

Budget Bills And Medicare Policy: The Politics Of The BBA

Slowing the engines of spending now can buy time until Medicare's inevitable financial crisis. What can past budget battles teach future policymakers?

by Charles N. Kahn III and Hanns Kuttner

ABSTRACT: With the Balanced Budget Act (BBA) of 1997 and a balanced federal budget, the link may be broken between the budget and Medicare policy's timing and direction. However, despite a balanced budget, Medicare's eventual financial crisis must be addressed. The BBAs of 1995 and 1997 provide two models of Medicare legislation: one based on conflict and another on consensus. Because the 1997 act became law and the 1995 act did not, the consensus model has proved to be politically feasible. However, this model appears to be inadequate for devising a solution to Medicare's long-term financial problems.

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IF THE BALANCED BUDGET ACT (BBA) of 1997 realizes its promise, a new era has begun. Over the past generation, longer than half of the program's life, Medicare policy has been made in broad legislative packages intended to reduce the deficit. The BBA's budget-balancing intent has already been fulfilled. With the deficit gone and continued surpluses plausible, there is likely to be a lengthy pause before the next big challenge is faced: securing Medicare's fiscal viability as the baby boomers retire.

In a bipartisan miracle, the BBA became law 5 August 1997. The signing ceremony brought together many who influenced the act. There was a president who had used Medicare as the fulcrum for shifting political momentum to his favor. There also was a speaker of the house who viewed Medicare as an issue vital to his party's political success, joined by congressional Republicans who were

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key players on health issues. But far more people shaped the event than were present at the White House that day: from analysts at the Congressional Budget Office (CBO) who decided when policymakers had done enough to meet their budget-balancing goal, to new Medicare beneficiaries who, once retired, could not continue in the same preferred provider organization (PPO) network.

The BBA put in place a broad set of changes in Medicare. It slows the program's growth from a pre-BBA projection of 8.5 percent per year between 1997 and 2002 to 6 percent per year post-BBA. This assures solvency until 2007 for the Part A (Hospital Insurance) trust fund, which primarily pays for Medicare hospital benefits. But the BBA's policy changes are not all about balancing budgets or shoring up trust funds. The act also means that Americans covered by the program will have the opportunity to choose among more alternatives to fee-for-service medicine. They also will have more preventive health services. For health plans and insurers, the BBA opens opportunities to offer more products, mandates Medicare's promotion of these options, and asks most of them to expect lower payment. Finally, it means that federal bureaucrats must shift their mind-set from overseeing bill payments to managing benefits.

BBA 1997: An Echo Of 1995

For the Republican leaders of Congress who were present for the signing of the BBA, it was not their first choice of legislation. They would have preferred the BBA of 1995, which they had written without input from President Bill Clinton or his party. The 1997 BBA has strong roots in the earlier act. In fact, understanding the later law and the current relationship between Medicare and American electoral politics requires a look back to the 1995 version.

The 1994 election made a balanced budget act in 1995 possible. That election produced a result not seen in American politics since a decade before Medicare became law: Republican control of both houses of Congress. It also meant a Republican Congress and a Democratic president, something not seen since 1946.

The results of the election had both process and policy implications. The outlook of congressional Republicans, particularly in the House, would prove crucial. No House Republican had served in the majority or as chair of a committee or subcommittee. Finding their hands on the wheel of power, they wanted to accomplish as much as they could, as quickly as possible.

When the 1995 congressional session opened, Medicare was invisible. That might not have seemed unusual, given health issues' adverse political impact on the 1994 election. After all, President Clinton's proposal for comprehensive health care reform was widely

blamed for contributing Democrats. However, during the budget, Republicans were at the close of the first 100 days. At the close of the first 100 days, the "Contract with America" Gingrich distributed a brochure to his fellow House members. The theme of the brochure was "creating jobs by balancing the budget." Medicare and Social Security were central to the House Republican agenda.

However, even absent Medicare's finances required explanation. The budget explained that "the budget boomers' retirements will less the problem is honest we face up to these challenges of a safe financial future of course, Republicans' tax that funds the Hospital Insurance Trust Fund."

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Turning that forecast billion less in Medicare

blamed for contributing to the defeat suffered by congressional Democrats. However, driven by their ambition to balance the budget, Republicans were forced to add Medicare to their agenda. At the close of the first 100 days, time devoted to House passage of the "Contract with America," then Speaker of the House Newt Gingrich distributed a briefing package articulating post-100 day themes to his fellow House Republicans. The last of five "strategic improvements" was "creating a safe future for our children and ourselves by balancing the budget and solving the financial crises in Medicare and Social Security."¹ Linking these two challenges was central to the House Republicans' message.

However, even absent a budget deficit, the looming crisis in Medicare's finances required action. Gingrich's strategy document explained that "the budget deficit, combined with the coming baby boomers' retirements will cause a crisis of historic proportions unless the problem is honestly faced and managed well in advance. If we face up to these challenges now, we can establish the foundations of a safe financial future for ourselves and our children."² And, of course, Republicans' plans did not include increasing the payroll tax that funds the Hospital Insurance (HI) trust fund.

Republicans had made Medicare part of their macrostrategy. If they succeeded, Medicare—traditionally an issue owned by Democrats—would be at least partially owned by the GOP. The quest for partisan advantage shaped the process and the result.

The process unfolded unlike any described in a text on the regular order in which legislation is made. Rather than working through House committees with Medicare jurisdiction, the House Republican leadership created a task force chaired by Speaker Gingrich. Instead of separate activity by the two committees with Medicare jurisdiction (Ways and Means and Commerce), their chairs, Rep. Bill Archer (TX) and Rep. Thomas J. Bliley Jr. (VA) and subcommittee chairs Rep. William M. Thomas (CA) and Rep. Michael Bilirakis (FL), worked with a group of handpicked colleagues to produce a unified product. When the two committees held markup, panel members ratified on party lines what the task force had developed. In the House/Senate conference committee, this speaker, unlike any previous speaker, actually chaired the Medicare conference himself.

The two goals, balancing the budget and preserving the HI trust fund, determined the scope and scale of the Medicare changes. After many internal debates, congressional Republicans set 2002 as their target year for balancing the budget. At the time, the CBO put the 2002 deficit at \$349 billion.

Turning that forecast into a balanced budget would require \$270 billion less in Medicare spending over the following seven years

under the Republicans' budget plan. This also might be put in terms of Medicare outlays rising from \$196 billion in 1996 to \$289 billion in 2002 instead of \$360 billion. In a formulation favored by congressional Republicans, expenditures per beneficiary would rise from \$4,816 in 1995 to \$6,734 in 2002.

All were true statements. But making CBO spending projections equal their revenue forecasts meant that the language that dominated was what fit the CBO rules most naturally. The CBO starts with the current service baseline; for Medicare, this is what spending would be if Congress took a holiday and passed no more laws. Under these rules, hospitals would always receive the market-basket update to their operating cost payments, even though Congress has not allowed it in a decade. Also, under these rules, asking beneficiaries to pay the same premium after 1 January 1996 would save money because current law reverted to a formula that would lead to a decrease. So for congressional staff and some journalists, anything that had a minus sign on a CBO spreadsheet was a cut.

Senior congressional Republicans rejected this language, preferring to emphasize the underlying growth in Medicare. To cure members and staff of "CBO-speak," Speaker Gingrich kept a jar in which he collected a dollar from anyone who used the word "cut" when referring to Medicare.

Satisfying Three Constraints

Medicare policy in the 1995 BBA satisfied three constraints. First, it changed policies so that \$270 billion less would be spent over the next seven years and—equally important—\$71 billion less in 2002, the year the budget was to be balanced. Second, it assured that the HI trust fund would remain solvent until 2011, when the baby-boom generation would begin to retire. Third, it accomplished these goals in a way that would earn the stamp of approval from outside scorekeepers—the CBO in the case of the balanced budget and the Office of the Actuary in the Health Care Financing Administration (HCFA) for trust-fund solvency.

No policy better explains the interaction of congressional policy-makers and the world they see reflected through the CBO than the "failsafe." The failsafe would have written into law a dollar limit on spending for Medicare benefits and divided spending into nine categories, such as inpatient hospital services and durable medical equipment. If overall spending was expected to exceed the ceiling, then across-the-board reductions in payment levels would be made in the offending categories.

Republicans looked to the failsafe as an opportunity to take advantage of what they saw as a distortion in the CBO vision. The CBO

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Part of the 1995 BBA's provisions: one to administer relations with most-quoted line of Blue Cross/Blue Health Care Financing mand bureaucracy. That last line was that Republicans

saw the 1995 BBA saving \$233 billion over the seven fiscal years (1996-2002). This would have required \$37 billion to be saved through the failsafe to meet the \$270 billion Medicare target. Republicans believed that the CBO had underestimated the success of beneficiary choice in containing costs and thus had overestimated the probability of triggering the failsafe. Democrats drew a different conclusion: They saw the failsafe as a cap on traditional fee-for-service Medicare that would limit patient care.

Fiscal pressures were not the only forces to shape the 1995 BBA. Congressional Republicans also used the act to shift Medicare toward the private sector. Some of that shift was more catch-up than new initiative. The private market for health coverage was changing rapidly; Medicare was not. Consequently, more and more innovations in the private market were not available to Medicare beneficiaries. Health maintenance organizations (HMOs) had found a modest place in Medicare, serving 9 percent of beneficiaries as the 1995 BBA was being written. PPO-like coverage (Medicare Select) was offered, but only as a Medicare supplemental (Medigap) package with availability determined by each state. Medicare could be opened up to these products.

Congressional Republicans feared that even if they rewrote the statutory rules, responsibility for implementing the changes would be in the hands of HCFA. This agency had implemented all of the rules that had made Medicare what it was and what Republicans wanted it not to be. Republican members saw the bureaucracy as an obstacle to the shift toward the private sector.

Thus, the 1995 BBA proposed splitting HCFA into two organizations: one to administer fee-for-service Medicare and one to administer relations with private plans. This proposal gave rise to the most-quoted line about the 1995 BBA. Speaker Gingrich told a group of Blue Cross/Blue Shield executives, "What do you think the Health Care Financing Administration is? It's a centralized command bureaucracy. . . . [W]e believe it's going to wither on the vine."³ That last line was widely cited in the 1996 election cycle as evidence that Republicans wanted to end Medicare itself.

Part of the 1995 BBA reflected congressional Republicans' strategic alliances. Provider groups were an important constituency. Although that did not blunt the size of the reduction in provider payments in the bill, it did allow for malpractice reform (proposed in the House but struck down in the Senate). It also answered providers' pleas by raising the standard that government must meet in fraud and abuse cases. More importantly, provider groups would get the opportunity to compete against insurers for prepaid plan enrollment as provider-sponsored organizations (PSOs).

For a while it appeared as if the Republicans could indeed make Medicare their issue. Polling results showed that more people were aware that Medicare faced a fiscal crisis. The House had a careful plan to distinguish budget balancing and saving the HI trust fund by passing Medicare reform separately and before the budget package.

However, events overcame plans. President Clinton gained the upper hand in the acrimonious conflict between the legislative and executive branches that culminated in the government shutdown of November 1995. When it ended, Republicans' effort to define their Medicare proposals as a solution to a growing problem gave way to Democrats' accusations that Republicans were hurting beneficiaries. Medicare as a political issue was again safely in Democrats' hands.

Republicans stumbled on the Part B premium. The 1995 BBA would have kept the Part B premium at the 1995 level, 31.5 percent of program costs. However, this provision had to become law before new computer programs could be written to deduct the Part B premium from 3 January 1996 Social Security checks. Absent new instructions, the programmers would follow a formula that pegged the monthly premium at \$42.50 for 1996, \$3.60 less than in 1995. To keep the premium from fluctuating, first down in January then higher later, Republicans attached the premium provision to the continuing resolution, the legislation that would keep the government going while the president and Congress finished action on appropriation bills for the fiscal year that had begun 1 October 1995.

A \$264 Difference

President Clinton used the Part B premium issue to transform the debate. Instead of a discussion about billions of dollars, the amount in question was one that ordinary Americans could comprehend. As the Democrats figured it, the Republicans wanted \$264 more every year from a retired couple. This single, sharp fact took away the momentum from the Republicans' Medicare juggernaut. President Clinton vetoed the continuing resolution, and part of the government shut down. When the Republicans blinked and the government reopened, it was under a continuing resolution that allowed the premium to drop.

After the 1995 BBA was vetoed 6 December, the president and Congress negotiated, but the stalemate on Medicare and on the overall budget remained through the 1996 election.⁴ The new year (1997) meant a new world, both politically and in the budget. The budget scorekeepers had lowered the goals for achieving a balanced budget. The amount of red ink that would accumulate over the next five years, absent any effort at deficit reduction, had shrunk by half

from \$1.19 to \$1.10 per person per month by the time the line of a balanced budget was reached. The economy's target for the next five years was to be

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from \$1.19 trillion in January 1995 to \$585 billion in January 1997. By the time the president and congressional leaders agreed on the outline of a balanced budget package in May 1997, the strength of the economy suggested still smaller deficits. That forecast brought the target for total Medicare savings in the budget deal to \$115 billion over five years—half the \$270 billion seven-year goal of 1995.

Transforming The BBA

The 1996 election results were just as important as the economy was in transforming the 1995 BBA into the 1997 version. The partisan balance in the Senate gave Republicans one more seat, with fifty-five Republicans and forty-five Democrats. However, the number of Republicans in the House shrank from 230 to 227, a nine-vote majority.

In 1997 there was more conflict between House and Senate than between Republicans and Democrats. The Senate had a bipartisan desire to ask beneficiaries to shoulder new burdens. Roll-call votes produced a majority in favor of raising the age of initial Medicare eligibility, making the Part B premium depend on a beneficiary's income, and imposing a copayment on home health services.

In the House, where Republicans put Medicare high on their list of explanations for losing seats in the 1996 election, consensus characterized the 1997 BBA as much as conflict had the 1995 BBA. In 1995, during the Ways and Means Committee markup, one member nearly assaulted another. In 1997 Congressman Thomas brought from his health subcommittee to the full Ways and Means Committee a package supported by a unanimous vote.

Provisions from the 1995 BBA that had given rise to charges of limiting care were gone from the House bill. One was the 31.5 percent Part B premium. Also missing were two provisions that Democrats said threatened access to care: the failsafe and a provision that would have allowed risk plans to charge beneficiaries more than the plans were paid by Medicare for the basic Medicare benefit package. The latter provision was seen as the path to making Medicare a "defined-benefit" plan and had been included in the conference agreement from the Senate version of the 1995 BBA. The income-related Part B premium also was gone. House Republicans agreed to support the Senate proposal only if it would be administered by the Department of Health and Human Services (HHS) and not by the Internal Revenue Service (as the Clinton administration wanted). Lacking consensus, the provision died.

Overall, the 1997 BBA was a consensus package. It balanced the budget, under current economic conditions, and preserved the HI trust fund. Lower budget goals meant less pressure to slow Medicare growth. The trust-fund goal was made easier when President

Clinton, in his 1997 State of the Union address, set a goal of ensuring ten years of trust-fund solvency. This was four years fewer than the Republicans had wanted in 1995 and made the goal easier to reach.

The power of the CBO-held mirror continued. The CBO staff was not convinced that the home health prospective payment system (PPS) agreed on in the House/Senate conference could be implemented as fast as Congress wanted. Thus, lawmakers added a policy that the CBO did believe: lower payment under cost reimbursement. The broadest policy change from the 1995 BBA forced by the accounting process was the demise of the graduate medical education (GME) trust fund. In 1995 Congressman Archer had wanted to use leftover revenue on the tax side to pay in part for a new formula grant for teaching hospitals and GME. The grant would have replaced Medicare's open-ended subsidy. In 1997 there was nothing left on the tax side, and the proposal disappeared, leaving payment reductions as the core of the 1997 BBA's GME policy.

Measured in terms of political process, the 1997 BBA was far different from the 1995 BBA. But aside from the provisions that caused the 1995 act to combust, the two were more similar than different (Exhibit 1). No matter which became law, more opportunities will be available for alternatives to fee-for-service care, and provider payments will be lower than otherwise.

Implications

The 1997 BBA has implications for both the timing and the content of what is to come. The next legislative moment is likely to be later rather than sooner. This assertion depends on one rather large condition: whether the economy performs as predicted. The key economic assumption is that there will be no recession in the next five years. The economy is now enjoying its longest peacetime expansion since World War II. It would be unprecedented and, in many economists' view, improbable for the expansion to continue as long as the official forecast envisions.

If the economy continues to perform as predicted, for the first time since 1980 there will be no pressure for Medicare policymakers to frame budget-oriented policy changes. In fact, if the scenario of economic bliss plays out, then there would never again be budget-side pressure to do anything legislatively to Medicare. Under "economic nirvana," lawmakers could put off tough policy choices until just before the trust-fund bomb detonates in 2007. Although tinkering at the margin will mean some legislative activity, there may be an unparalleled length of time without major Medicare legislation.

Experiences with the two balanced budget acts will remain in memory as Congress responds to pressure to change Medicare. The

EXHIBIT 1 Comparison Of Provisions

Provision

Total savings (billions of dollars)
Savings from providers

Expanding choice
Name for FFS alternative

Role of HCFA

Range of plans that can be an
alternative to traditional
Medicare

Payment

Provider payment levels
Hospitals

Teaching hospitals and GME

Physicians

Prospectivity
Additional providers to be
paid using prospective
payment methodologies

Failsafe
Upper limit for benefit
payment; automatic
reduction in provider
payment if limit surpassed

Beneficiaries
Part B premium

Income-related premium

Preventive services

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EXHIBIT 1**Comparison Of Provisions In The Balanced Budget Acts Of 1995 And 1997**

Provision	BBA 1995	BBA 1997
Total savings (billions of dollars)	\$139.3 over 5 years; \$270 over 7 years	\$115 over 5 years; \$172 over 7 years
Savings from providers	\$84 over 5 years; \$172 over 7 years	\$103 over 5 years; \$203 over 7 years
Expanding choice		
Name for FFS alternative	MedicarePlus	Medicare+Choice
Role of HCFA	MedicarePlus outside HCFA	HCFA to administer both FFS and Medicare+Choice
Range of plans that can be an alternative to traditional Medicare	Plan types include PPOs, provider-sponsored, FFS, and medical savings account (MSA) plans	Similar, except MSAs limited to 390,000 (about 1% of total beneficiaries)
Payment	Methodology: Link to FFS trends cut; transition to a 70% area-specific, 30% national rate; minimum monthly payment (\$300); minimum 2% annual update Amount: Payment growth rate set in law	Methodology: Similar, with 50% area-specific/national; \$367 floor; GME will be removed over 5 years Amount: Growth rate trimmed but still determined by FFS-sector growth rate
Provider payment levels		
Hospitals	Update set at market basket minus 2.5% in 1996 and 2% in each year from 1997 through 2002	No update for 1998; update reduced by 1.1% to 1.9% in each year from 1999 to 2002
Teaching hospitals and GME	Medicare's payments folded into new teaching hospital and GME trust fund	No trust fund; IME adjustment reduced; cap on number of residencies
Physicians	Adopts "sustainable growth rate" linked to growth in real domestic product	Similar
Prospectivity		
Additional providers to be paid using prospective payment methodologies	SNFs and home health agencies	SNFs, hospital outpatient departments, rehabilitation services, and home health agencies
Failsafe		
Upper limit for benefit payment; automatic reduction in provider payment if limit surpassed	Yes	No
Beneficiaries		
Part B premium	Set at 31.5% of program costs	Set at 25% of program costs, but home health costs added over 7 years
Income-related premium	Higher premium for couples with incomes over \$90,000; singles over \$60,000	No provision
Preventive services	No new services	Seven new or expanded services

House, in which every seat, of course, is on the ballot every two years, continues to have a bipartisan aversion to changes that could be portrayed as taking away Americans' Medicare benefits. With staggered six-year terms, the Senate is more insulated from popular sentiment. It likely will continue to be more friendly to sharing the burden with beneficiaries. After the 1997 BBA, conflict over Medi-

care policy, at least with respect to beneficiary issues, is more likely to continue to be between House and Senate than between Republicans and Democrats.

No matter how bright the economy, the insolvency of the HI trust fund, now expected in 2007, will force a new round of fiscal adjustment in Medicare. The 1995 legislation demonstrated the limited potential of the conflict model. A determined congressional majority as existed in 1995 cannot prevail in the face of presidential opposition. Congressional Republicans bet that President Clinton would bend to their desires, but when he did not, they lost policy control. The only hope for the conflict model is a congressional supermajority, with one party controlling the two-thirds vote required to override a presidential veto.

Consensus, in the BBA 1997 model, seems a more promising model of policy making. General agreement on the act came from lowering budget targets until the least common denominator between congressional Republicans and the president was enough to solve the policy challenge at hand. If it becomes necessary to solve the trust-fund problem through consensus, the solution is less likely to be far reaching. As in the short-term budget savings of the 1980s and 1990s and the home health transfer in the 1997 BBA, slowing the engines now can buy time until Medicare hits an iceberg.

But the BBA 1997 experience is a useful model for only one configuration: the Congress and the presidency in opposite partisan control. The model is less useful should future election results put control of both Congress and the Oval Office with the same party.

No matter what parties are at the helm, in the long, long run, Medicare policy requires action beyond the common core of bipartisan agreement. The challenge posed by the baby boomers' retirement represents an iceberg that no amount of squeezing payment to providers will be able to avoid.

Can the common core be expanded? It can, but only with great difficulty. Tax increases are anathema to the GOP, and House Republicans have an equally negative response to the changes affecting beneficiaries that have found favor in the Senate. A majority of House Democrats and many Senate Democrats equate increasing beneficiaries' financial burden with "throwing momma from the train." Until the memories of the 1995 BBA fade, policies that can be portrayed as capping benefits—such as making Medicare a defined-contribution plan—are politically unfeasible. The common core appears to include only slowing payment to providers. That strategy is insufficient to meet the challenge posed by baby boomers.

At some point there will be a crisis. Crises offer opportunities for statesmanship. In crises politicians agree to things that they pre-

viously would not have considered. The House Republican Amendments of 1983, which increased Social Security taxes on high-income earners and reduced future retirees. It took a crisis in the Social Security trust fund—to achieve the necessary compromise.

Who will be our statesman? It will be a different group from the one that supported the signing of the 1997 BBA. By the time the HI trust fund goes insolvent, Bill Clinton will be long gone. Newt Gingrich will be long gone. Medicare bankruptcy dilemmas and HI trust fund insolvency appears to be clear.

That is bad news for the National Bipartisan Commission on the Future of Medicare. On 1 March 1999, this body's common core. The 1997 BBA states that any recommendations must have a majority among the seven members. The members were on different sides of the issue. A commission solution will require these past differences.

The impact of the 1997 BBA on Medicare policy making is two-edged. It has slowed the HI trust fund until 2007. But it has also increased the probability that the need for action will arise until there is agreement on a solution. A financial crisis is no longer but close enough to injure that we must then will the cost of delay.

The authors acknowledge the support and assistance of Susan M. Gitterman. The authors retain full responsibility for the content of this article.

NOTES

1. N. Gingrich, "Renewing America's Promise," *The House Republican Challenge to Republican member* (Washington, DC: Heritage Foundation, 1995).
2. Ibid.
3. Newt Gingrich, Speaker of the House, "Cross and Blue Shield Association," 1995.
4. Many of the anti-fraud and abuse provisions of the Health Insurance Reform Act of 1996, the one major piece of

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...likely would not have considered. An example is the Social Security Amendments of 1983, when Republicans agreed to payroll tax increases and Democrats agreed to providing lower benefits to future retirees. It took a crisis—the imminent insolvency of the Social Security trust fund—to achieve these changes.

Who will be our statesmen and stateswomen for Medicare? It will be a different group from the policymakers who gathered for the signing of the 1997 BBA. By the time that the HI trust fund faces insolvency, Bill Clinton will no longer be president, and Newt Gingrich will be long gone. If there is to be a consensus to solve the Medicare bankruptcy dilemma, it will not be until the threat of insolvency appears to be closer.

That is bad news for those who have high hopes for the report of the National Bipartisan Commission on the Future of Medicare, due March 1999. This body's report will be a test of the size of the common core. The 1997 BBA, which created the commission, stipulates that any recommendation must win an eleven-vote supermajority among the seventeen commissioners. Some commissioners were on different sides of both the 1995 and 1997 budget acts. Any commission solution will rely on commissioners' ability to overcome these past differences.

The impact of the 1997 BBA on the future of Medicare policy making is two-edged. It has assured the solvency of the HI trust fund until 2007. But it has delayed the inevitable. The law increased the probability that the next burst of policy making will not occur until there is agreement on at least one proposition: that Medicare's financial crisis is no longer safely over the distant political horizon but close enough to injure the political players on the scene. Only then will the cost of delay outweigh the cost of action.

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- N. Gingrich, "Renewing America by Transforming the Federal Government: The House Republican Challenge, April-May 1995" (Briefing package distributed to Republican members of the House of Representatives, 1995).**
ibid.
Newt Gingrich, Speaker of the U.S. House of Representatives, remarks to Blue Cross and Blue Shield Association Conference, Washington, D.C., 24 October 1995.
Many of the anti-fraud and abuse provisions of the 1995 BBA became law as part of the Health Insurance Portability and Accountability Act (HIPAA) of 1996, the one major piece of health legislation to become law in 1996.

Medicare Reform: Who Pays And Who Benefits?

Medicare reform will have major financial consequences for every U.S. taxpayer. How can we better understand these effects?

by Mark McClellan and Jonathan Skinner

ABSTRACT: As Medicare's share of federal spending and gross domestic product (GDP) rises, the program may have increasingly important consequences not only for the health of Americans but also for their net income and financial well-being. We use incidence analysis to study payments and benefits in Medicare to various generations and income groups. We find that Medicare actually provides larger net dollar transfers to wealthier beneficiaries, although the "insurance value" of these dollars is greater for low-income households. We then evaluate a range of proposed Medicare reforms with regard to their impact on the distribution of both health care and disposable income.

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MEDICARE
REFORM

IN THE MID-1960S PRIVATE HEALTH INSURANCE for the elderly seemed increasingly inadequate to handle the then-shocking hospital charges of \$39 per day.¹ Roughly half of the elderly had no coverage at all, and those with policies often had caps of only \$10 per hospital day. These problems were a principal motivation for Medicare, an insurance program intended to provide nearly universal and more comprehensive coverage to the elderly population.

The policy debate leading up to Medicare's adoption focused on whether the federal government should be in the health insurance business at all or whether other approaches might better provide health insurance for the elderly.² But there was little debate about how to pay for Medicare, given that the program that emerged was so strongly linked to Social Security. Financing for hospital insurance came from a beefed-up Social Security payroll tax, and premiums paid by the recipient and general tax revenues each accounted for half of the cost of physician and ambulatory coverage.

Perhaps little attention was devoted to Medicare financing be-

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cause the required taxes were relatively modest. Total Medicare spending was only \$2.7 billion in fiscal year 1967 (\$13.4 billion in current 1998 dollars). Spending per beneficiary was \$710 in current dollars, and the supplemental Part B premium was \$3 per month (around \$15 in current dollars).¹

Over the next three decades, because the Medicare program has exploded in size, the financial implications of its promise to provide health insurance for older Americans loom much larger. Medicare now accounts for more than \$220 billion annually in tax revenue, which is transferred to the elderly and disabled—close to \$6,000 per beneficiary. Without significant reform, these transfers could exceed Social Security payments within a few decades. Victor Fuchs projects that Medicare spending per beneficiary in 2020, \$14,000 per capita, will roughly equal total spending by each elderly beneficiary on all other nonmedical goods and services.⁴

As a result, Medicare reform will have major financial consequences for every U.S. taxpayer—most of whom will someday become Medicare beneficiaries themselves. Who pays for Medicare now, and who would pay under various alternative reform proposals? Similarly, although Medicare covers a broad range of acute medical services, it covers others poorly or not at all. Who receives the benefits of Medicare insurance, broadly defined, and how do these benefits compare with payments?⁵ And how can financial assessments be used to provide an adequate summary of who really benefits from Medicare?

In this paper we review some of the principles of economic analysis that can be used to assess the equity implications of Medicare and of Medicare reform. We focus on incidence analysis, an economic method for analyzing who pays and who benefits from a government policy or program, with particular emphasis on differences across income groups and generations. As we argue below, a careful accounting of the enormous financial transfers in Medicare provides a starting point for assessing whether groups are better or worse off under reform. Thus, reforms should be judged not only on whether they balance the Medicare trust funds or improve efficiency or access, but also on their equity implications—how they influence the well-being of various groups of Americans.

What Is Incidence Analysis?

Incidence analysis traces out the overall impact of a given program or policy on the financial or more general well-being of various groups of people, with a full accounting of the dollar values of costs and benefits for each group. Some parts of this assessment are obvious; others are less so. Typically, it is relatively easy to add up taxes

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contributed and benefits paid out in a program, but it may be less clear how to value benefits that go beyond simple dollar payments.

For example, suppose we were to ask who benefited and who paid for Medicare during its first year of operation in 1966. People who previously did not have health insurance were now covered, so they were clear winners, especially if they were heavy users of health care services. Medicare benefited them in two ways: through better medical care and more disposable income to use on nonmedical goods and services. Healthy people enjoyed a greater sense of security about the future: Knowing that insurance coverage will be available in the event of major illness makes financial planning easier, even if the insurance is not actually used in a particular year. Such benefits of Medicare were most pronounced among the lowest-income groups, with the least coverage prior to Medicare.⁶ But the higher-income elderly also benefited, because they were able to obtain more generous health insurance in return for a small increase in general tax liability and a \$3 monthly premium. Their premiums were largely financed by nonelderly workers through payroll and other federal taxes. Moreover, the value of lifetime health insurance (after age sixty-five) can be greater for wealthier households, because they tend to have better access to health care and live longer. Both of these effects, which we quantify below, serve to increase Medicare benefits for high-income households relative to low-income households.

On the other hand, because Medicare insures most health care services received by the elderly, beneficiaries may use more services than they would if they were paying the full price. This is the "moral hazard" problem, although the term is a misnomer: The idea is simply that when the price of a service falls, people tend to consume more of it. As a result, some of the Medicare dollars spent on health care may be worth less to beneficiaries than an equivalent amount of money that they could spend on something else.

Other groups also have been affected significantly by Medicare. Physicians and other health professionals have enjoyed a more robust demand for their services, with a large reduction in charity and nonpaying cases among the elderly. Similarly, increased payments for health care institutions, plus some supplemental Medicare payments for certain types of hospitals, have benefited the employees, owners, and other stakeholders of such organizations. Although the health sector of the economy has some low-wage workers, the sector overall has a relatively large share of high-wage workers. Thus, the benefits of Medicare have extended to a much wider and relatively affluent group.

What about the costs of Medicare? The initial payroll taxes faced

by employers and workers were a payroll tax rate was 0.7 percent of earnings of \$6,500, the maximum earnings subject to the tax. Part A was \$46.20, or \$239.10 per year, the cost of the program, in terms of payroll tax purchases, was relatively small. Medicare has analyzed the extent to which it has influenced access to care and other aspects of health care utilization, financing and expenditure patterns, even though spending is not the net incidence of the program.

A historical illustration of the impact of Medicare reform are both in the Medicare Coverage Act of 1988. This was the Medicare population, an important part, including an endorsement by the Retired Persons (AARP).⁸ Studies from private seniors led to the conclusion that the program was funded entirely by payroll taxes, increased with income, many people as just not worth the additional cost.

The questions raised by the program go beyond "interest-group politics." For a program as large as Medicare, the benefits and costs to an individual's life, incidence may have

Medicare Financing: A New Perspective

Medicare Part A (hospital insurance) is financed by payroll taxes. The payroll tax has been increased from 0.9 percent to 1.45 percent on all earnings. From the standpoint of the employee, the tax is 2.9 percent less in total cost of their services.⁹ This is a proportion of taxes paid to earnings.

Medicare Part B (physician services) is financed mostly through general federal taxes. Medicare financing is progressive, in that the principal source of federal revenue

by employers and workers were small. The combined Medicare payroll tax rate was 0.7 percent, and because the tax was capped at earnings of \$6,500, the maximum annual worker payment to finance Part A was \$46.20, or \$239 annually in current dollars. Thus, the cost of the program, in terms of reduced income available for other purchases, was relatively small in 1966 and largely spread among the more plentiful working generation. Since then much research on Medicare has analyzed the expenditure side of the program—how it has influenced access to care, investment, innovation, and many other aspects of health care use. But little research has addressed the financing and expenditure sides of the program in an integrated way, even though spending has grown enormously and the overall net incidence of the program is unclear.⁷

A historical illustration of why the tax and expenditure sides of Medicare reform are both important is the Medicare Catastrophic Coverage Act of 1988. This was to be a major expansion of benefits to the Medicare population, and at first it garnered broad-based support, including an endorsement from the American Association of Retired Persons (AARP).⁸ Shortly after its passage, however, protests from irate seniors led to repeal of the bill. Because the expansion was funded entirely by additional beneficiary taxes that increased with income, many elderly people viewed the new benefits as just not worth the additional tax costs.

