Public Policy and the U.S. Health Insurance Market: Direct and Indirect Provision of Insurance

INTRODUCTION

The market for health care faces a number of obstacles that hinder its efficient operation. Factors such as moral hazard, adverse selection, and asymmetric information affect the availability and price of care. There are also important externalities associated with the provision of health care. In the face of these market failures there exists ample opportunity for efficiency gains through government intervention. In many countries this intervention takes the form of direct provision through a national health insurance program. The United States has chosen a different path; it directly provides health insurance to only a targeted subset of the population, but subsidizes the purchase of private insurance for most others.

In many ways this dual system has worked well, resulting in quality affordable care for the majority of Americans, significant technological advances, and dramatic reductions in mortality rates. However, the system is not without problems. Quality care and innovative technologies have come at a high price. The U.S. spends a larger fraction of its GDP on health care than does any other country and spends more on a per person basis as well. Not only are expenditures high, but for many decades they have increased faster than GDP. Even recently, after several years of stable spending, costs are once again rising faster than GDP. The joint problems of high and rising costs, coupled with a sizable uninsured population, are especially worrisome. With high costs, those without health insurance will have a difficult time affording quality care. Conversely, increases in health care costs will drive up the price of health insurance itself, potentially resulting in declines in coverage or a substitution to less generous (and less expensive) plans.

In this paper I examine the twin challenges of providing coverage for the uninsured and addressing the issues of high and rising costs. I focus particularly on the role of government intervention in the marketplace both directly, through the provision of health insurance itself, and indirectly via the subsidization of private expenditures. My goal is to describe

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1 These phenomena are described in detail elsewhere (c.f., Cutler, 2002; Glied and Remler, 2002).
the basic structure of government involvement in private health insurance, as well as the Medicare and Medicaid programs,\(^2\) and to provide a guide to the issues surrounding these forms of coverage. Throughout the paper I pay particular attention to the role of public policy in affecting the prevalence of health insurance coverage and the cost of care.\(^3\)

The following section describes the current health insurance system in the United States. It presents a number of statistics on insurance coverage and health care costs. The third section examines the private health insurance market and the government's role in its development while the fourth section turns to a discussion of public programs. This study of public programs is divided into two parts focusing in turn on Medicare and Medicaid. I also briefly discuss the new State Children's Health Insurance Program (SCHIP).\(^4\) A final section summarizes the current status of the health care system and highlights the challenges facing the nation.

**OVERVIEW OF THE CURRENT SYSTEM**

One of the main concerns voiced about the U.S. health care system is the cost of care. The U.S. stands alone among countries in total expenditures on health care, expenditures per capita, and expenditures as a fraction of GDP. In 1998 health care expenditures were equal to 12.9 percent of GDP in the U.S. The country with the second highest ratio of spending to GDP was Switzerland spending 10.4 percent. In dollar terms the U.S. spent $4,373 per capita in 1998 with Switzerland again the next closest nation spending $3,080 (Organization for Economic Cooperation and Development, 2002).

Of perhaps greater concern than the level of spending is the rapid increase that was observed for much of the 20\(^{th}\) century and that appears to be continuing. Since the 1940s real per capita health expenditures have grown by an average of nearly 4 percent per year compared to average increases of 2 percent for GDP (Cutler, 2002; Newhouse, 2002). Growth in spending leveled off somewhat during the 1990s but appears once again to be rising quickly (Levit, et al., 2002). If costs continue along their expected trajectory, by 2011 national health expenditures will be equal to 17 percent of GDP. Obviously this trend cannot be sustained indefinitely.

An important, and yet unanswered, question in the literature is whether the care received is worth the cost. As discussed below, several aspects of the health insurance system could result in more care being consumed than would be chosen in a freely operating market. Several studies have found, in fact, that the marginal product of an additional dollar of care is zero or close to it, and that there are a large number of inappropriate procedures performed (e.g., McClellan, McNeil, and Newhouse, 1994; Skinner, Fisher and Wennberg, 2001; Chassin, et al., 1987). However, if this "extra care" results in externalities, such as more rapid technological advances, then it could well be welfare enhancing. Several recent studies have concluded that technological innovations have, indeed, been worth their cost. I return to this issue later in the paper.

A second major difficulty facing the U.S. health care system is the large fraction of the population that is uninsured. This

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2 Medicare provides coverage for the elderly and disabled and Medicaid for the poor. These programs are described in detail below.

3 Federal and state governmental regulations also have important effects on the health insurance system, but I do not discuss these rules in this paper.

4 For the sake of brevity, I do not discuss smaller government insurance programs, such as benefits provided to those in the military or to government employees. I also exclude those programs providing for replacement of lost earnings due to illness or injury such as the Social Security disability program, the Supplemental Security Income (SSI) program, and the workers' compensation program.
problem goes hand-in-hand with the cost of care. As costs increase it becomes increasingly difficult for the uninsured to afford care. Yet at the same time, the rising costs lead to rising health insurance premiums making insurance even less affordable and reducing coverage.

Although policy makers debate the extent to which government should involve itself in the provision of medical care, most seem committed to at least some intervention. What has evolved over time is a system in which both the public and private sectors play substantial roles. The vast majority of Americans receive health insurance coverage through an employment relationship. As shown in Figure 1a, in 2000 72 percent of individuals had private health insurance, most (64 percent of the total) through employment, while 27 percent were covered by a government program, primarily Medicare or Medicaid. Fourteen percent of the population was uninsured. (Some were covered by more than one type of policy so totals equal more than 100 percent.) Looking back to 1987 in Figure 1b, the percentages with each type of coverage are fairly similar, but it is clear that there has been an expansion of Medicaid coverage over time along with a slight increase in the fraction uninsured. Medicaid coverage increased from 8.4 percent in 1987 to 10.4 percent in 2000, while the fraction uninsured increased from 12.9 to 14 percent. There was also a sizable decline in private coverage not related to employment, from 13.4 to 8.4 percent. What is not observed in these two snap shots of the population is the peak in the number uninsured in 1998. In that year, 16.3 percent of the population lacked health insurance. The subsequent decline to 14.0 percent two years later is coincident with both a strong economy yielding more employer-based coverage, and with an expansion of government programs.

These aggregate numbers mask a substantial amount of heterogeneity in insurance coverage. Figure 2 shows the breakdown in insurance coverage by race and ethnicity. Fewer than 10 percent of non-Hispanic whites lack coverage compared to almost one-third of Hispanics. The fractions uninsured are also high for blacks and Asian-Pacific Islanders, at approximately 18 percent for both groups. Both blacks and Hispanics are also almost three times more likely than whites to have Medicaid coverage, and much less likely to have private health insurance. The rates of private health insurance are 59 percent for blacks and 48 percent for Hispanics, compared to

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*Figure 1a. Health Insurance Coverage in 2000*
79 percent for whites. Seventy percent of Asian-Pacific Islanders have private coverage (U.S. Bureau of the Census, 2001).

While government programs cover only a quarter of Americans, the fraction they do cover consists in large part of those with the greatest expected costs, the elderly, the disabled, and the poor, particularly the poor in nursing homes. As a result, these government programs absorb a larger than proportional share of costs. In 2000 public expenditures accounted for 45 percent of health care costs (Levit et al., 2002). These expenditures are not just large in relative terms, but absolute magnitudes as well. All told, the public sector spent a total of $587.2 billion on health care in that year (Levit et al., 2002).

In addition to direct public expenditures, the government incurs substantial indirect expenditures through the tax deductibility of health insurance premiums and out-of-pocket expenditures (discussed below), and through insurance coverage for its own employees. When these expenditures are included in the calculation of public spending, the fraction of total spending coming from public funds rises to 60 percent (Woolhandler and Himmelstein, 2002). This 60 percent figure places U.S. public sector spending much closer to the OECD 21 country average of 75 percent in 1998. Regardless of whether one uses the 60 percent figure or the more commonly cited 45 percent, the fraction is at the low end among OECD nations. Only Korea, Mexico, and Greece cover similarly small fractions through public spending (46, 48, and 56 percent). At the upper–most tail of the distribution, 92 percent of expenditures in Luxemburg were publicly funded, 92 percent of those in the Czech Republic and 84 percent in Sweden. The United Kingdom had 83 percent of its health expenditures paid for by public funds. The Canadian and Australian figure is 70 percent (OECD, 2001).5

PRIVATE HEALTH INSURANCE

In 2000, 200 million Americans, or 72 percent of the population, received health insurance through the private sector. The vast majority of these policies, nearly 90 percent, were tied to employment (US Bureau of the Census, 2001). The prevalence of private insurance is unique among

5 Of course, public spending on health care must be financed somehow. Countries with high public health expenditures typically have higher ratios of taxes to GDP than the U.S. In 1998 the highest ratio of taxes to GDP was in Sweden at 52 percent. The ratio in the U.S. was 29 percent (Joumard, 2001).
Western countries. Most OECD countries have substantially larger public health insurance programs (OECD, 1994).

**History and Development**

*History:* At the start of the last century, few Americans had health insurance. This pattern is not surprising because health care costs, in general, were low. Many of the sick were treated in their homes, cared for by family or friends, and the primary cost of an illness was lost wages. As a result, the insurance that did exist was along the lines of the current workers' compensation or unemployment insurance pro-
grams, providing protection against earnings lost due to illness or injury (Scofea, 1994). The earliest policies covering medical costs were group policies that originated in the mining, lumber, and railroad industries in the late 1800s. These were pre-payment plans in which doctors were paid a set fee to provide medical services to the groups' members.

The first modern hospital insurance program (Blue Cross) was started in 1929 by a group at Baylor University who purchased "pre-paid" hospital care from the University hospital (Anderson, 1975). Enrollment in these sorts of plans and in similar plans covering physician care (Blue Shield plans) grew dramatically throughout the 1940s as did other private insurance plans offered to employee groups. Also, during this same time, Health Maintenance Organizations (HMOs) were beginning to be introduced. The first such organization was founded in California in 1929 and is still in operation as part of the Cigna health care system (Scofea, 1994). Between 1940 and 1960 the number of persons with private health insurance increased from 12 million to 126 million (Health Insurance Association of America, 1990).

Growth: Several factors contributed to the rapid growth of employment-related insurance. First, the Stabilization Act of 1942, an executive order by President Franklin Roosevelt, instituted strict wage and price controls. Firms were limited in the wages they could offer workers. However, court rulings exempted employee benefits, like health insurance, from these controls. Providing such benefits thus allowed employers to increase the effective wage of employees and attract more and/or higher quality workers, without violating the controls.

Private health insurance received another policy-related push in 1954 when the Internal Revenue Service (IRS) issued a ruling clarifying the tax treatment of health insurance benefits. That ruling made it clear that employer contributions to the insurance coverage of employees were not considered taxable income. This treatment remains in effect today and provides a substantial government subsidy to employer-provided insurance. For example, if the premiums paid by the employer total $5,000 per year, and the worker is in the 27 percent tax bracket and faces total payroll taxes of 15.3 percent, (ignoring state income taxes) the premium, if paid as cash wages, would net the employee only $2,885. In some cases the employee himself contributes a portion of the premium. Depending on the structure of the plan, these contributions and even out-of-pocket expenditures may be made on a pre-tax basis. Thus, compensation in the form of health insurance would be preferable to cash wages for a wide range of benefits.

Empirical evidence supports the importance of tax deductibility in increasing group coverage. In 1953, prior to the IRS ruling on the matter, 48 percent of households had access to a group health insurance plan, but by 1958 the fraction had risen to 67 percent, an increase of 40 percent. The increase in availability led to an increase in coverage; the percent of households with some form of private health insurance increased from 63 percent in 1953 to 76 percent by 1958 (Thomasson, 2000).

