, mandatory coverage for the entire population, tax-financed premium subsidies for low-income consumers and voluntary deductibles can also be found in the Swiss health insurance system. . . [S]ome key features of the health system reform 2007 in Germany look strikingly similar to the Dutch system: the introduction of a central fund to allocate resources to health insurers, mandatory coverage for the entire population, more options for consumers to choose from (including voluntary deductibles), a uniform income-dependent premium, a community-rated premium determined by health insurers, health-based risk adjustment and more instruments for health insurers to contract selectively. (*Gress et al.*, 2007)

Either income or payroll taxes can generate significant revenue in ways that are relatively fair and progressive. Regardless of whether the money comes from payroll tax deductions collected by employers and paid into a government social insurance fund that reimburses health care providers (like traditional Medicare), or from payroll deductions transferred to a government fund that buys down the cost of coverage in the private market (like the Netherlands), higher income people pay more for a standard level of coverage.

In addition to having the potential to generate significant revenue—assuming that the contributions are not distorted by perverse incentives in the tax code—income-related contributions present relatively minor administrative obstacles. Other tax-based approaches, including surcharges or tax credits, would likely require more new administrative systems to deal with advance payments to cover premium costs, adjustments related to changes in income, or family circumstances. Using the tax system to administer some form of income-related cost sharing could also introduce added "separation" between the time that people actually pay for services and when they "settle up" with the government at the end of the year (or on some predetermined schedule).

Premium assistance for low income people will be part of any coverage expansion. As the experience of the HCTC program and the various MSP programs has demonstrated, there are significant resource costs associated with obtaining, processing, and updating eligibility information. Costs increase when the programs involve multiple public and private entities. Health plans and employers with enrollees in more than one state have to deal with multiple sets of requirements. When different rules apply in different states, issues of fairness arise as well, because, depending on where they live, people in similar financial or health circumstances may have substantially different options for coverage or financial assistance with out-of-pocket costs. Medicare's experience with the MSP programs suggests that simplifying eligibility criteria as well as using data systems to facilitate eligibility and enrollment procedures could help the assistance programs to work more efficiently. Establishing the subsidy levels also raises difficult issues. The Massachusetts experience, consistent with other analyses, indicates that subsidies may have to be fairly large to make insurance affordable (Dubay, 2006; Blumberg et al., 2007).

Premium competition is compatible with a hybrid social insurance approach as well as with private market approaches. In social insurance models, health plans that provide the standard level of benefits could offer choices among different configurations of benefits and cost sharing that meet the overall standards. They could also compete on the basis of customer service or operational efficiency that could be translated into lower premiums. This kind of competition is currently in play in MA plans in Medicare, and in the Federal Employees Health Benefits Program. At the margins, consumer choices about accepting risk of out-of-pocket costs could reduce the indiscriminate use of medical services or supplies.

Linking what people pay for health care to improving efficiency and quality of health can also be accomplished in different ways. One approach is to develop standards that would apply to all plans. Information on what works best in clinical care can be used to define what is covered. Treatments, procedures, tests, and other services that are not effective would not be covered in basic insurance packages. This is the approach been integrated into a growing number of national health systems, particularly as applied to pharmacy benefits (Eichler, et al., 2004), and in private sector as well as public insurance programs the United States. As this work progresses, it may be possible to design systems where care that is appropriate and cost-effective would require little or no cost sharing, while medical treatments, tests, and services that are proven to be effective, but no more effective than less costly alternatives, would require higher levels of cost sharing (Pauly and Blevin, 2007).

An alternative approach would be to encourage health plans and insurers to develop their own techniques for using information about medical effectiveness, with appropriate safeguards to ensure that incentives do not create barriers to accessing needed care. Designing systems that will be able to integrate incentives to use health care effectively could be crucially important for efforts to control health care costs over time, but concluding that the resulting savings could pay for coverage expansions is not supported by available evidence (CBO, 2006).