The questions raised by this unfortunate political debacle go beyond "interest-group politics" and relate closely to incidence issues. For a program as large as Medicare, and which requires tax payments and provides health insurance over decades of each beneficiary's life, incidence may have major policy and political implications.

Medicare Financing From An Incidence Perspective

Medicare Part A (hospital, hospice, and some home health care) is financed by payroll taxes. Since the inception of the program, the payroll tax has been increased several times. Today workers pay a tax of 1.45 percent on all earnings, an amount matched by employers. From the standpoint of the incidence of the tax, however, whether the employer or the employee pays is immaterial: Workers receive 2.9 percent less in total compensation than what employers pay for their services.⁹ This is a proportional tax on earnings, because the fraction of taxes paid to earnings is constant for all levels of earnings.

Medicare Part B (physician and outpatient care) is financed mostly through general federal revenues. This component of Part B financing is progressive, in that the federal income tax—the principal source of federal revenues—assesses a higher average percentage

of taxes on income as income rises. The other major source of Part B spending is the monthly premium paid by enrollees, approximately \$44 per month. These contributions now fund about one-quarter of Part B costs. This component of the "tax" (or user fee) may be regarded as regressive, because the payment as a fraction of total income falls as income rises.

To see why the source of Medicare financing matters, consider one of the Medicare financing reforms included in the 1997 Balanced Budget Act (BBA): movement of a large part of the home health care benefit from Part A to Part B. In one sense, this was a convenient accounting change. Because Part B uses general tax revenues, whereas Part A draws from a trust fund of payroll tax contributions, the change deferred the impending "insolvency" of the Medicare trust fund and perhaps reduced the apparent urgency of Medicare reform. But it also mattered for the incidence of Medicare. Shifting from a proportional payroll tax on earnings to a progressive tax on general income tends to shift the burden of taxation from lower- to higher-income groups among the working population. Among current recipients of Medicare, on the other hand, the overall effect is regressive, because the (regressively financed) Part B premium accounts for a larger share of program costs than the elderly's (progressive) contribution to general tax revenue.¹⁰

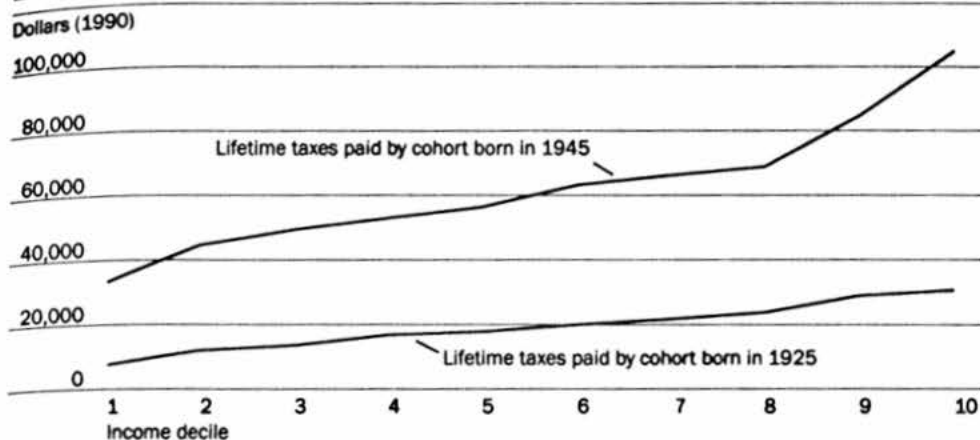
Who Pays for Medicare?

What are the implications of Medicare's financing mechanism for the relationship between lifetime income and payments into Medicare? To answer this question, we estimated lifetime Medicare tax and premium payments for ten equal-size groups (or deciles), ranked by a three-year average of their income prior to Medicare eligibility. We considered two cohorts: persons born in 1925 who turned age sixty-five in 1990, and persons born in 1945 who turn age sixty-five in 2010. For this analysis we used the Panel Study of Income Dynamics (PSID), which has followed earnings and tax payments for about 5,000 families since 1967; we also projected income and thus payments for the younger cohort extending out to 2010, based on their earnings trajectories up to now.¹¹ After adding in anticipated Part B premiums, we then calculated overall lifetime tax and premium payments for each decile in each cohort.

Clearly, tax payments rise with income. But overall tax payments are regressive, because the ratio of taxes paid to income at the highest income decile (10) is below the ratio for the lowest income decile (1) (Exhibit 1).¹² There are a number of reasons for the regressivity, including the presence of payroll tax "caps" mentioned earlier and

EXHIBIT 1

Estimated And Projected Lifetime Taxes Paid Into Medicare, For Cohorts Born In 1925 And In 1945



SOURCE: Authors' calculations based on data in M. McClellan and J. Skinner, "The Incidence of Medicare," National Bureau of Economic Research Working Paper no. 6013 (Cambridge, Mass.: NBER, April 1997).

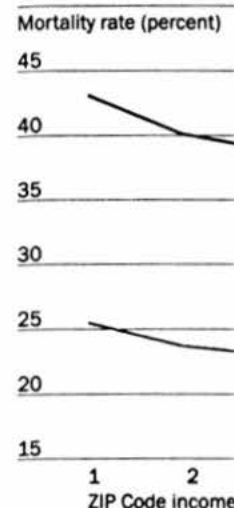
high levels of income might have paid in little because of low earnings during their younger years.

Exhibit 1 illustrates that the issue of who pays also depends on the year of the taxpayer's birth. The lifetime tax contributions for the cohort born in 1945 are much higher than for the 1925 cohort, and they are less regressive, for several reasons.¹³ First, real earnings have increased, and more women in the 1945 cohort than in the 1925 cohort are in the workforce (earning income). Second, the 1945 cohort has been paying into Medicare for almost their entire working lives. In contrast, workers in the 1925 cohort only started paying Medicare taxes in 1966, about halfway through their working lives. Finally, as Medicare spending has risen, so have the taxes required to finance it. Younger workers' earnings have faced higher tax rates and higher (or no) earnings caps for more years, as well as an increasing share of general federal revenues devoted to Part B payments. Clearly, Medicare financing has important implications for the program's intra- and intergenerational incidence.¹⁴

Who Benefits From Medicare?

We now turn from Medicare financing to Medicare benefits. Much of the past and current debate about the Medicare program has taken for granted that its benefits are progressive. Although many changes in financing and in the details of benefits have occurred, the core features of the program—entitlement to health insurance for "necessary" acute hospital care, physician care, and associated services, whatever those may be—apply to all beneficiaries. Indeed,

EXHIBIT 2
1987-1995 Cumulative Mortality Rate for Women Ages Sixty-Five to Sixty-Nine by ZIP Code Income Decile



SOURCE: Based on 1987-1995 Distribution of Medicare Beneficiaries by ZIP Code Income Decile

come and spending and for Part B physicians. Exhibit 3 shows the effect of lifetime Medicare spending on the assumption of a 2.5 percent annual growth in Medicare spending. Under the assumption of a 2.5 percent annual growth in Medicare spending, the predicted Medicare spending for 1995 is \$16,700 per person, which is closer to the actual spending of \$16,700 per person in 1995.

To compare the effect of lifetime tax revenue on Medicare spending, we used the code-based decile lines corresponding to both payments and the cohort of beneficiaries. The results show that higher income groups tend to incur greater payments per year in Medicare, especially later in life.¹⁹ The correspondence between in-

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Our earlier study of 1990 Medicare spending also showed that higher income groups tend to incur greater payments per year in Medicare, especially later in life.¹⁹ The correspondence between in-

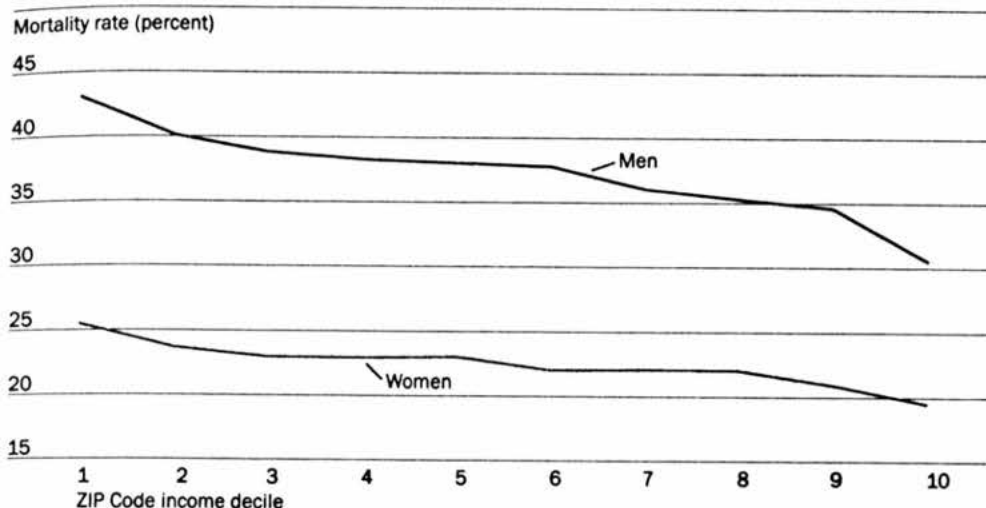
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EXHIBIT 2

1987-1995 Cumulative Mortality Rates, By ZIP Code Income Decile, For Men And Women Ages Sixty-Five To Sixty-Nine In 1987



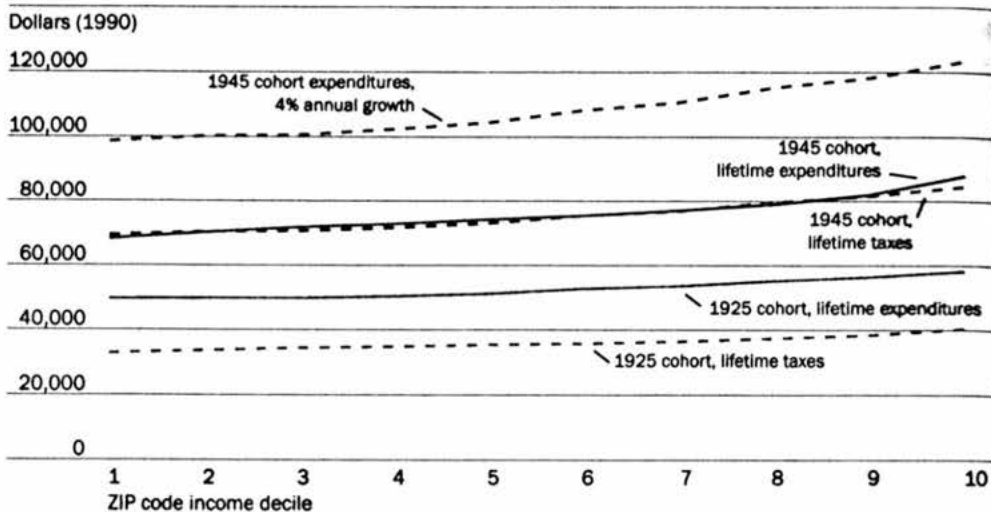
SOURCE: Based on 1987-1995 Medicare enrollment data, summarized from J. Lee, M. McClellan, and J. Skinner, "The Distribution of Medicare Benefits," in *Tax Policy and the Economy*, ed. J. Poterba (Cambridge, Mass.: MIT Press, forthcoming).

come and spending is more pronounced for men than for women and for Part B physician spending. Exhibit 3 shows the present value of lifetime Medicare expenditures.²⁰ The next-to-lowest line in Exhibit 3 shows these lifetime expenditures for the 1925 cohort, based on the assumptions that per capita Medicare spending will increase at a 2.5 percent annual rate and that future expenditures are discounted using a real annual interest rate of 3 percent. In addition, we show predicted Medicare expenditures for the cohort born in 1945, who will receive higher real lifetime benefits if real spending in Medicare continues to rise. The assumption of 2.5 percent real growth is modest, compared with recent historical evidence and the forecasts of many Medicare analysts.²¹ To illustrate the importance of Medicare spending growth for net payments to future cohorts, Exhibit 3 also shows expected expenditures for the 1945 cohort under the assumption of a future real growth rate of 4 percent per year, closer to the program's historical experience.

To compare tax payments to benefits received, we converted the lifetime tax revenues shown in Exhibit 1 to equivalent ZIP code-based deciles; these lifetime tax payments are plotted as dotted lines corresponding to the solid benefit lines.²² Accounting for both payments and spending, our calculations suggest that the cohort of beneficiaries who turned sixty-five in 1990 will receive much more in Medicare spending than what they paid in—an average gain of \$16,700 per person, even under a conservative assumption of 2.5

EXHIBIT 3

Lifetime Per Capita Medicare Expenditures And Taxes For The 1925 And 1945 Birth Cohorts, By ZIP Code Income Decile, 1998



SOURCE: Based on 1990 Medicare claims data presented in M. McClellan and J. Skinner, "The Incidence of Medicare," National Bureau of Economic Research Working Paper no. 6013 (Cambridge, Mass.: NBER, April 1997).

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MEDICARE REFORM

percent annual expenditure growth in the future. Thus, the 1925 birth cohort is a substantial net winner from the standpoint of Medicare incidence.²² Within the 1925 cohort the net transfer (the difference between lifetime benefits and taxes) for decile 10 of \$17,800 is greater than the net transfers to the lower-income groups. The net transfers are as small as \$15,500 in income decile 3, so that Medicare has redistributed as much as \$2,300 more to high-income beneficiaries in this cohort.

For the 1945 cohort, the greater progressivity of the Medicare financing system in recent years leads to less redistribution from middle low-income groups to upper middle-income groups. The lines based on a 2.5 percent future growth rate show that if Medicare expenditure growth does slow, the intergenerational transfers will largely evaporate; the taxation line sits almost on top of the expenditure line, largely because of the substantial increase in Medicare taxes paid by this younger cohort. However, if Medicare benefits grow at 4 percent, real benefits will be larger (top line in Exhibit 3), meaning that intergenerational transfers will remain.

The relationship between income and net benefits may change as a result of changes in Medicare policies, medical technology, or population health. For example, we have shown in a recent paper that use of Medicare home health benefits in low-income neighborhoods has increased dramatically since 1900 relative to use by high-income beneficiaries.²³ For women, per capita home health care

"Americans that Medicare"

spending (and recipients) increased between 1990 and 1998 for the income group for incidence restrictions or

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The BBA

"Americans preparing for retirement today have some expectation that Medicare will provide appropriate medical benefits."

spending (among all Medicare enrollees, not just home health care recipients) increased by \$634 in the lowest-income group (decile 1) between 1990 and 1995, compared with only \$207 in the highest-income group (decile 10). This change has important implications for incidence analysis but may be at least partially offset by new restrictions on home health spending in the BBA.

An important limitation of an incidence analysis based on dollars transferred is that the value of benefits may diverge greatly from the dollar amount of the transfers. As noted above, additional considerations related to the "insurance value" of Medicare might significantly alter our incidence conclusions. Previous research suggested that for lower-income groups, the insurance value of Medicare was roughly 20 percent higher than the dollar transfers suggested; for higher-income groups, benefits were worth about 10 percent less.²⁴

Our discussion about the uncertainty of future growth in medical spending illustrates another type of insurance provided by Medicare: insurance against the uncertainty of future spending growth. Americans preparing for retirement today have some expectation that Medicare will provide appropriate medical benefits, whatever those benefits ultimately turn out to be, making it easier to plan future expenses. Just as they are now picking up much of the cost for the actual expenses of the current elderly, which were difficult to predict several decades ago, so also may future generations assist current workers in meeting their medical expenses in old age.

Implications for Medicare Reform

We have argued that an explicit analysis of lifetime payments and benefits in Medicare can assist in evaluating Medicare reforms. Before turning to specific reforms, however, we pose one further question: How much should Medicare redistribute between income groups and generations? Answering this question is crucial in evaluating whether the incidence consequences of Medicare reforms are desirable or not. Some guidance is provided by what is probably the most popular notion of fairness underlying the program: Higher-income persons pay more into Medicare, but everyone receives "similar" insurance coverage. As we have seen, there is less redistribution from highest- to lowest-income Americans through the program than this popular notion implies.

The BBA legislates an increase in Part B monthly premiums to

\$105 in 2007; its impact on the incidence of Medicare is to shift funding toward current beneficiaries, albeit in a regressive way, since all elderly beneficiaries face the same premium increase.²⁵ Some observers have suggested tying Part B premiums to annual income so that higher-income elderly pay more, although there are administrative problems in implementing this approach.²⁶ Obviously, such a financing change would have incidence effects favoring lower-income beneficiaries.

Other reform proposals have focused on "rationalizing" Medicare benefits. Whatever their consequences for the efficiency of the program, they also may have important consequences for its incidence. For example, the current Medicare program provides more coverage for acute illnesses treated on an inpatient basis than for chronic illnesses, which depend primarily on outpatient treatment with prescription drugs or on long-term nursing care. Some proposed reforms include the addition of an ambulatory prescription drug benefit and possibly new long-term care benefits, perhaps at the expense of less generous coverage of acute hospital services. These changes are likely to be particularly valuable for beneficiaries with chronic illnesses and relatively high out-of-pocket spending on prescription drugs, which are more prevalent in the younger lower-income elderly. Reforms that affect coverage or generosity for specific diseases such as renal failure, special services for patients with complicated diabetes, and treatment for substance abuse disproportionately benefit people in lower-income groups, given their greater likelihood of having such illnesses.²⁷

More fundamental reforms would partially decouple Medicare spending from the growth in medical spending. For example, some proposals advocate changing the Medicare benefit from a fee-for-service entitlement to a defined contribution toward the premium of one of a set of approved insurance plan choices.²⁸ In principle, changing to such a premium-support system not only would effectively cap Medicare spending per beneficiary but also could lead to more efficient health plan choices, since beneficiaries would be responsible for the additional costs of a relatively expensive plan.

How this premium support is allocated and financed and how it grows over time are the key questions for determining the implications for Medicare incidence. The premium support could be financed in the same way as current benefits are financed. If so, it would have no implications for intergenerational incidence unless it led to a slower rate of Medicare growth over time—which would reduce transfers from younger workers to current beneficiaries. Under the current system, we have seen that actual spending may vary positively with income. With premiums risk-adjusted for health

status, a premium-support system would amount to a transfer of funds from higher-income to lower-income people.

A premium-support or defined-contribution system would change the "insurance-value" incidence of Medicare. If contributions were relatively fixed, beneficiaries would bear more risk in a defined-contribution plan, possibly leading to health care decisions that reflect the value of health care dollars for all beneficiaries. For lower-income beneficiaries, this effect would probably be offset by differences in health care use between lower-income and higher-income beneficiaries. On the other hand, without adequate methods to limit the problem of adverse selection, the introduction of insurance coverage at an actuarially fair rate for lower-income beneficiaries who are likely to be in poor health would "pool" of supplement

Medicare's "risk" health maintenance and the new Medicare+Choice program. If the new choices are similar to those of a premium-support system, they would provide a dollar payment toward the premium of one of the approved alternative to traditional Medicare. From this standpoint, it is perhaps not surprising that Medicare+Choice has been relatively popular with lower-income beneficiaries not eligible for Medicaid—the income groups that would benefit most in terms of net benefits in traditional Medicare.

Reforms instituting individual accounts would have important incidence effects. For example, if beneficiaries pay for their own health care through individual Medicare accounts funded during their working lives.³⁰ Because they would fund their own Medicare spending, there would be no net transfers from younger to older generations.

Just about any kind of dollar-based reform would have income effects. For example, if higher-income persons and taxing contributions were required. But complete prefunding would predictably lead to variations in the future individual fund's accumulation, with higher-income persons having relatively limited insurance against health care expenses. Although empirical evidence suggests that these reductions in health care spending in low-income households.³²

Medicare is a regressive premium increase, although there are incidence effects (increasing

Medicare's incidence effects for its incidence effects more coverage than for chronic treatment with some proposed prescription drug caps at the expense of these changes. These changes are on prescription drug lower-income and specific diseases with complex disproportionate their greater life

couple Medicare for example, from a fee toward the premium. In principle, only would effect also could lead to a more extensive plan, and how the impact could be financed. If incidence effects—which would beneficiaries spending may be reduced for health

premium support system could ensure a more equal dollar income to lower-income persons.²⁹

A premium support or defined-contribution reform also might reduce the "insurance-value" incidence of Medicare. The use of related contributions might be expected to reduce moral hazard as beneficiaries would bear more of the cost of a more expensive plan, possibly leading to health plan choices that increase the cost of health care dollars for all beneficiaries. However, because lower-income beneficiaries probably would purchase less medical care, this effect would probably be manifested as increasing differences in health care use between lower- and higher-income groups. On the other hand, without adequate risk adjustment or other methods to limit the problem of adverse selection, fixed contributions may make it more difficult for beneficiaries to obtain desired insurance coverage at an actuarially fair price—especially for lower-income beneficiaries who are likely to receive the subsidies and insurance "pooling" of supplemental retiree health benefits.

Medicare's "risk" health maintenance organization (HMO) option and the new Medicare+Choice program have incidence implications similar to those of a premium-support program. They too provide a dollar payment toward the costs of a managed care or other approved alternative to traditional Medicare. From an incidence standpoint, it is perhaps not surprising that these programs have been relatively popular with lower-income beneficiaries who are not eligible for Medicaid—the income group that fares least well in terms of net benefits in traditional Medicare.

Reforms instituting individual "prefunding" also could have important incidence effects. For example, some reforms envision having persons pay for their own health insurance in old age, through individual Medicare accounts funded by their own payroll taxes during their working lives.³⁰ Because each birth cohort would prefund its own Medicare spending entirely, the current Medicare transfers from younger to older generations would be eliminated.³¹

Just about any kind of dollar-based redistribution between generations and income groups could be achieved through a prefunding approach, perhaps by partially matching contributions by low-income persons and taxing contributions by high-income persons. But complete prefunding provides no insurance against unpredictable variations in the future growth of medical spending or an individual fund's accumulation. The individual fund also provides relatively limited insurance against the risk of chronic, lasting illnesses. Although empirical evidence is sparse, our previous analyses suggest that these reductions in insurance value would be largest for low-income households.³²

MEDICARE REFORM MAY HAVE major implications for the incidence or equity of the program—who pays and who benefits—both across income groups and across various cohorts or generations of beneficiaries. We have not answered the more difficult normative question: Who should pay, and who should benefit? But we have tried to provide a framework for judging the fairness of particular reform proposals, compared with the status quo incidence of Medicare. Because of the program's magnitude, incidence analysis is an important complement to considerations of efficiency, ethics, and other issues in the reform debate.

From the perspective of intergenerational incidence, programs that transfer income from current workers to finance benefits for current elderly have been popular. However, Medicare transfers are rapidly surpassing even Social Security transfers in magnitude. To maintain the net transfers from younger to older generations so that every cohort continues to "win" from a lifetime perspective in Medicare, medical spending must continue to grow much faster than the rest of the economy, and taxes on younger workers to finance Medicare must continue to rise. This approach may become increasingly difficult to sustain, but the alternatives—reducing the growth of Medicare spending, or switching a greater part of program costs to the current elderly—hardly seem more politically appealing. Careful consideration of the incidence of Medicare reforms may not make the choices among difficult alternatives any easier. But incidence analysis can help to ensure that the complex but basic questions of who gains and who loses are included in the debate.

All opinions expressed in this paper are those of the authors and should not be construed to represent those of the National Bureau of Economic Research (NBER). The authors are grateful to the editors and two anonymous referees for very helpful and constructive comments, to Julie Lee for extraordinary research assistance, and to the National Institute on Aging for financial support.

NOTES

1. Or about \$200 in 1998 dollars. Testimony by Paul E. Hanchett, "Private Health Insurance for the Elderly," Senate Special Committee on Aging, vol. 4 (88th Congress, 1964), 1631.
2. T. R. Marmor, *The Politics of Medicare* (Chicago: Aldine, 1973).
3. U.S. House Ways and Means Committee, *Green Book* (Washington: U.S. Government Printing Office, 1998); and Congressional Budget Office, *Economic and Fiscal Outlook: Update* (Washington: CBO, August 1998).
4. V. Fuchs, "Provide, Provide: The Economics of Aging," in *Medicare Reform: Issues and Answers*, ed. T. R. Saving and A. Rattenmaier (Chicago: University of Chicago Press, forthcoming); and CBO, *Long-Term Budgetary Pressures and Policy Options* (Washington: CBO, May 1998).
5. Other low government health insurance programs include the Medicare enti-

6. Only 15 percent of single distribution had health insurance. For example, see the Health Statistics, *Health Insurance in the United States: The 1963 Social of Health, Education, and*
7. For an exception, see R. J. Intergenerational Transfers, *First Twenty Years of Medicare*, University of Pennsylvania.
8. L. J. Haas, "Fiscal Catastrophe," *Public Finance*, 5th ed. (New York: Macmillan, 1986).
9. This is not to say that we experience a full 2.9 percent increase in net earnings demand for workers and taxes on younger workers to finance Medicare must continue to rise. This approach may become increasingly difficult to sustain, but the alternatives—reducing the growth of Medicare spending, or switching a greater part of program costs to the current elderly—hardly seem more politically appealing. Careful consideration of the incidence of Medicare reforms may not make the choices among difficult alternatives any easier. But incidence analysis can help to ensure that the complex but basic questions of who gains and who loses are included in the debate.
10. In 1986, the most recent year for which data are available, federal income taxes. In: (Washington: U.S. Government Printing Office, 1986), financing 25 percent of the elderly pay just over one percent (1.4), of which 70 percent is for high school graduate.
11. Consistent with trends in real terms at the for high school graduate.
12. Lifetime tax payments, percent for the lowest-income.
13. Part B premiums are as higher growth rate (which would reduce the degree).
14. A. Auerbach, J. Gokhale, Policy from the Perspective, *Economy*, vol. 6 (Cambridge: MIT Press, 1993).
15. J. S. House et al., "Age, Sex, and Health Status," *Journal of Human Capital*, no. 3 (1990): 383-411.
16. K. Davis and R. Reynolds, "The Economics of Aging," in *Medicare Reform: Issues and Answers*, ed. T. R. Saving and A. Rattenmaier (Chicago: University of Chicago Press, forthcoming); and CBO, *Long-Term Budgetary Pressures and Policy Options* (Washington: CBO, May 1998).
17. A. Geronimus, J. Bound, *Geocode Characteristic: A study of the American study comparing Medicare beneficiaries*, Gornick et al., "Effect among Medicare Beneficiaries," *Journal of Human Capital*, 791-799.

plement through disability insurance or the end-stage renal disease program and Medicaid insurance. Although we do not do so here, our methods could readily be extended to analyzing these programs. For the reasons discussed above, we suspect that the benefits of these programs are likely to extend beyond the low-income population.

6. Only 15 percent of single elderly men in the bottom third of the income distribution had health insurance in 1962, compared with 80 percent of elderly couples in the highest third of the income distribution. See National Center for Health Statistics, *Health Insurance Coverage*, Series 10, no. 11 (Hyattsville, Md.: NCHS, August 1964); and L. Epstein and J. Murray, *The Aged Population of the United States: The 1963 Social Security Survey of the Aged* (Washington: Department of Health, Education, and Welfare, 1967).
7. For an exception, see R.J. Vogel, "An Analysis of the Welfare Components and Intergenerational Transfers under the Medicare Program," in *Lessons from the First Twenty Years of Medicare*, ed. M.V. Pauly and W.L. Kissick (Philadelphia: University of Pennsylvania Press, 1988).
8. L.J. Haas, "Fiscal Catastrophe," *National Journal* (7 October 1989): 2453-2456.
9. This is not to say that were Medicare payroll taxes erased, workers would experience a full 2.9 percent "raise" in after-tax earnings. The magnitude of their increased net earnings would depend on the ratio of the elasticity of demand for workers and the elasticity of supply by workers. See H. Rosen, *Public Finance*, 5th ed. (New York: Irwin McGraw Hill, 1998).
10. In 1986, the most recent published figures, the elderly paid 14 percent of total federal income taxes. Internal Revenue Service, *Individual Income Tax Returns* (Washington: U.S. Government Printing Office, 1986). With Part B premiums financing 25 percent of Part B program costs, as a rough approximation the elderly pay just over one-third of a \$1 increase in Part B spending (.25 + .75 x .14), of which 70 percent (25/35) is a lump-sum assessment.
11. Consistent with trends over the past two decades, we assume that earnings grow in real terms at the rate of 1 percent for high school dropouts, 1.5 percent for high school graduates, and 2 percent for college graduates.
12. Lifetime tax payments, expressed as a fraction of annual income, are 32 percent for the lowest-income decile and 19 percent for the highest.
13. Part B premiums are assumed to grow in real terms at 2.5 percent per year. A higher growth rate (consistent with projected rates legislated in the BBA) would reduce the degree of progressivity.
14. A. Auerbach, J. Gokhale, and L.J. Kotlikoff, "Social Security and Medicare Policy from the Perspective of Generational Accounting," in *Tax Policy and the Economy*, vol. 6 (Cambridge, Mass.: NBER and MIT Press, 1992).
15. J.S. House et al., "Age, Socioeconomic Status, and Health," *Milbank Quarterly* 68, no. 3 (1990): 383-411.
16. K. Davis and R. Reynolds, "Medicare and the Utilization of Health Care Services by the Elderly," *Journal of Human Resources* 10, no. 3 (1975): 361-377; C.R. Link, S.H. Long, and R.F. Settle, "Equity and the Utilization of Health Care Services by the Medicare Elderly," *Journal of Human Resources* 17, no. 2 (1982): 195-212; and J. LeGrand, *The Strategy of Equality* (London: George Allen and Unwin, 1982).
17. A. Geronimus, J. Bound, and L. Neidert, "On the Validity of Using Census Geocode Characteristics to Proxy Individual Socioeconomic Characteristics," *Journal of the American Statistical Association* 91, no. 434 (1996): 529-537. For a study comparing Medicare use by ZIP code and survey income, see M.E. Gornick et al., "Effects of Race and Income on Mortality and Use of Services among Medicare Beneficiaries," *New England Journal of Medicine* 335, no. 11 (1996): 791-799.

COST ESTIMATES

Uses And Abuse

Long-Term M

Cost Estimate

Although long-term cost estimates projecting too far into the future is

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Because the United States spe

Joseph White is an associate professor in the I

Uses And Abuses Of Long-Term Medicare Cost Estimates

Although long-term cost estimates can be a useful policy tool, projecting too far into the future is a risky business.

by Joseph White

ABSTRACT: Long-term cost estimates are central to the current Medicare policy debate. This paper uses Congressional Budget Office (CBO) and Health Care Financing Administration (HCFA) data, and comparisons to international trends, to make some distinctions and warnings about the use of those estimates. Projected spending increases related to a larger enrollee population may be more easily justified than increases related to higher prices or volume of services per enrollee. Projections of demographics as if policy will not change are at least plausible; projections as if payment policies will not change for the next seventy-five years are absurd. The demand for solutions that would "fix" the problem for seventy-five years biases options in the direction of radical reforms, to the exclusion of more incremental and careful approaches.

MEDICARE &
PUBLIC POLICY

63

THE NATIONAL BIPARTISAN COMMISSION on the Future of Medicare was formed out of concern about Medicare's long-term costs.¹ Yet when that group met in June 1998 to consider alternative estimates of those costs, one of its members, former Health Care Financing Administration (HCFA) Administrator Bruce Vladeck, denounced the whole enterprise of forecasting costs beyond a ten-year horizon as "an enterprise in comparative fantasy."²

Vladeck was responding in part to a position taken by many other members of the commission, who claimed that the standard baseline forecasts from the HCFA actuaries and the Medicare Health Insurance (HI) and Supplemental Medical Insurance (SMI) trustees' reports were likely to be too optimistic. Both sides agreed that the plausibility and reliability of long-term estimates is a fundamental question for any consideration of Medicare "reform." But how plausible, reliable, or even relevant are such estimates?

Because the United States spends far more for health services

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than any other country spends and has seen its costs increase more quickly, without obvious comparative extra benefit, there is *prima facie* reason to pay special attention to limiting Medicare costs. Long-term forecasts provide useful extra justification for serious efforts to control costs. They may be particularly helpful as a weapon against laxity in easy budget times. Given projected surpluses, pressure for even short-to-medium-term Medicare savings might ease without forecasts that remind us that saving now is the best way to make choices more manageable.

Despite these positive aspects, the use of long-term estimates can be taken too far and can distort policymakers' views of both Medicare problems and alleged solutions.