The group insurance provided by employers enjoys a further advantage over policies written in the non-group market because of lower administrative expenses. Employee groups provide a simple,

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6 This was the Ross–Loos clinic started in Los Angeles by Dr. Clifford Ross and Dr. Donald Loos. Subscribers were charged $2 per month and given free access to most services including hospital care (http://www.cigna.com/general/about/history/april.html).

7 In 2000, workers paid an average of 15 percent of the cost of individual coverage and 27 percent of family coverage (Kaiser, 2001a).
straightforward way of organizing large groups to purchase insurance. They reduce the need for advertising by the insurance company and simplify the billing processes. One study found that the administrative costs (loads) on health insurance policies were such that an individual insured in the group market paid $1.15 for every $1 of coverage while someone insured in the individual market paid $1.50 for the same amount of coverage. These returns to scale are evident even within the group market with larger groups obtaining lower rates than smaller groups. The Congressional Research Service (1988) estimates that firms with 1 to 4 workers have loading factors that are more than 7 times higher than firms with more than 10,000 workers. Furthermore, in recent years premiums have increased at a greater rate for small firms than for large firms, exacerbating the difference in price and resulting in a decline in the fraction of small firms offering coverage (Kaiser, 2001a).

Thus, through the tax subsidization that encouraged employment–related plans, and the inherent cost savings associated with the large group market, the government has helped bring lower priced coverage to workers. The lower prices in turn lead to greater coverage. Although the direction of the effect is clear, the magnitude is not. One would expect responses to price changes along several fronts. First, changing the price would likely affect the probability that employers offer health insurance; second, it would be expected to affect the fraction that employers contribute towards premiums; and third, it would likely alter the probability that a worker takes up benefits. Studies attempting to estimate these elasticities have yet to agree on the degree of responsiveness. (See Gruber, 2002, and Cutler, 2002 for summaries of the literature.) In weighing earlier work, Gruber (2002) concludes that, if the tax exemption of health insurance premiums were dropped, there would be a 14 percent decline in firms offering insurance and 22 million additional Americans would become uninsured.

The Indirect Effects on Prices and Coverage

While government subsidy of employer–sponsored health insurance is good for many, there are potentially negative effects of this system. Here I discuss briefly the problems of over–consumption and the repercussions for the non–group market.

Over–Consumption: While in many cases additional coverage is a positive outcome, there can be "too much" of a good thing. Economic theory predicts that the heavy subsidization of insurance will lead to the purchase of more coverage than individuals would choose absent the reduced price. In this sense the market is not efficient (c.f., Pauly and Goodman, 1995). If employees were offered the cash value of health insurance they would likely purchase less coverage than they have currently and more of other goods. With less coverage, the employee would be responsible for a larger fraction of potential costs and would likely use fewer services. The resulting reduction in demand throughout the health care system would be expected to lead to lower prices. Estimates of the economic loss arising from the tax subsidy and resulting over–provision of care vary widely but a reasonable magnitude appears to be on the order of 5 percent of total spending (Chernick, Homer, and Weinberg, 1987) although earlier estimates were much larger (Feldstein and Friedman, 1977).

Coverage in the Non–group Market: Not all individuals have insurance available through an employer. Most obviously,

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* Changes in the price of insurance could also affect the generosity of the plan offered by employers or that chosen by employees.
some individuals lack group coverage because they are not employed. However, even among those with a job, employment-based coverage is far from certain. In 2001 just 65 percent of all firms offered health benefits. While firms with 200 or more workers were nearly certain to provide health insurance, only slightly more that one-half of firms with 3–9 workers did so. Even in firms with health insurance benefits, many employees are not eligible because of job tenure or hours worked. In 2001, 20 percent of individuals employed by firms offering coverage were themselves ineligible (Kaiser, 2001a).

Individuals without employment-based coverage must purchase health insurance in the non-group market or do without. Prices in the non-group market are higher than prices in the group market, in part because of the loss of the returns to scale. Those purchasing insurance on their own are further disadvantaged in that they do not enjoy the tax exempt status afforded health insurance premiums paid for by an employer because individually paid premiums are not typically tax deductible. These payments qualify as a deduction only for the self-employed or to the extent that they along with other health expenditures exceed 7.5 percent of income.9

Perhaps more important than these two factors is the phenomenon of adverse selection. By basing the health insurance subsidy on employment, the government has favored those who are in the labor force. The selection of younger, healthier individuals into employment means that those who are not in the labor force have higher expected health care costs on average. If insurers cannot accurately price policies based on expected costs, either because important components of future costs are unobserved or because of regulations, then prices for the healthier members of the non-group market will be “too high.” These healthier potential applicants will forego coverage, leading to an increase in the average costs of those remaining, and a further increase in price. The end result is that to one degree or another, prices in the non-group market spiral upwards, resulting in prohibitively expensive policies for many. Through this mechanism, the link between health insurance and employment, that stemmed originally from government policies, has important effects on the non-group market.

Additional Economic Implications

The strong ties between employment and health insurance have a number of other economic implications. By subsidizing employment–related insurance the government is providing a large transfer to individuals, some of whom benefit more than others. There are also effects on job mobility because leaving a job, through retirement or to accept a new position, carries the additional cost of losing or changing health insurance policies. Finally, as noted above, the association between work and insurance has spillover effects in the non–group market. I discuss these issues below.

Redistributive Aspects: Although the government does not directly provide health insurance to the working population, the tax treatment of the benefits results in a large government transfer for much of this group. For 2003, the lost tax revenues due to the tax treatment of health insurance premiums are estimated to be $99 billion (Office of Management and Budget, 2002). An additional $5.3 billion is expected to be lost to the deductibility of medical expenses.10 Because income tax

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9 The self-employed are able to deduct a portion of the premiums they pay. In 2001 the self-employed could deduct 60 percent of their premiums. This fraction was 70 percent in 2002 and is scheduled to increase to 100 percent in 2003.

10 The total lost revenue from all health–related tax incentives, including such items as medical savings accounts, is estimated to be $118 billion in 2003.
rates are progressive, this subsidy disproportionately benefits the wealthy. Estimates for 2000, for families with a household head younger than 65, show an average yearly tax benefit from the deductibility of employment related health insurance premiums of over $2,600 for those with incomes above $100,000. In contrast, the benefit for families with incomes between $15,000 and $20,000 averaged just $330 (Sheils, et. al., 1999). Thus the highest income families receive a tax subsidy equal to nearly eight times that of lower income families. For those with no tax liability, the subsidy is irrelevant. This regressivity runs counter to the progressivity of our tax system and many public programs.

Job Mobility: The link between employment and health insurance coverage also affects job changing behavior. If an individual leaves a job that provides employment-based health insurance, he will lose that coverage. Even if he finds a new job that provides similar insurance, there may be a period of time during which the individual (and his family) is uncovered while the job search is in progress. Mobility is therefore more costly and less likely to occur because of the tie between employment and health insurance. While firms may value the stability of the employment relationship induced by health insurance, economists fear the resulting inefficiency from workers not matched to the best-suited jobs.

For older workers considering retirement rather than a job change, the costs of losing employment-related coverage may be even greater. Medicare provides health insurance for persons age 65 and over. Individuals wishing to retire prior to this age must either have retiree health insurance provided through an employer or must purchase coverage. Even when continuation coverage can be purchased through a former employer's plan, the premiums are likely to be costly. Furthermore, the importance of employment-related insurance need not end at age 65 if coverage is also being provided for a younger spouse or other dependents. In this case, retirement might be postponed beyond the normal retirement age to ensure continued coverage of family members.

Numerous papers have been written analyzing the effect of health insurance on job changing and retirement behavior. Madrian (1994a) estimates that the "job-lock," induced by the lack of portability of health insurance, reduces voluntary job mobility by 25 percent. Gruber and Madrian (1994) examine the effect of continuation coverage on job changing and find that policies such as COBRA (discussed below) that require that workers be offered the option to purchase insurance through a former employers' plan, have a significantly positive effect on mobility. However, not all studies have found strong evidence of job-lock. Kapur (1998) uses the same data as Madrian but reaches different conclusions, finding no evidence of job-lock. Gilleskie and Lutz (2002) conclude that the estimated job-lock effect is due largely to omitted job characteristics (particularly fringe benefits). In their study they are able to control for job characteristics and unobserved heterogeneity and when doing so find no evidence of job-lock for married men and only small effects, a 10–15 percent reduction in mobility, for single men.

Another large literature has concluded that health insurance has a substantial effect on retirement. Early retirees (those younger than age 65) who attempt to purchase insurance in the non-group market face premiums that are high both because of the loss of the returns to scale associated with group insurance and the added

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11 See Currie and Madrian (1999) and Gruber and Madrian (2002) for detailed analyses of the effect of health insurance on job mobility and retirement behavior.
cost associated with their age. Age is an important factor in pricing policies. A recent survey of non-group health insurance policies found that basic preferred provider plans averaged $975 per year for a 25-year-old man, but $2,750 per year, or nearly three times larger, for a 55-year-old man. Furthermore, policies for the older man were found to run as high as $6,700 in some cities (Council of Economic Advisers, 2002). Costs of this magnitude may well cause an individual to postpone retirement.

Some firms provide retiring workers with health insurance coverage. This coverage is often subsidized, at least in part, by the firm and eliminates the need to purchase continuation coverage and/or private health insurance. A large number of studies have consistently found that retirement probabilities are positively related to the availability of retiree health insurance (Karoly and Rogowski, 1994; Gustman and Steinmeier, 1994; Hurd and McGarry, 1996; Rust and Phelan, 1997; Blau and Gilleskie, 2001). Madrian (1994b) estimates that the increased prevalence of retiree health insurance over the last several decades is responsible for a substantial portion of the decline in the labor force participation of older workers. Unfortunately for employees, the trend towards employers offering retiree coverage has reversed; the fraction of firms offering the benefit has declined dramatically in recent years. The fraction of firms with 200 or more employees providing retiree health insurance fell from 66 percent in 1988 to just 34 percent in 2001 (Kaiser, 2001a). Small firms rarely offer this coverage.

Even before the academic debate on the importance of job-lock, policymakers were concerned about the phenomenon. This concern led to legislation that intentionally weakened the link between health insurance and a particular job. The 1985 Consolidated Omnibus Budget Reconciliation Act (COBRA) mandated that employees be given the option to purchase continued health insurance coverage through a former employer for up to 18 months after leaving the firm. The cost to the former employee of this continuation coverage can be no more that 102 percent of the employer’s premium; with the 2 percent being for administrative expenses. Although the former employee is bearing the entire cost of the plan, because the insurance is purchased through the group market it should be of lower cost than identical insurance purchased in the non-group market. It also means that the insured can continue to visit the same providers, and experience no break in the coverage of pre-existing conditions, an option that might not be possible with a change of plans.

Thus, COBRA ought to have made continued health insurance coverage more obtainable to those changing jobs or retiring. However, COBRA coverage is often prohibitively expensive and thus participation is low. In 2001, the average cost of family coverage under employer plans was $588 per month (Kaiser, 2001b). One hundred and two percent of $588 is $600, or $7,200 per year, a large amount, particularly in comparison to the average monthly unemployment benefits of $925.\footnote{Average individual (rather than family) coverage is “only” $221 per month (Kaiser, 2001b), but still larger than what many unemployed workers can afford.} Likely because of the high costs involved, many of those eligible for COBRA coverage do not purchase it. In 2000 only 25 percent or so of those who were eligible chose to purchase coverage (Kaiser, 2001b).