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³⁵ The Dutch system has applied some of the same concepts developed in Oregon, including evaluating the relative effectiveness of "condition/treatment pairs" (Enthoven and van de Ven, 2007). The Oregon Health Services Commission has been working actively on systems for prioritizing treatment alternatives for specific conditions. See for example J. Santa and M. Gibson. "Designing Benefits with Evidence in Mind," *Issue Brief* No. 209 (Employee Benefits Research Institute) February, 2006.

Price competition and cost sharing, with appropriate safeguards, can be compatible with social insurance models for comprehensive health coverage. Underwriting and insurance rating cannot. In social insurance systems, health coverage is community rated and no one can be excluded from coverage based on health risk. Evidence from small group and individual insurance market reform initiatives indicates that community rating and related market regulation are critically important if market-based programs are to play a significant role in expanding coverage to people who are poor or in poor health. If insurance carriers are allowed to deny or condition coverage based on health status, or charge some people or groups more than others, markets become segmented. The costs of providing coverage to people who need help paying premiums or cost sharing spiral up, making it harder for government to subsidize those costs.

Ultimately, the effectiveness of any approach to restructuring how people pay for health coverage or care, with respect to any of the policy goals discussed here – revenue, system efficiency, or promoting social or political policies—will depend on how insurance is defined and regulated. The scope of benefits and financial protection determines whether coverage is "comprehensive." If obtaining the right care at the right time in the right place involves high out-of-pocket spending, or coordinating benefits across multiple insurers, it is difficult to assign responsibility for health care outcomes or efficiency. But if insurance is designed to provide access to appropriate health care, many of the problems of insurance markets, including risk selection, market segmentation, and moral hazard associated with secondary coverage, become far more manageable. If the health care services that people actually need are covered and affordable, health providers have a better chance of being able to promote better health and manage health care effectively. And, if care that people need is covered and affordable, it is reasonable to hold health providers, working with their patients, accountable.

References

Abraham, J., Vogt, W., and Gaynor, M., "How Do Households Choose Their health Insurance," *Inquiry* 43: 315-332, Winter 2006/7.

Alker, J., "Premium Assistance Programs: How are they Financed and Do States Save Money," *Issue Paper* (The Kaiser Commission on Medicaid and the Uninsured) (October 2005).

Antos, J. "Is There a Right Way for Promote Health Insurance through the Tax System?" AEI Working Paper #127 (American Enterprise Institute) (publication 24583) June 2006.

Appleby, J., "Billing Errors Dog Medicare Drug Benefit Since its Start," *USA Today*, posted November 11, 2006, available at http://www.usatoday.com/money/industries/health/drugs/2006-11-07-medicare-bills-usat-x.htm.

Argita, S. and O'Malley, M., "Increasing Premiums and Cost Sharing in Medicaid and SCHIP: Recent State Experiences," *Issue Paper* (The Kaiser Commission on Medicaid and the Uninsured) (May 2005.

Baker, C. A. "Cost Sharing in Medical Insurance Plans," *Compensation and Working Conditions Online*, U.S. Bureau of Labor Statistics. Originally posted March 31, 2004. Available at http://www.bls.gov/opub/cwc/print/cm20004032ar01pl1.htm.

Banthin, J. and Bernard, D., "Changes in Financial Burdens for Health Care: National Estimates for the Population Younger than 65 years, 1996 to 2003," JAMA 13(296): December 2006: 2712-2719.

Barbaro, M, "Health Plan Overhauled at Wal-Mart," The New York Times, September 19, 2007.

Biles, B, Hersch, L., and Guterman, S., Medicare Beneficiary Out-of-Pocket Cost: Are Medicare Advantage Plans a Better Deal?" *Issue Brief* (Commonwealth Fund) (May 2006).

Bloche, M., "Consumer-Directed Health Care and the Disadvantaged," *Health Affairs* 26 (5): 1315-1327, 2007.