Sources Of And Influences On Estimates

The two main sources for Medicare long-term cost estimates are the HCFA actuaries, through the annual reports by the trustees of the HI and SMI trust funds, and the Congressional Budget Office (CBO).¹ Each year the CBO reports on the *Economic and Budget Outlook* in the medium term; in 1996, 1997, and 1998 the CBO separately projected the budget outlook over a time period similar to the trustees' seventy-five-year standard.⁴

■ **How the estimates are made.** Economic growth and inflation, compounded over decades, create spending numbers that are so much larger than current figures as to be meaningless. Therefore, long-term estimates should be expressed as percentages of some baseline that also grows with inflation and production. For Medicare, the best baseline is gross domestic product (GDP).⁵

Exhibit 1 reports both CBO and HCFA estimates of the trend in Medicare spending as a share of GDP. The CBO estimates that spending will grow from 2.7 percent of GDP in 1997 to 6.3 percent in 2030 and 7.8 percent in 2070, while the trustees predict that spend-

ing will be a full percentage difference; in 1997 it was a care problem as an more devoted to the program about a quarter larger than

The difference between one example of the great. Between the 1997 and 1998 Medicare spending in 2.7 percent. That change in 1997 Balanced Budget Act with underlying Medicare

The CBO and HCFA use different techniques and assumptions. There are three basic types of demographic factors, general medical care cost trends, rates of medical care and growing more or less quickly.

The CBO and HCFA also make different projections made by Social Security. HCFA also adopts SSA's own projections of economic conditions. Both agencies estimate differently for the short term, estimate costs for different age groups, and combine these estimates to project totals. Beyond that, medical costs per age group trend down by the year 2030, revenues and the economy. HCFA assumes that per capita rate of per capita GDP. HCFA assumes an increase equal to

The CBO also does its own short term (a ten-year period) for both HI and SMI beneficiaries—an increase—the growth of a program recognizing that its data are an adjustment into its long-term economics and demographic trends, same growth rates.

The CBO's long-term estimates

EXHIBIT 1
Comparison Of CBO And Medicare Trustees' Projections Of Long-Term Medicare Spending Trends, 1997-2070

	Percent of gross domestic product				
	1997	2010	2030	2050	2070
CBO (1998)	2.71%	3.67%	6.29%	7.02%	7.76%
Trustees (1998)	2.62	3.46	5.85	6.29	6.71

SOURCES: For Congressional Budget Office (CBO) 2010-2070, *Long-Term Budgetary Pressures and Policy Options* (Washington: CBO, May 1998), Table 4-2. The published tables only report to one decimal place, but I have provided two, to match the trustees' figures, based on background materials kindly provided by CBO staff. For CBO 1997, *The Economic and Budget Outlook: Fiscal Years 1999-2008* (Washington: CBO, January 1998), Tables H-2 and H-1. For Medicare trustees, 1998 *Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund*, 28 April 1998, Table III.B.1.

ing will be a full percentage point lower in 2070. This is not a small difference; in 1997 it would be \$85 billion. If we defined the Medicare problem as an increase in the amount of the economy being devoted to the program, the CBO is saying that the problem will be about a quarter larger than HCFA projects.

The difference between the CBO and HCFA projections is just one example of the great volatility of estimates far into the future. Between the 1997 and 1998 trustees' reports, HCFA's projections of Medicare spending in 2070 fell from 8.38 percent of GDP to 6.71 percent. That change reflected both estimates of the effect of the 1997 Balanced Budget Act (BBA) and more favorable experience with underlying Medicare spending trends.⁶

The CBO and HCFA numbers differ by what looks like a substantial amount in 2070 because of small differences in their estimating techniques and assumptions, compounded over seventy-two years. There are three basic types of assumptions or estimates: involving demographic factors, general economic trends, and specifically medical care cost trends. The latter include, for example, different rates of medical care and general cost inflation, or medical activity growing more or less quickly than the size of the economy.

The CBO and HCFA adopt virtually identical demographic projections made by Social Security Administration (SSA) actuaries. HCFA also adopts SSA economic assumptions.⁷ The CBO uses its own projections of economic trends, instead of the SSA's assumptions. Both agencies estimate specifically medical care cost trends differently for the short than for the long term. HCFA actuaries estimate costs for different components of the HI and SMI programs and combine these estimates into short- and medium-term projected totals. Beyond that horizon, they assume that the growth of medical costs per age- and sex-adjusted HI and SMI beneficiary will trend down by the year 2020 to annual rates related to the growth of revenues and the economy. For SMI, financed by general revenues, HCFA assumes that per enrollee spending will rise at the growth rate of per capita GDP. For HI, financed by a payroll tax, HCFA assumes an increase equal to the growth of average hourly earnings.

The CBO also does its own projections of costs per enrollee in the short term (a ten-year period). Then, the CBO assumes, costs for both HI and SMI beneficiaries will trend down to the same rate of increase—the growth of average hourly earnings. But the CBO, recognizing that its data are not as good as HCFA's data, builds an adjustment into its long-term model so that, given identical economics and demographics, HCFA and the CBO would produce the same growth rates.

The CBO's long-term estimate in 1998, then, differs from HCFA's

for two basic reasons. Just over 0.4 percent of GDP in 2070 is because the difference between the CBO's and HCFA's more detailed estimates through 2008 compounds (doubling over time). The rest (equivalent to about \$50 billion in current dollars) results from CBO modeling choices that make sense given data availability but from a policy viewpoint are randomly different from HCFA's choices.⁸

All current and recent projections of Medicare costs do, and should, show large enough increases to deserve further attention. Yet the ways that small differences in assumptions lead to significant changes in long-term totals should warn us not to give those numbers too much credence. Rather than focusing on totals, it may make more sense to think about the causes individually.

■ **Cost factors.** Three issues are relevant to each of the basic factors in Medicare cost estimates: (1) How reliably can they be predicted? (2) Do they represent "good" or "bad" reasons for cost increases? (3) What can be done about them, predictable or not?

Long-term (and short-term) economic estimates are particularly unreliable. Because our concern is Medicare costs as a share of GDP, however, that unpredictability is not so relevant to Medicare debate. Most errors in economic estimates would have similar effects on both the numerator and denominator of the Medicare cost-to-GDP ratio.⁹ Economic projections also involve a factor that cannot be manipulated much by Medicare policy. At the margin, lower government spending on Medicare (or anything else) may lead to slightly higher economic growth but not enough to add meaningfully to the direct reduction in budget burden from simply spending less.¹⁰ So (fortunately) we do not have to think much about general economic factors.

Demographic trends are both a larger cost factor and, in the medium term, more reliably estimated. They also represent a reason for increases that is more clearly defensible than are the other causes. The size of the Medicare-eligible population represents (if the program makes sense to begin with) one indicator of program need, just as the size of the school-age population is an indicator of the need for education expenses. Whether need is defined by size of eligible population or some other factor (such as external threat determining need for military spending, or traffic congestion, the need for road building), one would expect program spending to rise or fall with it. From this perspective, demographically driven increases in Medicare's costs as a share of the economy might seem acceptable.

Exhibit 2 uses CBO figures to provide a rough estimate of the effect on future Medicare costs from estimated enrollment trends alone. Those increases, shown in columns 4 and 5, are somewhat less than half of the total. Thus, the CBO projected that total spending

EXHIBIT 2
CBO Alternath

Calendar year

1995
2010
2030
2050
2070

SOURCES: Congress
4-2 for the first three
a The Medicare Part E
home health benefits
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b The estimates in co
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as being slightly high
from the estimated gr

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TABLE 2
Alternative Projections Of Long-Term Medicare Spending Trends, 1995-2070

Calendar year	Enrollment as percent of population	Spending as percent of GDP	Spending percent net of premiums	Spending if only grew with enrollment	Net spending if only grew with enrollment
1995	13.6%	2.6%	2.3% ^a	2.6% ^b	2.3%
2010	14.8	3.7	3.2	3.0	2.6
2020	22.0	6.3	5.5	4.4	3.9
2030	23.1	7.0	6.2	4.5	4.0
2070	24.7	7.8	6.8	4.8	4.3

^aSource: Congressional Budget Office, *Long-Term Budgetary Pressures and Policy Options* (Washington: CBO, May 1998), Table 4-5 for the first three columns, Table 4-5 for the next two.

^bThe Medicare Part B premium is expected to grow more quickly than overall program costs, because of both the move of some health benefits to Part B and the estimates that Part B will grow more quickly than Part A. Therefore, premiums as a share of spending grow faster than spending, creating the slower growth of net spending (column 3) than of total spending (column 2). The estimates in columns 4 and 5 are taken from an option of allowing spending per enrollee to grow only at 4 percent per year as part of a defined-contribution approach. The report describes this as an increase "equal to the average annual rate of growth projected for GDP per capita" (p. 57). Background materials supplied to me by the CBO, however, show estimates for given years as being slightly higher or lower than 4 percent. So the estimates here for given years, such as 2010, will be slightly different from the estimated gross domestic product (GDP) trend.

would rise by 5.2 percent of GDP from 1995 to 2070, of which 2.2 percent of GDP would be caused by an increase in Medicare enrollees' proportion of the population. Since SMI premiums would grow with the program's costs, the net increase (column 5) if only demographic factors were relevant would be 2 percent of GDP.

The purely demographic impact on eventual costs could be modified either by changes in population trends, such as faster or slower declines in mortality rates or greater or lesser immigration, or by Medicare policy choices, such as raising the age of eligibility for the program. The 2 percent of GDP figure, however, can be interpreted as a base estimate of the cost increase that must be expected if something resembling the current promise of benefits (expressed as a share of GDP per capita) is maintained for the currently anticipated population.

Whether one believes that such an increase would be necessary must depend, however, on what one believes about medical care costs. Perhaps the current benefits could be provided more efficiently, so costs per enrollee would not have to rise as quickly as GDP per capita rises, and total costs would not rise as fast as the Medicare share of the population rises. Or, medical innovation might increase the volume and intensity of services in ways that would increase costs per enrollee faster than per capita GDP.

Both numerically and normatively, therefore, the estimated trend of medical care costs per enrollee is the most significant factor in long-term Medicare budget projections. The CBO shows more cost growth from increases in costs per enrollee than from demographics.

Yet savings from providing care more efficiently, which would not reduce real benefits, would be easier to justify than measures to change eligibility would be.

Medical care costs per capita are especially hard to predict, precisely because they are the most easily manipulated factor. The conventions of budget estimation say that projections should be made as if there will be no policy change. Yet that is an absurd assumption about Medicare, for which payment rules are changed frequently.

Because altering Medicare's eligibility rules would be such a major policy step, there is some reason to discuss demographic trends as if they cannot be changed. Yet because costs per enrollee are subject to policy, and policy is not static, judgments of the trustees' or the CBO's assumptions about long-term costs per enrollee as pessimistic or optimistic miss the point. The right question is not what those costs "will" be, but what they reasonably "could" be without radical programmatic reform. Critics argue that past experience is worse than the trustees' projections. But if past experience were our only guide, policy could never improve. The Medicare savings legislated in the 1980s and 1990s could not have happened.

To get a sense of potential cost control within Medicare, therefore, we might look at other health care systems. The past four or five years in American private insurance markets are one example. A much wider array of data, over longer time periods, is available from the experience of other countries.

An International Perspective

Comparing Medicare cost forecasts with cost trends in other countries reveals several issues to consider.

■ **Medicare's peculiar demographic problem.** The United States is unique in having (and so budgeting for) a health insurance guarantee only for the elderly and a portion of the disabled. Therefore, medical insurance costs for the average American at age sixty-four do not show up in the federal budget. When he or she turns sixty-five, suddenly most of his or her medical insurance cost is in Medicare. So the effect of a larger proportion of persons age sixty-five and older is to greatly increase Medicare costs.

If the elderly were in the same plan(s) as everyone else (as is the case in other countries), the effect of a person's turning sixty-five would be only the difference between his or her costs at ages sixty-four and sixty-five. So, even though the effect of an aging population on future health care costs is a concern throughout the industrialized world, other nations face smaller proportional effects on their costs than Medicare does on its costs.¹¹

In fact, aging will increase Medicare's costs far more quickly than

it will raise total U Organization for Economic Cooperation and Development simulated the effects in other countries, it projects that by 2030, the total health care cost per person is expected to rise by 0.48 percent per year, so the demographic effect is expected to be four times as strong as the effect of the increase in Medicare enrollees in 2030, that increase in private budget care costs and the federal problem is bigger than the national health insurance spending.

■ **Costs per enrollee.** However, should have a higher cost per enrollee. That change that alters the price of Medicare enrollee care costs as a share of the total health care costs as a share of the total health care costs less quickly, so will be less quickly.

Exhibit 3 provides a comparison of per capita health care costs in other countries allowed to crack down in OECD data after control, therefore, compare the United States economic development with German data from the system of health care spending per capita spending, but the extent that a country's health care spending, it yielded much less.

The second column of per capita health care costs shows growth in per capita health care costs and if the United States column also shows with Sweden acting

it will raise total U.S. health care costs. For example, when the Organization for Economic Cooperation and Development (OECD) simulated the effects of aging on overall health care costs in various countries, it projected that aging would raise U.S. health care costs by 0.48 percent per year from 2000 to 2020.¹² Yet Medicare enrollment is expected to grow by more than 2 percent per year in that period, so the demographic effect on Medicare costs alone would be four times as strong.¹³ In Exhibit 2, as the share of the population enrolled in Medicare grows from 13.6 percent in 1995 to 22 percent in 2030, that increase also represents lower total health care burdens on private budgets. So a discussion that focuses only on Medicare costs and the federal budget creates an illusion that the nation's problem is bigger than it really is. Ironically, if the United States had national health insurance, the effect of an aging population on government spending would seem significantly smaller.

■ **Costs per enrollee.** The peculiarities of Medicare eligibility, however, should have little effect on the change in medical costs per enrollee. That change depends on policy choices or other behavior that alters the price and/or quantity of services. When spending per Medicare enrollee grows at the same rate as per capita GDP, Medicare costs as a share of GDP will grow at the same rate as enrollment as a share of the population. If per enrollee spending grows more or less quickly, so will Medicare's share of GDP.

Exhibit 3 provides rates of growth of total health care spending per capita, calculated from the OECD's 1997 health database. Most countries allowed health care costs to grow substantially before cracking down in the late 1970s and early 1980s; also, some of the OECD data after 1994 are estimated. To measure potential cost control, therefore, I chose the ten-year period 1984–1994. I also compare the United States only to countries that were at high levels of economic development throughout the period. Also, Exhibit 3 uses German data from 1980–1990, instead of 1984–1994, because reunification of Germany greatly reduced GDP per capita and dislocated the system of health care finance. Trends in personal health care spending per capita might differ from those for total health care spending, but the OECD's data on the former are less thorough. To the extent that a comparison of ten-year periods was possible, however, it yielded much the same results.¹⁴

The second column of Exhibit 3 shows the annual rate of growth of per capita health care spending on top of the effect of annual growth in per capita GDP. The international norm is 1.15 percent, and if the United States were excluded it would be 1.02 percent. The column also shows that national rates of growth have varied greatly, with Sweden actually reducing costs per capita.

EXHIBIT 3

Trends In Total Health Care Spending Per Capita, Sixteen Countries, 1984-1994

	Growth in annual spending per capita	
	In real local currency	Relative to per capita GDP
Australia	2.60%	1.04%
Belgium	2.81	1.02
Canada	2.87	1.73
Denmark	2.03	0.33
France	2.84	1.35
Germany ^a	2.08	0.18
Italy	3.90	1.95
Japan	3.24	0.47
Luxembourg	5.61	0.72
Netherlands	3.00	0.93
New Zealand	2.83	2.20
Norway	4.13	1.78
Sweden	-1.37	-2.01
Switzerland	2.95	2.10
United Kingdom	3.58	1.54
United States	4.78	3.13
Average, all countries		1.15
Average, all except U.S.		1.02

SOURCES: Organization for Economic Cooperation and Development, *OECD Health Data, 1997* (Paris: OECD, 1997); and author's calculations.

NOTE: GDP is gross domestic product.

^a 1980-1990.

How does this international experience compare to the CBO's and trustees' forecasts for Medicare costs? Exhibit 4 provides figures based on the CBO's projections. These are a bit more pessimistic than HCFA's, as we have seen. Since some people participate in HI but not SMI, there also is no simple definition of "Medicare enrollee." Following the CBO's conventions, I have divided total spending by the number of HI enrollees.¹⁵ Even with these problems, however, Exhibit 4 enables some interesting comparisons.

First, note that the CBO was forecasting significantly faster growth per enrollee than the international pattern through 2015. In fact, it was forecasting more rapid growth per Medicare enrollee from 2000 through 2015 than in the previous fifteen years. Then the CBO's growth projection slows, running about two-thirds of a percent above GDP per capita through 2035 before trending toward zero. If Medicare's costs per enrollee grew only one percentage point faster than per capita GDP through 2015 (so similar to the non-U.S. figure of 1.02 percent in Exhibit 3), Medicare costs in that year would be 14 percent lower than the CBO's forecast. The budgetary benefits of such savings would be greater than the Medicare savings alone, because lower spending reduces federal debt and interest costs. Hence, either from an international perspective or based on

EXHIBIT 4

Annual Increases in Me

1975-1980
1980-1985
1985-1990
1990-1995
1995-2000
2000-2005
2005-2010
2010-2015
2015-2020
2020-2025
2025-2030
2030-2035
2035-2040
2040-2045
2045-2050
2050-2055
2055-2060
2060-2065
2065-2070

SOURCE: Background Spreadsheet
NOTES: GDP is gross domestic product

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EXHIBIT 4

Annual Increases in Medicare Spending Per Enrollee, 1975-2070

	Medicare spending per enrollee	GDP per capita	Medicare over GDP trend
1975-1980	14.84%	10.27%	4.14%
1980-1985	12.05	7.39	4.34
1985-1990	7.02	5.49	1.45
1990-1995	5.06	3.75	1.26
1995-2000	4.54	3.97	0.55
2000-2005	6.55	3.89	2.56
2005-2010	6.04	3.97	1.99
2010-2015	5.47	3.97	1.44
2015-2020	4.65	3.88	0.74
2020-2025	4.38	3.83	0.53
2025-2030	4.63	3.94	0.66
2030-2035	4.77	4.05	0.69
2035-2040	4.59	4.10	0.47
2040-2045	4.28	4.08	0.19
2045-2050	3.95	4.04	-0.09
2050-2055	3.92	4.00	-0.08
2055-2060	4.10	4.00	0.10
2060-2065	4.34	4.01	0.32
2065-2070	4.35	4.01	0.32

SOURCE: Background Spreadsheet supplied by the Congressional Budget Office, June 1998; and author's calculations.

NOTES: GDP is gross domestic product. Percentages are annual increases per capita from five years before.

Medicare's own experience, seeking to improve on the CBO's medium-term projection seems plausible enough.

In the long run, if Medicare only matched the international trend, then by 2045 costs would be equal to the CBO's baseline and higher thereafter. Over the long run, neither Medicare nor U.S. private health insurance costs have grown as slowly per capita as the international average. Yet the implications of that fact for future policy are not straightforward. Although obstacles to cost control are likely to remain, Americans, having driven costs to unmatched levels, may face less risk to quality of care from restraining costs more severely than do countries that already spend less. Sweden's exceptional cost-control performance, for instance, might be related to the fact that it trailed only the United States in health care spending as a share of GDP beforehand.

Medicare's Internal Demographics

The most significant comparison generated by Exhibit 4, however, is between its numbers and the CBO's stated assumption that "the increase in spending as a percentage of GDP that is expected to occur after 2020 accounts for growth only in the number of Medicare beneficiaries as a share of the population."¹⁶ So why does Ex-

hibit 4 show spending per enrollee increasing more quickly than per capita GDP? The main reason is how the CBO (and HCFA) account for demographic change within Medicare.¹⁷

Both agencies apply assumptions about annual growth of spending per enrollee separately to each age and sex combination. The CBO, for example, projects that between 2030 and 2031 spending on seventy-year-old women will grow by the increase in average hourly earnings that year. The change in average Medicare spending per enrollee, however, will also depend on the age mix of enrollees. If the average age of enrollees increases then, since expenses tend to be higher for older than for younger enrollees, average costs will grow more quickly than average hourly earnings.

Yet this assumption about internal demographic effects, which underlies the pattern in Exhibit 4, is flawed.¹⁸ The major reason older persons tend to cost more than younger ones is that persons who are dying cost more than those who are not. If the life expectancy of Medicare beneficiaries increases, then the average eighty-five-year-old will cost less in the future than he or she did in the past (other things being equal), because that person will be less likely to die that year. Having more persons age eighty-five relative to those age seventy-five in 2030 than in 1998 should not increase costs in line with the current observed extra costs, because persons of either age must be healthier in 2030 if death rates are assumed to have fallen.

Analyzing a longitudinal file of Medicare enrollees from 1974 to 1990, James Lubitz and his colleagues found that enrollees who lived longer had lower average costs per year, for two reasons: First, the high expenses in their death year were averaged over more years, and second, "the costs of medical care treatment near death decrease with increasing age of death." They therefore projected that increased longevity while a person is enrolled in Medicare should have only a small effect on total Medicare costs in the future.¹⁹ These data precede the explosion of home health benefits, but those remain a small part of Medicare's total, are being subjected to stricter control after 1997, and seem unlikely to change the basic point of their work.

Evidence from other countries makes the same point. Peter Zweifel and colleagues, analyzing cohort data for Switzerland from the period 1983-1992, found that health spending "depends on remaining lifetime but not on calendar age, at least beyond age 65. . . . The positive relationship between age and [spending] observed in cross-sectional data may thus be caused by the simple fact that at age 80, e.g., there are many more individuals living in their last two years than at age 65."²⁰ An OECD cross-national econometric analysis found no effect on spending from the proportion of the population age seventy-five and older.²¹ Another projected much different

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effects on costs if one assumes that the main demographic effects are aging, *per se*, or death rates.²²

On balance, then, aging within Medicare should not increase per capita spending per enrollee to the extent that the standard long-term estimates assume. Greater longevity will raise Medicare spending by increasing enrollment and will affect Medicare spending much more than that of any national health care system (including U.S. totals). But a modest bias toward overestimation in the current projections' treatment of Medicare's internal demographics is another reason why spending that is lower than the projections could be possible without drastic reforms.

Estimating 'Solutions'

I have argued that estimates should focus on plausible goals for Medicare cost control, not on what spending "will" be. Even if that were accepted, there would be debates about ways to achieve those goals. Unfortunately, estimates of long-term solutions have the same flaws that other long-term estimates have—and more.

■ **Dangers of very long term estimates.** Virtually random differences in assumptions can compound into huge differences in effects. Consider the CBO's estimate of the effects of replacing Medicare with a federal contribution with which persons would buy insurance. Persons would pay the difference between the cost of insurance and the federal contribution, and the latter would grow by 4 percent a year after the year 2000. If premiums grew at the same rate as the contribution, the CBO estimates, then total spending for the Medicare package in 2070 would be lower by 3 percent of GDP (4.8 percent compared with the forecasted 7.8 percent). Enrollees also would be paying significantly less than if there were no Medicare reform at all.²³ Yet if costs per enrollee instead rose by 4.7 percent per year, the total cost of the program in 2070 would be the same as under current law, and all of the government's savings would be at the expense of beneficiaries, who would be paying premiums equal to 3.5 percent of GDP and 44 percent of total Medicare costs.²⁴

Making policy based on assumptions that we know something as unpredictable as the annual change in health insurance costs to within 0.7 percentage points is dubious enough. Yet there are further reasons for skepticism about cost-control measures that are

supposed to operate far into the future.

An idealist might point out that medical care is a dynamic field, we cannot predict the capabilities that will be offered, so we cannot predict the choices that people might want to make. Innovations could be so valuable that most people would consider them worth paying for.²⁵ Imagining that we could decide now how citizens thirty years later will value health care for the elderly or anyone else is both fanciful and arrogant.

A cynic might remind us that health care provides the incomes of a large number of very smart people. Give them a decade or two or three, and they are very likely to invent either ways around or ways to create great public dissatisfaction with any set of cost-control methods. It is no more reasonable to imagine that one can know how to control medical care costs in 2030 than it is to imagine that one can decide on a military force structure for that far in the future. In both cases, we cannot anticipate all threats, and any potential threat, by adapting to our strategy, may make it fail.

None of these objections applies to measures that reduce costs in socially acceptable ways in the short run, so if you lower the baseline on which future increases will compound, you may reduce long-term cost pressures. Yet sensible short-term measures are not the demand of the current Medicare debate.

■ **Bias in selection of solutions.** The most serious problem with long-term estimates of solutions is that they are biased against concrete controls of the trend of costs per enrollee. The bias has nothing to do with any estimator's preferences but is inherent to the estimating process. Any concrete set of measures to reduce spending per enrollee must be very detailed and address specific spending categories—as for previous Medicare savings legislation. Yet the CBO and HCFA only estimate baselines in detail for ten years, so they simply cannot project savings from detailed reforms over longer periods. If they did, they would not be believed: Who, for instance, would take seriously projections of prospective payment system (PPS) hospital update factors through 2070? So the CBO's 1998 long-term analysis could not and does not project the options, such as reductions in payment rates for individual services and forms of budgeting and block payments, that have been the main sources of past savings in Medicare and in other countries.²⁶

It is much more plausible to project budgetary savings from changes in eligibility or from charging higher premiums to Medicare enrollees. Both of these strategies offer relatively large, relatively simple savings compared with specific controls on specific costs, and they were two of the three options that the CBO estimated in 1998. The third, as explained above, was to shift Medicare to a

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defined-contribution scheme, with the federal payment limited in advance to an increase of 4 percent per year.

The CBO said nothing about what policies defined-contribution plans might follow to control costs.²⁷ From a budget analysis perspective, that is the plan's problem: The federal fisc is protected once Congress requires the contribution. The CBO also offered no basis for its choice of a defined contribution that would increase by 4 percent per year other than that figure's being the long-term trend of GDP per capita.

Inasmuch as the CBO's own "long-run projection for growth in [private] premiums" was "about 1 percent above GDP growth," one might wonder why the CBO assumed that Medicare would do better.²⁸ There are two obvious answers. First, the CBO did not quite assume that Medicare would do better. Instead, it offered an option and a description of what would happen if things worked out (premiums rising to meet the contribution) and what would happen if things did not work out so well (a large transfer of costs to enrollees). The CBO did not commit itself on Medicare costs, but only on federal obligations, which by the nature of a defined-contribution approach is safe. If legislation says that the federal payment will grow by exactly 4 percent per year, that is the law.

Second, the CBO could not use its estimate of private-sector trends, because even though that would yield savings for a few decades, it would not yield savings through 2070. If the CBO had not picked a lower estimate, there would have been only two options. So the CBO picked the number and explained the risks, more or less. Yet the defined-contribution option still looked like the winner in a comparative test of budget savings, in a report whose main subject was budget cuts.

Advocates of a market system may, of course, argue that there should be better health insurance, restructured, risk-adjusted, and otherwise different from the current market than in the "imperfect" private insurance market that exists today. Perhaps, but these arguments cannot be based on numbers and experience, the stuff of budget estimates and the basis on which the CBO would estimate more concrete cost savings. No numbers nor evidence were needed to make budget estimates for an arbitrarily defined contribution.

Policy Choices and Budget Estimates

Although this report has emphasized weaknesses in the ways that long-term cost estimates are being used in Medicare debate, such estimates should not be thrown out. We should remember, for example, that the CBO's medium-term estimate of demographic pressures on costs is fairly reliable and does inform us about

"Serial incrementalism not only may be the best way to make policy but can add up in the long run to substantial savings."

substantial cost pressures. There is a case for paying those bills, but there also are good arguments that, facing those demographics, we should be especially concerned, now, about making Medicare as efficient per enrollee as it can be and still provide decent care. Unfortunately, the useful role of long-term estimates as a force for continuous short- and medium-term cost-control efforts is being overwhelmed by their use to justify claims that radical change is both necessary and inevitable.

Forecasting anything for seventy or seventy-five years is presumptuous on its face: Which of our current policy choices could plausibly have been predicted in 1923? It seems particularly questionable to presume to know what level of future medical care spending would be appropriate, and so to threaten benefits soon to lower spending much later. If society believes that health care for the elderly is desirable and works best through government, then the demographic portion of projected Medicare cost increases might not seem to be a problem at all. Even larger costs per enrollee, which means consuming a larger share of the average lifetime income for medical care after age sixty-four, to live longer and more ably and with less pain, might seem like a good thing. The current budget focus hides such value choices behind budget logic, under which any extra spending is inherently a "problem," because more on the expense side of a ledger is always bad.

The argument over baselines within the Commission on the Future of Medicare is unnecessary. The assumption that there will be no further cost-control legislation is unrealistic, and the CBO's and HCFA's long-term figures are already "bad" enough to do good in the short run; there is no need for a more frightening baseline. The use of long-term numbers to assess "solutions," moreover, leads to unjustified analytic radicalism. We are forced to dismiss the measures that have been used most often to gain savings both in the United States and elsewhere.

In the real world of changing conditions, challenges, and tactics to drive up costs, serial incrementalism—cutting costs a bit through measures one year, then a bit with different measures five years later, and so on—not only may be the best way to make policy but can add up in the long run to substantial savings. Along the way, we might experiment with defined-contribution approaches, looking for ways to reduce their risks. But in the imaginary world of seventy-

five-year budget (wrongly) to eliminate the standard option that can be structured of Medicare through 2070.³⁰

Such an approach peculiar blunders one should preface Medicare spending and prospects. abuses what should be a tool. It is fantasy.

The author thanks this work and of two anonymous reviewers. Two anonymous reviewers acknowledges the assistance want to have their none of whom will bears any blame for

NOTES

1. M.A. Carey, "Quarterly Weighing in on the Problem of Medicare," 2514-2515.
2. R. Pear, "Payroll Taxes," 3 June 1999.
3. Board of Trustees of the Social Security Administration, "The Board of Trustees of the Social Security Administration: Report to Congress," 1999-2008.
4. Congressional Budget Office, "The Social Security Budget: 1999-2008," 1999-2008.
5. Estimates of the Social Security Administration, "Social Security Administration: 1999-2008," 1999-2008.
6. Compare the Social Security Administration's Hospital Insurance and Medical Insurance (HI and MI) with the Federal Hospital Insurance and Medical Insurance (FHI and FMI) in the same table.
7. Both the Social Security Administration and the Medicare program have a scenario for

five-year budget "fixes," only measures that promise (rightly or wrongly) to eliminate the long-term "problem" in one fell swoop meet the standard for policy success. The CBO, following that logic, finds itself recommending that Congress "initiate fundamental restructuring of Medicare" as soon as possible, because that is the only option that can offer (whether or not it provides) scoreable savings through 2070.¹⁰

Such an approach, however, looks necessary only through the peculiar blinders of a focus on budget costs farther ahead than anyone should pretend to be able to see. Making long-term estimates of Medicare spending can help to illuminate the program's conditions and prospects. But excessive current use of long-term forecasts abuses what should be a modestly useful analytic and rhetorical tool. It is fantasy—without a happy ending.

The author thanks the Century Foundation for generous and collegial support of this work and of the book on Medicare and Social Security to which it is related. Two anonymous reviewers provided useful comments. He also gratefully acknowledges the assistance of many CBO and HCFA staff, some of whom surely would not want to have their names associated with any of the opinions expressed here, and none of whom will. None of these organizations or individuals associated therewith bears any blame for any failings of this work, and all deserve credit for its merits.

NOTES

1. M.A. Carey, "Failure Is Not an Option for This Commission," *Congressional Quarterly Weekly Report* (14 March 1998): 669-670; and A. Simendinger, "Another Problem, Another Commission," *National Journal* (13 December 1997): 2514-2515.
2. R. Pear, "Panel Finds Medicare Costs Are Underestimated by U.S.," *New York Times*, 3 June 1998, A23.
3. Board of Trustees, Federal Hospital Insurance Trust Fund, *1998 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund* (Washington: U.S. Government Printing Office, April 1998); and Board of Trustees, Federal Supplementary Medical Insurance Trust Fund, *1998 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund* (Washington: U.S. GPO, April 1998). Since the two boards of trustees are identical, I refer to them hereafter as the Medicare trustees.
4. Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1999-2008* (Washington: CBO, January 1998); and CBO, *Long-Term Budgetary Pressures and Policy Options* (Washington: CBO, May 1998).
5. Estimates for trust funds financed by payroll tax also may use taxable payroll; since SMI is paid largely from general revenues, however, GDP is a better base for Medicare as a whole.
6. Compare the 1997 figure from Exhibit III.B1 of Board of Trustees of the Federal Hospital Insurance Trust Fund, *1997 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund* (April 1997), 70, to the same figure in the same table of the 1998 report, page 78.
7. Both the economics and demographics are taken from the "intermediate" scenario for Social Security's financial condition. The CBO and the Medicare

- assuming an 8.2 percent increase in health care costs from 2065, and then projecting total health care costs by assuming projected total health care costs would be the underlying growth rate. The underlying growth rate might overstate it from the commission's assumption that the CBO assumes a norm through 2015.
- The CBO's Long Term Budgetary Outlook. The CBO's use of hourly wage as a factor cannot explain the results. It is assuming that average per capita GDP per capita at 4.05 percent spending per enrollee above the base level. Demographic assumptions show average spending per generation dies off, and younger ones. By 2060 there is a small steady increase because of increased life expectancy.
- J. Lubitz, J. Beebe, and C. Englund, "Journal of Medicine," McWilliam, and J. Lubitz, "Payments," Health Affairs. Medicare does not cover Medicare cost estimates.
- P. Zweifel, S. Felder, and Expenditure: A Red Herring on Ageing and Old-Age Expenses.
- OECD Working Party on Affirming Health Spending Review paper, OECD, Paris.
- OECD, "Ageing in OECD Countries." The relevant figures are enrollees' premiums as a percentage of GDP in 1995, a percentage of GDP in 1995, a percentage of GDP in 1995.
- Author's calculations from See D. Cutler, M. McClellan, "Intensive Treatment for Chronic Disease: Institute/Brookings Medical Treatments."
- The CBO briefly discusses the merits of that discussion. Cost control expenditures. Proposals and International Comparisons.
- This did not stop the Commission explaining what "policy" growth in costs per capita pressures.
- CBO, The Economic and Budgetary Outlook. Long Term Budgetary Outlook, 52.

rising to 92.2 percent in 2025; staying between 92.2 percent and 92.5 percent through 2065; and then falling to 91.2 percent in 2070. So the CBO's estimate comparing projected total costs with HI enrollment should slightly understate the underlying growth in medical costs per capita through 2020 and slightly overstate it from 2020 to 2025. These differences do not threaten the conclusion that the CBO and HCFA are projecting growth above the international norm through 2015 and not so far below it through 2035.