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) attempted to enhance further the portability of employment-related health insurance by limiting restrictions on the exclusion of pre-existing conditions, requiring greater access to policies, and ensuring
renewability of coverage. However, it
does not alter the price of policies.13

Thus, while COBRA and HIPAA have
done much in theory to increase the port-
ability of health insurance and the ease with
which coverage can be maintained, in prac-
tice continuation coverage remains costly
and the loss of health insurance is likely to
remain an impediment to changing jobs.

Current Environment

Prices and Coverage in the Group Market:
Just as the subsidized price for health in-
surance increased coverage initially, sub-
sequent increases in cost would be ex-
pected to decrease it. Health care costs
rose rapidly in the late 1980s and early
1990s and then leveled off. Rising premi-
ums increase an employer’s cost. In re-
ponse the employer can eliminate coverage
or can pass along additional costs to
employees, increasing their share of the
premium. Cutler (2002) uses the years
from 1987 to 2001 to analyze the effect of
costs on the provision and take-up of pri-
ivate health insurance benefits. Between
1987 and 1993 health care costs rose dra-
matically and the fraction of the popula-
tion with employment-based coverage fell
from 71 percent to 65 percent. Cutler
finds that this drop in coverage was not
due to changes in the fraction of employ-
ers offering benefits, but rather to declines
in take-up by eligible employees. Furth-
more, he attributes the drop in take-up to
the rising costs facing employees. Marquis
and Long (2001) also find only small
changes in the probability that a firm of-
fers health insurance coverage to its work-
ers in response to changes in price. Thus
it appears that changes in coverage dur-
ing this time period were due to choices
made by employees and their valuation
of the benefit.

However, more recent evidence suggests
that employers are beginning to reduce
coverage in response to new cost increases.
Between 2000 and 2001 premiums for em-
ployment-based insurance increased by 11
percent, and they increased by another 12.7
percent from 2001 to 2002. Over this same
two year period, the fraction of firms of-
ferring health insurance coverage fell from
67 to 62 percent (Kaiser, 2002a).

As an alternative to dropping coverage
or requiring larger employee contribu-
tions, the employer can reduce the gener-
osity of the plan it offers. One trend that
has received much attention in the press
recently is the movement towards health
insurance plans with very large deductibles (Kowalczyk; 2002; Kristof,
2002).14 In some cases these plans are
linked to medical savings accounts that
can be used to pay for services prior to
meeting the annual deductible. While
plans with high deductibles provide in-
surance against the risk of very large out-
of-pocket expenses, individuals must pay
for much of the routine care they receive.
There is therefore concern that individu-
als may forego preventative care or
needed treatments to save money. In re-
ponse to these concerns, some of the high
deductible plans do provide coverage for
regular check-ups.

Kaiser (2002a) shows a trend towards
both declines in the generosity of coverage
and increases in average deductibles. In
2001, 11 percent of workers had less gen-
erous benefits than in the preceding year,
for 2002 the number was 17 percent. Aver-
age deductibles for Preferred Provider Or-
ganizations (PPOs) in-plan services in-
creased from $201 in 2001 to $276 in 2002.15

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13 See Claxton (2002) for a clear discussion of HIPAA and the private insurance market in general.
14 Blue Cross in Massachusetts recently received approval for a health insurance plan that had a family deduct-
able of $12,500 (Kowalczyk, 2002).
15 PPOs allow plan members to use out-of-network providers with higher cost-sharing than in-plan providers.
Average deductibles for out-of-plan services increased from $407 to $488. In 2002, 52 percent of workers with
health insurance had a preferred provider plan.
A Proposed Change for the Non-group Market:16 The persistently high number of uninsured individuals and the cost of individually purchased policies have resulted in numerous proposals to modify the current system. These suggested changes have varied from large restructuring, such as moving towards a national health insurance program, to smaller changes in the tax treatment of medical costs. President Bush has recently proposed tax credits to help those without employment-related coverage purchase private insurance. The proposal aims to expand coverage while retaining the overall system of private insurance rather than turning towards greater public assistance.

The current plan would provide individuals who do not have employment-based coverage with a refundable tax credit of $1,000 to be used towards the purchase of private health insurance. Families would receive up to $3,000. The credit would be advanceable, meaning that a taxpayer could receive the credit prior to filing a tax return for the year based on income in the prior year (but would not have to repay the credit if income increased), and would be phased out as income increased.

Providing a tax credit to those without employer-sponsored plans addresses several of the criticisms of the current system. The primary concern—the unequal tax treatment of those with employer-sponsored plans and those without—is somewhat lessened; many of those who purchase insurance on their own will receive a federal subsidy for at least a portion of the cost. Subsidizing private purchases in the non-group market will also help alleviate the adverse selection problem by enticing more people, and particularly more “good risks,” into the market. Finally, because the credit can be applied to COBRA coverage, it could reduce job-lock by making it easier for individuals to move to a job that does not offer health insurance or that might have a waiting period before the employee is eligible for benefits.

President Bush’s plan has been criticized for offering too small a subsidy (Parrott, 2001; Park, 2002).17 For older workers and those in poor health, it would indeed be difficult to find a policy for even twice the value of the tax credit. The Council of Economic Advisers (2002) reports that only 17 percent of the low cost plans it surveyed for 55-year-old men had premiums that were below $2,000 (twice the value of the tax credit). Even the lowest cost plan found for this age group was more than 50 percent above the value of the credit. There is also concern that the tax credit might lead employers to discontinue coverage and force workers to fend for themselves in the non-group market, foregoing not only the tax advantages of employment related insurance, but also the returns to scale existing for group plans. Finally, because health insurance plans can be complicated and differ on many dimensions, including copayments, deductibles, yearly and lifetime limits on benefits, and coverage, it is feared that individuals with no prior experience in selecting a health plan might choose poorly and have inadequate coverage.

Certainly the U.S. system of employment-related insurance can be improved and tax credits offer one direction to explore. An alternative avenue is through the expansion of public programs. The following section outlines the public insurance programs already in place and their recent expansions.

PUBLIC INSURANCE

Much of the impetus for government intervention arises from the notion that health care is a right; that all are entitled

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16 Details of this proposal are taken from a report of the Council of Economic Advisers (2002).
17 See Gruber and Levitt (2000) for simulations of the cost and benefits resulting from several similar plans.
to at least some basic level of care. While the government subsidy for employment-related insurance encourages the private provision of insurance and mitigates some of the inefficiencies in the health insurance market, it may make purchasing insurance more difficult for those without a strong attachment to the labor force. The selection of prime-age healthier individuals into jobs means that those without employment-related coverage are likely to be older (retired) and/or less healthy (perhaps disabled) with greater expected medical costs, higher insurance rates, and, absent the protections of a subsidized group market, less able to afford insurance. In addition, because the majority of Americans have access through employment, the market for non-group coverage is limited in size. If health care is a right that we want all citizens to have access to, one solution is to provide national health insurance to all. This is the fact taken in many countries (see Roemer, 1993 for a summary of health insurance around the world). The U.S. has toyed with this idea at various times in its history, but has never instituted such a plan. Instead, public health insurance has been made available only to specific groups who are expected to have a difficult time obtaining coverage on their own.

Efforts to design and implement various forms of public insurance were begun at the start of the last century, but gained significant attention with the establishment of the Social Security program in 1935. President Roosevelt’s Committee on Economic Security investigated the idea of public health insurance and included some discussion in its final report, but no legislation was ever passed. After the enactment of Social Security many ideas for some sort of public health insurance program were put forth. One of these proposals, the Kerr–Mills Act of 1960, resulted in the establishment of Medical Assistance for the Aged (MAA), a health insurance program for the elderly, similar in structure to the current Medicaid program. Eventually, in 1965, Congress passed legislation establishing the current Medicare and Medicaid programs. Today, these two programs account for nearly all of U.S. public health insurance. This section outlines these programs and briefly discusses the newly established State Children’s Health Insurance Program (SCHIP).

Medicare

Although Social Security and Medicare are often referred to jointly and thought of as sister programs targeting the elderly, in reality, Social Security is a much older program, having been established 30 years before Medicare. The Medicare program was signed into law as Title XVIII of the Social Security Act in 1965. Since its inception, the number of individuals covered by Medicare and the cost of the program has grown dramatically. By 2001 there were 40.1 million persons covered by Medicare, of whom 34.4 million were elderly and 5.7 million disabled. Medicare expenditures in that year totaled $241 billion or $6,199 per enrollee. It is important to note that although Medicare is a government transfer program, providing substantial benefits to the eligible population, it is not a means tested program. The wealthiest elderly receive subsidized insurance just as do those with modest incomes.

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18 Myers (1970) provides a detailed discussion of the political environment leading up to and surrounding the enactment of the Medicare and Medicaid Programs. Myers (1993) includes a discussion of more recent developments.
19 Although MAA was targeted to the elderly, its focus on the medical needs of the poor, its state level administration, and its joint federal and state funding were all later incorporated into the Medicaid program.
20 There exist several smaller government programs such as those that target military personnel and their dependents (CHAMPUS/TRICARE/CHAMPVA) that I do not discuss here.
21 The distributional aspects of Medicare are more directly discussed below.
Initially Medicare covered only the elderly, but in 1973 eligibility was extended to those who had received Social Security disability benefits for at least two years. Medicare consists of two parts; Part A, which is mandatory and provides hospital coverage (sometimes referred to as HI) and Part B or Supplemental Medical Insurance (SMI), which is optional and provides coverage for outpatient services. Part A is financed by a payroll tax instituted specifically for this purpose. The structure of the Medicare payroll tax mimics that of the Social Security program. In 2002 employees and employers each contributed 1.45 percent of labor earnings for a total of 2.9 percent. Originally the payroll tax was applied only up to a specific level of earnings. Since 1994, however, all earnings have been taxed. Revenues in excess of expenditures are held in a trust fund similar to that which exists for the Social Security program. Approximately 60 percent of Medicare expenditures are associated with Part A spending.

In contrast to the targeted tax for Part A, Part B of Medicare is financed in part from general revenues and in part from premiums paid by the beneficiaries (or on their behalf under the Medicaid program). Originally the monthly premium paid by beneficiaries was equal to one-half of the cost of the insurance. This fraction varied over time as premiums were updated on a relatively ad hoc basis. In 1997 premiums were set permanently to 25 percent of program costs, providing a substantial transfer from taxpayers to beneficiaries. The premium in 2002 was $54 per month.

More recently, the Balanced Budget Act of 1997 (BBA) established a third component of Medicare, Medicare Part C or Medicare-Choice. This is an optional program through which a Medicare beneficiary can enroll in a managed care plan in lieu of traditional Medicare. These plans typically cover services not included in traditional Medicare, most notably prescription drugs, but put restrictions on the choice of providers. The majority of Medicare-Choice plans now charge an additional premium. The Medicare-Choice option initially saw rapid growth, reaching a peak of 6.3 million enrollees in 2000. However, in recent years the number of available plans has fallen substantially, benefits have been reduced, and premiums have increased, making the plans less attractive to beneficiaries. As a result, enrollment has fallen. By 2002, enrollment had declined to 5.1 million beneficiaries or 13 percent of the Medicare population (Kaiser, 2002b). The benefits of these plans vary widely and I therefore confine the remainder of the discussion to traditional Medicare, which serves the vast majority of the elderly.

In addition to premiums for Part B, Medicare enrollees pay deductibles and copayments on most covered services. Part A, the hospital insurance portion, currently has a deductible of $812 per hospital admission. Medicare then pays the full cost of the next 60 days of the hospital stay. For stays beyond 60 days the beneficiary faces a copayment of $203 per day for up to 90 days. After 90 days, Medicare pays nothing although each beneficiary has an additional lifetime reserve of 60

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22 This section draws on Myers (1970) and Committee on Ways and Means (1998).