Block. A., Director, Center for Beneficiary Choice, Centers for Medicare & Medicaid Services, Baltimore, MD. . Memo, Introduction from CMS on 2008 Call Letter, April 19, 2007.

Blumberg, L., "Addressing Adverse Selection in Private Health Insurance Markets," Statement before the Joint Economic Committee, Congress of the United States, September 22, 2004. Blumberg, L., Holahan, J., Hadley, J., et al., "Marketwatch: Setting a Standard of Affordability for Health Insurance Coverage," Health *Affairs* Web Exclusive, DOI 10.1377/hlthaff.4463. w463-w473/. 2007.

Boards of Trustees, Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds, 2007 Annual Report. Washington DC: Government Printing Office, 2007.

Braithwaite, R. and Rosen, A., "Linking Cost Sharing to Value" An Unrivaled Yet Unrealized Public Health Opportunity, *Annals of Internal Medicine* 146 (8): 602-605, April 17, 2007.

Buchmueller, T., "The Health Plan Choices of Retirees Under Managed Competition," *Health Services Research* 35 (5 Pt 1): 949-76, December 2000.

Buchmueller, T.C. and Couffinhal, A., 'Private Health Insurance in France," *OECD Health Working Papers* (Organization for Economic Co-operation and Development) (No.12) March 2004.

Burman, L. and Leiserson, G., "Two-Thirds of Tax Units Pay More Payroll Tax than Income Tax," *Tax Notes* (Urban-Brookings Tax Policy Center) April 9, 2007.

Burman, L., Furman, J., Leiserson, G., and Williams, R., "The President's Proposed Standard Deduction for Health Insurance: An Evaluation," Urban-Brookings Tax Policy Center, February 14, 2007. Available at

http://www.taxpolicycenter.org/UploadedPDF/411423 Presidents Standard Deduction.pdf.

Busch, S., Barry, C., Vegso, S., at al., "Effect of a Cost-Sharing Exemption on the Use of Preventive Services at One Large Employer,: *Health Affairs* 25 (6): 1529-1536. November/December 2006.

Casalino, L., "Medicare, the National Quality Infrastructure, and Health Disparities," *Medicare Brief* (National Academy of Social Insurance), October 2006.

Chandra, A, Gruber, J, and McKnight, R, "Patient Cost-Sharing, Hospitalization Offsets, and the Design of Optimal Health Insurance for the Elderly", *NBER Working Paper Series*) (National Bureau of Economic Research) (No. 12972) May 2007.

Chernew, M., Cutler, D., and Keenan, P., "Increasing Health Insurance Costs and the Decline in Insurance Coverage," *Health Services Research* 40(4), pp. 1021-1039. 2005.

Chernew, M.E., Rosen, A.B., and Fendrick, A.M., "Value-Based Insurance Design", *Health Affairs* Web Exclusive" w195-203, January 30, 2007. Available at http://content.healthaffairs.org/cgi/content/full/26/2/w195.

Chernew, M., Frick, K., and McLaughlin, C., "The Demand for Health Insurance Coverage by Lowincome Workers: Can Reduced Premiums Achieve Full Coverage?" *Health Services Research* 32 (4): 453-70, October 1997.

Chollet, D., "The Role of Reinsurance in State Efforts to Expand Coverage," *Issue Brief* (State Coverage Initiatives, AcademyHealth) V (4) October 2004.

Chollet D., Lui, S., Biderman, P., et al., *Quantitative and Comparative Analysis of Reform Options for Extending Health Care Coverage in New Mexico*. Final Report (Washington, DC: Mathematical Policy Research, Inc.), Submitted to the State of New Mexico Legislative Council Service, July 31, 2007.

Chollet, D., "Expanding Individual Health Insurance Coverage: Are High-Risk Pools the Answer?" *Health Affairs* Web Exclusive w2.349v1, October 23, 2002 Available at http://content.healthaffairs.org/cgi/content/full/hlthaff.w2.349v1/DC1.

Congress of the United States, Congressional Budget Office [a], *Budget Options* (Washington, DC) February, 2007.