16. CBO, *Long-Term Budgetary Pressures*, 50.
17. The CBO's use of hourly earnings rather than per capita GDP as the growth factor cannot explain the difference. From 2030 to 2035, for instance, the CBO is assuming that average hourly earnings grow by 4.08 percent per year and GDP per capita at 4.05 percent. But its estimated annual increase in Medicare spending per enrollee above GDP per capita is 0.69 percent.
18. Demographic assumptions also explain why, after about 2040, the exhibit shows average spending growth declining: At that point, the large baby-boom generation dies off, and some very old beneficiaries are being replaced by younger ones. By 2060 the baby-boom bulge is gone, and the exhibit projects a small, steady increase in the average age of Medicare beneficiaries simply because of increased life expectancy.
19. J. Lubitz, J. Beebe, and C. Baker, "Longevity and Medicare Expenditures," *New England Journal of Medicine* (13 April 1995): 1001. See also M. Gornick, A. McMillan, and J. Lubitz, "A Longitudinal Perspective on Patterns of Medicare Payments," *Health Affairs* (Summer 1993): 140-150. Nursing home costs that Medicare does not cover may rise with longevity, but that is not relevant to Medicare cost estimates.
20. P. Zweifel, S. Felder, and M. Meier, "Ageing of Population and Health Care Expenditure: A Red Herring?" (Paper presented to International Conference on Ageing and Old-Age Econometrics, University of Athens, 18-19 May 1995).
21. OECD, Working Party No. 1 of the Economic Policy Committee, "Factors Affecting Health Spending: A Cross-Country Econometric Analysis" (Unpublished paper, OECD, Paris, 29 September 1994), 31.
22. OECD, *Ageing in OECD Countries*, 57-59.
23. The relevant figures are in columns 4 and 5 of Exhibit 2, which show that enrollees' premiums as a share of GDP (the difference between "net" and "gross" spending) would be 0.5 percent of GDP in 2070, as opposed to 0.3 percent of GDP in 1995, and 1.0 percent in 2070 if there were no reform.
24. Author's calculations from Exhibit 4-5 of CBO, *Long-Term Budgetary Pressures*, 58.
25. See D. Cutler, M. McClellan, and J. Newhouse, "The Costs and Benefits of Intensive Treatment for Cardiovascular Disease" (Paper delivered at American Enterprise Institute/Brookings Institution conference, "Measuring the Prices of Medical Treatments," Washington, D.C., 12 December 1997).
26. The CBO briefly discusses such methods in *Long-Term Budgetary Pressures*, 55; the merits of that discussion are not my subject here. For analysis of international cost-control experience, see J. White, *Competing Solutions: American Health Care Proposals and International Experience* (Washington: Brookings Institution, 1995).
27. This did not stop the CBO from criticizing the Medicare trustees for not explaining what "policies designed to achieve that result" would reduce growth in costs per capita to the post-2020 forecast. CBO, *Long-Term Budgetary Pressures*, xix.
28. CBO, *The Economic and Budget Outlook: Fiscal Years 1999-2008*, 146.
29. CBO, *Long-Term Budgetary Pressures*, 51-52, 57-61, especially figures 4.1 and 4.2.
30. *Ibid.*, 52.

Three Streams, One River: A Coordinated Approach To Financing Retirement

The strengths of Medicare, Social Security, and pensions can be joined to ensure a better retirement for tomorrow's elders.

by Lynn Etheredge

ABSTRACT: A national retirement policy that coordinates Medicare, Social Security, and private pension reforms could make substantial progress in dealing with problems related to the baby-boom generation's retirement. Such a policy should include (1) better-designed work incentives for older persons—for example, a \$10,000 "retirement bonus" option, paid by Social Security and Medicare, for each year of delayed retirement; (2) allowing workers without employer-sponsored pensions to use Social Security's payroll contribution system to invest in pension accounts; (3) expansion of private long-term care insurance by allowing pension-plan assets to be used for paying premiums; and (4) placing a higher priority on financing for basic Medicare and Social Security benefits than on taxpayer-financed subsidies of far more generous pension benefits.

OVER THE PAST SIXTY YEARS national retirement policy has relied on three major tools: Social Security, Medicare, and pensions. In 1998 more than \$400 billion of federal revenues will go to the Social Security trust funds and more than \$200 billion to the Medicare trust funds—the two basic retirement programs that cover almost every American. Net federal tax breaks of \$74 billion will go for pension plans that supplement Social Security and Medicare for about half of the workforce. When the baby-boom generation is fully retired, more than seventy million persons will depend on Social Security, Medicare, and pensions for their standard of living, health benefits, and economic security, for an average of about twenty years (more than forty years for some). Although these elements of national retirement policy are all primarily financed by

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FINANCING RETIREMENT

employer and employee dependently.

Congress and Presidential policies and program's retirement. They Medicare since its enactment on the Future. The debate started by the report may lead to the enactment. Recent developments about expanded consumer care and private health comes and reduced by medical savings accounts taxes in private pension Council on Social Security taxes on individual retirement they are made so that (Roth IRA); and expanded tax-favored savings (qualifying long-term capital

These new measures process of revamping so that they can be a boomers. However, for

■ **Work versus retirement** aged a trend toward workers from continuing workers retire at ages are now retired by increasing, so that a retirement period, years. But analysts are ing more than seventy to leave the workforce (GDP) and government financial resources. Retirement benefits (so far, with comprehensive review Social Security, Medicare Security and Medicare substantial work effort

■ **Pension coverage**

employer and employee payroll contributions, each has evolved independently.

Congress and President Bill Clinton have begun to redesign national policies and programs to prepare for the baby-boom generation's retirement. They legislated the most far-reaching reforms of Medicare since its enactment in 1965; a National Bipartisan Commission on the Future of Medicare is studying even more changes. The debate started by the Advisory Council on Social Security's 1997 report may lead to that program's greatest changes since its 1935 enactment. Recent developments show an openness to new ideas about expanded consumer choice and flexibility in benefit options such as allowing retirees options to choose among traditional Medicare and private health plan benefits, or to receive higher cash incomes and reduced benefits (via Medicare+Choice and Medicare medical savings accounts); investing some part of Social Security taxes in private pension accounts (two proposals by the Advisory Council on Social Security); allowing individuals to choose to pay taxes on individual retirement account (IRA) contributions when they are made so that benefits will be tax-free during retirement (Roth IRA); and expanding retirement needs that can qualify for tax-favored savings (exclusion of employer-paid premiums for qualifying long-term care insurance).

These new measures signal the beginning of the long-overdue process of revamping Medicare, Social Security, and pension policy so that they can be a viable national retirement system for the baby boomers. However, four major problem areas remain.

■ **Work versus retirement.** Government policies have encouraged a trend toward earlier retirement and have discouraged older workers from continuing substantial work. As a result, 59 percent of workers retire at age sixty-two (or earlier), and 95 percent of workers are now retired by age sixty-six.¹ Life expectancy has been steadily increasing, so that persons now turning sixty-five can anticipate a retirement period, on average, of at least another fifteen to twenty years. But analysts are beginning to question the sense of encouraging more than seventy-five million (mostly healthy) baby boomers to leave the workforce early—lowering the gross domestic product (GDP) and government revenues, as well as their own earnings and financial resources. Retirement ages are rising for full Social Security benefits (so far, with little effect). However, amid these changes, a comprehensive review of early retirement and work incentives in Social Security, Medicare, and pension policies is overdue. Social Security and Medicare-paid benefits still contain incentives against substantial work efforts on the part of older Americans.

■ **Pension coverage and savings.** The national personal sav-

ings rate has continued to decline and is now at its lowest rate in nearly forty years, only 3.8 percent in 1997.² One of the key contributing factors has been that growth of employer-sponsored pensions has stalled out, leaving more than half of the workforce (more than sixty million workers) without current pension coverage.³ These persons lack the automatic payroll withholding and tax advantages (and the employer matching contributions) that encourage savings among workers with employer-sponsored pension benefits. Many will receive little or nothing in pension benefits and will be mostly dependent on what the federal government decides to spend for Social Security and Medicare benefits, supplemented by other savings or part-time earnings. As Victor Fuchs points out elsewhere in this volume, rising health costs not covered by Medicare will likely erode the living standards of many older persons.⁴ With large fiscal problems looming over both Medicare and Social Security, more private savings (particularly tax-boosted savings, such as pensions) are important for financing health care needs, higher living standards, and financial security.

■ **Benefits.** Overall, Medicare covers less than half of the elderly's health expenses, and most persons patch together Medicare with supplementary (Medigap) plans. An improved health insurance benefit menu, including rollover financing options from pension plans for supplemental benefits, could offer additional coverage, savings, portability, better financing, and more choices. Insurance underwriting practices and tax policies now limit market functioning and some types of benefit exchanges. It is particularly important to foster rapid growth of long-term care coverage—the largest gap in insurance protection for most retirees.

■ **Financing.** Social Security and Medicare's Hospital Insurance (HI) trust fund (Part A) are both inadequately funded to provide benefits through the baby boomers' retirement. Increased revenues will be needed for Medicare; a constant 1.45 percent (employer/employee) tax rate can hardly be expected to finance coverage for doubling the number of enrollees. The financial difficulties for Social Security and Medicare—intended to be a near-universal floor for all citizens—raise questions about the taxpayer-paid subsidies for private pensions, particularly about subsidies that far exceed Social Security benefits. If there will be inadequate taxpayer financing for basic Medicare and Social Security benefits, perhaps economies should come from pension subsidies.

In this paper I present several ideas for how a new policy framework that features better coordination of Medicare, Social Security, and pension policies could produce needed progress on the intractable retirement policy issues described above.

Work Versus Retirement

The rules government makes for Social Security, and particularly for Medicare, are critical in determining whether people work longer and more than they want to. Today these rules are inconsistent with the needs of the aging workforce. Given the rising medical care costs, and the uncertainty about Medicare benefits, many persons have changed their retirement plans for several years before they would rise with the general economy.

■ **Eligibility.** Medicare eligibility rules are complex. Persons cannot start Medicare at age 62, and must pay higher premiums, and are not available for early retirement. Persons can defer starting Medicare until age 65 and receive full earned income benefits (or lower premiums). Persons can receive full earned income benefits starting at age 62, age sixty-seven). The reduced benefits starting at age 62 (or age sixty-seven) qualify for a delay Social Security until age 65 (or age sixty-seven) qualify for a similar enhancement later month of \$9,000, a one-year delay in Social Security paid out as a rise of about 1 percent of the retiree's lifetime. There are no penalties for the \$9,000 benefit.

Pension plans—including 401(k)s, Keoghs, Simple IRAs—offer more flexibility than Social Security. For example, 401(k) plans allow persons to start retirement plans, allow persons to start as early as age fifty-nine and without penalty and to defer until age sixty and a half. For defined-contribution plans, a person is entitled to the full amount withdrawn.⁵

■ **Work Incentives.** Medicare rules differ in their incentives for persons to work, for a primary recipient of Social Security benefits, persons under age sixty-five, and persons with earnings over \$9,120; from

Work Versus Retirement

The rules government makes about the eligibility age(s) for Medicare, Social Security, and pension benefits, and how work affects these benefits, are critical issues for present and future retirees. Today these rules are inconsistent and often penalize persons who work longer and more than statutorily designated retirement ages and earnings limits. Given the increasing span of retirement, rising medical care costs, and uncertain financing for Social Security and Medicare benefits, many persons would be better off if these incentives were changed and they planned to "semi-retire"—work part time for several years before full retirement. Government tax revenues would rise with the greater earnings that would result.

■ **Eligibility.** Medicare eligibility begins at age sixty-five. Retirees cannot start Medicare at an earlier age, even with reduced benefits or higher premiums, and affordable private insurance often is not available for early retirees with health problems. Persons who defer starting Medicare until after age sixty-five do not receive higher benefits (or lower premiums) later. For Social Security, persons can receive full earned benefits starting at age sixty-five (as of 2022, age sixty-seven). They also can elect to receive actuarially reduced benefits starting as early as age sixty-two. Persons who delay Social Security until after "normal" retirement age (sixty-five to sixty-seven) qualify for "deferred retirement credits" that will similarly enhance later monthly benefit checks. For an annual benefit of \$9,000, a one-year delay in the start of these benefits would be paid out as a rise of about \$60 per month in initial benefits for the retiree's lifetime. There are now no options for "lump-sum" payment of the \$9,000 benefit.

Pension plans—including tax-advantaged retirement plans such as 401(k)s, Keoghs, Simplified Employee Pensions (SEPs), and IRAs—offer more flexibility than Medicare or Social Security do. For example, 401(k) plans, the rapidly growing employee-directed retirement plans, allow persons to take lump-sum withdrawals as early as age fifty-nine and a half (or annuities at an earlier age) without penalty and to defer starting withdrawals until age seventy and a half. For defined-contribution plans, such as 401(k) plans, a person is entitled to the full value of the account, whenever it is withdrawn.⁵

■ **Work Incentives.** Medicare, Social Security, and pensions also differ in their incentives for recipients to work. Social Security benefits, for a primary recipient and family members, are reduced (for persons under age sixty-five) by one dollar for every two dollars of earnings over \$9,120; from ages sixty-five to sixty-nine, the reduc-

Over the problems of financing the baby-boom generation's retirement, better work incentives should be a top priority."

There are one dollar for every three dollars of earned income over \$14,500. These are punitive tax rates, applied in addition to the income and Social Security taxes owed on earnings. They hit particularly hard on modest-income retirees who need to earn money, for example, to pay a spouse's medical bills, and on others who simply want to remain in the workforce. Under current law the thresholds for these extra taxes are scheduled to increase for workers ages sixty-five to sixty-nine to \$15,500 in 1999 and to \$17,000 in 2000, and then to \$30,000 in 2002. In contrast, taxable pension incomes are subject to the same tax rates as earned incomes, except that there is a 10 percent penalty for early withdrawal (prior to age fifty-nine and a half). A 10 percent surtax on pension incomes of more than \$160,000 per year from tax-advantaged pensions was repealed in 1997.

Persons lose much of their Medicare benefit financing when they work after age sixty-five for an employer with twenty or more workers that offers health insurance benefits. In these instances, Medicare becomes a "secondary payer" and only pays supplemental benefits. The worker still receives Medicare benefits, but most costs are shifted to the employer's compensation costs. This provision raises employers' costs for older workers and thus makes it more difficult for these workers to find good jobs. There are no offsetting benefits for older workers. Workers for smaller employers and for firms that do not offer health insurance do not have reduced benefits.

■ **Crafting a more coherent policy.** A more coherent national retirement policy should allow for early retirement of those who cannot work. Given the financial problems of financing the baby-boom generation's retirement, however, better work incentives should be a top priority.

A set of early retirement options, with actuarially reduced benefits for those who are unable to find suitable work or choose to retire early, could be coordinated for Medicare, Social Security, and pensions. Adopting a common age standard for all three would allow more personal decision-making flexibility.⁶ On the opposite side of the coin, delayed retirement options up to age seventy and a half, coordinated for Medicare and Social Security, could provide actuarially fair and enhanced benefits for later retirees. If a worker delayed receiving Social Security and Medicare for one year, for example, he or she might be allowed to elect a lump-sum "retirement bonus"

check of \$10,000 payable on the monthly benefits.⁷ Government incentives because it would save approximately \$9,000 Social Security benefits, plus interest) and from the workers' earnings.

These lump-sum options for life, tially to the "nest egg" of many effective inducement for continuing payment option: small increases in 1993 the median household head aged sixty-nine had only \$23,650 in benefit options would increase up to age seventy and a half—for years' delay in retirement.

Older persons should incur economically productive membership benefit reductions for work rates) ought to be eliminated. Employer health insurance as could make a premium contribution for the added costs of coverage would not be disadvantaged in

These types of measures would offer (and fairer) incentives for short-term payoff, for retirees and government how much additional earnings.

Expanded Pensions

A second key challenge for an alternative is to create new retirement savings from employer-provided pensions. A secondary pension income is the critical is just "getting by" on Social Security much better standard of living financial security. The majority of private pension incomes, are all programs. Some 60 percent of income cent (or more) of their income the elderly depend on Medicare coverage.⁹ As Fuchs illustrated by Medicare (Medigap), costs are rising much faster than next year), these persons v

check of \$10,000 payable on the day of retirement and/or enhanced monthly benefits.⁷ Government could afford these financial incentives because it would save approximately \$12,000 annually from later retirements (\$9,000 Social Security benefits, plus \$3,000 Medicare benefits, plus interest) and also would collect additional taxes from the workers' earnings.

These lump-sum options for later retirement could add substantially to the "nest egg" of many retirees. They thus may be a more effective inducement for continued work than offered by the current payment option: small increases in monthly retirement checks. In 1993 the median household headed by persons ages sixty-five to sixty-nine had only \$23,650 in nonhousing assets.⁸ The enhanced benefit options would increase for each year of delayed retirement up to age seventy and a half—for example, a \$30,000 bonus for three years' delay in retirement.

Older persons should incur no penalties for earning income as economically productive members of society. The steep Social Security benefit reductions for work-related earnings (33–50 percent tax rates) ought to be eliminated. For workers over age sixty-five with employer health insurance as their primary coverage, Medicare could make a premium contribution (via an employer tax deduction) for the added costs of covering these workers, so that they would not be disadvantaged in the labor market.

These types of measures would provide senior citizens with better (and fairer) incentives for substantial work efforts. The longer-term payoff, for retirees and government budgets, would depend on how much additional earnings, savings, and revenues resulted.

Expanded Pensions

A second key challenge for an integrated national retirement policy is to create new retirement savings options for persons without employer-provided pensions. The availability of good supplementary pension income is the critical difference between a retiree who is just "getting by" on Social Security and Medicare and one with a much better standard of living, ability to afford health care, and financial security. The majority of retirees, lacking significant private pension incomes, are almost totally dependent on these two programs. Some 60 percent of retirees, for example, receive 75 percent (or more) of their income from Social Security, and nearly all of the elderly depend on Medicare as their primary health insurance coverage.⁹ As Fuchs illustrates, so long as health care costs not covered by Medicare (Medigap, prescription drugs, and long-term care) are rising much faster than Social Security increases (1.3 percent next year), these persons will likely have declining standards of

living during their retirement years unless they have additional savings as well as work options.¹⁰

The major federal government policy to build pension coverage has been to encourage employers to offer pension plans to workers.¹¹ The tax-code subsidies of about \$74 billion a year are intended to give higher pension benefits to executives so that their companies will offer pension benefits to workers and encourage their participation.¹² Experts now report uncertainty as to how well justified these subsidies' higher-income tilt is, but most pension benefits are paid to middle- and upper-middle-income persons.¹³ Because there has not been a thorough congressional review of national pension policy since the enactment of the Employee Retirement Income Security Act (ERISA) of 1974, many elements of pension policy merit re-examination. Employer-based pension plans now have assets of more than \$6 trillion.¹⁴

An improved national retirement policy should make available voluntary pension coverage for the majority of workers—more than sixty million persons—without employer-sponsored pensions. These workers are most often without coverage simply because their employer does not offer a pension plan. In broad terms, national retirement policy thus faces the same issues that national health policy faces: Our social welfare policies have primarily emphasized employer-based coverage and have left tens of millions of persons, whose employers do not want to offer health insurance and pension benefits, without comparable benefits and tax assistance. Many of these workers are now multiply disadvantaged, second-class citizens; they lack both health insurance and pension coverage and also do not share in the more than \$125 billion annually in federal tax subsidies offered to workers who do have such benefits.

An integrated approach to Social Security and pensions would offer a practical method for making good pension plans available to all workers. The Social Security payroll contribution collection system can be used to direct investments to both government social insurance and individual pension plans.¹⁵ Persons who do not have an employer-sponsored pension plan (and their employers) could make payroll contributions via this collection system to (1) qualified private pension plans (a Teachers Insurance and Annuity Association, or TIAA, model); (2) stock, bond, and money market index funds (a federal employees' pension model); and/or (3) Social Security for supplemental benefits.¹⁶ Such contributions would benefit from the same contribution limits, tax benefits, and legal protections that employer pensions enjoy. Thus, there would be two parallel retirement savings systems: Persons with employer-sponsored pensions would make payroll contributions to those plans, and per-

sons without such per individual pension acc

Using this approach \$2,000 annual contributi higher contributions n (\$9,500 of employee co advantages for worker ally not available for If would be excluded fro form, as is done for IR funds also would be in

Although younger v the baby-boom genera are grown and mortga new opportunities as t needs. There is certain tial savings, if they h workers with employ ing to invest \$5,000 pe fifty would have appro 8 percent annual inta arrangements are suc federal investment. If retirees was generate rate) would be \$1.5 building up resources ing to increase taxes l

Cafeteria Benefi

An integrated retiren choices to fill the gap age. The gaps in Mec tinent prescription dru ance protection, are such benefits with p supplemental cover these standardized Medigap options as persons can choose Such arrangements portability, and allo care (with Medigap

■ Prescription

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sons without such pensions would make payroll contributions to individual pension accounts.¹⁷

Using this approach, the average worker, who is now limited to a \$2,000 annual contribution to an IRA, could benefit from the much higher contributions now allowed for workers with employer plans (\$9,500 of employee contributions to a 401[k] plan in 1996). Other advantages for workers include payroll withholding (which is usually not available for IRAs) and tax benefits (pension contributions would be excluded from taxable income on the taxpayer's 1040 tax form, as is done for IRAs), as well as ERISA-type regulation. Such funds also would be immediately vested and universally portable.

Although younger workers with children may not be large savers, the baby-boom generation will be more able to save, once children are grown and mortgages are paid, and may take advantage of these new opportunities as they become better educated about retirement needs. There is certainly time for such persons to build up substantial savings, if they have tax-advantaged means similar to those of workers with employer pension plans. A two-worker couple starting to invest \$5,000 per year in a tax-advantaged pension plan at age fifty would have approximately \$135,000 by age sixty-five (assuming 8 percent annual interest). To the extent that these new savings arrangements are successful, they offer a highly leveraged return on federal investment. If \$10 billion annually of new savings for future retirees was generated, the tax costs (at a 15 percent income tax rate) would be \$1.5 billion, which entails much less expense for building up resources for the baby-boom generation than does having to increase taxes by \$10 billion for government trust funds.

Cafeteria Benefits

An integrated retirement policy also could offer a broader range of choices to fill the gaps in health and long-term care insurance coverage. The gaps in Medicare's acute care coverage, such as no outpatient prescription drug coverage and inadequate catastrophic insurance protection, are well known. Most elderly persons now fill in such benefits with private Medigap policies or employer-provided supplemental coverage. It would be desirable to include many of these standardized Medigap options in basic Medicare, or to offer Medigap options as part of the new national "open season" in which persons can choose among Medicare and competing health plans. Such arrangements would reduce administrative expenses, improve portability, and allow better comparison shopping between Medicare (with Medigap) and Medicare+Choice plans.

■ **Prescription drugs.** It would be particularly desirable to have an expanded, government-structured "cafeteria menu" of options

that included guaranteed choice for prescription drug coverage. This was highlighted by the recent loss of coverage options for more than 400,000 Medicare health maintenance organization (HMO) enrollees, many of whom will lose their HMOs' drug coverage. Two of the criticisms against prescription drug coverage in the past no longer apply. First, nearly all pharmacies now use electronic claims submission, so the high administrative costs of paper claims for small benefits is no longer a factor. Second, most pharmacy benefits (such as those for federal employees) are now offered through pharmacy benefit management (PBM) companies that negotiate price discounts, so a national system of Medicare price controls for prescription drugs would not be needed.

■ **Long-term care.** The most serious insurance market failure for the elderly is the lack of a good system of long-term care benefits. Few retirees can have full economic security until these gaps can be closed. Private long-term care insurance covered only 5 percent of national nursing homes expenses of \$78 billion in 1996 (only a slight increase from 4 percent in 1990), and Medicare paid for only 11 percent of nursing home costs. Persons can qualify for Medicaid, which paid 48 percent of nursing home expenses in 1996, only by spending down nearly all of their assets. Nearly 31 percent of nursing home expenses were paid out of pocket in 1996.¹⁸ Because Medicaid nursing home expenses remain one of the largest long-term government budget costs of both federal and state governments, government and retirees both would benefit from a better-developed market for private long-term care coverage.

Congress recently attempted to accelerate the growth of private long-term care insurance by excluding employer-paid premiums for qualified plans (as well as such plans' benefits) from recipients' income tax. Although some employers offer long-term care benefits, most are still fully employee paid, and it is questionable whether this product will grow quickly as a new, employer-financed retirement benefit. Indeed, employers are tending to cut back on many retiree commitments, including health benefits. Similarly, it is questionable whether a large Medicare benefit improvement to cover most nursing home care should be anticipated; the Congressional Budget Office (CBO) forecast for Medicare expenses to rise by about 3 percent of GDP by 2030 would require revenue increases comparable to about a \$270 billion annual tax increase in the year 2000 (when GDP will be about \$9 trillion) just to cover current benefits.¹⁹ Thus, for long-term care benefits it is particularly useful to consider whether more flexible use of pension fund assets could be part of the answer.

Two measures that might rapidly increase private long-term care

coverage are as follows: (1) For be required to offer a menu of "over" for a portion of pension. ing long-term care policies. If election into their early sixties their retirement needs and re their long-term care coverage would, by itself, create a ve long-term care insurance. The care insurance into the same fits, with qualification stand ance, and performance "repo term care insurance as a ca would instantly make avail pool for these benefits, if the should be much less expens ing stream of taxpayer-subs term care insurance.²⁰

(2) Private long-term ca (and much less risky) if M were redesigned to mesh cover benefits after a two-y private insurance. One pos nancing would be needed percent tap on tax-qualifie sion plans have been devel because the tap would eli that few persons can now gain widespread acceptan employer and individual t rate would raise about \$2 bined with state matching private long-term care in Medicaid spend-down re

Government would lose pension incomes became ments. Nevertheless, it s long-term care insurance than from living expense (untaxed) into an estate tion that covers most est tion. Government's maj market in private long-to in this way, sharply re

coverage are as follows: (1) Federally qualified pension plans could be required to offer a menu of payout options that includes a "roll-over" for a portion of pension accounts to pay premiums for qualifying long-term care policies. If persons were allowed to make such election into their early sixties, at the time most will be considering their retirement needs and resources, they would not need to use their long-term care coverage for about fifteen years. This change would, by itself, create a very large potential market for private long-term care insurance. These reforms should integrate long-term care insurance into the same public market as other Medicare benefits, with qualification standards, consumer rights, quality assurance, and performance "report cards" for beneficiaries. Adding long-term care insurance as a cafeteria option for pension arrangements would instantly make available a very large potential purchasing pool for these benefits, if the products are deemed to be of value, and should be much less expensive than building up still another funding stream of taxpayer-subsidized savings available only for long-term care insurance.²⁰

(2) Private long-term care insurance would be more affordable (and much less risky) if Medicaid spending down and Medicare were redesigned to mesh with private coverage, for example, to cover benefits after a two-year period for individual self-payment or private insurance. One possible source for whatever additional financing would be needed in an integrated system would be a 0.25 percent tap on tax-qualified retirement fund balances. Because pension plans have been developed to provide retirement security and because the tap would eliminate a major gap in financial security that few persons can now close by themselves, this approach could gain widespread acceptance. With about an \$8 trillion balance in employer and individual tax-favored pension accounts, such a tax rate would raise about \$20 billion annually, which could be combined with state matching funds. Persons who purchase qualifying private long-term care insurance could also be exempt from state Medicaid spend-down requirements.

Government would lose tax revenues to the extent that (taxable) pension incomes became (nontaxed) long-term care premium payments. Nevertheless, it seems likely that persons would purchase long-term care insurance from reserves held for contingencies rather than from living expenses. If these contingency reserves had passed (untaxed) into an estate—most likely within the \$600,000 exemption that covers most estates—they also would have escaped taxation. Government's major long-term gain would result if a large market in private long-term care insurance could be "jump-started" in this way, sharply reducing future Medicaid expenses and tax

deductions for catastrophic long-term care expenses. Additional government financing from a tap on pension fund assets would improve budget resources.

Funding Priorities

A comprehensive national retirement perspective also raises important questions about priorities for taxpayers' support of Social Security, Medicare, and pensions. Social Security and Medicare were designed to be nearly universal benefits, guaranteeing basic standards of living and economic security. Pension benefits were a supplement. Nevertheless, both Social Security and Medicare are now in financial jeopardy, and there are proposals for benefit cuts. If cutbacks are on the table for basic benefits, however, taxpayer support for supplemental pension benefits should be subjected to new scrutiny. Major overhaul of the pension system could jeopardize what has proved to be a useful private savings vehicle for retirement. However, economies could be considered in taxpayer financing for pensions if savings are needed to ensure financial security for the Social Security and Medicare programs.

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FINANCING RETIREMENT

A NEW NATIONAL RETIREMENT POLICY for the baby-boom generation needs to make major progress on the four critical problems of better work incentives, expanded pension coverage, more health and long-term care benefits, and sound financing of Medicare and Social Security. A strategy based on coordinated reforms of Medicare, Social Security, and pension policies offers a number of promising options for consideration.

The author thanks Alicia Munnell, John Rother, Dallas Salisbury, and Larry Thompson for thoughtful critiques of an earlier version of this paper. The paper was supported by a grant from the Robert Wood Johnson Foundation to the Health Insurance Reform Project at the George Washington University.

NOTES

1. House Committee on Ways and Means, 1996 Green Book (Washington: U.S. Government Printing Office, November 1996), Table 1-9.
2. Employee Benefit Research Institute, *What Are Personal Savings?* (Washington: EBRI, May 1998), based on National Income and Product Accounts data.
3. Some of these workers will earn retirement benefits at other points in their career; others will withdraw and spend funds prior to retirement.
4. V.R. Fuchs, "Health Care for the Elderly: How Much? Who Will Pay for It?" *Health Affairs* (January/February 1999): 11-21.
5. For defined-benefit plans, earlier retirement often is available with reduced benefits; later retirement may not result in higher benefits.
6. Actuarially reduced (or enhanced) benefits would be budget-neutral for trust-fund expenditures over time. Medicare benefit reductions could be through higher premiums.

7. Social Security care expenditure
8. The lowest quarterly \$16,747. Asset
9. EBRI Databook March 1996 C
10. Fuchs, "Health
11. Pension policy and a medical
12. The intention to reduce pension; (2) employment in higher consumption advantages of are limited by and Medicare
13. D. Salisbury (1994); and R.ington: Nation
14. All retirement lion as of the contrast, Social Security billion.
15. One of the options to direct part individual pension (SSA) procedure
16. Collection attempt, so the pension outlays. Function if more consumption are essential not now have reason that pension
17. Employers' contribution since an employee \$30,000 for exclusions of Health Insurance approach for employee and S. Jones, "Eradicate" (Health Washington
18. K.R. Levit et al. Review (Fall 1998)
19. Long-Term Budget Office
20. A rollover option need to be paid premiums.