23 In 1991 the Medicare limit was increased to $125,000 while the Social Security limit was $53,400. The Medicare tax limit then increased to $130,200 in 1992 and $135,000 in 1993. In 1994 the limit was removed and all earnings were subject to tax (Board of Trustees, 2002).

24 In 1999 80 percent of Medicare-Choice plans did not require an additional premium. By 2002 this fraction had fallen to 40 percent (Kaiser, 2002).

25 More specifically, the deductible limits are for a particular episode defined as beginning with a hospital admission and ending with a period of at least 60 days after leaving the hospital or skilled nursing facility. Thus, an admission that is related to a recent hospital stay will not result in a new deductible.
days with a coinsurance payment of $406 per day. Part B services generally have a deductible of $100 and a copayment of 20 percent for services beyond this amount.

There are also important gaps in Medicare coverage. Items such as eyeglasses, hearing aids, and most dental services are excluded. More important, however, is the lack of a prescription drug benefit or the coverage of long-term care needs. Costs for each of these services can be quite high. While most individuals have relatively low prescription drug costs in any given year, for those in the upper tail of the distribution, costs can be high. In 2000, average prescription drug costs for the top 10 percent of the expenditure distribution were $4,793 (Shearer, 2000). Recent studies have found that low-income elderly with substantial prescription drug bills may not take their medication as prescribed or may delay filling a prescription to reduce costs. If this is a common phenomenon, then potential out-of-pocket medical spending may be even larger than statistics on actual spending indicate. Costs for nursing home care can be even more of a problem. In 2002, the average nursing home rate was approximately $52,000 per year for a semi-private room, or $61,300 for a private room, and prices varied widely. In the most expensive city, Stamford CT, the average cost of a private room was nearly $347 per day or over $125,000 per year (MetLife, 2002). A final important characteristic of the Medicare program is the reimbursement mechanism. The payment strategy is complicated and has changed considerably over time. Briefly, doctors have the option of whether to accept assignment from Medicare. If they accept assignment they are paid the amount Medicare determines to be appropriate. Alternatively, doctors can refuse to accept assignment and charge higher fees. In this case the patient pays the excess above what Medicare determines to be the reimbursable amount, although there are limits on the amount doctors can charge. For hospitals, Medicare reimburses the institution using a prospective payment system (PPS) that sets the amount of payment as a function of the patient’s diagnosis, or specifically, the “diagnosis-related group” (DRG). Skilled nursing care and home health care are reimbursed using a similar system. An excellent summary of the details of Medicare allowable costs and the evolution of payment mechanisms is available in Newhouse (2002).

Economic Issues

Role of Intervention: One of the primary reasons for government intervention in the insurance market is the possibility of adverse selection. Part A of Medicare is compulsory. This characteristic eliminates the potential for adverse selection; everyone is included. Part B of Medicare is optional, but the subsidy, equal to 75 percent of the cost, is so large that nearly all Part A beneficiaries enroll. In 2001, out of a total of 34.4 million Medicare enrollees, 32.7 million or 95 percent were enrolled in Part B. So, again, there are unlikely to be prob-

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26 A prescription drug benefit was discussed at the time of the initial Medicare legislation but was rejected in part because of the expected costs (Myers, 1993).
27 Medicare covers up to 100 days in a skilled nursing facility if the stay is related to a hospitalization.
28 A Harvard University survey found that 15 percent of the elderly with prescription drug expenses of over $100 per month reportedly did not fill a prescription at one time because they could not afford it (Harvard School of Public Health, 2000).
29 There does exist a private market for long-term care insurance but it is not well developed. Many of the policies have limits on yearly expenditures or lifetime caps on benefits. Furthermore, most policies are not indexed to health care costs and with sufficiently large increases in prices could end up covering little of the eventual cost of a nursing home stay.
30 Akerlof (1970) uses the market for health insurance for the elderly as a prime example of the effect of adverse selection and notes the potential for Medicare to improve market performance.
lems with selection. As a further precaution against adverse selection, those who fail to enroll in Medicare Part B when they are first eligible face a higher premium if they choose to enroll at a later date. The mechanism is designed to discourage individuals from enrolling only after their expected medical expenses rise to a high level.

A second explanation for government intervention is for equity or redistributional concerns. Health care is often viewed as a right. For the elderly, health care is particularly expensive and many are on fixed incomes, so insurance may be difficult to afford. Furthermore, the elderly are typically not in the labor force and therefore do not have the advantage of government-subsidized, employment-related insurance. Without public support, many old people might go without needed care once they become ill, or might eventually impoverish themselves attempting to pay for this care. As an example of the insurance costs associated with aging, consider a basic Blue Cross policy that costs a 25–year-old male $420 dollars per year. That same policy would cost $1,608 for a 64–year-old male, nearly four times as much.31 Because health care needs are greater, copayments and deductibles incurred over the course of the year would also be larger for older persons. The importance of these barriers to purchase is evident by the low coverage rates that existed prior to Medicare. In 1965, only half of the elderly population was insured compared to nearly complete insurance coverage today (Gornick et al, 1985).

Supplemental Coverage: In addition to the lack of prescription drug coverage or long–term care benefits, Medicare beneficiaries face other risks for high out–of–pocket spending. Medicare benefits can be exhausted by long hospital stays and there are deductibles and copayments required for most services. All told, these expenditures can be substantial. In 1997 total average expenditures per Medicare beneficiary were $9,340. Fifty–five percent of this amount was paid for by Medicare, leaving $4,226 to be paid for through other sources (Health Care Financing Administration, 2000). For those who are ill, annual expenses are much larger.

Fortunately, most elderly have some type of insurance in addition to Medicare so few actually incur out–of–pocket costs equal to the non–Medicare portion of their expenses. The additional insurance can come from one of several sources. Supplemental insurance may come from a former (or current) employment relationship, it may be purchased privately in the form of “medigap insurance,” or it may come from another government program. Participants in the Medicare+Choice program typically have more complete coverage than those in traditional Medicare and do not normally purchase supplemental insurance. The distribution of elderly across these various options is highlighted in Figure 3. In 1999, only 13 percent of the non–institutionalized Medicare population had no supplemental coverage.

The most common avenue for supplemental insurance coverage is through an employment relationship. In 1999, 33 percent of Medicare enrollees had supplemental insurance related to employment (Kaiser, 2001c). However, evidence suggests that such insurance is becoming less common. In 1988, 66 percent of large firms (200+ employees) offered retiree health insurance, but by 2002 this figure had fallen by nearly half to 34 percent. Only 5 percent of small firms offer retiree coverage. Thus, the fraction of the Medicare population with retiree coverage will likely fall.

Many of those who do not have employer–sponsored insurance choose to purchase supplemental coverage on their

31 These figures were obtained from www.ehealthinsurance.com.
Figure 3. Sources of Supplemental Coverage among Non-Institutionalized Medicare Beneficiaries, 1999

Employed-sponsored 33%

Medicare+Choice 17%

Medicaid 11%

Medigap 24%

Total = 34.7 million non-institutionalized Medicare beneficiaries

own. This insurance, referred to as medigap, is regulated by the federal government and must cover specific expenditures. The varying levels of coverage are organized into 10 plans, lettered A–J. The coverage provided by each of the 10 plans is detailed in Figure 4. Plan A offers the least complete package of benefits consisting of payment for Part A coinsurance, Part B coinsurance, 365 additional hospital days over a lifetime and 3 pints of blood. Plan J provides the most extensive coverage including, among other things, coverage of up to $3,000 in prescription drug costs. These insurance plans are not subsidized by the government or by employers and as a result adverse selection does occur, particularly among those policies that cover prescription drugs. In 2002, premiums in Los Angeles, CA through Blue Cross of California ranged from $900 per year for plan A to $3,036 for plan J (http://www.bluecrossca.com/user_groups/Visitors/Individual/).

As an alternative to purchasing a private medigap policy, an individual may choose to enroll in a Medicare+Choice plan. As noted above, this option typically provides greater coverage than traditional Medicare but has recently fallen in popularity and availability.32 Abraham, et. al. (1999) find that enrollment in Medicare+Choice plans is positively related to the price of medigap insurance, suggesting the Medicare+Choice plans are a substitute for the combination of Medicare and medigap.

Finally, for the poor elderly supplemental coverage is available from the Medicaid program. Medicaid pays the Part B premiums of eligible enrollees and fills the gaps existing in Medicare coverage including long-term care and prescription drug expenses. Because of Medicaid, many of the poorest are insulated from large out-of-pocket medical expenses. The details of the Medicaid program are outlined below.

32 Only 64 percent of Medicare beneficiaries now have an HMO available in their area, down from 72 percent in 1999 (Barry and Kline, 2002).
These supplemental insurance plans have consequences beyond the reduction in out-of-pocket spending. The Medicare program was designed with both copayments and deductibles for most services in order to reduce the purchase of unnecessary care. By requiring the insured to pay part of the cost of any medical service, the risk of excessive purchase of care is reduced. However, in many cases the supplemental coverage purchased by or provided to Medicare recipients eliminates all out-of-pocket expenses providing the insured with what is termed “first dollar coverage.” With such coverage, medical services are costless (except for the individual’s time and discomfort) so the insured person is unlikely to pause to consider whether a particular test, procedure, or doctor visit, is worth the price. More medical care will therefore be purchased than if the individual were paying a portion of the cost of the treatment. The over-consumption of medical services brought upon by an inefficiently low price has been termed moral hazard in the health economics literature.\(^3\) Skinner, Fisher, and Wennberg (2001) show that there is a good deal of unnecessary treatment in the Medicare program.

On first glance it would seem a simple matter to deduce how much additional care was being purchased due to moral hazard. To do so one might simply compare service use for those with medigap policies with the usage of those with Medicare only. However, this simple comparison could lead to incorrect conclusions. If there is adverse selection in the medigap market, then individuals who are most likely to be heavy users of medical care would also be the most likely purchasers of supplemental coverage. Thus one would expect medigap holders to use more services even if there were not a moral hazard or price effect. Several papers have attempted to estimate the extent of moral hazard. Hurd and McGarry (1997), Lillard and Rogowski (1995), and Ettner (1997) all fail to find any evidence

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\(^3\) A second form of moral hazard, more consistent with the traditional definition, occurs when individuals invest too little in good health habits because they have insurance against negative health events.
of adverse selection in the holding of supplemental health insurance. However, these studies also all find that those with supplemental health insurance consume substantially more services than those without, providing evidence of moral hazard. For example, in Hurd and McGarry (1997), 92 percent of those with medigap coverage in addition to Medicare saw a doctor in the past year, compared to just 84 percent of those with Medicare alone. Christensen and Shinogle (1997) find similar differences. In both studies those with supplemental insurance also had more visits to a doctor conditional on having at least one.

Because Medicare pays a portion of the additional service use, the presence of medigap and other supplemental insurance adds to Medicare’s cost. Kaiser (2001c) shows that Medicare expenditures vary greatly with supplemental insurance status. For those with traditional Medicare coverage alone, Medicare spending in 1997 averaged $3,663 while those with private medigap insurance averaged $4,634, or 27 percent more. While some of this difference may be due to adverse selection, the failure of the literature to find evidence of selection based on health suggests that a good deal of the cost differential is due to moral hazard. Individuals with Medicaid coverage in addition to Medicare averaged an even larger $6,482.