Congress of the United States, Congressional Budget Office [b], Statement of Peter R. Orszag, "Health Care and the Budget: Issues and Challenges for Reform" before the Committee on the Budget, United States Senate, June 21, 2007.

Congress of the United States, Congressional Budget Office, "Consumer-Directed Health Plans: Potential Effects on Health Care Spending and Outcomes," *A CBO Study*, December 2006.

Cooper, P., and Vistnes, J., "Workers' Decisions to Take-Up Offered Health Insurance Coverage: Assessing the Importance of Out-of-Pocket Premium Costs," *Medical Care* (41)7, Supplement: III-35-III-43, 2003.

Crowley, J., "Medicaid Medically Needy Programs: An Important Source of Medicaid Coverage," *Issue Paper* (The Kaiser Commission on Medicaid and the Uninsured) (January 2003).

Davis, K., "Consumer-Driven Health Care: Will it Improve Health System Performance/" *Health Services Research* 39 (4): 1219-1233, August 2004.

Dembner, A.[a], "Health Plan May Exempt 20% of the Uninsured" *The Boston Globe*. April 12, 2007.

Dembner, A.[b], "Success Could Put Health plan in the Red", The Boston Globe, November 18, 2007.

Dorn, S. [a], "Administrative Costs for Advance Payment of Health Coverage Tax Credits: An Initial Analysis," *Issue Brief* (The Commonwealth Fund) March 2007.

Dorn, S. [b], "Automatic Enrollment Strategies: Helping State Coverage Expansions Achieve Their Goals," (AcademyHealth, State Coverage Initiatives) August 2007.

Dorn, S. [c], "How Well Do Health Coverage Tax Credits Help Displaced Workers Obtain health Care," Statement of Stan Dorn, J.D., Senior Research Associate, The Urban Institute to the Congress of the United States, Committee on Education and Labor, U.S. House of Representatives, March 26, 2007.

Dorn, S. [d], "Take-up of Health Coverage Tax Credits: Examples of Success in a Program with Low Enrollment." (Washington DC: Urban Institute) December 2006, available at http://www.urban.org/url.cfm?ID=411390.

Dubay, L., Holahan, J., and Cook, A., "Marketwatch: The Uninsured and the Affordability of Health Insurance Coverage," *Health Affairs* 26 (1) 2006: w22-w30. Published online November 30 2006: 10.1377/hlthaff.26.1.w22.

Eichler, H., Kong, S., Gerth, W., et al., "Use of Cost-Effectiveness Analysis in Health-Care Resource Allocation Decision-Making: How Are Cost-Effectiveness Thresholds Expected to Emerge?," Value in Health 7 (5): 518-28, 2004.

Enthoven, A.., and van de Ven, W., "Going Dutch – Managed Competition Health Insurance in the Netherlands," New England Journal of Medicine 357 (24) 2421-23, December 13, 2007.

Etheredge, L., Moore, J., Swartz, S. et al., "Administering a Medicaid+Tax Credits Initiative" (National Health Insurance Reform Project, National Academy for State Health Policy), February 28, 2007.

Felland, L., Draper, D., and Liebhaber, A., "Massachusetts Health Reform" Employers, Lower-Wage Workers and Universal Coverage," *Issue Brief No. 113* (Center for Studying Health System Change, July 2007.

Fendrick, A. and Chernew, M., "Value-Based Insurance Design: A "Clinically Sensitive" Approach to Preserve Quality of Care and Contain Costs," *The American Journal of Managed Care* 12 (1): 18-20, January 2006.

Florence, C., Atherly, A., and Thorpe, K., "Will Choice-based Reform Work for Medicare? Evidence from the Federal Employees Health Benefits Program," *Health Service Research*, 41 (5): 1741-61, October 2006.

Furman, J., "The Promise of Progressive Cost Consciousness in Health Reform," *The Hamilton Project Policy Brief N.*, 2007-05 (The Brookings Institution) (June, 2005).