7. Social Security benefits for new retirees now average more than \$9,000; Medicare expenditures for sixty-five-year-olds average more than \$3,000.
8. The lowest quintile had only \$2,499 in such savings and the second quintile, \$16,747. Asset Ownership of Households, 1993 U.S. Census.
9. *EBRI Databook on Employee Benefits*, 4th ed. (Washington: EBRI, 1997), based on March 1996 Current Population Survey data.
10. Fuchs, "Health Care for the Elderly."
11. Pension policy has been supplemented in recent years by IRAs, Roth IRAs, and a medical savings account (MSA) demonstration.
12. The intentional inequities include (1) "integration" rules that allow employers to reduce pensions for lower-wage workers to offset their Social Security benefits; (2) employer contributions based on percentage of earnings, which result in higher contributions for higher-income workers; and (3) the greater tax advantages of tax-excludable income for higher-income executives. Disparities are limited by various "top heavy" rules and other provisions. Social Security and Medicare intentionally favor low- and moderate-income workers.
13. D. Salisbury and N. Jones, eds., *Pension Funding and Taxation* (Washington: EBRI, 1994); and R. Friedland et al., eds., *Social Welfare Policy at the Crossroads* (Washington: National Academy of Social Insurance, 1994).
14. All retirement plan assets, including Keoghs and IRAs, totaled about \$8 trillion as of the end of 1996. EBRI, personal communication, 18 June 1998. In contrast, Social Security and Medicare trust-fund assets were about \$700 billion.
15. One of the options proposed by the Advisory Council on Social Security was to direct part of Old Age and Survivors Insurance (OASI) contributions to individual pension accounts. Improvements in Social Security Administration (SSA) procedures will be needed to implement individual account proposals.
16. Collection and redirection of contributions would occur via the banking system, so the pension contributions need not become government revenues and outlays. Funds also could be remitted directly by employers to pension plans, if more convenient. Pension experts believe that payroll withholding methods are essential for broad participation in retirement plans; most employees do not now have payroll withholding for their IRA contributions, which is one reason that participation is low.
17. Employers that now offer pension plans would not be likely to drop them since an employer-sponsored plan offers (1) higher contribution limits (up to \$30,000 for executives); (2) greater employer design flexibility; and (3) tax exclusions of employer contributions from Old Age, Survivors, Disability, and Health Insurance (OASDHI) taxes, a 15.3 percent advantage. A similar approach for extending health insurance coverage is proposed by L. Etheredge and S. Jones, "Affordable Health Benefits for Workers without Employer Coverage" (Health Insurance Reform Project, George Washington University, Washington, D.C., February 1998).
18. K.R. Levit et al., "National Health Expenditures, 1996," *Health Care Financing Review* (Fall 1997): Table 17.
19. *Long-Term Budgetary Pressures and Policy Options* (Washington: Congressional Budget Office, May 1998).
20. A rollover option excludes the pension funds from income taxes that would need to be paid if the pension funds were withdrawn and then used to pay the premiums.

**MEDICARE
PROPOSALS**
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Reversal Of Fortune: Commercial HMOs In The Medicaid Market

A look at some plans that have gambled and lost in Medicaid managed care.

BY MICHAEL J. McCUE, ROBERT E. HURLEY, DEBRA A. DRAPER,
AND MICHAEL JURGENSEN

ABSTRACT: Between 1992 and 1996 the number of health maintenance organizations (HMOs) entering the Medicaid market grew at an average annual rate of approximately 22 percent. Participation among all ownership segments grew, resulting in a broad distribution of beneficiaries across the HMO industry. However, recent declines in financial performance within the industry appear to be more dramatic for plans with many Medicaid members. In addition, growing

concerns about rate adequacy and volatility as well as expanding administrative demands raise questions about the long-term commitment of commercial HMOs to Medicaid participation. This paper analyzes operating characteristics and financial performance of licensed commercial HMOs from 1992 through 1996, drawing on in-depth interviews with health plan executives and managed care stock analysts.

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THE CALL TO MANAGED CARE to enter the Medicaid market was prompted by the notion that contracting with fully capitated plans would be an effective way to improve beneficiaries' access to care, contain program costs, and achieve greater fiscal predictability in the Medicaid program. Because many of the plans entering the Medicaid market had been exclusively commercial, their newly enrolled Medicaid beneficiaries would have greater access to mainstream providers. In their desire to build membership and improve negotiating leverage with providers, managed care organizations (MCOs) would pursue opportunities to

enroll substantial numbers of Medicaid beneficiaries through the accelerated solicitation and procurement processes often provided by the states. Running counter to this optimistic notion, however, has been the widely held view that, given Medicaid's typically meager payment rates, providers would only serve Medicaid beneficiaries insofar as there were no other paying patients to replace them.¹

A recent analysis of health plans serving Medicaid beneficiaries examined various operational characteristics, including size, Medicaid enrollment, system affiliation, geographic location, and whether or not the plan was a new market entrant.² Given the growth

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of Medicaid managed care and the volatility of this line of business, it also is important to assess the financial viability of MCOs that participate in Medicaid. Our study evaluates the financial structure of the HMO industry and how various industry segments, including predominantly commercial and Medicaid HMOs, are represented and performing in Medicaid managed care.

DATA AND METHODS

This study encompasses the years 1992 through 1996, a period of rapid expansion of Medicaid managed care fueled in large part by the Medicaid waiver programs.¹ We used Health Care Investment Analysts (HCIA) data to analyze plan characteristics and financial performance of HMOs that are licensed in their respective states of operation. The first analysis evaluates, over the five-year time frame, HMOs that are and are not participating in Medicaid based on the plans' chain affiliation status; model type: closed (staff and group) versus open (independent practice association and network); federal qualification status; profit status; percent Medicaid membership; and ownership. "Percent Medicaid membership" is defined as the number of Medicaid enrollees as a percentage of the plan's total membership. Based on this percentage, each plan was assigned to one of three categories: small (less than 26 percent Medicaid), medium (26-75 percent), or large (more than 75 percent). "HMO market segment" is defined in terms of ownership/sponsorship according to the following classifications: HMO Group affiliates; other not-for-profit; publicly traded; other for-profit; and Blue Cross plans.⁴

The second analysis evaluates the financial performance of these plans, based on their medical and administrative loss ratios and operating margins. These ratios were defined in accordance with the Health Plan Employer Data and Information Set (HEDIS) 3.0 indicators of financial stability.⁵ The medical loss ratio is computed as the insurance revenue dollars paid in medical claims as a percentage of the plan's total operating expenses. The ad-

ministrative loss ratio is based on a similar computation, but it replaces medical claims dollars with the insurance revenue dollars paid in administrative expenses. The operating margin ratio is the proportion of operating income as compared with total insurance revenues. It provides the most valid measure of a plan's overall financial performance. Specifically, it indicates how well a plan is controlling its medical and administrative expenses and generating a profit.

HCIA's HMO database series provided the secondary financial and operating data for the individual health plans included in the study. The HCIA data contain descriptive, membership, utilization, and financial information extracted largely from HMOs' periodic filings with their state insurance regulatory agencies. HCIA also uses information from the Health Care Financing Administration's (HCFA's) Office of Prepaid Health Care, the InterStudy Center for Managed Care Research, and various other supplemental sources when compiling its database.⁶

Some limitations of the HCIA data warrant mentioning. A small number of companies, whose HMOs are licensed in multiple states, have filed consolidated data in their various states of operation. HCIA has eliminated all duplicate filings from the database, so information for any single HMO is represented only once. In these instances, however, the HCIA database assigns the plan's total membership to the state of the plan's national or regional headquarters.⁷ Therefore, we used additional information from the American Association of Health Plans (AAHP) to classify and refine plan data.⁸ Second, the database includes only those organizations identified and licensed by the individual states as HMOs. It underrepresents the entire population of fully capitated entities participating in Medicaid, particularly those in states with Section 1115 waivers. Our findings therefore are best understood as reflective of the participation and performance among licensed, commercial HMOs. Third, a few states are not reflected in the database, because either there were no HMOs operating in the state or the

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CIA data warrant ver of companies, n multiple states, a in their various has eliminated all latabase, so infor- IO is represented ces, however, the plan's total mem- plan's national or erefore, we used n the American As- (AAHP) to classify ond, the database nizations identified ividual states as the entire popula- ies participating in ose in states with findings therefore flective of the par- ce among licensed, a few states are not because either there g in the state or the

state regulatory reporting methodology did not permit their inclusion.⁹

The HCIA database represents the following number of states (including the District of Columbia) and plans for each year noted: 1992 and 1993: forty-three states, 471 plans; 1994: forty-three states, 495 plans; 1995: forty-six states, 538 plans; and 1996: forty-seven states, 574 plans.¹⁰ Because of outliers and extreme variations of financial measures, median values were used in the analyses.

Our study also draws on information gleaned from in-depth interviews with stock analysts and Medicaid health plan executives, the details of which are reported elsewhere.¹¹ The twenty-five executives interviewed represented sixty HMOs with more than 2.5 million Medicaid members, approximately one-third of the Medicaid HMO enrollment.

"Several stock analysts noted that rate adjustments cause capital markets to become skittish about HMOs in the Medicaid market."

PLAN CHARACTERISTICS

The number of plans participating in the Medicaid market steadily escalated during the 1992-1996 period, reflecting a 121 percent increase (Exhibit 1). In 1992 there were 102 participating plans; by 1996 there were 225. Participating plans exhibited wide variation in their individual operating characteristics. In 1992, 43 percent of participating plans were chain-affiliated; by 1996 this figure had risen to 51 percent. The plans participating in the Medicaid market, like those in the industry as a whole, were overwhelmingly open models.¹² In 1996, for example, 79 percent of the plans were open models, and only 21 percent were closed-model plans. In 1992, 51 percent of plans participating in Medicaid were federally qualified, but this dropped to 43 percent in 1996. The number of for-profit plans increased sharply, from 42 percent in 1992 to 58 percent in 1996.

Over the 1992-1996 period the majority of plans had small memberships (that is, less

than 26 percent Medicaid membership), and the number of plans with midsize Medicaid memberships (26-75 percent) decreased. This trend indicates that a large number of new entrants into the market pursued a limited Medicaid enrollment, and a smaller group either entered the market as predominantly Medicaid plans or moved rapidly from a small to a large membership.

MARKET SEGMENTATION

Not-for-profit plans were the mainstays of the Medicaid market in 1992 (Exhibit 2). Among publicly traded plans, participation rates more than doubled over the five-year period, to 36 percent in 1996. The net (entrants less exits) number of publicly traded plans accelerated until 1996, when enthusiasm leveled off. Participation among other for-profit HMOs also soared, from 13 percent to 32 percent during the period. Among Blue Cross plans, Medicaid participation increased substantially, from 17 percent in 1992 to 40 percent in 1996 (not shown).¹³

Did the entry of additional plans into the Medicaid market lead to changes in the distribution of Medicaid membership across market segments? The Medicaid percentage of total enrollees in the HMO Group plans and in the other for-profit category grew substantially over the 1992-1996 period—from 7.7 percent to 13.1 percent and from 12.9 percent to 25.2 percent, respectively. It declined among publicly traded plans and other not-for-profits—from 34.9 percent to 23.9 percent and from 33.6 percent to 23.2 percent, respectively (not shown). However, by 1996 other not-for-profit, publicly traded, and other for-profit plans had each aggregated more than 20 percent of the Medicaid members in the study plans. By 1996 the distribution of membership among these plans was markedly more balanced than in 1992, signaling broad participation. However, as noted earlier, this finding

EXHIBIT 1**Health Plan Participation Status in Medicaid Managed Care, By Plan Characteristics, 1992-1996**

Plan characteristic	1992		1993		1994		1995		1996	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Total plans	102	369	116	355	150	345	188	350	225	349
Chain affiliation										
Chain										
Number	44	232	53	223	77	208	100	202	115	181
Percent	43.1	62.9	45.7	62.8	51.3	60.3	53.2	57.7	51.1	51.9
Nonchain										
Number	58	137	63	132	73	137	88	148	110	168
Percent	56.9	37.1	54.3	37.2	48.7	39.7	46.8	42.3	48.9	48.1
Model type										
Closed										
Number	36	70	39	67	46	61	41	68	46	70
Percent	35.3	19.0	33.6	18.9	30.9	17.9	21.9	19.8	21.0	21.5
Open										
Number	66	298	77	287	103	280	146	275	173	256
Percent	64.7	81.0	66.4	81.1	69.1	82.1	78.1	80.2	79.0	78.5
Federal qualification										
Qualified										
Number	52	187	59	180	85	147	93	137	97	129
Percent	51.0	50.7	50.9	50.7	56.7	42.6	49.5	39.1	43.1	37.0
Nonqualified										
Number	50	182	57	175	65	198	95	213	128	220
Percent	49.0	49.3	49.1	49.3	43.3	57.4	50.5	60.9	56.9	63.0
Profit status										
For-profit										
Number	43	276	52	267	73	256	106	262	131	256
Percent	42.2	74.8	44.8	75.2	48.7	74.2	56.4	74.9	58.2	73.4
Not-for-profit										
Number	59	93	64	88	77	89	82	88	94	93
Percent	57.8	25.2	55.2	24.8	51.3	25.8	43.6	25.1	41.8	26.6
Percent Medicaid membership										
Small (<26%)										
Number	69		79		106		128		147	
Percent	67.6		68.1		70.7		68.1		65.3	
Medium (26-75%)										
Number	22		26		26		26		38	
Percent	21.6		22.4		17.3		13.8		16.9	
Large (>75%)										
Number	11		11		18		34		40	
Percent	10.8		9.5		12.0		18.1		17.8	

SOURCE: Health Care Investment Analysts (HCIA), HMO database, 1992-1996.

should be interpreted with caution, because unlicensed plans, particularly in states with Section 1115 waivers, may be underrepresented in the data.

FINANCIAL PERFORMANCE

■ **MEDICAL LOSS RATIOS.** Plans not participating in Medicaid experienced growth in

their medical loss ratios (from 0.85 to 0.90) between 1994 and 1996 (Exhibit 3). During this same period, plans serving a large Medicaid membership reported medical loss ratios of 0.83 and under; in contrast, their counterparts serving a small Medicaid membership experienced an increase in their medical loss ratios, from 0.86 to 0.91.

EXHIBIT 2**Health Plan Participation Status in Medicaid Managed Care, By Plan Characteristics, 1992-1996****Market segment**

Total plans	
Not-for-profit	
HMO Group	
Number	
Percent	
Other not-for-profit	
Number	
Percent	
For-profit	
Publicly traded	
Number	
Percent	
Other for-profit	
Number	
Percent	
Blue Cross	
For-profit	
Number	
Percent	
Not-for-profit	
Number	
Percent	

SOURCE: Health Care Investment Analysts (HCIA), HMO database, 1992-1996.

■ **ADMINISTRATIVE COSTS.** One would expect that administrative costs for Medicaid managed care plans would be lower than for private health plans. However, administrative costs for Medicaid managed care plans have increased significantly since 1994. For example, administrative costs for Medicaid managed care plans increased from 0.14 during the period 1994-1996 to 0.18 during the period 1997-1999. These increases in administrative costs are attributable to a number of factors, including the increasing complexity of Medicaid managed care rules and the increasing costs of health care services. In our interviews, many administrators reported that administrative costs for Medicaid managed care plans have increased significantly since 1994.

In our interviews, many administrators reported that administrative costs for Medicaid managed care plans have increased significantly since 1994.

Characteristics,

	1996	
	Yes	No
50	225	349

02 115 181
57.7 51.1 51.9

148 110 168
42.3 48.9 48.1

68 46 70
19.8 21.0 21.5

75 173 256
80.2 79.0 78.5

137 97 129
39.1 43.1 37.0

213 128 220
60.9 56.9 63.0

262 131 256
74.9 58.2 73.4

88 94 93
25.1 41.8 26.6

147
65.3

38
16.9

40
17.8

(from 0.85 to 0.90)
(Exhibit 3). During
serving a large Medic-
d medical loss ratios
contrast, their counter-
edicaid membership
in their medical loss

HEALTH TRACKING: MARKETWATCH

EXHIBIT 2

Health Plan Participation Status in Medicaid Managed Care, By Market Segment, 1992-1996

Market segment	1992		1993		1994		1995		1996	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Total plans	102	369	116	355	150	345	188	350	225	349
Not-for-profit										
HMO Group										
Number	8	11	8	11	11	8	11	8	14	7
Percent	42.1	57.9	42.1	57.9	57.9	42.1	57.9	42.1	66.7	33.3
Other not-for-profit										
Number	44	59	47	56	55	61	60	61	65	70
Percent	42.7	57.3	45.6	54.4	47.4	52.6	49.6	50.4	48.1	51.9
For-profit										
Publicly traded										
Number	20	121	24	117	35	111	47	107	53	95
Percent	14.2	85.8	17.0	83.0	24.0	76.0	30.5	69.5	35.8	64.2
Other for-profit										
Number	19	123	22	120	30	116	45	125	62	130
Percent	13.4	86.6	15.5	84.5	20.5	79.5	26.5	73.5	32.3	67.7
Blue Cross										
For-profit										
Number	5	39	7	37	10	35	17	34	20	34
Percent	11.4	88.6	15.9	84.1	22.2	77.8	33.3	66.7	37.0	63.0
Not-for-profit										
Number	6	16	8	14	9	14	8	15	11	13
Percent	27.3	72.7	36.4	63.6	39.1	60.9	34.8	65.2	45.8	54.2

SOURCE: Health Care Investment Analysts (HCIA), HMO database, 1992-1996.

■ ADMINISTRATIVE LOSS RATIOS. As one would expect, plans with large Medicaid memberships incurred higher administrative expenses than did those with fewer or no Medicaid enrollees (Exhibit 3). For predominantly Medicaid plans, the administrative loss ratio climbed from 0.17 in 1994 to 0.22 in 1996; for plans with small Medicaid memberships, this ratio remained between 0.13 and 0.14 during the period. The higher administrative costs among predominantly Medicaid plans are attributable in part to the fact that these plans are much smaller in overall membership than plans with limited Medicaid enrollment and apparently are not able to achieve the economies of scale of their larger counterparts. When contracting with these plans, Medicaid agencies will find that a smaller portion of their premium dollars is being applied to medical care for beneficiaries.

In our interviews with health plan executives, many attributed the high administrative costs to extraordinary turnover among

Medicaid enrollees, insufficient volume to achieve economies of scale, and generally more extensive contract requirements than are found in commercial lines of business. The importance of higher administrative requirements was noted in particular by HMO executives with predominantly commercial members. These executives have limited their exposure to Medicaid because the financial uncertainty and volatility, and thus the expected returns, may not justify the added costs of serving these beneficiaries.¹⁴

■ OPERATING MARGINS. Plans with a higher proportion of their membership in Medicaid earned the largest profits in 1992 and 1993, as reflected in their operating margins. After 1994, however, the operating margins for all plans, regardless of Medicaid participation level, dropped dramatically. For those plans not participating in Medicaid, the drop was greater than for the small and medium Medicaid participants. By 1996 plans not participating in Medicaid recorded an op-

EXHIBIT 3**Health Plan Performance Measures By Percentage Of Membership In Medicaid, 1992-1996**

Percent of membership in Medicaid	Medical loss ratios				
	1992	1993	1994	1995	1996
None	0.87	0.85	0.85	0.88	0.90
Small (<26%)	0.90	0.88	0.86	0.88	0.91
Medium (26-75%)	0.84	0.84	0.84	0.87	0.89
Large (>75%)	0.85	0.82	0.83	0.82	0.83
	Administrative loss ratios				
	1992	1993	1994	1995	1996
None	0.13	0.13	0.15	0.15	0.16
Small (<26%)	0.12	0.12	0.13	0.14	0.13
Medium (26-75%)	0.14	0.16	0.14	0.16	0.18
Large (>75%)	0.18	0.19	0.17	0.19	0.22
	Operating margins				
	1992	1993	1994	1995	1996
None	0.01	0.02	0.01	-0.02	-0.08
Small (<26%)	0.01	0.02	0.02	0.00	-0.02
Medium (26-75%)	0.02	0.02	0.02	-0.02	-0.03
Large (>75%)	0.04	0.03	0.01	-0.04	-0.08

SOURCE: Health Care Investment Analysts (HCIA), HMO database, 1992-1996.

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erating margin of -8 percent, as compared with an average of -3 percent for all participating plans.

Our interviews with health plan executives revealed that early success in Medicaid was achieved when enrollment was voluntary, marketing activities were largely unregulated, contract demands were limited, rate development was imprecise, and managed care enrollment was low but rising. In fact, representatives of some plans reported that the success of some early Medicaid market entrants (for example, Physician Corporation of America in Florida, which did a public offering in 1993) contributed to their belief that this was a lucrative business for plans in the right place at the right time.¹⁵

Although nonparticipating plans experienced the greatest drop in margins, the picture changed dramatically for predominantly Medicaid plans as well, with operating margins dropping from 1 percent in 1994 to -8 percent in 1996. Lower financial returns resulted from factors that affected both revenues and expenses. Factors that may have curtailed revenues include rate reductions,

more competition because of an increased number of qualified bidders, and inadequate risk adjustment for resource-intensive Supplemental Security Income (SSI) enrollees.

Several of the stock analysts we interviewed noted that rate adjustments, particularly unanticipated ones that result from states' belief that their rates overcompensate health plans, cause capital markets to become skittish about HMOs in the Medicaid market. Although some states have a reputation as sound business partners, the unexpected actions of other states have had a greater influence on analysts' evaluation of risk, resulting in the opinion that "Wall Street doesn't trust Medicaid and state government." Analysts interpreted the unexpected and substantial rate rollbacks by some states (for example, Florida, New York, Ohio, and Pennsylvania) as a cue to other states to initiate capricious, drastic rate cuts. One analyst we interviewed claimed that states are more eager to control costs than care. Another observed that "[p]oliticians are not willing to hurt Medicare because it relates to the middle class, but government does not mind hurting the poor." This analyst viewed

EXHIBIT 3
Health Plan Performance Measures By Percentage Of Membership In Medicaid, 1992-1996

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0.87 0.89

0.82 0.83

0.15 0.16

0.14 0.13

0.16 0.18

0.19 0.22

-0.02 -0.08

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-0.02 -0.03

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ment." Analysts in-
and substantial rate
for example, Florida,
sylvania) as a cue to
pricious, drastic rate
viewed claimed that
control costs than
hat "[p]oliticians are
are because it relates
government does not
This analyst viewed

EXHIBIT 4

Health Plan Operating Margins, By Medicaid Participation And Market Segment, 1992-1996

Market segment	1992		1993		1994		1995		1996	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
HMO Group	0.00	0.01	0.02	0.01	0.02	0.02	0.00	-0.01	-0.11	-0.02
Other not-for-profit	0.00	0.01	0.01	0.01	0.01	0.00	-0.03	-0.02	-0.10	-0.02
Publicly traded	0.00	0.01	0.03	0.03	0.01	0.05	-0.02	0.02	-0.04	-0.01
Other for-profit	0.01	0.02	0.01	0.02	0.00	0.02	-0.04	-0.01	-0.11	-0.03
Blue Cross	0.03	0.04	0.05	0.02	0.04	0.01	-0.02	-0.02	-0.07	-0.03

SOURCE: Health Care Investment Analysts (HCIA), HMO database, 1992-1996.

Medicaid rate cuts as a safe cost-saving initiative because they affect a class of people that is not politically unified.¹⁶

For each year of the study period, the operating margins of publicly traded and other for-profit plans participating in Medicaid were greater than those of their counterparts that did not participate (Exhibit 4). Nonparticipating plans across all market segments experienced a dramatic decline in their operating margins between 1995 and 1996. The HMO Group, other not-for-profit, and other for-profit plans not participating in Medicaid incurred operating losses greater than (or equal to) 10 percent for 1996. Publicly traded and Blue Cross plans that did not participate in Medicaid incurred operating losses of 4 percent and 7 percent, respectively. In contrast, all of the participating plans across all market segments incurred operating losses of 3 percent or less.

PROBABLE CAUSES AND IMPLICATIONS

HMO participation in Medicaid grew dramatically from 1992 to 1996, despite declining operating margins. Profitability among plans with high Medicaid enrollment exceeded those with lower enrollment in 1992 and 1993. In 1994 an apparent reversal of fortune began among predominately Medicaid plans, and by 1995 and 1996 these plans mounted losses that substantially exceeded those of low Medicaid enrollment plans.

Favorable selection among enrollees and

higher Medicaid rates may have contributed to the profitability of predominantly Medicaid plans prior to 1994. Higher administrative demands and increased requirements of participation and compliance may explain why predominantly Medicaid plans experienced greater financial losses after 1993 than did plans with a small proportion of Medicaid enrollment. Higher medical expenses do not appear to have driven these losses. This study measured only overall HMO operating margins not specific to any individual line of business. Declining operating results in other lines of business may influence the decision to participate in Medicaid.

Our interviews with both stock analysts and Medicaid HMO executives confirmed that the downturn in financial performance for predominantly Medicaid plans had three probable causes: rate inadequacy, substantial volatility, and excessive administrative burden resulting in higher costs. These factors, combined with the spiraling decline in profitability of other business lines and the pressure to meet the earnings estimates of stock analysts, explain why commercial HMOs are reconsidering their long-term commitment to Medicaid business.¹⁷

This study was funded by the Center for Health Care Strategies and made possible by a major grant from the Robert Wood Johnson Foundation (RWJF) through its Medicaid Managed Care Program. The findings, statements, and views expressed are those of the authors and do not necessarily reflect those of the Center for Health Care Strategies or the RWJF.

NOTES

1. This phenomenon is known as the "two-market theory" of Medicaid. See F. Sloan et al., "Physician Participation in State Medicaid Programs," *Journal of Human Resources* (Supplement 1978): 211-245.
2. S. Felt-Lisk and S. Yang, "Changes in Health Plans Serving Medicaid, 1993-1996," *Health Affairs* (September/October 1997): 125-133. This study evaluated both licensed HMOs and other risk-bearing entities that participate in Medicaid.
3. *National Summary of Medicaid Managed Care Programs* (Washington: Health Care Financing Administration, 1998). The number of Medicaid beneficiaries enrolled in managed care has increased from less than four million in 1992 to more than thirteen million in 1996. Also see *1995 Annual Report to Congress* (Washington: Physician Payment Review Commission, 1996).
4. The HMO Group is an alliance of more than thirty not-for-profit staff- and group-model HMO plans (www.hmogroup.org).
5. *Health Plan Employer Data and Information Set (HEDIS 3.0)* (Washington: National Committee for Quality Assurance, 1998).
6. *HMO Database 1995 Series Diskette Version User's Manual* (Baltimore: Health Care Investment Analysts, Inc., 1996).
7. Ibid.
8. *1995-1996 Managed Health Care Directory* (Washington: American Association of Health Plans, 1996).
9. *HMO Database 1995 Series Diskette Version User's Manual*.
10. Ibid.
11. R. Hurley and M. McCue, *Medicaid and Commercial HMOs: An At Risk Relationship* (Princeton, N.J.: Center for Health Care Strategies, 1998).
12. J. Gabel, "Ten Ways HMOs Have Changed during the 1990s," *Health Affairs* (May/June 1997): 134-145.
13. Blue Cross plans include both for-profit and not-for-profit plans but exclude those that have been converted to publicly traded entities. These plans are included in the publicly traded group.
14. Hurley and McCue, *Medicaid and Commercial HMOs*.
15. Ibid.
16. Ibid.
17. Ibid.; R. Langreth, "After Seeing Profits from the Poor, Some HMOs Abandon Them," *Wall Street Journal*, 7 April 1998, B1, B4; and H. Meyer, "Medicaid: States Serve Up a Real Turkey," *Hospitals and Health Networks* (20 November 1997): 22-24, 26, 28.

Prescription Drug Coverage, Utilization, And Spending Among Medicare Beneficiaries

As the cost and use of prescription drugs move to the forefront of Medicare policy discussions, new survey data shed light on recent trends.

by Margaret Davis, John Poisal, George Chulis, Carlos Zarabozo, and Barbara Cooper

ABSTRACT: Outpatient prescription drugs are not a covered benefit under Medicare. There have been proposals in the past to expand Medicare benefits to include drug coverage, and current discussions dealing with "modernizing" the Medicare benefit package have raised the issue again. Using data from the 1995 Medicare Current Beneficiary Survey (MCBS), we describe the sources and extent of drug coverage among Medicare beneficiaries. The data show that 65 percent of Medicare beneficiaries have some level of drug coverage—a figure much higher than previous published numbers—and that 95 percent of Medicare health maintenance organization (HMO) enrollees have drug coverage. The data provide a baseline to observe future changes in the level of coverage, particularly among Medicare managed care plans.

DATAWATCH

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PRESCRIPTION DRUGS PLAY AN essential role in the treatment of disease, particularly among the elderly and the chronically ill. Innovations in drug therapies have led to improved health outcomes and quality of life for persons living with chronic conditions such as heart disease, hypertension, diabetes, arthritis, and depression, which are common among the elderly. Yet providing these therapies can be costly, and drug prices have been rising rapidly. In the six years between 1990 and 1995, national spending on prescription drugs increased 51 percent, an average of more than 8 percent per year.¹ The rise in spending reflects both the increasingly

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plans, and research has shown that insurance carriers are setting premium rates to account for the presence of adverse selection among plans with drug coverage.⁵

Access to the remaining sources of coverage depends largely on a person's employment status and income, as well as geographic location. Many beneficiaries receive some type of employer-sponsored prescription drug coverage as part of their retiree health benefits. Beneficiaries also can enroll in Medicare managed care plans that provide drug coverage, either as a supplemental policy or as part of the basic risk-plan benefit package. In addition, certain low-income Medicare beneficiaries have access to drug coverage because they qualify for Medicaid coverage ("dual eligibles"). Another source of coverage for beneficiaries in certain states is state-administered prescription drug programs. At least eleven states have implemented special programs to provide drug coverage for low-income elderly or persons with disabilities. Finally, some beneficiaries with a military service connection receive drug coverage through Department of Veterans Affairs (VA) or Department of Defense programs.

Data Sources And Methods

The data reported here were compiled from the 1995 MCBS Cost and Use file. The MCBS is a continuing panel survey of about 12,000 aged and disabled beneficiaries. The information in this DataWatch is limited to data about persons participating in community interviews during the year and includes beneficiaries who were enrolled in Medicare at any point during the year.⁶

Type of supplemental coverage. We assigned Medicare beneficiaries to different categories depending on their supplemental insurance or supplemental coverage status. Many Medicare beneficiaries hold more than one type of supplemental insurance. Although we consider the effect of additional types of supplemental coverage, we have assigned persons with multiple sources of coverage to the single category that is most likely their primary source of coverage. In addition, to be included in a particular category, beneficiaries had to have spent all of their Medicare-eligible months in that category. Those who switched supplemental insurance coverage during the year were placed in a separate category of "switchers." Our Medicaid category includes qualified Medicare beneficiaries (QMBs) and specified low-income Medicare beneficiaries (SLMBs) who may not have drug coverage in their Medicaid benefits.

Prescription drug coverage. Beneficiaries were considered to have drug coverage if they had it at any point during their eligible months. Previously published reports on prescription drug coverage used beneficiaries' self-reported data for persons with private insur-

important role of drugs in the treatment of disease and the rising costs of these drugs. Elderly and disabled Medicare beneficiaries are particularly vulnerable to the high cost of prescription drugs, which are not a covered benefit under Medicare (with limited exceptions).

This DataWatch presents the most current information available from the 1995 Medicare Current Beneficiary Survey (MCBS), which documents the number of noninstitutionalized Medicare beneficiaries with drug insurance coverage, how they are getting that coverage, and the amount that they and insurers are spending for prescription drugs. These data provide an overview of drug use and sources of payment among the entire Medicare population, including managed care plan enrollees.

Background. Medicare beneficiaries have several options for obtaining prescription drug coverage, although not all beneficiaries have access to these options. Prescription drug coverage is included in some Medigap plans, in most employer-sponsored plans, as part of Medicaid coverage and in other public programs, and, at least in recent years, in most Medicare risk plans.

Some Medicare beneficiaries can purchase limited supplemental drug coverage through Medigap plans. However, only three of the ten standardized Medigap plans include a prescription drug benefit.² In addition, the Medigap drug coverage is limited, with high beneficiary cost sharing: Two of the plans require beneficiaries to meet a \$250 deductible and then cover 50 percent of the cost of prescription drugs up to a maximum annual benefit of \$1,250. The third plan is the same but has a maximum annual benefit of \$3,000. Access to individually purchased Medigap policies can sometimes be limited. Elderly Medicare beneficiaries are guaranteed a six-month open-enrollment period when they first enroll in Part B at age sixty-five or older. However, disabled beneficiaries under age sixty-five are not eligible for an open-enrollment period and often are not able to purchase a Medigap policy.³ Under federal law, at any time after the open-enrollment period, insurers can refuse to issue Medigap policies on the basis of age or health status and can impose preexisting condition exclusion periods or refuse to cover certain conditions at all. Even insurers that have "guaranteed issue" for Medigap policies without drug coverage underwrite drug coverage purchased outside of the open-enrollment period.

Premiums for Medigap plans with drug coverage are expensive. When the benefits to be included in the model Medigap plans were being debated by the National Association of Insurance Commissioners (NAIC), there was considerable concern over adverse risk selection if drug benefits were added.⁴ In fact, the premiums for these plans tend to be much higher than those for other Medigap

ance and reasonable assumptions for persons in HMOs or with Medicaid coverage to determine whether or not their supplemental insurance included prescription drug coverage. One difficulty with this approach, however, is that, in general, Medicare enrollees do not have a clear idea of what either Medicare or their supplemental insurance actually covers.⁷ MCBS prescription drug records contain information on each source of payment that contributed any amount in paying for a prescription. For example, if a person answered "no" to whether his or her policy covered drugs, but our drug payment records showed that the insurer actually paid for prescription drugs for the person, we changed the person's insurance status to "yes." It is highly unlikely that an insurer would make a payment unless there was a policy in effect covering drugs.