*Distributional Issues:* Medicare represents a substantial transfer from the young to the old (Auerbach, Gokhale, and Kotlikoff, 1991). Certainly the 75 percent of Part B paid for by general revenues constitutes an important intergenerational transfer. Because the importance of Part B has increased relative to Part A and because the beneficiary’s share of the Part B premium has decreased since Medicare’s inception, this intergenerational transfer has increased over time. Furthermore, because health care costs and the Medicare payroll tax have increased over time, a portion of Part A benefits also represents a transfer. Vogel (1988) estimates that for the cohort that turned 65 in 1985, the present value of Part A benefits was $54.5 billion while their lifetime payroll tax totaled just $5.6 billion. For Part B, total benefits summed to $32.5 billion and total premiums to $6.4 billion. Thus, each part of Medicare represents a substantial intergenerational transfer. Based on Vogel’s estimate of 2 million new 65 year olds in 1985, the total net transfer is an average of $37,000 per person. Using more recent data, McClellan and Skinner (1997) estimate that the intergenerational transfer from Medicare for those 5 years younger (the cohort turning age 65 in 1990) is $16,800 per person. Again, much of this transfer is due to the substantially lower taxes paid by early cohorts relative to later groups. Assuming a steady state, the transfer falls to just over $1,000.26 Culler and Sheiner (2000) echo this finding. They show that rates of return from Medicare have declined steadily over time, from 27.6 percent for the cohort born in 1910 to 2.2 percent for the 1980 birth cohort, but continue to exceed the rate of return for Social Security for all cohorts.

Not only has Medicare resulted in a transfer from younger to older generations, but its financing and benefit regulations result in varying costs and benefits across groups within a given cohort as well. Currently all individuals are taxed at a single rate for Part A of Medicare. This

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34 Note that these authors test for the possibility of adverse selection based on observable health status. Adverse selection on unobserved tastes for care, for example, cannot be controlled for. Those who “like” seeing a doctor could be more likely to purchase additional insurance, and, all else constant, more likely to visit a doctor.

35 In contrast, studies of selection into Medicare+Choice plans do find evidence of selection on observable health characteristics for enrollment in these plans (Eggers and Prihoda, 1982; Hellinger, 1995).

36 To reach the steady state transfer requires assumptions about the rate of growth of earnings and medical expenses, among others. See the original paper for details.
portion of the program is therefore neither progressive nor regressive but proportional. High-income workers pay more in taxes but pay the same fraction of their income as low-income workers.37

Financing for Part B comes from two parts. Twenty-five percent of the cost is financed by premiums that are identical across individuals. This equality means that the poor pay a greater share of their income and this portion is thus regressive. However, the majority of revenue for Part B comes from general revenues and thus from a progressive income tax.38 Over the next 30 years or so, Medicare Part B expenditures are forecasted to grow more rapidly than Part A (Board of Trustees, 2002). If these projections are correct, the financing of Medicare will become more progressive as an increasing share of the expenditures are financed through income tax receipts rather than through the payroll tax or premiums.

In addition to differences by earnings, there are also redistribution aspects related to marital status. Spouses of those eligible for Medicare are entitled to Part A benefits even if they have never paid payroll taxes themselves. This feature, like the similar construct in the Social Security program, results in a transfer to single-earner married couples from other groups. Dual-earner married couples in particular lose from this arrangement. Even if both spouses have paid payroll taxes throughout their lives, they will receive exactly the same benefit from Medicare as if only one had ever worked.

A less straightforward mechanism through which Medicare can redistribute resources across demographic groups is through benefits. Most obviously, those with greater expected medical expenses receive larger transfers, so Medicare, as would any insurance program, redistributes resources from the healthy to the sick. Garber, MaCurdy, and McClellan (1997) estimate that Medicare expenditures in 1989 for beneficiaries in the 95th percentile of costs averaged $34,015 (in 1996 dollars) while average expenditures for the entire bottom half of the distribution were just $165. If the poor are in worse health than the rich, an analysis of the distribution of Medicare benefits by income will confound the effect of differences by health status and differences by income. Conversely, in terms of lifetime transfers, those who live longer will, *ceteris paribus*, receive a greater benefit from Medicare. Because the well-to-do live longer than the poor, the redistributional effect of differential mortality operates in the opposite direction. Similar effects have been noted with respect to Social Security benefits (Panis and Lillard, 1996; Liebman, 2002).

Contrary to what one might expect given socio-economic differences in health, McClellan and Skinner (1997) show that Medicare expenditures generally rise with income. In 1990, average expenditures for men age 75–79 were $2,955 in the lowest income decile and $3,794 in the highest. For women the amounts were $2,548 and $2,974.39 Taking into account differences in longevity and taxes paid into the system, McClellan and Skinner conclude that the Medicare program results in net transfers from the poor to the rich. Furthermore, they find that the majority of the difference in medical expenditures across income categories arises from greater use of physicians and ambulatory services (Part B services) by higher income individuals. Finally, despite these

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37 Recall that prior to 1994 taxes were based only on earnings up to a set amount. Thus, for a large portion of the program's life, individuals with earnings above the annual maximum taxable limit paid a smaller fraction of their earnings into Part A of the Medicare program than those with lower earnings, resulting in a regressive tax.

38 The progressivity/regressivity of the program is further complicated because Part B premiums for the poor elderly are paid for by Medicaid.

39 The pattern of higher expenditures for men than for women holds across age groups and deciles.
substantial differences in spending in a single year, even larger differences exist for a lifetime perspective due to differences in mortality rates.

Bhattacharya et al. (2002) analyze differences by schooling level and find conflicting results; expenditures on Part A services are greater for those with low levels of schooling on a year-by-year basis. However, as in the McClellan and Skinner analysis, once a lifetime perspective is taken, the net present value of Medicare is greater for those with more schooling.

Of greater interest than the straightforward correlations between Medicare expenditures and health status or life expectancy is the possibility that benefits differ across population subgroups after controlling for health. This difference could result from differential access to the health care system or to caregivers, different social norms in the use of care, or differences in supplemental coverage that affect the cost and thus use of Medicare services. Lee, et al. (1999) examine the difference in service use by income, controlling for health status. They find that the differences in Medicare expenditures between rich and poor are even larger when differences in health are controlled for. As noted earlier, numerous articles have shown that service use, and hence Medicare expenditures, increase with additional coverage (e.g., Link et al., 1980; McCall et al., 1991; Hurd and McGarry, 1997). Because the probability of supplemental coverage rises with income, the wealthier likely face little out of pocket cost and therefore consume more services. The availability of Medicaid for the very poor would be expected to have a similar effect on service use and thus to mitigate the difference. This observed difference may therefore be attributable in part to differences in access to care. Finally, differences in service use by income may reflect differences in access to care or comfort with the health care system.

Work life: As noted above, having employer sponsored health insurance on the job but not in retirement can result in a longer work life. Because Medicare is not available until age 65, many may postpone retirement until that age, a theory consistent with the large spike observed in retirement rates at age 65. However, although many studies have found that employer-provided retiree insurance increases the retirement probability, there has not been equally strong evidence for the role of Medicare. Rust and Phelan (1997) estimate a structural model of retirement and identify the effect of Medicare from the variation in medical expenditures. They conclude that Medicare plays an important role in explaining the observed spike in retirement at age 65. In contrast, Lumsdaine, Stock, and Wise (1996) examine data for a specific firm and conclude that the large spike in retirement at age 65 is attributable to factors other than Medicare eligibility. Madrian (1994b) shows that there exist similar spikes in the retirement probability at age 65 for both those with retiree health insurance (who should value Medicare less) and those without. Her result suggests that some factor other than Medicare is behind the increase in the probability of departing. Thus, despite the intuitive appeal of the argument, the empirical evidence regarding the effect of Medicare on retirement is far from overwhelming.

Gaps and Poverty: For those lacking medical insurance to supplement Medicare, there is significant potential for substantial out-of-pocket medical expenditures. Although the average out of pocket medical expense was $3,142 in 2000, the distribution is highly skewed. Maxwell et al., (no date) found average out-of-pocket medical expenses of $6,000 for low-income women in poor health. This amount is sufficiently large that it will likely have deleterious effects on a woman’s well-being.
Health care costs in general are likely to be largest at the end of life. Lubitz and Riley (1993) find that Medicare expenditures are six times larger during the last year of life than in preceding years. For the eventual decedent, the spending down of assets to meet these expenditures, or the run-up in debts, is unlikely to be a problem provided that the stream of care continues uninterrupted. However, for the surviving spouse who is left to pay the bills, these expenses could have a significant effect on her financial status. Because wives typically outlive their husbands, this phenomenon could play an important role in explaining the substantially higher risk of poverty faced by elderly widows. McGarry and Schoeni (2001) examine the role of out-of-pocket medical expenses on the financial well-being of the surviving spouse. The authors find that these end-of-life expenditures are substantial, averaging 25 percent of income in the last years of life. Furthermore, for couples in the lowest income quartile, end-of-life medical expenses average 70 percent of income. This result suggests that changes in the Medicare program that lead to better catastrophic coverage could have important effects on the persistent poverty of widows.

Benefits of Medicare: Medicare expenditures in 2000 were over $5,500 per enrollee. In that same year the median income for persons age 65 and over was $13,738 and the poverty threshold for a single elderly person was $8,259. Thus the actuarial value of the Medicare benefit is a sizable fraction of income for many. By supplying this relatively generous medical coverage at very low cost, not only is the government giving the elderly access to insurance coverage they might not otherwise be able to obtain, but it is freeing up income to be used for other forms of consumption.

The purpose of the transfer is, of course, to improve the health and well-being of the elderly. What then is the evidence on the effect of Medicare on health? Insurance coverage has been shown to increase the use of medical services by a significant amount, and this result appears to hold true for Medicare. However, it is not clear that additional care necessarily leads to improved outcomes. The RAND health insurance experiment concluded that the additional services used by those with free health care did not lead to improved outcomes (Newhouse, et al., 1993). However, it is not unreasonable to suppose that the availability of subsidized medical care may have a differential impact on the health status of the elderly because of their greater medical needs and lower incomes.

It is difficult to identify the effect of Medicare because it covers all those over age 65. It is not surprising therefore that there has been little work on the subject. Researchers who have attempted to identify an effect have done so by comparing health outcomes for a sample of individuals just below the age of Medicare eligibility with outcomes for those newly eligible. One of the first studies along these lines examined the role of Medicare in access and utilization of a specific diagnostic procedure (Decker and Rapaport, 2002). The authors found that Medicare eligibility increased the probability of a mammogram for black women and for less educated women, two groups who face above average risks of being uninsured prior to age 65. Because better access to diagnostic procedures ought to improve outcomes, the authors conclude that Medicare will have a positive effect on health. Lichtenberg (2002) examines changes in trends in health care utilization, mortality and morbidity at age 65. He finds a significant increase at age 65 in both hospital admissions and visits to a

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40 Poverty rates for elderly widows are close to 20 percent while those for elderly married women are closer to 5 percent.

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doctor's office and a corresponding decline in the average number of bed days and in mortality.\(^4\) Bed days declined 13 percent and mortality by an identical amount. Preliminary work by Meara, Landrum, and Cook (2002) finds that although Medicare increased insurance coverage and hospital days there was no effect on doctor visits or bed days. Certainly more work is needed in this area.

The future of Medicare

Currently Medicare expenditures are equal to 2.4 percent of GDP. This figure is forecasted to grow further, with expenditures forecasted to reach 5 percent of GDP by 2035. The current estimates are that the Medicare trust fund, which finances Part A expenditures, will be exhausted in 2030. To bring the program into actuarial balance over the next 75 years will require either a 38 percent cut in benefits or a 60 percent increase in revenues or a combination of the two (Board of Trustees, 2002).\(^4\) Thus, in many ways the looming budgetary crisis in the Social Security program is dwarfed by that of Medicare.