Furman, J., Summers, L., and Bodoff, J. "Achieving Progressive Tax Reform in an Increasingly Global Economy. *The Hamilton Project Strategy Paper* (The Brookings Institution) (June, 2007).

Gabel, J., Dhont, K., Whitmore, H., at al., "Marketwatch: Individual Insurance: How Much Financial Protection Does it Provide/", *Health Affairs* Web Exclusive" w172-181, April 17, 2002. Available at http://www.healthaffairs.org/cgi/content/full/hlthaff.w2.172v1/DC1.

Gencarelli, D., "Health Insurance Coverage for Small Employers," *NHPF Background Paper* (Washington, DC: National Health Policy Forum) April 19, 2005.

Gress, S., Manouguian, M, and Wasem, J., "Health Insurance Reform in the Netherlands" available at http://www.stefan-gress.eu/mediapool/40/403223/data/dicereport107-rm1.pdf

Gruber, J., "The Role of Consumer Copayments for Health Care: Lessons from the RAND Health Insurance Experiment and Beyond" Prepared for the Kaiser Family Foundation, Publication #7566, October 2006.

Hacker, J. "Universal Risk Insurance: Stop Loss Protection for Middle-Class Family Finances. The Tobin Project, Tobin Project Working Paper, Risk Policy Working Group, May 6, 2007. Available at http://www.tobinproject.org/downloads/Rp.UninsuredRisk.Insurance.pdf.

Hacker, J. And Marmor, T., "Medicare Reform: Facts, Fiction and Foolishness," *Public Policy & Aging Report* 13 (4) (Washington DC: National Academy on an Aging Society), December 2003. Available at http://mba.yale.edu/faculty/PDF/hudson.pdf.

Hewitt Associates, LLD, *The Road Ahead: Emerging Health Trends* 2007. Publication SR-0171-002-EV.03/2007.

Hunt, S., Maerki, S., and Rosenberg, W., Assessing Quality-Based Benefit Design. Prepared for the California HealthCare Foundation and Pacific Business Group on Health, April 2006.

Hynes, D., Koelling, K., Stroupe, K., at al., "Veterans' Access to and Use of Medicare and Veterans Affairs Health Care", *Medical Care* 45 (3): 214-223, March 2007.

I Amsterdam.Com, Health Insurance, available at http://www.iamsterdam.com/living_learning/getting_started/health_insurance. Updated June 14, 2006.

Ikegami, N., and Campbell, J., "Japan's Health Care System" Containing Costs and Attempting Reform," *Health Affairs* 23(3): 26-36, May/June 2004.

Illinois Department of Central Management Services, FY2008 Premium Calculation Worksheet. Available at http://www.state.il.us/cms/3_services_ben_choice_workfy08.htm .

Kaiser Commission on Medicaid and the Uninsured, "Dual Eligibles" Medicaid's Role for Low-Income Medicare Beneficiaries," *Medicaid Facts* (Kaiser Family Foundation) July 2005.

Kaiser Family Foundation, "Medicare: Low Assistance Under the Medicare Drug Benefit," *Fact Sheet* (Henry J. Kaiser Family Foundation) (June 2005).

Kaiser Family Foundation and Health Research and Education Trust, Employer Health Benefits 2007 Annual Survey. Chicago: HRET and Kaiser Family Foundation, 2007.

Kaiser Family Foundation, State Health Facts. Medicaid Medically Needy Program Enrollment, FFY 2003. Updated January 2007. Available at http://www.statehealthfacts.kff.org/comparetable.jsp?ind=209&cat=4&yr=21&typ=1&sort=a&o=a.

Knottnerus, J. and ten Velden, G., "Dutch Doctors and their Patients - Effect of Health Care Reform in the Netherlands," *New England Journal of Medicine* (357 (24): 2424- 2426, December 13, 2007.