Our original intention was to use the payment data only to correct self-reported information on drug coverage. Initially, we looked at whether a self-report or assumed coverage corresponded to payment data within the person's primary insurance category. All previous reports assumed that the person's drug insurance coverage came from his or her primary supplemental insurance. However, in analyzing the payment data we found that beneficiaries sometimes have drug coverage from a source other than their primary supplemental and sometimes have drug coverage from multiple sources. Clearly, these findings highlight that many beneficiaries attempt to "cobble together" the best total insurance package they can using all of the possibilities available to them.

This led us to create two categories of drug coverage: The main category includes persons who have drug coverage from their primary supplemental coverage; the new category includes persons who do not have drug coverage from their primary supplemental coverage but obtain some drug coverage from another source. The combined result of these efforts is to produce estimates of drug coverage that are considerably higher than previous estimates. Most previous estimates of prescription drug coverage estimated that 50–55 percent of the Medicare population had prescription drug coverage, compared with our estimate of 65 percent (Exhibit 1).⁸ Our internal analyses suggest that drug coverage in the Medicare population increased 2–3 percent between 1992 and 1995. Identifying persons with secondary drug coverage added another 3–4 percent. Using more reliable source-of-payment data to correct self-reports and assumptions about drug coverage contributed the remaining 4–9 percent difference. We believe that persons with secondary drug coverage, and those whose payment records contradicted their self-reports or assumptions about drug coverage, were largely omitted from previous analyses.

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EXHIBIT 1 Distribution Of Non Insurance And Pres

Type of coverage

All persons
No supplemental coverage: (FFS Medicare only)
Supplemental coverage
Medicare risk HMO
Medicaid ^b
Employer-sponsored ^c
Individually purchased
All other ^d
Switched coverage during the year ^e

SOURCE: HCFA Office of S

NOTES: FFS is fee-for-service; community-based population has been assigned to one supplementary source. "With primary drug insurance." "With secondary supplementary insurance."

^a Number is unreliable because

^b Includes beneficiaries receiving low-income Medicare benefits.

^c Includes those who only individually purchased supplementary

^d Includes other public programs for low-income

^e Includes beneficiaries who

Survey methods for household surveys on drugs. Critics of surveys seriously underestimate the cause of poor health. These debates have been developing. use and cost control methods generally have been used but we acknowledge

Payments. price for each drug which discourages use. applied. We also have reasonable track record. knew the amount

EXHIBIT 1

Distribution Of Noninstitutional Medicare Beneficiaries, By Type Of Supplemental Insurance And Presence Of Drug Coverage, 1995

Type of coverage	Number of persons			Percent distribution			
	Total	With primary drug coverage	With secondary drug coverage	No drug coverage	With primary drug coverage	With secondary drug coverage	No drug coverage
All persons	36,715,848	22,671,434	1,257,223	12,787,190	61.7%	3.4%	34.8%
No supplemental coverage (FFS Medicare only)	2,953,582	0	0	2,953,582	0.0	0.0	100.0
Supplemental coverage							
Medicare risk HMO	2,507,962	2,383,685	- ^a	103,918	95.0	- ^a	4.1
Medicaid ^b	4,498,400	3,949,139	89,751	459,510	87.8	2.0	10.2
Employer-sponsored ^c	12,105,893	10,161,803	289,723	1,654,369	83.9	2.4	13.7
Individually purchased only	10,640,789	3,075,376	743,124	6,822,289	28.9	7.0	64.1
All other ^d	985,931	773,753	- ^a	198,466	78.5	- ^a	20.1
Switched coverage during the year ^e	3,023,291	2,327,678	100,557	595,056	77.0	3.3	19.7

SOURCE: HCFA Office of Strategic Planning, data from the Medicare Current Beneficiary Survey.

NOTES: FFS is fee-for-service. HMO is health maintenance organization. Data are based on the noninstitutionalized, community-based population and include those who were enrolled in Medicare at some point during the year. Each person has been assigned to one supplementary insurance category, but they may or may not obtain their drug insurance coverage from that source. "With primary drug coverage" means that the person has drug insurance, and it is from their primary supplementary insurance. "With secondary drug coverage" means that the person has drug insurance, but it is not from their primary supplementary insurance.

^a Number is unreliable because of small sample size.

^b Includes beneficiaries receiving full Medicaid benefits, as well as qualified Medicare beneficiaries (QMBs) and specified low-income Medicare beneficiaries (SLMBs).

^c Includes those who only had employer-sponsored supplemental insurance and those who had both employer-sponsored and individually purchased supplemental insurance.

^d Includes other public programs such as Veterans Affairs, Department of Defense, and State Pharmaceutical Assistance Programs for low-income elderly, as well as non-risk HMOs (cost and health care prepayment plans).

^e Includes beneficiaries who did not spend 100 percent of their Medicare-eligible months in one insurance category.

Survey methods. There is a long-standing debate on whether a household survey is the appropriate way to collect expenditure data on drugs. Critics in earlier reform debates argued that previous surveys seriously underestimated prescription drug use and costs because of poor recall and other methodological problems.⁹ Others argued that these critics were overstating the size of the problem.¹⁰ These debates were taking place as the MCBS field procedures were being developed, and special pains were taken to improve its drug use and cost collection procedures.¹¹ We believe that our field methods generally have improved the drug use underreporting problem, but we acknowledge that underreporting is still a problem.

Payments. We attempted to determine the actual transaction price for each prescribed drug, not the listed or posted price to which discounts (such as senior citizen discounts) are sometimes applied. We also developed a variety of methods for establishing a reasonable transaction price for the drug used when the respondent knew the amount he or she paid out of pocket but did not know the

total transaction price (for example, if an HMO, Medicaid, the VA, a state-based plan, a local charity, or other entity made the payment on their behalf).¹² The end result of this process was to establish a realistic average transaction price for each drug, taking payers into account. In individual cases, the average payment may actually have been more or less than the average price we established. But in the aggregate, and on average, we believe that our final price is a reasonable estimate of the total price paid to the dispenser for that patient to obtain that particular drug. In allocating total payments among the various sources of payment, we classified only 2 percent of payments as coming from an unknown payment source.

Prescription Drug Coverage

Although Medicare does not offer outpatient prescription drug benefits as part of its traditional fee-for-service benefits package, in 1995 nearly two-thirds (65 percent) of Medicare enrollees living in the community had some form of supplemental insurance that covered outpatient prescription drugs (Exhibit 1).¹³ Among persons with drug coverage, 62 percent received their drug coverage from their primary supplemental plan; for an additional 3 percent, payment records indicate coverage from another source. For example, a person may have Medicare and an individually purchased Medigap plan that does not cover his or her drug purchases but may get drugs through a state-based drug coverage plan or the VA. We believe that such persons previously had been classified as not having drug coverage. Slightly more than one-third of noninstitutionalized Medicare beneficiaries had no prescription drug coverage.

Supplemental policies vary widely in the extent to which they include drug coverage. Beneficiaries in Medicare risk HMOs have the highest level of prescription drug coverage (95 percent). Other groups of Medicare enrollees with high levels of drug coverage include persons with Medicaid (88 percent, including QMBs and SLMBs), employer-sponsored supplemental insurance (84 percent), and other public coverage such as a state-based drug plan or VA coverage (78 percent). Most enrollees in these groups obtain their coverage from their primary supplemental insurance, but some receive it from a secondary source (about 2 percent in each category).

Only 29 percent of beneficiaries with individually purchased private Medigap plans had drug coverage from the Medigap plan. This is not surprising, given the high cost and limited coverage available under standard Medigap policies. It is also not surprising that the insurance category with the lowest level of primary drug coverage has the highest share of persons who get drug coverage from a secondary source (7 percent).

Prescription coverage for 10 percent of retired persons is consistent with coverage for 10 percent of retirees living in the community during 1995 (Exhibit 1). Prescriptions in 1995

The presence of drug coverage is shown to increase the use of health services. Coverage for prescription drug use is 15.3 prescriptions per year.

Persons with no supplemental insurance (per year) had prescription coverage less than the national average compared with persons with no supplemental insurance than the average

EXHIBIT 2 Percentage Of Medicare Prescriptions Per Payer By Presence Of Drug Coverage

Type of coverage

All persons
No supplemental coverage (Medicare only)
Supplemental coverage
Medicare risk HMO
Medicaid ^b
Employer-sponsored ^c
Individually purchased
All other ^d
Switched coverage during year

SOURCE: HCFA Office of Statistics.
NOTES: FFS is fee-for-service; community-based population has been assigned to one supplemental source.

^a Not applicable.

^b Includes beneficiaries receiving low-income Medicare benefits.

^c Includes those who only have individually purchased supplemental coverage.

^d Includes other public programs for low-income elderly.

^e Includes beneficiaries who

Prescription drug use. A recent national survey reported that 80 percent of retired persons take a prescribed drug every day.¹⁴ This is consistent with our findings that 86 percent of Medicare beneficiaries living in the community used at least one prescription drug during 1995 (Exhibit 2). The average such beneficiary used 18.5 prescriptions in 1995.

The presence of supplemental insurance has consistently been shown to increase utilization rates for, and access to, most types of health services. Our data show that this pattern holds true for prescription drug use. Persons with drug coverage averaged 20.3 prescriptions per year, whereas those with no drug coverage averaged 15.3 prescriptions per year.

Persons with no supplemental insurance at all (12.7 prescriptions per year) had prescription drug use rates that were 31 percent below the national average, and again the disparity was even greater when compared with persons holding drug insurance. Beneficiaries with no supplemental coverage are more likely to have lower incomes than the average Medicare beneficiary.¹⁵ In general, economic fac-

EXHIBIT 2

Percentage Of Medicare Beneficiaries Using Prescription Drugs And Average Prescriptions Per Person, By Type Of Supplementary Insurance Coverage And Presence Of Drug Coverage, 1995

Type of coverage	Percent using prescription drugs			Average number of prescriptions per person		
	All persons	With drug coverage	No drug coverage	All persons	With drug coverage	No drug coverage
All persons	86%	89%	81%	18.5	20.3	15.3
No supplemental coverage (FFS Medicare only)	70	- ^a	70	12.7	- ^a	12.7
Supplemental coverage						
Medicare risk HMO	87	87	81	15.7	16.2	5.1
Medicaid ^b	87	91	56	25.6	27.0	12.9
Employer-sponsored ^c	89	89	90	18.4	18.6	16.9
Individually purchased only	87	87	86	17.8	19.8	16.8
All other ^d	92	95	77	19.4	20.9	13.4
Switched coverage during the year ^e	87	89	76	18.8	20.6	11.6

SOURCE: HCFA Office of Strategic Planning, data from the Medicare Current Beneficiary Survey.

NOTES: FFS is fee-for-service. HMO is health maintenance organization. Data are based on the noninstitutionalized, community-based population and include those who were enrolled in Medicare at some point during the year. Each person has been assigned to one supplementary insurance category, but they may or may not obtain their drug insurance coverage from that source.

^a Not applicable.

^b Includes beneficiaries receiving full Medicaid benefits, as well as qualified Medicare beneficiaries (QMBs) and specified low-income Medicare beneficiaries (SLMBs).

^c Includes those who only had employer-sponsored supplemental insurance and those who had both employer-sponsored and individually purchased supplemental insurance.

^d Includes other public programs such as Veterans Affairs, Department of Defense, and State Pharmaceutical Assistance Programs for low-income elderly, as well as non-risk HMOs (cost and health care prepayment plans).

^e Includes beneficiaries who did not spend 100 percent of their Medicare-eligible months in one insurance category.

tors—including income and supplemental insurance coverage—play an important role in whether a prescription medication is obtained to treat a health problem: Higher income and more comprehensive insurance coverage increase the chances that an elderly beneficiary will use a prescription drug, whether or not the drug is for a minor illness or for a serious, chronic condition.¹⁶ Similarly, beneficiaries whose only coverage is fee-for-service Medicare have fewer physician visits than do those with any form of supplemental insurance.¹⁷ Also, ambulatory physician visit rates for elderly beneficiaries tend to decline as income declines.¹⁸ This clearly would affect a person's ability to obtain a prescription, given that a physician contact generally is required to obtain a prescription.

Persons with Medicaid used about twice as many prescriptions on average (25.6) as persons in fee-for-service with no supplemental insurance (12.7), reflecting the higher concentration of older, sicker, and low-income persons in Medicaid. Another interesting finding is the relatively low prescription use rate for persons in Medicare risk plans (15.7 per person per year): 15 percent below average. Studies to date have suggested that persons enrolling in Medicare HMOs are generally healthier and less expensive to care for on average.¹⁹ This may be one reason that Medicare risk plans simultaneously have the highest share of persons with prescription drug coverage (95 percent), coupled with prescription drug use rates well below the national average, although this also may reflect the effect of pharmacy benefit management in an HMO setting.

Prescription drug payments per person. Drug expenditures for the average Medicare beneficiary living in the community were about \$600 in 1995, accounting for payments from all sources (Exhibit 3). Total average spending per person for those with drug insurance was 60 percent higher than for persons without any drug coverage (\$691 versus \$432). The lowest average level of spending per person, by far, was for Medicare risk HMOs (\$458). In every insurance category spending per person was much higher for persons with drug insurance coverage than for those without it.

Average drug insurance payments per person vary widely by insurance category. The highest average insurance payment per person (\$577) for persons with Medicaid is more than five times greater than that for those with Medigap insurance (\$112). High deductibles and coinsurance associated with the standard Medigap drug insurance probably account for most of this disparity, although higher prescription drug use rates for Medicaid beneficiaries also contribute to the higher payment rate.

Shares paid out of pocket. Average out-of-pocket payments for drug expenses for beneficiaries without any form of drug coverage

EXHIBIT 3 Average Drug Expenditures Supplementary

Type of coverage

All persons
No supplemental coverage (FFS Medicare only)
Supplemental coverage: Medicare risk HMO, Medicaid ^c , Employer-sponsored
Individually purchased
All other ^e
Switched coverage the year ^f

SOURCE: HCFA Office of Research and Statistics.

NOTES: FFS is fee-for-service; not applicable to ins.

^a Includes expenditures for drugs.

^b Not applicable.

^c Includes beneficiaries with low-income Medicaid.

^d Includes those who have individually purchased coverage.

^e Includes other public programs for low-income persons.

^f Includes beneficiaries who have switched coverage the year.

were \$432 in 1995, on average. Many persons have no drug coverage and some pay drug coverage premiums we do not count. Medicare risk HMOs have the lowest average drug coverage payments.

Among persons with drug insurance, average drug expenses are highest for Medicare risk plans (\$432) and lowest for Medicare HMOs (\$458).

Exhibit 3 shows the average drug coverage payments paid out of pocket for drug coverage. Medicare risk HMOs paid half of the entire U.S. drug expenses. One clear trend is that persons have

EXHIBIT 3

Average Drug Expenditures Per Person For Medicare Beneficiaries, By Type Of Supplementary Insurance And Presence Of Drug Coverage, 1995

Type of coverage	Total expenditures per person			Insurance expenditures per person		Out-of-pocket expenditures per person ^a		
	All persons	With drug coverage	No drug coverage	All persons	With drug coverage	All persons	With drug coverage	No drug coverage
All persons	\$600	\$691	\$432	\$297	\$459	\$303	\$232	\$432
No supplemental coverage (FFS Medicare only)	352	- ^b	352	- ^b	- ^b	352	- ^b	352
Supplemental coverage								
Medicare risk HMO	458	472	125	297	310	160	162	125
Medicaid ^c	727	777	284	577	642	150	135	284
Employer-sponsored ^d	698	732	484	438	507	260	224	484
Individually purchased only	550	674	480	112	313	437	361	480
All other ^e	618	677	385	341	427	277	249	385
Switched coverage during the year ^f	547	600	331	244	304	303	297	331

SOURCE: HCFA Office of Strategic Planning, data from the Medicare Current Beneficiary Survey.

NOTES: FFS is fee-for-service. HMO is health maintenance organization. See Exhibit 2 Notes. The category "no drug coverage" is not applicable to insurance expenditures per person and is omitted.

^a Includes expenditures where the source of payment is unknown.

^b Not applicable.

^c Includes beneficiaries receiving full Medicaid benefits, as well as qualified Medicare beneficiaries (QMBs) and specified low-income Medicare beneficiaries (SLMBs).

^d Includes those who only had employer-sponsored supplemental insurance and those who had both employer-sponsored and individually purchased supplemental insurance.

^e Includes other public programs such as Veterans Affairs, Department of Defense, and State Pharmaceutical Assistance Programs for low-income elderly, as well as non-risk HMOs (cost and health care prepayment plans).

^f Includes beneficiaries who did not spend 100 percent of their Medicare-eligible months in one insurance category.

were \$432 in 1995, compared with \$232 for those with drug coverage. Many persons pay premiums for their supplemental coverage, and some part of those premium amounts undoubtedly goes toward drug coverage. A more precise comparison would add drug insurance premium payments to out-of-pocket payments. Unfortunately, we do not always know from our records whether reported insurance premiums include or exclude drug coverage, or how to split drug coverage premiums out from total premiums.

Among insurance categories, out-of-pocket payments for drug expenses are highest for those with individually purchased Medigap plans (\$437) and lowest for persons with Medicaid and those belonging to Medicare risk HMOs (\$150 and \$160, respectively).

Exhibit 4 shows the share of total spending on prescription drugs paid out of pocket, on average, by all beneficiaries and those with drug coverage. The data show that the average Medicare beneficiary paid half of the cost of prescription drugs in 1995. By contrast, for the entire U.S. population the national average share of prescription drug expenses paid out of pocket was much lower (34 percent).²⁰ One clear reason for this difference is that a larger share of younger persons have prescription drug insurance. We noted above that 65

EXHIBIT 4

Share Of Total Drug Payments Paid Out Of Pocket By Medicare Beneficiaries, By Type Of Supplemental Insurance And Presence Of Drug Coverage, 1995

Type of coverage	Ratio of out-of-pocket expenditures to total expenditures	
	All persons	With drug coverage
All persons	50%	34%
No supplemental coverage (FFS Medicare only)	100	- ^a
Supplemental coverage		
Medicare risk HMO	35	34
Medicaid ^b	21	17
Employer-sponsored ^c	37	31
Individually purchased only	80	54
All other ^d	45	37
Switched coverage during the year ^e	55	49

SOURCE: HCFA Office of Strategic Planning, data from the Medicare Current Beneficiary Survey.

NOTES: FFS is fee-for-service, HMO is health maintenance organization. See Exhibit 2 Notes.

^a Not applicable.

^b Includes beneficiaries receiving full Medicaid benefits, as well as qualified Medicare beneficiaries (QMBs) and specified low-income Medicare beneficiaries (SLMBs).

^c Includes those who only had employer-sponsored supplemental insurance and those who had both employer-sponsored and individually purchased supplemental insurance.

^d Includes other public programs such as Veterans Affairs, Department of Defense, and State Pharmaceutical Assistance Programs for low-income elderly, as well as non-risk HMOs (cost and health care prepayment plans).

^e Includes beneficiaries who did not spend 100 percent of their Medicare-eligible months in one insurance category.

percent of Medicare beneficiaries have prescription drug coverage. The Bureau of Labor Statistics estimates that 80 percent of persons employed in medium and large firms have prescription drug coverage.²¹ Another possible reason is that the prescription drug coverage held by Medicare enrollees may not be as comprehensive as that held by younger persons.

While the average out-of-pocket share for Medicare beneficiaries is half the total payment, persons with drug coverage paid an average of 34 percent. Persons with Medicaid paid the least out of pocket (21 percent). This seems consistent with the aim of Medicaid to help low-income persons and reflects the low cost-sharing amounts most states apply to Medicaid-covered prescriptions.²² Beneficiaries with Medigap policies pay 80 percent of their drug expenditures out of pocket (in addition to the premium paid for the coverage). Members of risk HMOs and persons with employer-sponsored insurance both pay about one-third of their drug expenditures out of pocket. These differences again illustrate the wide variation in the level of drug insurance coverage.

Policy Implications

For years policy discussions over whether and how to expand Medicare to include a prescription drug benefit have led to a number of proposals, none of which has ever been permanently adopted.

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This issue has again been raised during the deliberations of the National Bipartisan Commission on the Future of Medicare, created by Congress in the Balanced Budget Act (BBA) of 1997. Discussions among the various commission task forces have included the need to consider "modernizing" the Medicare benefit package to make it more consistent with the current structure of private health insurance plans, including adding some type of prescription drug benefit.

The Medicare population clearly has a need for coverage, as the average beneficiary uses eighteen prescriptions per year. Even those without prescription drug coverage use almost thirteen prescriptions per year. Medicare beneficiaries also spend a lot out of pocket for their prescription drugs—much more than the average for the U.S. population (50 percent versus 34 percent of expenses paid out of pocket). A significant portion of the Medicare population now has drug coverage from one or more sources, but there is wide variation in the extent of protection, or lack of protection, from the various sources. Not presented here, but important for further analysis, are the socioeconomic characteristics and health and functional status of beneficiaries in each of the insurance categories—in particular, for those without any drug coverage. Understanding these factors is necessary to further understand the gaps in coverage and vulnerabilities of the population as policymakers attempt to craft options for reform.

Another important finding is the extent to which enrollees in Medicare risk plans have drug coverage, and the relative generosity of that coverage. The MCBS data show that enrollees in Medicare risk plans had very high rates of drug coverage in 1995, when three million Medicare beneficiaries were enrolled in risk plans.

Risk-based Medicare managed care plans are not obligated to provide drug benefits, but a recent unpublished analysis by HCFA of Medicare HMO data indicates that the vast majority of such plans provide some level of prescription drug coverage to their enrollees, which confirms the results of the MCBS analysis. In addition, the HCFA analysis shows a clear correlation between the Medicare capitation payment and the extent of coverage offered. Although the extent of that coverage varies significantly across plans, 40 percent of plans that provide drug coverage in the basic benefit package have no maximum annual dollar caps on their coverage. Of those that do impose limits, about 60 percent have caps of \$1,000 or more per year—that is, the vast majority of beneficiaries have no caps on their HMO drug coverage or are subject to a cap that is above the average yearly total of drug expenditures for all Medicare beneficiaries reported in the MCBS data. Whether Medicare HMOs will continue to offer generous drug coverage is unclear.

There has been a good deal of attention recently to the managed care industry's assertion that payment changes required by the BBA, combined with rising drug costs and other factors, will result in plans' cutting back in the additional benefits that they now offer to Medicare beneficiaries, such as prescription drugs, or withdrawing from the Medicare managed care market altogether. Again, it will be important to monitor these benefit and enrollment changes, as well as changes in retiree coverage and the Medigap market, as policymakers consider options for prescription drug policies.

The authors thank Frank Eppig, Dan Waldo, Ellen O'Brien, and Jack Hoadley for comments on an earlier draft of this paper.

NOTES

1. K.R. Levit et al., "National Health Spending Trends in 1996," *Health Affairs* (January/February 1998): 35-51.
2. Wisconsin, Massachusetts, and Minnesota do not conform to federal standardization requirements. Wisconsin and Massachusetts have drug coverage mandates that apply to Medigap insurers, and, until the effective date of federal preemption provisions of the BBA, these mandates also applied to Medicare risk HMOs. Wisconsin requires plans to offer catastrophic drug coverage, consisting of coverage of 80 percent or actual charges after having met a deductible of \$6,250 per year.
3. A few states now require insurers to sell Medigap policies to persons under age sixty-five with disabilities.
4. P. Fox, T. Rice, and L. Alecxih, "Medigap Regulation: Lessons for Health Reform," *Journal of Health Policy, Politics and Law* (Spring 1995): 31-46.
5. L.A. McCormack et al., "Medigap Reform Legislation of 1990: Have the Objectives Been Met?" *Health Care Financing Review* (Fall 1996): 157-174.
6. G. Adler, "A Profile of the Medicare Current Beneficiary Survey," *Health Care Financing Review* (Summer 1994): 153-163.
7. N. McCall, T. Rice, and J. Sangl, "Consumer Knowledge of Medicare and Supplemental Health Insurance Benefits," *Health Services Research* (February 1986): 633-657.
8. American Association of Retired Persons Public Policy Institute, *Prescription Drug Coverage and the Elderly: Issues and Options* (Washington: AARP, 1994), 5, Table 2; G. Chulis, F. Eppig, and J. Poisal, "Ownership and Average Premiums for Medicare Supplementary Insurance Policies," *Health Care Financing Review* (Fall 1995): 255-274; and AARP Public Policy Institute, *Prescription Drug Coverage among Medicare Beneficiaries* (Washington: AARP, August 1997).
9. M. Berk, C. Schur, and P. Mohr, "Using Survey Data to Estimate Prescription Drug Costs," *Health Affairs* (Fall 1990): 146-156.
10. During that debate both the Congressional Budget Office (CBO) and the Health Care Financing Administration's (HCFA's) Office of the Actuary filed reports with Congress indicating that survey reports of drug utilization and costs were probably 10-20 percent underestimated based on the survey data used (the 1987 National Medical Care Expenditure Survey). J. Moeller and N. Mathiowetz, "Correcting Errors in Prescription Drug Reporting: A Critique," *Health Affairs* (Spring 1991): 210-211; and Berk et al., "Using Survey Data."
11. Each MCBS respondent is asked each round (essentially every four months) about all health care events, charges, and payments since the previous inter-

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recently to the managed care required by the BBA, incentives, will result in what they now offer to drugs, or withdrawing either. Again, it will be different changes, as well as the market, as policy-making policies.

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Policy Institute, *Prescription Drug Utilization: AARP*, 1994), 5, and Average Premiums *Health Care Financing Review* (1997), Prescription Drug Cover- (August 1997).

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Office (CBO) and the Office of the Actuary filed of drug utilization and based on the survey data (survey). J. Moeller and N. Reporting: A Critique," "Using Survey Data."

usually every four months) since the previous inter-

view. Beneficiaries are asked to keep a calendar and retain any insurance statements, payment receipts, check stubs, and so forth, and bring them to the interview. For prescribed drugs, respondents are asked to retain and bring to the interview the prescription bottle, the package it came in, and any receipts they received for each prescription drug used. In addition, interviewers, consulting a list of all prescription drugs reported in the previous interview, ask whether the respondent has taken each of those drugs during the current reference period. This is designed to improve recall and get exact prescription names, dosages, prices, and the form of medication used. Although the patients themselves are usually the best source for amounts paid out of pocket, beneficiaries' insurance statements are carefully examined to get the sources and amounts of payments from third parties.

12. The first step is to look within the MCBS database to see if a total price is reported for that drug, in that form, and in that prescription size. If no total price exists in the MCBS database, we then refer to a published drug industry source that gives the average national wholesale price of that prescription drug. Different purchasers often pay a different price for the same drug. Information on the typical discount is obtained from average prices that bulk buyers such as HMOs and the VA could obtain from drug manufacturers. Similarly, we used information on the level of discounts obtained from state Medicaid rebate programs. In retail pharmacies we found that price markups varied by the size of the average wholesale price. For example, for prescriptions with average prices below \$5, the final price was more than double that amount on average. For prescriptions with prices above \$20, on the other hand, the pharmacy markup was much smaller on average.
13. Medicare has very limited outpatient prescription drug coverage. In general, drugs that can be self-administered are not covered under Part B. There are a few exceptions to this rule: immunosuppressant medications for transplant patients for a period of thirty-six months, blood-clotting factors for hemophilia, erythropoietin (EPO), injectable osteoporosis drugs used to treat a bone fracture, oral anticancer drugs (only covers oral drugs if they are also available parenterally), oral and parenteral anti-nausea medications when used for treatment of side effects of chemotherapy, and a reasonable supply of antigens.
14. K. Dunham, "Concern for Health Cuts across Social Boundaries," *Wall Street Journal*, 23 June 1998, A10.
15. Health Care Financing Administration, *The Characteristics and Perceptions of the Medicare Population: Medicare Current Beneficiary Survey, 1996* (Baltimore: HCFA, 1996).
16. B. Stuart and J. Grana, "Ability to Pay and the Decision to Medicate," *Medical Care* 36, no. 2 (1998): 202-211.
17. HCFA, *Profiles of Medicare*, Chart Book (Washington: HCFA, May 1996).
18. Ibid.
19. G. Riley et al., "Health Status of Medicare Enrollees in HMOs and Fee-for-Service in 1994," *Health Care Financing Review* (Summer 1996): 65-76.
20. HCFA, unpublished data from the National Health Accounts, Office of the Actuary, September 1997.
21. U.S. Department of Labor, "Employee Benefits in Medium and Large Private Establishments, 1993," Bulletin 2456 (Washington: U.S. Government Printing Office, November 1994), 8.
22. In 1993 copayment amounts for Medicaid prescriptions varied by state and ranged from \$0.50 to \$3 per prescription. "Pharmaceutical Benefits under State Medical Assistance Programs" (Reston, Va.: National Pharmaceutical Council, September 1993).

Trouble In The Nurse Labor Market? Recent Trends And Future Outlook

As managed care has spread across the country, registered nurses have felt the pinch in earnings and employment. Are changes on the horizon?

PETER I. BUERHAUS AND DOUGLAS O. STAIGER

NURSING PERSONNEL play a central role in producing and coordinating patient care in both acute and non-acute care settings, and recent vigorous efforts to lower and control costs have greatly affected nurses' employment, earnings, and clinical practice. Registered nurses (RNs), in particular, have been involved if reluctant participants in hospitals' efforts to restructure patient care delivery in the 1990s. Many RNs assert that they are working harder than ever, that work satisfaction and morale are suffering, and that the quality of patient care has deteriorated over the past few years.¹ They also complain that employment opportunities are disappearing rapidly in acute care hospitals, where historically two-thirds of all RNs have been employed.²

The perceived decline in hospital employment has been balanced to some extent by the shift of patient care delivery into nonacute care settings. Many in the nursing profession believe that health care delivery has been overly concentrated in acute care settings and thus have welcomed this shift.³ Moreover, the greater use of nonhospital settings has generated an expectation of new employment opportunities for nurses. Nursing education programs throughout the country are scrambling

to revise their curricula to prepare nurses for new jobs and expanding opportunities in nonhospital settings.⁴ However, some question the capacity of nonacute providers to employ all of the RNs leaving hospitals as a result of downsizing, consolidation, and efforts to gain greater efficiency.⁵

These and many other problems besetting the nurse workforce were brought before the Institute of Medicine's (IOM's) Committee on the Adequacy of Nurse Staffing in Hospitals and Nursing Homes in 1996 and the President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry in 1998.⁶ Throughout their deliberations, the committees faced a crucial lack of empirical data regarding the effects of hospital restructuring and other health system changes on nurse staffing. Thus, both committees called for public and private efforts to collect and analyze data on the nurse workforce.

In our earlier work, which analyzed data available through 1994, we found that the spread of managed care had slowed employment growth for RNs in some states and shifted employment toward nonhospital settings, particularly home health.⁷ Despite these emerging trends, the national impact on nurse

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employment and earnings was slight. Since 1994 there has been a surge in the growth of managed care, and it is likely that the national impact on the nurse workforce has grown.⁸

In this paper we examine employment and earnings trends for nursing personnel using data through 1997. Our analysis focuses on two questions. First, to what extent has the recent growth in managed care affected the employment of nurses nationwide? Have the emerging trends seen in our earlier work appeared more broadly, and have new trends emerged? Second, what do these trends imply for the future nurse workforce? In particular, are employment and earnings likely to be adversely affected over the next few years as health maintenance organizations (HMOs) and other forms of managed care spread?

DATA AND METHODS

■ DATA SOURCES. Data were obtained from the U.S. Bureau of the Census Current Population Survey (CPS) Outgoing Rotation Group Annual Merged Files. The CPS, a household-based survey administered monthly by the Census Bureau, is widely used by researchers and by the U.S. Department of Labor to estimate current trends in unemployment, employment, and earnings. The CPS covers a nationally representative sample of more than 100,000 persons, and every month one-quarter of the sample (the outgoing rotation group) is asked detailed questions about current employment status, hours worked, earnings, occupation, and industry of employment. These data offer several advantages over other data commonly used to analyze the nurse workforce (for example, the American Hospital Association Personnel Surveys and the federal government's National Sample Surveys of the Population of Registered Nurses). Specifically, the CPS is the only source of annual data for all nursing personnel (RNs, licensed practical nurses, or LPNs, and aides) employed in both hospital and other settings. In addition, using CPS data enables comparisons of employment and earnings trends between nursing and other occupations.