Although the long run solvency of Medicare is in jeopardy, there is no agreed upon solution. In fact, much of the current discussion centers on an expansion of Medicare to cover prescription drug benefits with both Congressional Democrats and Republicans putting forth legislative proposals to do so. Certainly a prescription drug benefit would be welcomed by seniors, but it does not help the financial status of the program.

Other plans being discussed call for a modernization of Medicare. Medicare has changed little since its inception in 1965, while our health care system has changed substantially. The use of prescription drugs is a prime example. Many diseases are now treated with medications and yearly drug costs can be prohibitively high. However, Medicare does not cover most prescription drugs.

Another problem with how the Medicare system has evolved is the prevalence of first dollar coverage. New proposals in Washington would alter the structure of medigap plans so that Medicare beneficiaries face some cost for additional procedures. In doing so, the use of unnecessary services ought to be reduced thereby reducing costs for the entire system.

Finally, Medicare does not provide any sort of yearly or lifetime cap on potential out-of-pocket expenses. In cases of catastrophic expenditures, the elderly individual bears a substantial burden. A restructured Medicare program might include some protection against extremely large expenditures.

A new pilot project, scheduled to get underway in November of 2002, will allow seniors to enroll in a Medicare preferred provider organization or PPO. PPOs have proved popular in the group insurance market and are seen as a way of providing Medicare beneficiaries with more benefits than are available from traditional Medicare while keeping costs low. Advocates of the plan hope that the new Medicare PPOs will provide an answer to the difficulties recently experienced with Medicare+Choice plans and the rising cost of medigap policies. Opponents fear that it will delay much needed reform in the Medicare program and, particularly, the institution of a prescription drug program.

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\(^4\) The Health Care Financing Administration points to the correlation between Medicare coverage and the increase in life expectancy (HCFA, 2000). Prior to the enactment of Medicare in 1965, life expectancy at age 65 was 12.9 years for men and 16.3 years for women. Thirty-five years later, the estimated life expectancy for 65 year olds had increased to 15.7 for men and 19.3 for women, increases of 22 and 18 percent.

\(^4\) This is an improvement over past projections that at one time predicted bankruptcy of the trust fund in 2001. The financial improvement stems in part from a shifting of expenses between Part A and Part B and in part from lower than anticipated costs and higher revenues due to programmatic changes (particularly the Balanced Budget Act of 1997) and the strong economy (Newhouse, 2002).
Medicaid

The public interest in providing health insurance to those who may not be able to afford it extends beyond the elderly and disabled to include many of the poor. These individuals can obtain public health insurance through the Medicaid program; a program enacted in 1965 along with Medicare as part of Lyndon Johnson's Great Society program. For the poor elderly and disabled, Medicaid is a supplement to Medicare, filling the gaps in Medicare coverage. For others Medicaid is the sole provider.

In contrast to Medicare, the Medicaid program is means tested. Originally Medicaid covered only recipients of cash welfare programs and medically indigent children. Over time the Medicaid program has grown substantially, both in enrollment and expenditures, and now provides coverage to children in families with incomes well-above the poverty line as well as to low-income pregnant women. Medicaid differs further from Medicare in that it is a state-run program financed jointly by the states and federal government. The federal government sets minimum standards of coverage, but states are given leeway to provide more generous benefits.

History and Current Law

The Medicaid program was enacted as Title XIX of the Social Security Act. It expanded the state-run programs of Medical Assistance to the Aged (MAA) to benefit other low-income populations. The groups covered initially were those receiving Old Age Assistance, Aid to the Blind, Aid to the Permanently and Totally Disabled, or Aid to Families with Dependent Children. Eligibility for these cash assistance programs was based on meeting the demographic requirements (e.g., elderly or single parent family) and on meeting income and asset limits. States were also permitted to offer Medicaid coverage to those who satisfied the demographic characteristics and not the income limits, but who had sufficiently large medical expenditures that they could "spend down" to the established maximums. This group of eligibles is referred to as the medically needy. States were free to expand the program beyond these categories but would not receive federal matching funds for the additional expenditures. The federal government did, however, allow the coverage of children up to age 21 if they were medically needy even if their families were not eligible for the Aid to Families with Dependent Children program.

With the establishment of Medicaid, spending on medical care for the poor grew dramatically. In fiscal year 1961, the first year of the MAA program, vendor payments through MAA and the programs of Old-Age Assistance, Aid to the Blind, Aid to the Permanently and Totally Disabled, and Aid to Families with Dependent Children totaled $477 million. By 1968, two years after the inception of Medicaid, the total medical spending through these programs and through the Medicaid program totaled $3.5 billion with Medicaid alone accounting for 94 percent of the total. By 1980 expenditures in the Medicaid program were $25.8 billion.

Beginning in the early 1980s the population covered by Medicaid was expanded substantially. In a series of legislative actions coverage was extended to children and pregnant women in families with incomes above the eligibility limits for the cash welfare programs (c.f., Deficit Reduction Act of 1984, Consolidated Omnibus Budget Reconciliation Act of 1985, Omnibus Budget Reconciliation Act of 1986, Omnibus Budget Reconciliation Act of 1987, Medicare Catastrophic Coverage Act of 1988, Family Support Act of 1988, Omnibus Budget Reconciliation Act of 1989,

43 The federal match rate depends on the ratio of state to national per capita income.
44 Some provisions were enacted as amendments to the act in 1967.

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Omnibus Budget Reconciliation Act of 1990. Some of these acts allowed states to expand coverage while later acts mandated expansions. The end result was that Medicaid coverage was extended to all children under age six in families with incomes up to 133 percent of the poverty line, and at the state's option, to those in families with incomes up to 185 percent of the poverty line. Medicaid coverage was also mandated for all children born after September 30, 1993 whose family income was below the poverty line. Cutler and Gruber (1996) report that with these changes, 27 percent of all children in the U.S. were eligible for Medicaid. The expansions also assisted pregnant women, with coverage made mandatory for pregnant women with family incomes up to 133 percent of the poverty line. These changes have allowed many of those leaving cash welfare programs to retain coverage. More recent changes have further extended eligibility to children through the new State Children's Health Insurance Programs (SCHIP).

As a result of these expansions Medicaid enrollment and expenditures have seen another dramatic increase. In 2000, an estimated 33.4 million persons, or approximately 12 percent of the population, were enrolled in Medicaid (HCFA, 2001). This change represents a nearly 50 percent increase over the 22.9 million enrollees in 1990. Costs also increased dramatically. Total expenditures were $207.1 billion in 2000, up from $72.5 billion in 1990 and from just $25.8 billion in 1988.

As shown in Figure 5, in 1998 children comprised approximately 50 percent of the Medicaid population, making them the largest single group of beneficiaries. However, despite their predominance among enrollees, spending on children accounted for just 14 percent of Medicaid payments. In contrast, spending on the disabled accounted for 43 percent of payments while they comprised just 17 percent of enrollees. In terms of spending by type of service, the majority of expenditures are for nursing home care. In 1998, the Medicaid program alone spent $22.7 billion on nursing facilities. The next largest category of expenditures was hospital care at $15.3 billion (not shown).

Insurance coverage Crowding Out of Private Insurance: Because Medicaid was originally aimed at the welfare population there was little risk of crowding out of private insurance; those eligible were simply too poor to purchase coverage. Furthermore, because they were either elderly, blind or disabled, or single mothers who were not expected to work, they would not have employer sponsored insurance that might be dropped in response to Medicaid eligibility. However, as the income limits for eligibility have risen, and an increasing number of children in two-parent families have become eligible, there has been a growing concern that Medicaid is crowding out, or replacing, private coverage. The fear is that parents who are offered employment-related insurance and who must pay a portion of these premiums, will drop private coverage and will instead enroll their children in Medicaid. In this case the government incurs the costs formerly borne by the eligible individual and/or his employer but there is no increase in coverage. Furthermore, because adults are typically not eligible for Med-

45 Gruber (2000) contains a very useful table summarizing the provision of the various acts.
46 These mandates typically resulted in increased costs for the state. To meet these costs states could increase revenues or decrease spending in other areas. Baicker (2000) finds that the costs of the Medicaid mandates in the 1980s and 1990s were met almost entirely by cutbacks in other welfare programs, resulting in no net increase in spending on the poor. However, as McClellan and Skinner (1997) show, the utility value of a health insurance program could well be greater than the cash equivalent if it provides coverage to those who could not purchase it on their own, and in doing so helps smooth consumption and ensure access to medical care.
Figure 5. Medicaid Population and Expenditures

Number of Medicaid Recipients by Eligibility Status, 1998

- adults: 8.7 million (21%)
- age 65%+: 4.4 million (11%)
- blind/disabled: 7.1 million (17%)
- children: 20.4 million (51%)

Medicaid Payments by Eligibility Status, 1998

- other Title XIX, 6,049 million (4%)
- adults, 14,833 million (10%)
- age 65+, 40,602 million (29%)
- children, 20,459 million (14%)
- blind/disabled 60,375 million (43%)

Source: HCFA, 2001
ic aid, if those who drop family coverage when children become eligible for Medicaid also drop their own coverage and/or that benefiting a spouse, the fraction of uninsured adults could actually rise. Finally, because Medicaid eligibility criteria may depend on age or birth year of the child, it is possible that some children in a family may be eligible and not others. Thus, the dropping of a family policy could cause older children to lose coverage along with their parents, while younger siblings benefit from Medicaid.

Researchers have put a great deal of effort into estimating the extent of crowding out, and similarly, the corresponding net increase in coverage resulting from the Medicaid expansions. Cutler and Gruber (1996) estimate that fewer than 30 percent of the children made eligible for Medicaid by the expansions between 1987 and 1992 were uninsured in 1987. Yazici and Kaestner (1998) find a larger fraction initially uninsured. They estimate that nearly 45 percent of those who gained Medicaid eligibility between 1988 and 1992, were uninsured in 1988.

Because only a subset of newly eligible children lacked coverage initially, a portion of the increase in Medicaid enrollment likely came for the ranks of the insured. Cutler and Gruber (1996) estimate that approximately one-half of the increase in Medicaid enrollments associated with the expansions came from a decline in private coverage. Later papers have found substantially less crowding out, with estimates of approximately 15–25 percent (Yazici and Kaestner, 1998; Blumberg, Dubay, and Norton, 2000). Recent work using panel data with individual fixed effects does not find a significant effect of Medicaid expansions on enrollment in private health insurance, indicating that crowding out has not been an important component of the expansions (Ham and Shore-Shipard, 2001).

While the precise amount of crowding out is difficult to measure, these studies do offer support for the conclusion that the potential for crowding out is significant enough that policy makers should consider it when assessing further expansions of Medicaid or similar programs. At the same time, however, it is not clear that all crowding out is bad. If parents replace less generous private policies with more generous Medicaid, access to care may improve. Medicaid provides coverage for items like preventative care that may be excluded from private policies or subject to deductibles and copayments. Such additional benefits may have significant effects on the health of children. Furthermore, freeing up money used for private insurance premiums may also benefit the family if the resources are used to improve the diet of the children, provide better or safer housing, or better access to education. These factors too must be taken into account when assessing the impact of Medicaid expansions.