Kocot, S.L., Senior Advisor to the Administrator, Centers for Medicare & Medicaid Services, "Medicare Part D: Is it Working for Low-Income Seniors," Statement before the Senate Special Committee on Aging, Wednesday, January 31, 2007.

Ku, L. and Wachino, V, "The Effect of Increased Cost-Sharing in Medicaid: A summary of the Research Findings," Washington DC: Center on Budget and Policy Priorities, Revised July 7, 2005.

Jul-Lu, R. and Hsiao, W., "Does Universal Health Insurance Make Health Care Unafffordable? Lessons from Taiwan," *Health Affairs* 22 (3): 77-88, May/June 2003.

Marquis, S., Buntin, M., Escarce, J., et al., "Subsidies and the Demand for Individual Health Insurance in California," Health Services Research 39 (5): 1547-70, 2004.

Medicare Payment Advisory Commission, Data Book 2007, (Washington DC: MedPAC), June 2007.

Medicare Payment Advisory Commission, "Report to the Congress: Benefit Design and Cost Sharing in Medicare Advantage Plans," (Washington dc: MedPAC) December 2004.

Merlis, M. *Simplifying Administration of Health Insurance* prepared for the National Academy of Social Insurance and the National Academy of Public Administration (Draft report, 2007).

Mossialos, E., and Thomson, S., "Voluntary Health Insurance in the European Union", European Observatory on Health Systems and Policies. (Brussels: World Health Organization), 2004.

National Center for Health Statistics, *Health, United States with Chartbook on Trends in the Health of Americans* (Hyattsville, MD: NCHS), 2006.

National Conference of State Legislatures, "State Employee Health Benefits – Monthly Premium costs (Family Coverage), compiled by Richard Cauchi. Available at http://64.82.65.67/health/StateEmplhealthpremiums.pdf. Revised May 2006.

National Governors Association, NGA Center for Best Practices, "Leading the Way: State Health Reform Initiatives," *Issue Brief, July 11, 2007.*

National Governors Association, NGA Center for Best Practices, "Helping the Working Poor Buy Insurance: Addressing Barriers to Premium Assistance," *Issue Brief, September 28, 2006.*

Nemore, P., Bender, J., and Kwok, WW., "Medicare" Toward Making Medicare Work for Low-Income Beneficiaries: A Baseline Comparison of the Part D Low-Income Subsidy and Medicare savings Programs Eligibility and Enrollment Rules," (Kaiser Family Foundation) May 2006.

The Netherlands, Ministry of Health, Welfare and Sport, "Health Insurance System," available at http://www.minvws.nl/en/themes/health-insurance-system/default.asp. Last modified May 22, 2007.

Organisation for Economic Co-operation and Development, "Private Health Insurance in OECD Countries," *Policy Brief* (OECD: OECD Observer) September 2004.

Orszag, P., Director, Congressional Budget Office, Letter to Hon. Pete Stark, Chairman, Subcommittee on Health, Committee on ways and Means, U.S. House of Representatives, September 5, 2007.

Pear, R., "Sluggish Start for Offer of Tax Credits for Insurance," The New York Times, January 25, 2004.

Pauly, M., "The Truth about Moral Hazard and Adverse Selection" *Center for Policy Research Policy Briefs* (Maxwell School, Syracuse University, Center for Policy Research), No. 36/2007) 2007.

Pauly, M.V. and Blavin, F.E., "Value Based Cost Sharing Meets the Theory of Moral Hazard: Medical Effectiveness in Insurance Benefits Design," *NBER Working Paper Series*, (National Bureau of Economic Research) (No. 13044) April 2007.

Pollitz, K. and Bangit, E., "Federal Aid to State High-Risk Pools: Promoting Health Insurance or Providing Fiscal Relief," *Issue Brief* (The Commonwealth Fund) November 2005.

Remler, D. and Glied. S., "Marketwatch: How Much More Cost Sharing Will Health Savings Accounts Bring," *Health Affairs* 25 (4): 1070-1078, 2006.