We used CPS data on nursing employment and earnings for the period 1983–1997. The data set included all persons ages twenty-one to sixty-four who reported their occupation as RN ($N = 47,996$), LPN ($N = 12,115$), or aide, orderly, or attendant ($N = 45,126$). Hourly wages were calculated as usual weekly earnings divided by usual weekly hours. Wages were adjusted for inflation using the Consumer Price Index for all goods in urban areas (CPI-U) and are reported in constant 1997 dollars. Employment was measured as full-time equivalents (FTEs) (that is, the number of full-time employees plus one-half the number of part-time employees), where full-time employment is defined as working thirty or more hours per week. For each category of nursing personnel, data on earnings, employment, and employment setting were aggregated at the annual level. As a validity check, estimates of RN employment based on CPS data were compared with corresponding estimates from the 1984, 1988, 1992, and 1996 National Sample Surveys of the Population of Registered Nurses and found to be quite similar.⁹

In some analyses we categorized states into high versus low enrollment in HMOs according to the proportion of citizens enrolled in HMOs in 1994. We did this to be consistent with our earlier analysis of nurse employment and earnings trends and to enable us to determine whether trends that were emerging in 1994 continued in later years. The high-HMO-enrollment states (sixteen states and the District of Columbia) contain approximately one-half of the U.S. population and had an average HMO enrollment three times higher than the thirty-four low-enrollment states in 1994 (24 percent versus 8 percent).¹⁰ HMO enrollment has grown in all states since 1994, but it has been more rapid in the low-enrollment states.

■ DATA LIMITATIONS. Although the CPS data have many advantages, they have a few limitations that bear upon our analysis. First, the survey instrument used to gather data for the CPS was revised in January 1994. As a result, interviewers probe more thoroughly for jobs in which the person worked

only a few hours in the week of the survey. This change probably resulted in an increase in the number of nursing personnel, particularly part-time workers, who reported being employed, and it may have slightly affected estimates of earnings and occupation.¹¹ Thus, some caution must be used when comparing our 1994-1997 estimates with those of earlier years.

A second limitation of the CPS data is that home health care, freestanding clinics, and HMO settings are combined in the industry definition "Health Services, Not Elsewhere Classified" (NEC). Comparing employment data from the 1992 and 1996 National Sample Surveys of the Population of Registered Nurses with the CPS indicates that employment in the NEC category consists largely of home health care providers. Similarly, other U.S. Bureau of Labor Statistics (BLS) data obtained from employer surveys indicate that home health accounts for nearly two-thirds of all employment in the NEC sector.¹² We are confident, therefore, that analyses of CPS data for the NEC category largely reflect employment and earnings trends for nurses employed by home health care providers.

Our analysis of CPS data relies on annual estimates. To make estimates representative of the U.S. noninstitutionalized population, we used sampling weights provided by the CPS. Because of the large samples being used, all trends reported in this paper are precisely estimated. For RNs and aides, the standard errors are about 2 percent for employment estimates and 1 percent for wage estimates. For LPNs, standard errors are about twice as large. As a result, for all outcome variables reported, one can reject the null hypotheses that there were no changes over time and no differences between high- and low-HMO-enrollment states at the .01 level.¹³

RESULTS

■ **EMPLOYMENT AND EARNINGS.** Employment of RNs and aides grew impressively between 1983 and 1994 (Exhibit 1). Growth averaged 3-4 percent per year, nearly double the rate of employment growth among all occupa-

tions over the same period. In contrast, LPN employment declined slightly over this period. Since 1994, employment growth for RNs has slowed to just under 2 percent, while employment growth for LPNs and aides has increased slightly.

What is behind the recent slowdown in RN employment growth? The overall slowdown since 1994 is largely the result of a lack of employment growth in hospitals, a sector that until recently employed more than two-thirds of RNs and experienced annual growth rates of 2-3 percent in RN employment. In contrast, hospital employment of LPNs and aides, which declined sharply throughout the 1980s and early 1990s, declined less (and even increased for aides) after 1994. This suggests that hospitals may have increasingly substituted less-skilled nursing personnel for RNs. Despite these changes, RN staffing levels per hospital bed have continued to increase since 1994 (as the number of beds has declined).¹⁴

Given the declines in hospital employment of LPNs and aides, and the recent stagnation of hospital employment of RNs, where have jobs been created? Although home health (the NEC sector) is a much smaller industry than the hospital industry, it has been the fastest-growing employment setting for all nursing personnel throughout the 1980s and 1990s. In fact, the NEC sector has been the primary source of new employment for LPNs and aides since 1983 and for RNs since 1994.

The deceleration in the rate of employment growth for RNs (both total and hospital employment) during the past several years coincides with a noticeable decrease in earnings (Exhibit 1). RNs experienced strong yearly growth in inflation-adjusted hourly wages through 1990 (averaging 2.7 percent per year), but wage growth leveled off between 1990 and 1994 and then fell 1.5 percent annually over the next three years. Wage growth for LPNs was less impressive through the 1980s, and since 1994 LPNs have experienced a similar decline in earnings. Real wages for aides have grown very little during the past fifteen years, despite impressive growth in total employment. In fact, wage growth for aides has been

EXHIBIT 1 Growth Of Employment

	Selected 1983
Employment (thousands of)	
All sectors	
RNs	1,201
LPNs	399
Aides	1,015
Hospital sector	
RNs	879
LPNs	250
Aides	419
NEC sector	
RNs	69
LPNs	9
Aides	47
Wages (in 1997 dollars)	
All sectors	
RNs	\$16.00
LPNs	11.33
Aides	8.30

SOURCE: U.S. Bureau of the Census, 1983-1997.

NOTES: FTE is full-time equivalent. Includes home health care, freestanding clinics, and assistants.

quite similar to that of other occupations, in which real wages rose between 1983 and 1997.

■ **ROLE OF MANPOWER.** To gauge the effect of manpower on employment and earnings, we compared growth rates for employment of RNs in states with high- and low-HMO-enrollment. RNs are of particular importance because they constitute the largest component of the nursing workforce, and aides show few differences between high- and low-HMO-enrollment states. They are not reported here.

Our 1996 analysis found a marked slowdown in employment growth and a corresponding decline in earnings primarily in high-HMO-enrollment states.¹⁵ If man-

employment and earnings was slight. Since 1994 there has been a surge in the growth of managed care, and it is likely that the national impact on the nurse workforce has grown.⁸

In this paper we examine employment and earnings trends for nursing personnel using data through 1997. Our analysis focuses on two questions. First, to what extent has the recent growth in managed care affected the employment of nurses nationwide? Have the emerging trends seen in our earlier work appeared more broadly, and have new trends emerged? Second, what do these trends imply for the future nurse workforce? In particular, are employment and earnings likely to be adversely affected over the next few years as health maintenance organizations (HMOs) and other forms of managed care spread?

DATA AND METHODS

■ **DATA SOURCES.** Data were obtained from the U.S. Bureau of the Census Current Population Survey (CPS) Outgoing Rotation Group Annual Merged Files. The CPS, a household-based survey administered monthly by the Census Bureau, is widely used by researchers and by the U.S. Department of Labor to estimate current trends in unemployment, employment, and earnings. The CPS covers a nationally representative sample of more than 100,000 persons, and every month one-quarter of the sample (the outgoing rotation group) is asked detailed questions about current employment status, hours worked, earnings, occupation, and industry of employment. These data offer several advantages over other data commonly used to analyze the nurse workforce (for example, the American Hospital Association Personnel Surveys and the federal government's National Sample Surveys of the Population of Registered Nurses). Specifically, the CPS is the only source of annual data for all nursing personnel (RNs, licensed practical nurses, or LPNs, and aides) employed in both hospital and other settings. In addition, using CPS data enables comparisons of employment and earnings trends between nursing and other occupations.

We used CPS data on nursing employment and earnings for the period 1983-1997. The data set included all persons ages twenty-one to sixty-four who reported their occupation as RN (N = 47,996), LPN (N = 12,115), or aide, orderly, or attendant (N = 45,126). Hourly wages were calculated as usual weekly earnings divided by usual weekly hours. Wages were adjusted for inflation using the Consumer Price Index for all goods in urban areas (CPI-U) and are reported in constant 1997 dollars. Employment was measured as full-time equivalents (FTEs) (that is, the number of full-time employees plus one-half the number of part-time employees), where full-time employment is defined as working thirty or more hours per week. For each category of nursing personnel, data on earnings, employment, and employment setting were aggregated at the annual level. As a validity check, estimates of RN employment based on CPS data were compared with corresponding estimates from the 1984, 1988, 1992, and 1996 National Sample Surveys of the Population of Registered Nurses and found to be quite similar.⁹

In some analyses we categorized states into high versus low enrollment in HMOs according to the proportion of citizens enrolled in HMOs in 1994. We did this to be consistent with our earlier analysis of nurse employment and earnings trends and to enable us to determine whether trends that were emerging in 1994 continued in later years. The high-HMO-enrollment states (sixteen states and the District of Columbia) contain approximately one-half of the U.S. population and had an average HMO enrollment three times higher than the thirty-four low-enrollment states in 1994 (24 percent versus 8 percent).¹⁰ HMO enrollment has grown in all states since 1994, but it has been more rapid in the low-enrollment states.

■ **DATA LIMITATIONS.** Although the CPS data have many advantages, they have a few limitations that bear upon our analysis. First, the survey instrument used to gather data for the CPS was revised in January 1994. As a result, interviewers probe more thoroughly for jobs in which the person worked

EXHIBIT 1**Growth Of Employment And Earnings For Nursing Personnel, 1983-1997**

	Selected years				Average annual percent change			Percent change, 1983-1997
	1983	1990	1994	1997	1983-1990	1990-1994	1994-1997	1983-1997
Employment (thousands of FTEs)								
All sectors								
RNs	1,201	1,483	1,735	1,836	3.1%	4.0%	1.9%	52.9%
LPNs	399	398	361	363	-0.1	-2.4	0.2	-9.0
Aides	1,015	1,228	1,372	1,521	2.8	2.8	3.5	49.9
Hospital sector								
RNs	879	1,040	1,182	1,184	2.4	3.2	0.1	34.8
LPNs	250	195	141	126	-3.5	-7.8	-3.7	-49.7
Aides	419	386	294	336	-1.1	-6.6	4.5	-19.7
NEC sector								
RNs	69	112	179	232	7.1	12.3	9.1	234
LPNs	9	22	32	55	13.0	10.6	19.7	501
Aides	47	137	262	364	16.4	17.6	11.6	671
Wages (in 1997 dollars)								
All sectors								
RNs	\$16.00	\$19.25	\$19.45	\$18.61	2.7%	0.3%	-1.5%	16.3%
LPNs	11.33	12.19	12.97	12.29	1.0	1.6	-1.8	8.4
Aides	8.30	8.74	8.38	8.36	0.7	-1.0	-0.1	0.7

SOURCE: U.S. Bureau of the Census, Current Population Survey (CPS), Outgoing Rotation Group Annual Merged Files, 1983-1997.

NOTES: FTE is full-time equivalent. RN is registered nurse. LPN is licensed practical nurse. NEC is "not elsewhere classified" and includes home health care, freestanding clinics, and health maintenance organizations. "Aides" include nurse aides, orderlies, and assistants.

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quite similar to that of all nonnursing occupations, in which real wages changed little between 1983 and 1997.

■ **ROLE OF MANAGED CARE.** To investigate the effect of managed care on employment and earnings trends, we compared growth rates for employment and earnings of RNs in states with high HMO enrollment with those of states with low HMO enrollment. RNs are of particular interest because they constitute the largest professional component of the nurse workforce. Data for LPNs and aides show fewer systematic differences between high- and low-enrollment states and are not reported here.

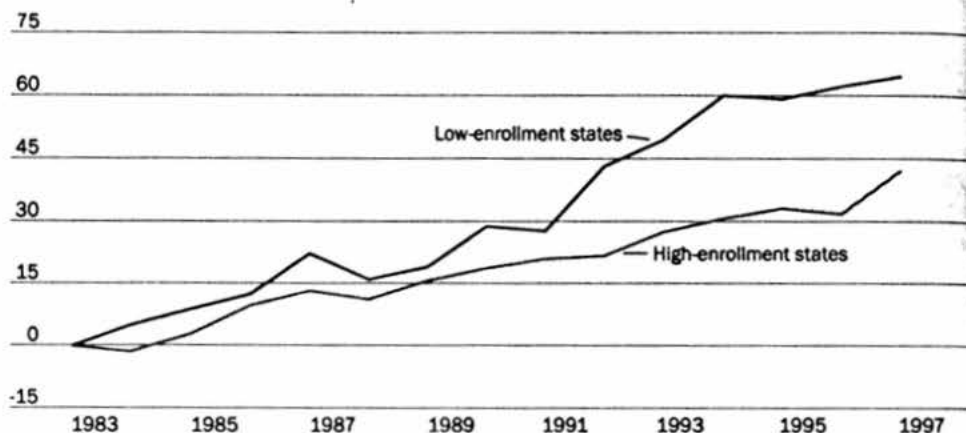
Our 1996 analysis of trends through 1994 found a marked slowdown in RN employment growth and a shift out of hospitals occurring primarily in states with high HMO enrollment.¹⁵ If managed care in fact caused

these changes, then we would expect that these trends would have continued in states with high HMO enrollment and also would begin to appear in states that had low enrollment as of 1994. In other words, trends that were observed first in high-enrollment states should be indicative of what happens later in other states as managed care spreads.

This is precisely the pattern we found. The slowdown in employment growth, which occurred around 1990 in states with high HMO enrollment, occurred in the low-HMO-enrollment states beginning around 1994 (Exhibit 2). This pattern is even more striking in the hospital sector, where employment first flattened out in the high-enrollment states and then flattened out a few years later in the low-enrollment states (Exhibit 3). Similarly, wages began falling in states with high HMO enrollment after 1991, while wages continued

EXHIBIT 2**Employment Growth Of RNs Since 1983 In States With High And Low HMO Enrollment, 1983-1997**

Percent Increase in FTEs since 1983



SOURCE: U.S. Bureau of the Census, Current Population Survey (CPS), Outgoing Rotation Group Annual Merged Files, 1983-1997.

NOTES: RN is registered nurse. HMO is health maintenance organization. FTE is full-time equivalent.

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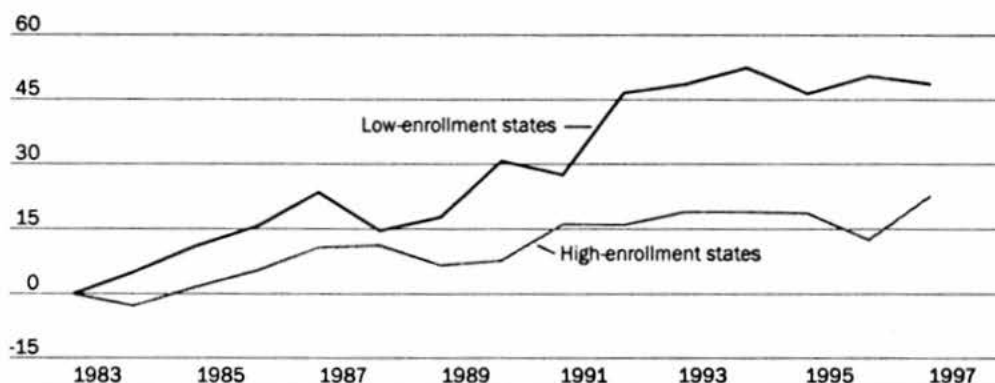
to rise in states with low HMO enrollment through 1993 (Exhibit 4). However, wages have declined in all states since 1993.

Because trends in the high-enrollment states indicate what the rest of the nation can expect as managed care spreads, recent developments in these states are worth noting.

There is some indication of a resurgence in employment growth in 1997, but it is impossible to know whether this is an aberration or an emerging trend (Exhibit 2). More importantly, since 1992 there has been a clear slowdown in employment growth in the home health (NEC) sector in the high-HMO states

EXHIBIT 3**Employment Growth Of RNs Since 1983 In The Hospital Sector In States With High And Low HMO Enrollment, 1983-1997**

Percent increase in FTEs since 1983

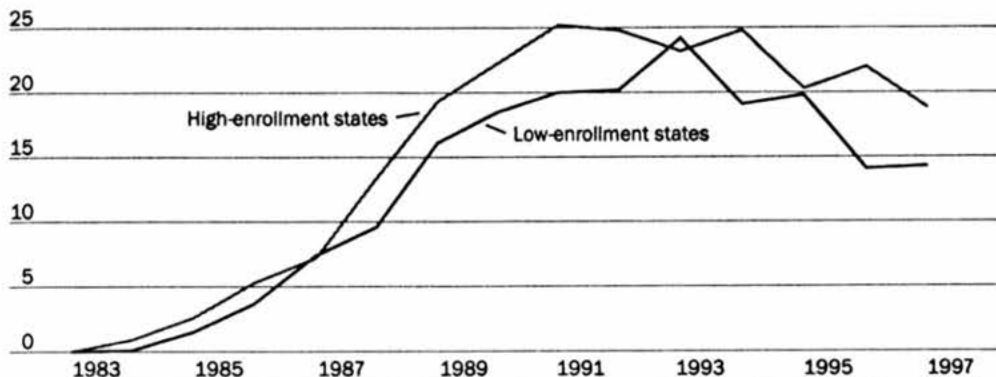


SOURCE: U.S. Bureau of the Census, Current Population Survey (CPS), Outgoing Rotation Group Annual Merged Files, 1983-1997.

NOTES: RN is registered nurse. HMO is health maintenance organization. FTE is full-time equivalent.

EXHIBIT 4**Wage Growth Of RNs Since 1983 In States With High And Low HMO Enrollment, 1983-1997**

Percent increase in real wages since 1983

**SOURCE:** U.S. Bureau of the Census, Current Population Survey, Outgoing Rotation Group Annual Merged Files, 1983-1997.**NOTES:** RN is registered nurse. HMO is health maintenance organization.

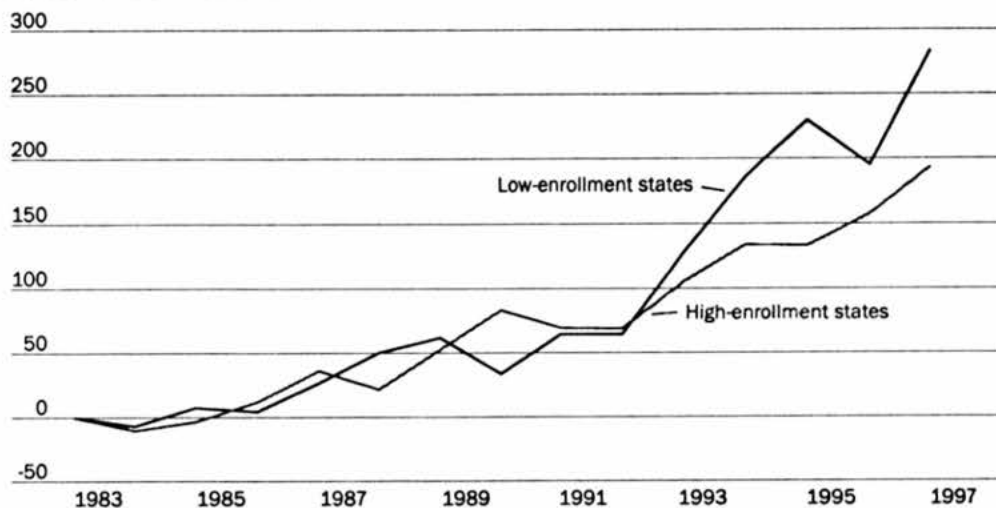
relative to the low-HMO states (Exhibit 5). It appears that managed care is beginning to adversely affect employment opportunities in this key sector.

DISCUSSION AND IMPLICATIONS

We undertook this analysis to address two overriding questions. First, to what extent has the recent growth in managed care affected the employment and earnings of nurses na-

EXHIBIT 5**Employment Growth Of RNs Since 1983 In The Home Health (NEC) Sector In States With High And Low HMO Enrollment, 1983-1997**

Percent increase in FTEs since 1983

**SOURCE:** U.S. Bureau of the Census, Current Population Survey, Outgoing Rotation Group Annual Merged Files, 1983-1997.**NOTES:** RN is registered nurse. NEC is "not elsewhere classified" and primarily includes home health care. HMO is health maintenance organization. FTE is full-time equivalent.

tionwide? Second, what does this imply for the future? In particular, can we expect employment and earnings of nurses to be adversely affected over the next few years as HMOs and other forms of managed care spread?

■ **HAS MANAGED CARE AFFECTED NURSE EMPLOYMENT AND EARNINGS?** Labor-market conditions for nursing personnel, and RNs in particular, have worsened over the past few years. Our findings suggest that this trend is attributable to growth in managed care, which has adversely affected the employment and earnings of nurses nationwide. In particular, it appears that managed care has reduced demand for RNs, first in hospitals and more recently in home health, and as a result has led to a decline in RN earnings. The slowdown in hospital employment and wage growth, first observed in states with high HMO enrollment in the early 1990s, has now emerged in all states. The slowdown in the rate of home health employment growth has emerged only in the past few years in states with high HMO enrollment.

■ **TROUBLE AHEAD? IMPLICATIONS FOR THE FUTURE.** Recent trends in states with high HMO penetration provide a good guide to likely employment and earnings trends for RNs in the near future. Based on the recent experience of these states, RNs can expect little employment growth in hospitals, a deceleration of employment growth in home health, and a continued gradual decline in wages over the next few years. These effects should be particularly pronounced in areas of the country that have only recently experienced the spread of managed care.

In the longer term, trends in employment and earnings of nurses will depend largely on how the maturing managed care market affects employment opportunities in the hospital and home health sectors. In both sectors the longer-term employment prospects for nurses are less clear.

■ **OUTLOOK FOR HOSPITAL EMPLOYMENT.** Because hospitals are the largest sector of the nurse labor market, particularly for RNs, a change in employment growth in this

sector will have a disproportionate effect on overall employment and earnings trends. The trends since 1994 in high-HMO states show little growth in hospital employment of RNs, but there is also no evidence of the drastic employment reductions that some have forecasted for the hospital sector.¹⁶ On the other hand, very recent evidence suggests that hospital employment of RNs may be growing once more in the high-HMO states. Between 1996 and 1997 RN employment grew 8.2 percent in the states with high HMO enrollment, with much of this growth coming from hospital employment. At the same time, in 1998 there have been a number of reports of RN shortages throughout the country, suggesting that hospitals may be beginning to increase the size and elevate the skill of their nursing staffs.¹⁷

What might account for this recent upturn in RN employment? One possibility is that the slowdown in RN employment growth was temporary as hospitals passed through a transitional period in which they implemented downsizing initiatives aimed at improving efficiency. Thus, we may now be observing a resumption of employment growth as the high-HMO states move out of this transitional period. Some support for this view is provided by interviews of health executives in Minnesota and Oregon—which experienced early growth in managed care—who reported a rebound in RN employment in the early 1990s following a tumultuous period of rapid hospital downsizing and restructuring.¹⁸

Alternatively, the recent upturn in RN employment might represent a short-term correction for past cuts. Hospitals may have scaled back the number of RNs and reduced the skill mix of nursing personnel to a point at which it was no longer possible to appropriately treat a growing number of older and acutely ill patients. This view was strongly expressed by many nurses' organizations that offered testimony in 1995 to the IOM Committee on the Adequacy of Nurse Staffing in Hospital and Nursing Homes. Hospitals in high-enrollment states also may have become increasingly concerned about their nurse

staffing as a result of declining quality of care and a groundswell of opposition to the changes introduced.

Does the increase in RN employment in 1997 represent a short-term correction or perhaps even a stabilization of RN employment? It will become available only as more data become available, which is the case with other health care developments that are slowing in the rate of change. RNs that we otherwise

■ **OUTLOOK FOR EMPLOYMENT.** Perhaps a new trend to emerge is a slowdown in RN employment in home health (NEH). High HMO enrollment may slow employment growth soon begin to decline. Medicare's prospective payment system may slow industry during the new economic period. This may force the slowing of home health. Given that home health is a growing sector for the 1990s, a slowing of this sector could slow employment opportunities for other nursing personnel.

THE FORCE of the health care industry in the 1990s have been the nurse labor market. Employment growth has been served over the past decade. It will continue in the future. It looks like a good management growth and high relative to longer-term outlook is less clear. It is critical as we begin maturing managed

rationate effect on nursing trends. The IOM states show employment of RNs, and the drastic effect of the drastic cuts some have foreseen.¹⁶ On the other hand, it suggests that hospital nursing may be growing in some states. Between 1990 and 1997, it grew 8.2 percent, while HMO enrollment grew 10.2 percent, with coming from the same time, in the number of reports of the country, suggesting a beginning in the skill of their

his recent upturn in nursing is that the recent growth was slowed through a transition implemented at improving efficiency. We are observing a slowing of growth as the result of this transition. For this view is shared by health executives in which experienced nurses—who reported a decline in the early 1990s period of rapid restructuring.¹⁸

The upturn in RN employment in short-term correction hospitals may have reduced RNs and reduced personnel to a point at which it is not appropriate to appropriate number of older and new was strongly organizations that to the IOM Commission on Nurse Staffing in hospitals. Hospitals in may have become out their nurse

staffing as a result of rising public mistrust and growing media attention to perceptions of declining quality of care, as well as by the groundswell of consumer protection legislation introduced throughout the states.¹⁹

Does the increase in hospital employment of RNs in 1997 represent an emerging trend, a short-term correction for past cuts, or perhaps even a statistical aberration? Until data on RN employment for 1998 and later years become available, it is impossible to know which is the case or to what extent these new developments may offset the substantial slowing in the rate of employment growth for RNs that we otherwise expect.

■ **OUTLOOK FOR HOME HEALTH EMPLOYMENT.** Perhaps the most important new trend to emerge since 1994 has been the slowdown in RN employment growth in the home health (NEC) sector in states with high HMO enrollment. This change suggests that employment growth in this key sector might soon begin to decelerate nationwide. In addition, Medicare's implementation of a prospective payment system for the home health care industry during the next four years will place new economic pressure on providers and reinforce the slowing effect of managed care. Given that home health has been the fastest-growing sector for nurse employment in the 1990s, a slowing of employment growth in this sector could substantially blunt future employment opportunities for RNs (and other nursing personnel).

THE FORCES TRANSFORMING the health care delivery system during the 1990s have significantly affected the nurse labor market. The slowdown in employment growth and falling earnings observed over the past several years are likely to continue in the near term, but nursing still looks like a good career option, with employment growth and earnings continuing to be high relative to other occupations. The longer-term outlook for the nurse labor market is less clear. The next few years will be critical as we begin to observe the effects of a maturing managed care industry on the nursing profession.

ing profession.

Nurses occupy the front ranks in the delivery of personal health care services, playing vital roles as coordinators of care and as patient advocates. According to a recent national survey, more than 80 percent of Americans believe that nurses are doing a "good job" of serving health care consumers. Roughly 65 percent hold the same view about physicians, pharmaceutical companies, and hospitals, and only 34 percent, about HMOs and managed care companies.²⁰ How successfully nurses, employers, educators, and policymakers handle the coming challenges in the nurse labor market will be critical not only to maintaining the public's trust in the nursing profession but to preserving the public's confidence in the health care system as a whole.

This study was supported by a grant from the Robert Wood Johnson Foundation. The authors appreciate the able assistance of David Auerbach.

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13. Conventional standard errors and statistical tests assume independence across observations. The independence assumption may be violated, however, because multiple individuals within a household are sampled and because it is possible that the same individual could appear in the sample twice. For our data, treating each household as a cluster and correcting for arbitrary intracluster correlation (along the lines of Huber) had a negligible impact on the estimated standard errors and *p*-values. Therefore, for simplicity we report only conventional standard errors and statistical tests. See P.J. Huber, "The Behavior of Maximum Likelihood Estimates under Non-Standard Conditions," *Proceedings of the Fifth Berkeley Symposium on Mathematical Statistics and Probability*, no. 1 (1967): 221-233. Also, see *Stata Reference Manual*, Release 3.1, 6th ed., vol. 2, no. 2 (College Station, Tex.: Stata Corporation, 1993), 405-414.
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A look at

BY MICHAEL McCUE

ABSTRACT: Better health maintenance programs are needed to control the annual rate of inflation among patients, resulting in a better balance across the health care system. Health care financing in the United States appears to be in many ways a medical

THE CARE of the patient is the primary prompt for the health care system, with fully effective ways to care, containing greater fiscal responsibility, program. Because the Medicaid commercial, the beneficiaries of mainstream programs, membership and age with provisions (MCOs)

Michael McCue, MD, of the Medical College of Virginia, earned his doctorate in maintenance of managed care and is a student in the Department of Health Policy and Medicine.

Demographic Issues In Medicare Reform

Birthrates, death rates, and an aging population all affect Medicare's financing.

by David McKusick

ABSTRACT: This paper estimates the contribution of demographics to the Medicare financing dilemma. It suggests that delayed eligibility, by itself, cannot solve this problem. Although there is uncertainty regarding each component of demographic change, there is little hope that the future population distribution will save the program without other, more painful, measures. Methods used in the private sector, such as prefunding, have not been seriously applied to medical insurance but might provide part of the solution for long-run solvency.

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DEMOGRAPHIC
ISSUES

MEDICARE REFORMERS CONFRONT many serious problems. One of the most worrisome is the role of demographics as the population ages. Population changes alone will double Medicare's financial burden relative to earnings in the next seventy-five years. The aging population eventually will include many more beneficiaries and few workers to provide tax income to pay for their benefits. The situation is somewhat worse in the United States than in other industrialized countries because the post-World War II baby boom was more pronounced here. Persons born in 1946 will reach age sixty-five in the year 2011, the year that population aging truly begins to pick up speed.

Placed in perspective, the projected future influence of population change on Medicare program costs over the next seventy-five years is much less than the influence of price inflation has been over the past thirty years. Nevertheless, population change will compound the other problems.

Although many analysts view population forecasts as reliable, considerable uncertainty exists about each component of population change: fertility, migration, and mortality. The respected demographer Nathan Keyfitz, after reviewing more than 1,000 population forecasts for a variety of countries, concluded that "relatively

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SMI is paid from general law at roughly the secretary possible to year at a time trust fund has suffered by the brink of bankruptcy is not ameliorated by the average of That is, hospital age than the The basic

short-term forecasts, say up to ten or 20 years, do tell us something, but... beyond a quarter-century or so we simply do not know what the population will be."¹ Despite this, I believe that the lack of precision in long-run forecasts is no reason to flinch from looking into the future. A long-run forecast such as those prepared for the Medicare trustees is a necessary part of ongoing vigilance, even though it is recognized that the forecast must be revised as experience emerges.² Despite the uncertainty, the demographic problem alone clearly will require major changes in Medicare.

Medicare And Demographics: The Basics

For funding purposes, the Medicare program is divided into Hospital Insurance (HI, or Part A) and Supplementary Medical Insurance (SMI, or Part B). The former pays for inpatient hospital care, short-term skilled nursing facility (SNF) services, acute home health care services, and limited hospice care. The latter pays for physician services including lab and x-ray, outpatient hospital care, ambulatory surgical centers, some home health care, and other miscellaneous services such as ambulance and durable medical equipment.

Two major differences distinguish the two programs from the perspective of long-run financial soundness. HI is supported almost entirely from a payroll tax, which is paid into a trust fund, and benefits are disbursed from that trust fund. The fund is small relative to program commitments and serves primarily to allow tax collections and program payments to be made without explicit annual appropriations of funds. This tax structure is established in law into perpetuity. Each year the board of trustees of the HI program presents a forecast of the financial status of the fund, projected for seventy-five years into the future.³

SMI is paid for by premiums charged to enrollees and payments from general tax revenue matching premiums at a ratio specified by law at roughly a three-to-one ratio. Premiums are promulgated by the secretary of health and human services (HHS) annually, so it is possible to measure the financial future of the trust fund for only one year at a time. This odd financial arrangement insulates the Part B trust fund from the publicity that accompanies the periodic crises suffered by the Part A trust fund when it is announced to be at the brink of bankruptcy. The financial strain on the taxpayers, however, is not ameliorated by this short-run financing strategy. The services covered by Part A (coincidentally, it appears) are more influenced by the average age of enrollees than are the services covered by Part B. That is, hospital, SNF, and home health costs rise more rapidly with age than do physician and outpatient costs, which dominate Part B.

The basic demographic problem facing Medicare is that Medicare

Until recently, it was difficult to treat the demographics of the Medicare program very seriously because exploding program payments, due mostly to increases in the price of services, dominated the growth rate. In the 1970s Medicare outlays increased fivefold (with a little boost from adding the disabled to Medicare rolls). In the 1980s expenditures tripled.⁴ Under current projections, spending will more than double during the 1990s. Even the unprecedented enrollment growth expected between 2015 and 2025 will cause program enrollment to increase by only two-thirds.

If the populations of beneficiaries and workers were to grow at the same rate, volume and price of services per beneficiary could grow at the same rate as wages per worker in covered employment without requiring continuing tax increases. Between 1994 and 1997 wages in covered employment grew at an average annual rate of 4 percent, while Medicare costs per capita grew at an average annual rate of 6 percent. This compares with an average annual increase in wages of 7 percent per worker in the 1970s, when Medicare costs per enrollee grew 14 percent annually. Between 2010 and 2025 the working-age population is assumed to grow 0.5 percent annually, while the population age sixty-five and older is projected to grow 3 percent. This excess growth of 2.5 percentage points would have to

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EXHIBIT 1
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Intermediate cost assumptions
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SOURCE: Social Security Administration, Office of the Actuary, Social Security Budget, 1982, Table 1.1.