Take-up: The flip side of crowding out is the lack of participation among eligible individuals. It is well known that many of those eligible for benefits from public assistance programs do not enroll in these programs (Moffitt, 1983). This incomplete take-up is apparent in the Medicaid program as well. However, it is more difficult to measure the importance of the effect for Medicaid than for other welfare programs. Many of those who become eligible for Medicaid may not be presently enrolled in the program but could obtain coverage should they become ill and need to see a doctor. It is not clear how large this “potentially covered” population is, or how many children are missing preventative check-ups because they have not yet enrolled. Cutler and Gruber (1996) estimate that only about one-quarter of children made eligible by the 1987–1992 expansions enrolled in Medicare. In terms of the absolute number of children, Selden, Banthin, and Cohen (1998) estimate that in 1997, nearly 5 million children eligible for Medicaid were not enrolled.
The reasons for this low participation are not entirely clear. Certainly some children are already covered by a family policy through a parent’s employment and the marginal cost of keeping them insured through this policy may be small or zero. Information barriers, stigma, and administrative hurdles may also depress enrollment. Several recent studies have found evidence that the difficulty of the enrollment procedures and language difficulties are the dominate barriers (Perry, Smith, Smith, and Chang, 2000; Aizer, 2001). Perry, Kannel, Valdez, and Chang (2000) report that 72 percent of parents of Medicaid eligible, but uncovered, children cited the difficulty of obtaining the required documentation as a barrier to participation. Fifty-six percent reported that they did not know how to apply for benefits. In response to these low rates of participation, the recently enacted State Children’s Health Insurance Program (described below) has provided for outreach activities and for simplified enrollment procedures. Preliminary evidence suggests that improvements in take-up are possible (Aizer, 2002).

Additional economic implications

Medicaid has undoubtedly increased coverage although some of the increase in enrollment has been offset by the loss of private coverage. However, Medicaid has additional economic implications that extend beyond simple health insurance coverage including changes in savings behavior, the purchase of other health insurance, and impacts on health status. This section explores these effects.

Crowding out of Savings: An alternative form of crowding out is the potential for Medicaid to crowd out private savings. The asset tests used for welfare eligibility would be expected to reduce savings as individuals attempt to make or keep themselves eligible for benefits (Hubbard, Skinner, and Zeldes, 1995). This phenomenon is an important concern because it can prevent the poor from saving their way out of poverty, buying a home, starting a business, or paying for the college education of children. During the 1980s many states eliminated their asset tests for Medicaid eligibility, potentially reducing the savings disincentive and increasing savings by the poor or near poor. One would expect this change to lead to higher asset levels among the Medicare eligible both because those with higher initial levels could now qualify, and because those who were eligible under previous rules would not be penalized for saving. Medicaid may also negatively affect the incentive to save by eliminating or reducing the risk of large out-of-pocket expenditures and thereby reducing the precautionary motive for savings. Finally, Medicaid is a substantial transfer to families and by freeing up money previously spent on medical services, may increase savings.

Gruber and Yelowitz (1999) estimate that the Medicaid expansions of the 1984–1993 period led to a net reduction in the savings of the Medicaid population by 8.2 percent. Because both the income effect and the elimination of the asset test should lead to an increase in savings, this result suggests that it was the change in the precautionary motive that was dominant.

Crowding out and the Elderly: Because the poor elderly are unlikely to be working in jobs with employment related coverage, crowding out of employment-based coverage is unlikely. However, crowd out may well be a concern with respect to the coverage of the long-term care needs of the elderly. Here, Medicaid can cause crowding out in several dimensions. First, many low-income or moderate-income elderly may not purchase long-term care insurance because they know that Medicaid is available should they require nursing home care. Second, they may not save for future long-term care needs. And finally, Medicaid may crowd out or replace familial assistance.
Sloan and Norton (1997) find that Medicaid does appear to crowd-out the purchase of private long-term care insurance. Those who have qualified for Medicaid coverage are less likely to purchase long term care insurance. These results, however, are also consistent with non-linear effects of financial resources.\(^{47}\)

Crowding out of precautionary savings is typically a by-product of means tested transfer programs. The elderly who qualify for Medicaid can do so either because they have sufficiently low income and asset levels to be eligible for the Supplementary Security Income program (SSI) or because they have sufficiently high medical expenditures that they are declared “medically needy.” The asset limits for SSI eligibility are quite low, currently $2,000 for a single person and $3,000 for a couple. (States may set different levels for their own supplemental programs.) However, the value of a home and a car (and other minor items) are excluded from the calculation, making the asset test less onerous. Despite these exemptions, the low asset levels prohibit virtually all non-housing savings. They also provide an incentive to the elderly to move assets into housing, for example, by using liquid assets to pay down a mortgage.

Because nursing homes are so expensive, even those who enter with substantial financial assets run the risk of depleting their wealth and eventually receiving benefits from Medicaid. There was concern that spouses of long-term nursing home residents could be impoverished by the spend-down requirement. In 1988, Congress enacted a “spousal impoverishment law” that entitled the non-institutionalized spouse to retain a large amount of assets for his own use. This change reduced the disincentives to save during one’s life, since all assets need not be disposed of in order to receive Medicaid coverage of a nursing home stay. Currently this “Protected Resource Amount” (PRA) can be as high as $89,280, exclusive of a home. This allowance dramatically increases the pool of people potentially eligible for Medicaid should they require nursing home care.

In addition to crowding out of private savings, Medicaid may crowd out assistance from family members. If children or other relatives who would have provided care in the absence of Medicaid chose to let the Medicaid program pay for care for an elderly parent, then Medicaid has crowded out familial assistance. In this case the Medicaid program provides a transfer not so much to the elderly individual, but to her children who are spared the burden of care. I know of no estimates of the extent to which this crowding out takes place. However, McGarry (1998) does show that Medicaid coverage is associated with a significant increase in the probability that an informed elderly person receives paid home care, but that it has no effect on the probability that she receives care from a child. This result suggests that crowding out may not be complete, but there remains the possibility that the child substantially reduces the hours of care provided.\(^{48}\)

**Medicaid and Health Outcomes:** Certainly the Medicaid expansions increased coverage of children and pregnant women. The goal in doing so was to improve the health of these groups. It is thus appropriate to ask whether the increase in coverage has indeed had a significant effect on health outcomes. A large and growing body of literature has examined the outcomes and I summarize only briefly some of the more important findings.

\(^{47}\) Insurance companies may dissuade Medicaid eligible individuals from purchasing long-term care insurance. The information provided by TIAA-CREF states, “You should not buy this policy if you are now eligible for Medicaid.”

\(^{48}\) This type of crowding out could have a net economic benefit if the time of the caregiver is put to more productive use such as employment or child care.
There are two margins along which Medicaid would have been expected to have an effect. The most straightforward measure of changes in care are changes in utilization. By reducing the cost of care one would expect those eligible for Medicaid to use more medical services, e.g., have more visits to a doctor. The second margin is the more important one, whether Medicaid improves health outcomes. Neither change is as easily measured as one might expect. For example, if Medicaid improves health one might have fewer visits to a doctor, obscuring the effect. Alternatively, with insurance coverage doctor visits may replace visits to a hospital emergency room, resulting in more efficient provision of care, but arguably no change in the number of visits. Additional visits to a doctor may also uncover conditions that would have previously gone undetected, leading to a worsening of self-assessed health status.

Currie and Gruber (1996a) find that the Medicaid expansions led to a significant increase in timely prenatal care among eligible women. Cole (1995) finds similar results. With respect to care for children, Currie and Gruber (1996b) find increases in the probability a child visits a doctor at least once a year, thought to be an indicator of access to preventative services.

This greater use of medical services need not lead to improvements in health (Newhouse et al., 1993). However, for the very poor, more care may indeed have positive effects. Currie and Gruber (1996b) find that increased Medicaid eligibility is associated with a reduction in child mortality. They estimate that the increase in eligibility between 1984 and 1992 resulted in a decline in child mortality of 5.1 percent. They compare the number of lives saved to the cost of the program and calculate a cost of $1.61 million per life saved, lower than what is often assumed in the literature on the value of a statistical life (estimates are around $5 million). Cole (1995) finds small but significant declines in the fraction of low birthweight babies. In her data, a 10 percent increase in Medicaid eligibility is associated with a 2.5–3 percent decline in the number of low birthweight babies among teen mothers and a 5 percent decline in the number of preterm births for this group. In sum, there appears to be evidence that, although changes in outcomes are small in absolute terms, their value exceeds their cost.

A plan for increased coverage/ SCHIP

Despite the Medicaid expansions, many Americans remain uninsured. Within this group, attention has been focused on increasing the coverage of children. To that end the Federal government recently established a new public health insurance program called the State Children’s Health Insurance Program (SCHIP). SCHIP was enacted under Title XXI of the Social Security Act in 1997 and allows states the flexibility to expand health insurance coverage to children who do not qualify for Medicaid and provides federal funding to do so. States have the option of expanding their current Medicaid program or starting a new program. In the first quarter of 2002, all 50 states and the District of Columbia had SCHIP programs; 16 states had established programs that were separate from Medicaid, 16 expanded their Medicaid programs, and 19 used a combination of both plans (Center for Medicare and Medicaid Services, 2002b). The SCHIP program is small relative to Medicare and Medicaid but has grown rapidly. As of July 1, 2000, 2 million children were enrolled in SCHIP programs and expenditures for 2000 totaled $1.7 billion. By comparison expenditures in the same year for Medicare and Medicaid were $219 billion and $207 billion (HCFA, 2001). However, in the first quarter of 2002, 3.8 million children were enrolled (HCFA, 2002) indicating substantial growth. As with Medicaid, the program is financed by states with matching
funds from the federal government. States may also charge a small premium to enrollees.

The low take-up rates plaguing the Medicaid program were factored into the design of the SCHIP program. States are required to have funds earmarked for outreach activities and they appear to have been aggressively reaching out to families. Applications have been made easier to understand, mail-in applications are often allowed, asset tests have been eliminated, and there has been a great deal of advertising.\(^{46}\) There is also some evidence that enrollment in SCHIP programs, which are not linked to welfare participation and which may carry a small premium, is less stigmatizing than enrollment in Medicaid in part because of the premium (Perry, Kannel, Valdez, and Chang, 2000; Aizer, 2001). Perry, Smith, Smith, and Chang (2000) summarize some of the marketing strategies used by states to increase enrollment. As a further method of increasing the effectiveness of outreach activities, the Center for Medicare and Medicaid Services (CMS, formerly HCFA) maintains a website with examples of effective outreach activities. Aizer (2001) finds that outreach programs can indeed increase enrollment.

**CHALLENGES**

The American health care system differs from that used in much of the rest of the world in that it is focused on the private provision of health insurance, with public programs targeting smaller subpopulations. This organization happened not by chance, but by a government policy that initially subsidized employment-related coverage and only later added public programs to help those left behind. While the characteristics of the health insurance market, particularly adverse selection, moral hazard, and information asymmetries, make a strong case for government intervention, they do not necessary point to a particular method. Only by studying the operation of the current system can we assess what works and what does not and where changes might best be made.

In many ways the U.S. health care system is a success. The Medicare program has provided universal coverage for the elderly and disabled, and despite current budgetary concerns, has for decades made high quality care available to these groups. Similarly, the employment-based health insurance that covers the majority of the population has provided access to high quality care. Recent expansions in the Medicaid program and the establishment of SCHIP suggest that the problem of uninsurance among low-income children is being addressed.

However, despite these successes, there remain two particularly pressing problems: the continuous and at times rapid increases in health expenditures and a persistent lack of health insurance coverage for a large fraction of Americans, many of whom are not eligible for public programs. These problems are very much related. By reining in costs, the government can afford to provide coverage to more of the uninsured and more individuals will be able to purchase private insurance. Conversely, increases in coverage will likely increase demand perhaps putting upward pressure on prices. Fortunately the potential increase in costs from greater coverage do not appear to be unduly large. Newhouse (1992) estimates that covering all the uninsured would lead to an increase in prices equivalent to about two years worth of expenditure growth, not an unmanageable increase.