Rice, T. and Thorpe, K.E., "Income-Related Cost-Sharing in Health Insurance, *Health Affairs* 12(1): 21-39, Spring 1993.

Rodwin. V., and Sandier, S., "Health Care under French National Insurance" (New York University) Available at http://www.nyu.edu/projects/rodwin/french.html.

Rosen B. in Thomson, S. and Mossialos, E., (eds.) Health Care System in Transitions: Israel. (Copenhagen: European Observatory of Health Care System, 5(1), 2003.

Rowland. D., "Health Care: Squeezing the Middle Class with More Costs and Less Coverage", Testimony before the U.S. House of Representatives Ways and means Committee, January 31, 2007.

Royalty. A., and Hagans, J., "The Effect of Premiums on the Decision to participate in Health Insurance and Other Fringe Benefits Offered by the Employer: Evidence form a Real-World Experiment," *Journal of Health Economics* 24: 95-112, 2005.

Santa, J. and Gibson, M., "Designing Benefits with Evidence in Mind, " *Issue Brief* No. 209 (Employee Benefits Research Institute) February 2006.

Silow-Carroll, A., and Alteras, T. [a], Value-Driven Health Care Purchasing: Case Study of Wisconsin's Department of Employee Trust Funds" (The Commonwealth Fund: Publication no. 1056), August 2007.

Silow-Carroll, A., and Alteras, T. [b], "Value-Driven Health Care Purchasing: Case Study of Minnesota's Smart Buy Alliance (The Commonwealth Fund: Publication no. 1054) August 2007.

Stanton, M., "The High Concentration of U.S. Health Care Expenditures," *Research in Action Issue 19* (Agency for Healthcare Research and Quality) June 2006.

State Health Initiatives. Premium Assistance Toolbox for States, Table 6: Benefit and Cost-Sharing Features in Selected Premium Assistance Programs. Available at http://12.109.133.237/Fiiles/table-6.pdf.

Steuerle, E. and Van de Water, P., *Administering Health Insurance Mandate*, prepared for the National Academy of Social Insurance and the National Academy of Public Administration (Draft report, 2007).

Summer, L. and Friedland, R., "The Role of the Asset Test in Targeting Benefits for Medicare Savings Programs." Commonwealth Fund, October 2002.

Summer, L. and Thompson, L. "How Asset Tests Block Low-Income Medicare Beneficiaries form Needed Benefits," *Issue Brief* (Commonwealth Fund) (May 2004).

United States Government Accountability Office, "Social Security Administration: Short Time Frame and Workload Challenges Could Affect Timely Implementation of Income-Based Medicare Part B Premiums. GAO-07-228R. November 17, 2006.

U.S. Department of Labor, Bureau of Labor Statistics, "National Compensation Survey: Employee Benefits in Private Industry in the United States, March 2007". BLS Summary 07-05.

U.S. Department of Labor, Bureau of Labor Statistics, "National Compensation Survey: Employee Benefits in Private Industry in the United States, 2005," *Bulletin 2589*, BLS May 2007.

United States Department of Health and Human Services, FY 2008 President's Budget for HHS. Available at www.hhs.gov/budget/docbudget.htm/

United State House of Representatives, Committee on Ways and Means, Background Material and Data on Programs Within the Jurisdiction of the House Committee on Ways and Means (Green Book). (Washington DC: U.S. Government Printing Office, 2004. Available at http://www.gpoaccess.gov/wmprints/green/index/html.

University of Rochester Medical Center, Press Room, "University to Alter Employee Health Plans," posted Monday, August 6, 2007, available at http://www.urmc.rochester.edu/pr/news/story.cfm?id=1615

van Ginneken, E., "Health Insurance Reform in the Netherlands," *Health Policy Monitor, March* 2006. Available at http://www.hpm.org/survey/de/a6/1.

Wisconsin Department of Employee Trust Funds. It's Your Choice 2007 Book. Available at http://etf.wi.gov/members/health_ins_htm.