As noted earlier, 14 percent of the population was uninsured in 2000. The uninsured were more likely to be male, and

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46 As one example of the effort made to reach out to the public, SCHIP programs often carry cute, state-specific names. For example, Connecticut’s program is called Husky Health; Wisconsin has Badger Care; Oklahoma, Sooner Care; and Maine, CubCare.
more likely to be non-white. They had lower than average income and education levels and were less likely to be employed. They were also likely to be relatively young; 27.3 percent of those aged 18 to 24 were uninsured and 21.2 percent of those 25 to 34. These rates are strikingly different from the 0.7 percent uninsured among the elderly and 11.6 percent for children, groups targeted by government programs (U.S. Bureau of Census, 2001), but they are unsurprising given the eligibility requirements of public programs.

The best method for getting coverage to the uninsured depends on the reason for which they lack coverage. Some of those without insurance actually do have coverage available through an employer but chose not to enroll. In 2001, 83 percent of workers who were offered coverage, accepted it (Kaiser, 2001a). These uninsured workers may simply have low demand for health insurance and prefer to consume other goods rather than pay a premium for health insurance. Others may not be able to afford the employee portion of the premium.\(^{50}\) For those who cannot afford even this subsidized insurance, additional financial assistance may be necessary.

Among uninsured children, an important factor affecting insurance coverage is the low take-up rate in the Medicaid program. For this group of uninsured, outreach and education may be the most practical solution. Finally, there are those who are not eligible for public insurance and who do not have insurance through an employer. These individuals must purchase insurance on the private market where the price is likely to be high. Because this group is also likely to have lower than average income, the high price may put insurance out of their reach. It is this group that is being targeted by new policy proposals such as a health insurance tax credit.

The proposed tax credits for the purchase of non-group coverage and the newly established SCHIP programs provide some hope for improved health insurance coverage. Understanding and managing health care costs appears to be more difficult. There are two issues with which we must contend. First, the absolute level of spending in the United States is high. As noted earlier, we spend more on health care per capita than any other nation. We also spend more as a fraction of GDP. Second, costs are increasing significantly faster than the price level. In this respect though, the United States is not unique. Our rate of increase is similar to that observed in other developed nations. These twin problems, a high level of spending and high rate of increase, likely have different underlying causes and thus require different remedies.

The high level of expenditures could well be due in part to the organization of our health care system. As noted above, the decades old practice of subsidizing the purchase of private insurance has likely led to more generous coverage than would be chosen without the subsidy and thus the use of more services and higher costs. The first dollar coverage held by most of those aged 65 and over also would be expected to lead to high service use. Recent work by Skinner, Fisher, and Wennberg (2001) examines the large geographical variation in the intensity of service use by the elderly and concludes that much of the extra spending yields no improvement in health. They conclude that approximately 20 percent of Medicare expenditures are for unneeded services. These estimates suggest that costs could be reduced by more careful screening of care.

In fact, several changes in the structure of the health insurance market, including greater cost-sharing, the switch to managed care, and changes in Medicare reimbursement rules in the 1990s appear to

\(^{50}\) Some of those declining coverage are covered by a policy provided to a spouse or other family member.
have had an impact on expenditures. After decades of rapid growth, health care costs leveled off for a time. Unfortunately, these cost-saving methods have appeared to result in what Newhouse (1992) terms "once-and-for-all" effect on costs, a one-time reduction in the level of expenditures followed by a return to a similar rate of increase.

Explanations for the rapid and continuous increase in costs ought to point to factors that change over time, rather than those that remain static. Newhouse (1992) examines several alternative hypotheses for rising costs, including the aging of the population, the growth in health insurance coverage, increases in income, and changes in supplier behavior arising from such factors as defensive medicine. Each of these is likely to bear some responsibility. The population has been aging throughout the period of constant cost growth and we know that the elderly have greater health expenditures. However, Newhouse estimates that the aging of the population is responsible for only "a tiny fraction of the increase in expenditure" (Newhouse, 1992, p. 6). Similarly, he finds small effects of changes in health insurance coverage, incomes, and supplier behavior on cost increases. All told he concludes that this list of possible explanations is responsible for only about one-quarter of the growth in health care expenditures. The residual he attributes to advances in technology. Newhouse makes a number of additional points that support this contention. First, HMOs are thought to reduce unnecessary spending yet costs in the HMO sector have risen at the same rate as elsewhere. Along the same lines, costs in other countries have risen at similar rates despite very different health insurance systems. This fact suggests that the increases are not due to something unique to the U.S. system of private coverage. Finally, there has been no increase in hospital admissions or length of stay, but large increases in the price per hospital day.

Even if it is the case that this continual increase in real health care expenditures is driven by technology, we must ask whether it is worth the expense. Are we using too much technology or is the benefit greater than the cost? Cutler and McClellan (2001) document costs and benefits of innovation in the treatment of several conditions: heart disease, breast cancer, low-birthweight births, and depression. They find that for all except the treatment of breast cancer the benefits vastly outweigh the costs.

Rising costs and the plight of the uninsured have received a good deal of attention, but they are not the only problems we face. Other issues need to be addressed as well. Medicare is financially unstable. The trust fund for Part A is projected to go into deficit in 2030 and Part B is requiring a larger and larger share of government revenues. Medicare (and Medicaid as well) is growing at a rate that is not sustainable. However, despite these trends, there are calls for increased benefits, particularly through the addition of a prescription drug benefit. Certainly some reform must come to Medicare if we are to continue to provide coverage for future generations of elderly.

Another problem related to aging is the growing cost of long-term care. In 1998 Medicaid paid for 46.3 percent of nursing home expenditures, while private health insurance paid for just 5.3 percent (National Center for Health Statistics, 2001). Furthermore, while health care costs have increased faster than inflation, nursing home prices have been increasing even more rapidly than other health care spending. Without the development of a private long-term care market, the expenditures borne by Medicaid will continue to increase. Because the primary alternative to institutionalization is care from a family member, improvements in the market for long-term care insurance will help the children of the elderly, just as the enactment of Social Security in the 1930s helped
an earlier generation of children by providing income to their elderly parents. Certainly these are not new problems. They have long been recognized by both researchers and policy makers, and policy makers are working towards solutions. It is our role as economists to see that the proposed remedies make good economic sense and provide for improvement in the health insurance market.

Acknowledgments

I am grateful to Janet Currie, Therese McGuire, and Jonathan Skinner, for helpful comments and Hui Cao and Enrica Croda for research assistance.

REFERENCES


Auerbach, Alan, Jagadeesh Gokhale, and Laurence Kotlikoff. “Social Security and Medicare Policy from the Perspective of Generational Account-


Barry, Colleen, and Janet Kline. “Medicare Managed Care: Medicare+Choice at Five Year.” The Commonwealth Fund. Issue Brief, April, 2002.


Chassin, Mark, Jacqueline Kosecoff, R. Park, Constance Winslow, Katherine Kahn, Nancy Merrick, Joan Keesey, Arlene Fink, David Solomon, and Robert Brook.


Chernick, Howard, Martin Holmer, and Daniel Weinberg.


Christensen, Sandra, and Judy Shinogle.


Claxton, Gary.


Cole, Nancy.


Committee on Ways and Means.


Congressional Research Service.


Council of Economic Advisers.


Currie, Janet, and Jonathan Gruber.


Currie, Janet, and Jonathan Gruber.


Currie, Janet, and Brigitte Madrian.


Cutler, David.


Cutler, David, and Jonathan Gruber.


Cutler, David, and Mark McClellan.

"Is Technological Change in Medicine Worth It?" *Health Affairs* 20 No. 5 (September, 2001): 11–29.

Cutler, David, and Louise Sheiner.


Decker, Sandra and Carol Rapaport.


Eggers, Paul, and Ronald Prihoda.


Ettner, Susan.


Feldstein, Martin, and Benjamin Friedman.

Garber, Alan, Thomas Macurdy, and Mark McClellan.

Gilleskie, Donna, and Byron Lutz.

Glied, Sherry, and Dahlia Remler.

Gornick, Marian, Jay Greenberg, Paul Eggers, and Allen Dobson.

Gruber, Jonathan.

Gruber, Jonathan, and Larry Levitt.

Gruber, Jonathan, and Brigitte Madrian.

Gruber, Jonathan, and Brigitte Madrian.

Gruber, Jonathan, and Brigitte Madrian.

Gruber, Jonathan, and Aaron Yelowitz.

Gustman, Alan, and Thomas Steinmeier.

Ham, John, and Lara Shore-Sheppard.

Harvard School of Public Health.

Health Care Financing Administration.

Health Care Financing Administration.

Health Insurance Association of America (HIAA).

Hellinger, Fred.


Hurd, Michael, and Kathleen McGarry.


“To Offer or Not to Offer: The Role of Price in Employers’ Health Insurance Decisions.”
Health Services Research 36 No. 5 (October, 2001): 935–58.
Maxwell, Stephanie, Marily Moon, and Misha Segal.
“Growth in Medicare and Out-of-Pocket Spending: Impact on Vulnerable Beneficiaries.”
The Commonwealth Fund.
McCall, Nelda, Thomas Rice, James Boismier, and Richard West.
“Private Health Insurance and Medical Care Utilization: Evidence from the Medicare Population.”
McClellan, Mark, Barbara McNeil, and Joseph Newhouse.
McClellan, Mark, and Jonathan Skinner.
“The Incidence of Medicare.”
McGarry, Kathleen.
“Caring for the Elderly: The Role of Adult Children.”
In Inquiries in the Economics of Aging, edited by David A. Wise, 133–68.
McGarry, Kathleen, and Robert Schoeni.
“The Price of Mortality: Out of Pocket Medical Expenditures at the End of Life.”
Meara, Ellen, Mary Beth Landrum, and Benjamin Cook.
“Medicare and Changes in the Health of the Elderly.”
Paper Presented at the NBER Summer Institute, 2002.
MetLife.
“MetLife Market Survey on Nursing Home and Home Care Costs 2002.”
Moffitt, Robert.
“An Econometric Model of Welfare Stigma.”
Myers, Robert J.
Myers, Robert J.
National Center for Health Statistics.
Newhouse, Joseph.
“Medical Care Costs: How Much Welfare Loss?”
Newhouse, Joseph, and the Health Insurance Experimental Group.
Newhouse, Joseph.
“Medicare Policy in the 1990s.”
Office of Management and Budget.
Organization for Economic Cooperation and Development (OECD).
Organization for Economic Cooperation and Development (OECD).
Organization for Economic Cooperation and Development (OECD).
Panis, Constantijn, and Lee Lillard.
“Socioeconomic Differentials in the Returns to Social Security.”
RAND. Mimeo, 1996.
Park, Edwin.
“Health Insurance Proposals in Administration’s Budget Could Weaken the Employer-Based Health Insurance System.”
Parrott, Sharon.

Pauly, Mark, and John Goodman.

Perry, Michael, Susan Kannel, R. Burciaga Valdez, and Christina Chang.

Perry, Michael, Vernon Smith, Catherine Smith, and Christina Chang.

Roemer, Milton.

Rust, John, and Christopher Phelan.

Sofe, Laura.


Shearer, Gail.

Sheils, John, Paul Hogan, and Randall Haught.

Skinner, Jonathan, Elliott Fisher, and John Wernberg.

Sloan, Frank, and Edward Norton.

Thomasson, Melissa.


Vogel, Ronald J.

Woolhandler, Steffie, and David Himmelstein.
"Paying for National Health Insurance and not Getting It." Health Affairs 21 No. 4 (July, 2002).

Yazici, Esel, and Robert Kaestner.