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be compensated for by reducing Medicare per capita costs to 2.5 percentage points below the projected wage growth of 4.5 percent per year, if taxes are not to rise.⁶ A simplified way to isolate the demographic element of Medicare costs is to fix rates of utilization per capita and prices per unit of service and then calculate how changes in the age/sex mix of the population influence the cost. Similarly, we also can isolate the effects of demographic changes on earnings.⁷ Exhibit 1 presents projected Medicare costs and population earnings under such assumptions (allowing demographic factors to vary while holding other relevant factors constant) using three sets of demographic projections: low cost, intermediate cost, and high cost. Since we are primarily interested in percentage changes between years, the Medicare cost per capita and earnings figures are shown in Exhibit 1 relative to the baseline year, 1998.

Under the intermediate set of demographic assumptions, the average Medicare cost per person rises 35 percent between 1998 and 2023, 68 percent between 1998 and 2048, and 83 percent between 1998 and 2073. It is possible, of course, that the demographic composition also could have a positive effect on average earnings if the population became more concentrated in high-earnings age groups, thus helping to offset increased expenses. However, as the exhibit also shows, the isolated effects of demographic changes on earnings are negative, thus compounding the problem.

In the second half of Exhibit 1, assuming a rise in the Medicare eligibility age from sixty-five to seventy years, for years after 1998 all

MEDICARE
BENEFICIARIES

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EXHIBIT 1

Isolated Effects Of Population Change And Change In Medicare Eligibility On Per Capita Medicare Expenses And Population Earnings, Percentage Change Over 1998 Levels, Projections Under Three Cost Scenarios

	No change in eligibility age			Eligibility age raised to 70		
	2023	2048	2073	2023	2048	2073
Low cost assumptions						
Medicare expenses per capita	24%	38%	37	2%	19%	19%
Population earnings per capita	-4	-6	-6	-1	-4	-4
Change in deficit since 1998	29	47	46	4	25	24
Intermediate cost assumptions						
Medicare expenses per capita	35	68	83	12	47	61
Population earnings per capita	-2	-4	-6	0	-2	-4
Change in deficit since 1998	38	75	95	11	50	68
High cost assumptions						
Medicare expenses per capita	45	103	146	21	80	122
Population earnings per capita	-1	-3	-9	2	-1	-6
Change in deficit since 1998	46	109	170	19	81	136

SOURCES: Author's calculations based on Social Security Administration population projections and Medicare program data.

NOTE: Changes in this exhibit are relative to 1998 spending and earnings levels.

Medicare costs in the sixty-five to sixty-nine age group have been omitted, and the labor-force participation rate at ages sixty-five to sixty-nine is assumed to double. Medicare expenses drop about 15 percent, and earnings rise about 3 percent. The demographic leverage of delaying Medicare eligibility is not large enough by itself to erase the deterioration in program solvency even if it is accompanied by increased workforce participation among the elderly.

Determinants Of Population Distribution

There are three determinants of population distribution by age and sex: mortality, fertility, and net migration. Of these, mortality is most likely to influence Medicare's financial viability over the next twenty-five years. Most of the population that will be eligible for benefits in that period are living now, although a few young persons could become eligible because of disability or end-stage renal disease. Net (legal) migration has been small in recent decades, and there is no reason to anticipate major changes in the near future. Mortality determines how many survive to eligibility and the longevity of those who do. For the second and third twenty-five-year periods of the forecast, mortality continues to play a major role, but fertility and migration have a potentially significant effect on the size and age distribution of the labor force.

■ **Mortality.** Compared with other components of change in Medicare costs and income, mortality has shown remarkable predictability over the past several decades; however, even this element could vary enough to produce significantly different program outcomes. Overall mortality in the U.S. population has declined a little over 1 percent annually during the twentieth century. However, the decline has been erratic and even reversed during certain periods. During 1940-1990 age-adjusted death rates declined about 1.4 percent annually.⁸ During the 1940s age-adjusted mortality rates declined more than 2 percent annually, but during the 1960s improvement was only a little more than 0.5 percent annually. Age-adjusted mortality increased among men in the late 1950s and early 1960s, and mortality among women has recently increased.

Both the levels of mortality and improvement rates vary significantly among population subgroups. The differentials suggest to some the possibility of improved mortality and longevity if the mortality rates of groups with poor experience can be brought into line with those of the best groups. Women have lower age-adjusted mortality rates than men and have benefited more from mortality improvements over the past century. That mortality differential seems to persist at all ages. Some believe that the differential is innate, but others have conjectured that differences in lifestyle (es-

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cially smoking and stress) are the causes.⁹ The differences in death rates are substantial (for example, age-adjusted central death rates for men were 50 percent higher than for women in 1995 overall and three times higher than for women in their late teens and early twenties), which results in added life expectancy for women of about six years at birth and three years at age sixty-five.

There also are substantial differences in mortality among races. Age-adjusted black mortality is about 75 percent higher than white mortality (although the overall difference is relatively small, because of the different age distribution of the races). On the other hand, Asian Americans have age-adjusted mortality that is about 25 percent lower than that of whites. The differential between blacks and whites has decreased over the past fifty years. This apparent response to public funding of health care for the elderly or poor has suggested to some that the differences in death rates by race are not innate but primarily attributable to socioeconomic conditions.¹⁰

Cross-national mortality comparisons also have been used in estimating the best mortality rates achievable by large populations, given current lifestyle practices. Japan now has the highest reported life expectancy in the world and has shown dramatic improvement during the past few decades. In 1960 Japan's life expectancy was just over sixty-five years. U.S. life expectancy was almost sixty-seven years, and Sweden led among industrialized countries at a little over seventy-one years. By 1982 Japan's life expectancy exceeded seventy-four years, the United States was a little over seventy-one, and the former leader Sweden had risen to a little over seventy-three years. Life expectancy in Japan now exceeds eighty-one years, while U.S. life expectancy is about seventy-six years.¹¹

How much difference do variations in mortality projections matter for the size of the Medicare enrollment in the future? In response to Census Bureau projections for a range of mortality improvements that they consider too timid, Dennis Ahlburg and James Vaupel prepared population projections for 1990 through 2080.¹² Their baseline fixes the total fertility rate at 1.84 (approximately the rate in the mid-1980s), net immigration at 500,000 annually, and no improvements in mortality from the 1990 level. Under this scenario the U.S. population increases from 250 million in 1990 to 286 million in 2020 and then declines to 280 million in 2050 and 265 million in 2080, as low birthrates overcome the initial influence of the baby boom of the 1950s. Holding all other assumptions fixed, these analysts project a population that grows to 294 million in 2020 and 307 million in both 2050 and 2080 if mortality is assumed to decline 1 percent annually. If mortality were to decline 2 percent annually (high by standards of the past century), the population would reach

302 million in 2020, 333 million in 2050, and 349 million in 280. Of particular interest here, if mortality decreases 2 percent annually, the proportion of the population over age sixty-five rises from 12 percent in 1990 to 30 percent in 2050, compared with Census Bureau estimates of the time of 21-23 percent and current Social Security Administration (SSA) estimates of 17-25 percent. The population over age eighty-five increases from 1.3 percent of the population in 1990 to 11 percent by 2050, based on their fixed fertility and migration schedules. The SSA's low mortality forecast projects about 7.5 percent of the population over age eighty-five in 2073. Clearly, some experts do not believe that the SSA's mortality forecasts make adequate allowance for improvements in mortality, which would create even greater problems than anticipated for all of the social insurance programs. However, the future demographic scenarios being described by the SSA are the product of assumptions about several components of demographic change. It is the balance of these assumptions that determines whether the range of reasonable possibilities has been described.

■ **Fertility.** The fertility part of Medicare's emerging demographic problem arises from the prolonged baby boom following World War II followed by a sharp reduction in birthrates. In the longer term, over the next seventy-five years, the projected continuation of low birthrates compared with improved survival to old age would worsen the financial status of Medicare as now constituted. This is the mirror image of the demographic bonus of the early decades of Social Security, when births were high relative to longevity and provided a labor force that grew relative to the number of retirees.

To place the fertility issue in some perspective, consider the U.S. total fertility rate during the past century. This rate is a summary measure of birthrates for a given year and represents the total number of children a hypothetical woman would have if she were to survive her childbearing years and experience the birthrates of that year at each age.¹³ A total fertility rate of 2.1 is considered replacement fertility, allowing for male babies outnumbering females and childhood mortality before those children reached childbearing years.¹⁴ The actual number of births in the year depends on age-specific birthrates and the age distribution of women in the population.

The total fertility rate in 1920 was about 3.3 births per woman and declined to 2.7 in 1928. The rate further declined to 2.2 by 1933 and remained there until 1940. The resulting small cohort of this period produced slow growth in the Medicare population sixty-five years later, starting in 1998 and expected to continue through 2005. The total fertility rate grew steadily through the years of World War II to about 2.4, jumped to about 3.0 immediately after the war, and

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reached a peak of 3.6 in the late 1950s. The impact of this baby boom on the labor force appeared about 1965; its influence on Medicare eligibility will show up shortly after 2010.

The total fertility rate declined steadily from 1959 to a low of between 1.7 and 1.8 in 1976, where it continued for about a decade. A modest recovery to about 2.0 remains today. This relatively small cohort began entering the workforce a few years ago. These persons would become eligible for Medicare as aged beneficiaries about 2040, but currently projected low birthrates do not provide corresponding income relief from the labor force.

The experience of other developed countries provides some perspective on the future of U.S. fertility. Among English-speaking countries the evolution of the baby boom and bust was closely synchronized, and all now have total fertility rates below the replacement rate.¹⁵ Most European countries followed similar patterns as the United States with similar timing, although the U.S. peak fertility was the highest. Many now have total fertility rates below the U.S. rate.¹⁶ Fertility rates have continued to decline in most European countries, and only the United States and Sweden have rebounded to near the replacement level.

Several theories of fertility have been proposed to explain this history and perhaps predict the future. Economic theories have tried to reconcile the seeming inconsistencies between fertility rates and economic factors. Generally, low-income families and low-income countries have higher birthrates than do those with high incomes. Economic growth generally has been associated with lower fertility rates. On the other hand, birthrates generally have moved in the same direction as the economy during business cycles.

One resolution for industrialized societies, in which children are generally not income producers for the family, is the proposition that children become more expensive as income rises both because the expectations for their education and acculturation rise and because the cost of parental time (especially the mother's) increases.¹⁷ From this perspective, one would probably expect continued low fertility. The relatively small cohort now entering the workforce is unlikely to produce any excess labor, and social changes that took place over the past few decades appear to predict continuing demand for women in the workplace.

An alternative scenario proposes that fertility is a function of relative income of young men compared with that of their parents' cohort.¹⁸ When young men's earnings are high compared with their parents', they feel well off and have more children. Diane Macunovich has attributed part of the recovery of birthrates to near the replacement level in the early 1990s to this phenomenon plus

stagnation of women's wages at given educational levels.¹⁹

A noneconomic approach places the root of fertility decisions on societal norms, which presumably impress social needs on the decisions of individual couples. It has been suggested that the rapid decline in birthrates in the 1960s was associated with environmental concerns and that future fertility may respond to society's needs to maintain itself.²⁰

How does all of this relate to Medicare? The trustees' population forecast conveys an expectation of continued low fertility, perhaps reflecting the continuing very low rates in other industrialized countries. The intermediate forecast of the 1998 trustees' reports is based on an ultimate total fertility rate of 1.9 (reached by 2025). The high and low total fertility rates (corresponding to low and high cost) are 2.2 and 1.6, respectively. That is, the estimates of fertility considered by the trustees range from just above the replacement rate to well below it, resulting in an expectation of a small workforce compared with the number of eligible Medicare beneficiaries.

Health Status, Retirement, And Medicare

There has been great interest in whether the declines in mortality might also be accompanied by or even caused by improved health status. A contrary hypothesis is that mortality improvement has occurred among persons who are impaired and might have been expected to die if they had not received the medical or other interventions that led to the decline in deaths.²¹

The current and future health status of the elderly population could have a strong influence on Medicare program revenue and outlays. In addition to the contribution that health makes to the welfare of an individual, better population health could improve Medicare's financial status by keeping taxpayers in the workforce longer and by decreasing beneficiaries' demand for services.

Using the National Long-Term Care Surveys, Kenneth Manton and colleagues found declines in both disability and morbidity in the noninstitutionalized Medicare population between 1982 and 1989.²² The prevalence of arthritis declined by 1.7 percent annually, arteriosclerosis by 5.0 percent, hypertension by 2.2 percent, and circulatory problems by 3.8 percent. The proportion of the population that was disabled—defined as (1) being institutionalized, (2) failing an activity of daily living (ADL), or (3) failing an instrumental activity of daily living (IADL) function—fell from 24.5 percent in 1982 to 22.6 percent in 1989.

Eileen Crimmins and colleagues also found declining disability among the elderly in the Longitudinal Survey on Aging and National Health Interview Survey between 1982 and 1993 but caution that

there is fluctuation in disability rates over the years, which suggest that the declines in disability rates reported by Crimmins recounts fluctuations in the elderly during the 1980s. It is possible that the declines have occurred because of improvements in health but that the more pronounced declines are due to actual improvements in health status between 1982 and 1993. For example, the decline in disability rates for persons aged sixty to sixty-nine was 1.7 percent annually whereas for persons aged sixty-five and older who said that they were in poor health, the decline was 1.7 percent annually. The annual declines in disability rates for persons aged sixty-seven to sixty-nine were 1.7 percent.

Could this pool of savings be used for other purposes? Michael Hurley found that 50 percent of men and 50 percent of women aged fifty-five to sixty-four said that they would be willing to pay fifty-five percent of the cost of long-term care if they were aged sixty-five and older. By age sixty-five, the willingness to pay for long-term care was 20 percent for men and 10 percent for women. Updated figures from the 1996 Survey of Consumer Expectations (SCE) (Exhibit 1) show that 50 percent of women aged fifty-five to sixty-four in 1996. At age sixty-five, the willingness to pay for long-term care was 20 percent for men and 10 percent for women, and the proportion of men and women in the workforce was 20 percent.

Some workers already are in long-term care because they are unable to work because of health expenses and because of the high cost of long-term care insurance as their health declines. Some workers are in jobs that require them to purchase individual long-term care insurance. Others constitute a pool of savings that can be used for long-term care if their health declines. Encouraging work or long-term care policy-relevant findings.

The decision to work or retire is a function of health status. Between 1982 and 1993, the proportion of persons aged sixty-five and older who were in the workforce increased more than 10 percent. The Social Security Administration's 1996 report on Social Security as the major source of income for the elderly concludes that given the current health plan, persons in excess of the age sixty-five to work past age sixty-five would make little contribution to the Social Security system.

there is fluctuation in improvement and even worsening in some years, which suggests that a clear trend is not evident.²³ Elsewhere, Crimmins recounts findings of increased levels of disability among the elderly during the 1970s and suggests that the earlier results may have occurred because death was delayed among disabled persons but that the more promising trends of the 1980s might represent actual improvements in health status.²⁴ This study found declines between 1982 and 1993 in the proportion of men and women ages sixty to sixty-nine who reported inability to work. A decline of 0.71 percent annually was reported for men ages sixty-five and sixty-six who said that they were unable to work and 0.55 percent for men ages sixty-seven to sixty-nine. Among women in these age groups, the annual declines were 0.53 percent and 0.71 percent.

Could this pool of retirees contribute to Medicare's financial salvation? Michael Hurd reports that in 1988-1989 more than 80 percent of men and 50 percent of women were in the labor force at age fifty-five.²⁵ By age sixty-five the rates had dropped to about 30 percent of men and 20 percent of women. By age sixty-nine 20 percent of men and 10 percent of women were still in the labor force. I have updated those figures using the March 1997 Current Population Survey (CPS) (Exhibit 2). About 85 percent of men and 70 percent of women age fifty-five said that they were in the workforce during 1996. At age sixty-five there is a sharp drop in the proportion of men and women in the workforce (40 percent of men and 30 percent of women), and the proportion continues to decline.

Some workers already are only marginally participating in Medicare because they are probably in good health with modest medical expenses and because many have chosen their employer-sponsored insurance as their primary coverage instead of Medicare. Other workers are in jobs without medical insurance but might be able to purchase individual coverage if insurance laws allowed. Nonworkers constitute a potentially large pool of persons who might be working if their health permitted and if other considerations encouraged work or acquisition of private health insurance; this policy-relevant finding deserves further attention.

The decision to retire obviously is not just a matter of health status. Between 1960 and 1990 life expectancy at age sixty-five increased more than 18 percent, while labor-force participation over age sixty-five plummeted. David Wise credits pensions and Social Security as the major contributors to the decision to retire.²⁶ He concludes that given the presence of a (defined-benefit) pension plan, persons in excellent or very good health are more likely to plan to work past age sixty-two, but in the absence of such a plan, health status makes little difference. Availability of retiree health insur-

EXHIBIT 2
Labor-Force Participation Among Persons Ages 55-80, 1997

Age in March 1997 (years)	Males			Females		
	Percent employed	Percent full year full time	Wages	Percent employed	Percent full year full time	Wages
55	86%	77%	\$48,661	69%	64%	\$30,292
56	84	82	54,885	68	66	29,653
57	84	74	53,868	63	62	28,258
58	78	77	43,659	66	60	26,479
59	77	73	49,357	59	57	26,632
60	74	73	49,168	56	57	23,956
61	68	71	49,762	53	57	26,815
62	64	85	50,843	47	52	27,617
63	55	62	49,326	40	44	28,249
64	51	52	55,521	37	43	31,753
65	39	47	42,425	30	40	38,902
66	39	42	46,919	24	28	33,198
67	35	50	46,182	20	27	28,333
68	31	31	35,470	20	25	25,616
69	25	46	48,342	20	29	23,809
70	28	27	60,620	15	21	42,463
71	18	32	23,279	13	15	75,305
72	24	35	41,105	15	26	18,578
73	24	24	29,760	8	18	22,426
74	15	40	40,693	7	38	16,287
75	14	37	76,222	9	20	22,450
76	13	44	26,207	8	8	25,621
77	16	36	26,538	5	20	37,095
78	20	18	40,968	4	12	28,066
79	8	30	63,806	3	30	33,216
80	9	28	56,371	5	31	28,921

SOURCE: March 1997 Current Population Survey.

ance, Wise concludes, hastens retirement for those in excellent or very good health but has very little influence on those in fair or poor health. With or without retiree medical coverage, the existence of a defined-benefit pension plan dominates the decision to retire early.

Does Medicare coverage encourage the sharp drop in employment at age sixty-five? Several studies have reported that the existence of employer-sponsored health insurance for retirees is an incentive to retire prior to Medicare eligibility, but others have failed to find this effect.²⁷ Robin Lumsdaine and colleagues report that those with retiree medical coverage, who presumably have no stronger incentive to postpone retirement to age sixty-five than do those without, are actually more likely to retire at exactly age sixty-five.²⁸

On balance, it would seem unlikely that improved health status will provide major relief to Medicare's financial problems. The evidence of a sustained trend toward improvement is lacking. There is ample evidence that much of the older population wants to retire as soon as it is economically feasible.

Policy Implications

The demographic changes of the next decades might include lower fertility rates, a decline in health care costs, and an increase in immigration. These changes are commonly predicted to offer at best a partial solution. The nine makes up these persons removing them percent of pro working also c tion rates at a program incor

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Policy Implications

The demographic inconvenience facing Medicare in the next several decades might be solved through the serendipity of a rebound in fertility rates, a failure of mortality to improve, substantial improvement in health status of the elderly, or even a carefully orchestrated immigration policy. None of these seems particularly likely. The commonly prescribed fix of delaying retirement rates appears to offer at best minor relief. The population ages sixty-five to sixty-nine makes up about a quarter of Medicare enrollment; because these persons are younger than average (and thus incur lower costs), removing them from the program would bring savings of less than 15 percent of program costs. Encouraging older persons to continue working also does not help very much. Even if labor-force participation rates at ages sixty-five to sixty-nine were to double, Medicare program income would increase less than 5 percent.

Few good examples exist in the private sector on which to model Medicare financial reform. Prefunding (that is, accumulating assets during one's active years for later use) is the traditional method for assuring fixed-dollar commitments such as death benefits and annuities. State laws, in fact, require prefunding for these private insurance products. But the Medicare trust funds retain no assets on behalf of those who have paid taxes to support the present cohort of beneficiaries. They serve only as temporary contingency reserves.

Some individual medical insurance plans prefund for the expected rise in cost due to aging, but this has always been a trivial part of the inflation risk, which has been deemed intractable. With medical costs increasing less rapidly in recent years, the inflation risk starts to look more manageable, and the prospect of lessening the demographic risk may be worth a second look.

Various forms of prefunding also are now under consideration for the Social Security cash benefit programs. The most publicized of the Social Security prefunding proposals would have the individual contributor retain rights to the funds, but this is not a necessary part of the concept. To deal with the demographic risk, the age cohort of contributors would retain "rights" to the assets. Nor is it necessary to prefund for the entire risk. In the cited case of individual medical insurance, the policyholder group pays additional premiums in advance to protect against premium increases later that are due to age, but added premiums are charged later to account for medical inflation. In a public program the inflation risk could be divided between the beneficiary and the taxpayers.

Prefunding raises the awkward problem of a suitable prefunding vehicle. If prefunding merely results in purchasing government

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bonds that must be redeemed by a later generation of taxpayers, there is no clear advantage. One can certainly argue that public investment in infrastructure has a real payoff that enhances the nation's ability to meet its future social obligations, but current accounting of social insurance funds blurs any such connection and leads to the possibility of using presumably dedicated income for current consumption.

The author thanks Alice Wade for her assistance and two reviewers for their extensive help.

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Covering Older Americans: Forecast For The Next Decade

If current trends continue, private insurance coverage among the elderly will drop by 4.5 percent by 2005.

BY SHERRY GLIED AND MARK STABILE

SEVERAL RECENT POLICY initiatives have focused attention on the population nearing Medicare eligibility age. Congress has considered raising the Medicare eligibility age from sixty-five years to sixty-seven years, in tandem with the already scheduled increase in the Social Security eligibility age. President Bill Clinton has proposed allowing Americans ages fifty-five to sixty-four to buy into Medicare. The impact of such policies and the need for, and role of, public coverage will depend on the extent to which private coverage is held by the affected population: those nearing Medicare's eligibility age, whatever it ends up being.

Prior research has documented current patterns of health insurance coverage in the population that is near Medicare eligibility.¹ Private coverage in this population depends critically on three factors: the propensity of older adults to work full time, the likelihood that older workers will hold health insurance coverage, and the extent of private health insurance among retirees under age sixty-five. We used information about recent trends in these components to project coverage patterns for future cohorts of older persons and to assess the sensitivity of future private health insurance coverage to changes in these trends.

■ **DATA SOURCES.** The analysis conducted here used three years of data from the March Current Population Surveys (CPS)—1989, 1993, and 1997—to follow the labor-

force and health insurance experience of cohorts of older Americans. The CPS is a national survey of approximately 50,000 households that includes demographic and labor-force information, as well as information on source and nature of health insurance coverage. The CPS has used a consistent set of health insurance questions since 1989; these questions refer to health insurance coverage during the year preceding the survey. Economic conditions in 1992 were worse than in either 1988 or 1996, but the two latter years were quite similar.

CURRENT PATTERNS OF HEALTH INSURANCE COVERAGE

Just over half of older Americans who have health insurance obtain it through a current or former employer or spouse's current or former employer (Exhibit 1). More than one-fifth of persons ages sixty-one to sixty-four obtain coverage through Medicare, Medicaid, or the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). Finally, nearly 10 percent of older persons hold private insurance that is not obtained through a current or former employer. More than 16 percent of persons ages sixty-one to sixty-four were uninsured in the 1997 survey.

To get a better sense of the determinants of health insurance coverage among older Americans, we compared their coverage to

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EXHIBIT Health Insurance In 1997

Source

Medicare
Medicaid
CHAMPUS
Total public

Employer's
Working
Retired
Dependent

Total employed

Privately paid

No health insurance

Any health insurance

Any private insurance

Employer-paid

Employed

Employed full-time

Employed part-time

SOURCE: 1997

NOTE: CHAMPUS

^a Includes all

^b Includes all

^c Includes health

that of the cohort ages forty-five to sixty (Exhibit 1). The overall rate of coverage among persons ages sixty-one to sixty-four is nearly as high as that among the younger group, but the pattern of coverage is quite different. Persons ages sixty-one to sixty-four are less likely to hold private coverage and much less likely to hold employer-sponsored coverage than are their younger counterparts (although they are more likely to hold public coverage or individually purchased private coverage). This difference is a consequence of the much lower rates of employment, especially of full-time employment, in the cohort of persons ages sixty-one to sixty-four, relative to the younger group. Among persons working full time, those ages sixty-one to sixty-four are about as likely to have health insurance as are those ages forty-five to sixty.

The importance of labor-market behavior is equally apparent in comparisons within the cohort of persons ages sixty-one to sixty-four.

Among the most-educated men and women in this age group—those with a college degree—rates of private health insurance coverage are nearly twice as high as among the least-educated group. The difference is principally a consequence of much lower rates of employer-sponsored coverage in the latter group. Again, this difference is mainly a result of differences in labor-force participation. The least-educated persons are far less likely to be working full time in their early sixties than are their more-educated counterparts. The effect of this difference is further exacerbated by differences in the likelihood that more- and less-educated full-time workers obtain employer-sponsored coverage.

LABOR-MARKET BEHAVIOR AND PRIVATE HEALTH INSURANCE COVERAGE

The private health insurance coverage of older

EXHIBIT 1

Health Insurance Coverage, Persons Ages 45–64, By Primary Source Of Coverage In 1997

Source	Ages 45–60	Ages 61–64
Medicare	3.8%	12.0%
Medicaid	5.2	5.3
CHAMPUS	3.8	4.6
Total public coverage	12.8	21.9
Employer-sponsored		
Working	49.4	30.8
Retired	1.0	8.7
Dependent	16.8	12.7
Total employer-sponsored	67.2	52.2
Privately purchased insurance	5.6	9.6
No health insurance	14.3	16.3
Any health insurance ^a	85.7	83.7
Any private insurance ^b	73.4	62.4
Employer-provided health insurance ^c	67.3	52.3
Employed	75.5	42.8
Employed full time	65.3	31.4
Employed part time	4.6	2.6

SOURCE: 1997 March Current Population Survey.

NOTE: CHAMPUS is Civilian Health and Medical Program of the Uniformed Services.

^a Includes all private and public sources of insurance.

^b Includes any source of private insurance coverage.

^c Includes health coverage provided by an employer or by a household member's employer.

adults in the future is likely to depend on their employment patterns and on the inclination of full-time workers and nonworkers to obtain health insurance coverage. To see how patterns of coverage are likely to change, we examined patterns of employment and health insurance coverage over time.

Between 1989 and 1997 the percentage of persons working full time increased for all age categories (Exhibit 2). Nonetheless, in each year the percentage of the population working full time is significantly lower among older persons. Not surprisingly, as cohorts age, the percentage of persons working full time declines sharply. Although 60 percent of those born between 1933 and 1936 were working full time when they were ages fifty-three to fifty-six, only 31 percent of that cohort worked full time when they reached their early sixties. Similarly, 71 percent of persons born between 1941 and 1944 were working full time in 1989 when they were ages forty-five to forty-eight, but only 64 percent of this cohort worked full time by 1997 when they were ages fifty-three to fifty-six. This pattern of declining labor-force participation within a cohort is one element in predicting patterns of employer-sponsored insurance for today's late-middle-age workers. Since more of them are working today, more are likely to be working eight years from now.

As noted above, at any point in time, older full-time workers are nearly as likely as their

younger counterparts are to obtain health insurance coverage (Exhibit 2). Nonetheless, cohorts of older workers have been affected by the economywide decline in private health insurance coverage. Over the eight-year period examined here, the percentage of full-time workers in each age group who hold health insurance coverage has fallen by about two percentage points. As cohorts of full-time workers have aged, their rates of health insurance coverage have fallen. Although 86 percent of full-time workers in the cohort born in 1933-1936 held private health insurance coverage when they were ages fifty-three to fifty-six, only 83.3 percent of full-time workers in that cohort held private coverage eight years later.²

Only about one-third of persons ages sixty-one to sixty-four work full time, so changes in patterns of insurance coverage among nonworkers are likely to be particularly pronounced among older Americans. Private insurance coverage (both employer-sponsored and privately purchased) fell between 1989 and 1997 among nonworkers in all older age groups (Exhibit 3). In 1989, 58 percent of nonworkers ages sixty-one to sixty-four held such coverage. In 1997 only 50 percent of such persons did. A lower proportion of older nonworkers in each cohort held private insurance coverage in 1997 than had either four or eight years earlier.

In combination, these patterns generate

EXHIBIT 2

Full-Time Employment And Health Insurance Coverage Among Persons Ages 45-64, 1989-1997

Age	Percent employed full time ^a			Percent of full-time workers with private coverage ^b		
	1989	1993	1997	1989	1993	1997
45-48	70.6%	68.9%	70.8%	86.6%	85.9%	83.8%
49-52	66.6	66.7	70.3	85.5	85.2	95.0
53-56	59.5	60.3	63.5	85.9	85.2	83.8
57-60	50.6	49.5	50.9	85.6	85.4	84.4
61-64	29.9	29.9	31.4	86.1	83.8	83.3

SOURCE: Current Population Surveys, March 1989, 1993, and 1997.

^a Sample includes men and women ages forty-five to sixty-four.

^b Includes any source of private health insurance coverage, not just employer-sponsored coverage.

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53-56

57-60

61-64

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EXHIBIT 3**Private Health Insurance Coverage Among Persons Ages 45-64, By Employed Status, 1989-1997**

Age	All persons			Nonworking persons		
	1989	1993	1997	1989	1993	1997
45-48	79.1%	76.3%	74.6%	53.5%	45.9%	42.8%
49-52	76.9	75.3	74.9	54.4	47.5	43.4
53-56	75.1	74.1	72.8	53.9	52.5	45.2
57-60	73.7	72.0	70.1	58.7	55.3	50.5
61-64	68.1	66.4	62.4	57.9	56.2	49.7

SOURCE: Current Population Surveys, March 1989, 1993, and 1997.

NOTE: Includes any source of private health coverage.

trends in private health insurance coverage for the older population (Exhibit 3). For each age group between ages forty-five and sixty-four, private coverage rates (a combination of employer-sponsored and privately purchased coverage) fell 3-5 percent between 1989 and 1997. These declines translate into declines in coverage within cohorts of older Americans. Private health insurance coverage rates for the cohort born in 1933-1936 fell thirteen percentage points as they aged from their mid-fifties (in 1989) to their early sixties (in 1997). Private coverage rates for the cohort born in 1941-1944 fell six percentage points as they aged from their early forties (in 1989) to their mid-fifties (in 1997). Note that these drops in coverage did not translate one-for-one into declines in insurance coverage. Growth in public coverage offset more than half of the drop in private coverage.¹

These declines have been even more acute among the least-educated members of this population—those who did not complete high school. Although 58 percent of the least-educated members of the cohort born in 1933-1936 held private health insurance when they were in their mid-fifties, only 41 percent of this cohort did so eight years later.

PROJECTING COVERAGE INTO THE FUTURE

The forecasts described below are based on two premises. First, the private health insurance coverage of persons ages sixty-one to

sixty-four (and ages sixty-five to sixty-seven in the absence of Medicare) is closely linked to the coverage patterns that these people experienced when they were in their prime working years. Those who held jobs without health insurance coverage when they were in their mid-fifties probably will not obtain jobs with coverage ten years later. Retirees who lack private coverage in their early retirement years are unlikely to gain it later, either.

Second, the change in private coverage among those now in their mid-fifties as they reach their early sixties depends on the relationship between aging and health insurance coverage, a relationship that we assume remains relatively constant across cohorts. Based on these premises, we generate forecasts of future health insurance coverage by superimposing information about the link between aging and health insurance coverage obtained from past cohorts on the current coverage patterns of persons ages fifty-three to fifty-six.

Exhibit 4 presents baseline information about today's sixty-one to sixty-four-year-olds. Scenario One forecasts coverage patterns for today's fifty-three to fifty-six-year-olds in 2005, assuming that changes in labor-market and health insurance behavior follow past trends. Slightly more persons in the older cohort are expected to be working full time in 2005, because more persons ages fifty-three to fifty-six are working full time today than had done so eight years ago. The

EXHIBIT 4

Current And Projected Private Health Insurance Coverage, Persons Ages 61-64, 1997 And 2005

	Baseline	Scenario One	Scenario Two	Scenario Three	Scenario Four
Percent working full time	31.4%	33.5%	45.0%	33.5%	33.5%
Percent working part time	11.4	10.4	10.4	10.4	10.4
Percent not working	57.2	56.1	56.1	56.1	56.1
Percent with health insurance					
Working full time	83.3	81.3	81.3	83.3	81.3
Working part time	68.6	70.5	70.5	70.5	70.5
Not working	49.7	41.7	41.7	41.7	49.7
Total with health insurance coverage	62.4	57.9	62.5	58.8	62.4
Number of persons ages 61-64 without private health insurance	2,998,224	4,258,836	3,793,500	4,167,792	3,803,616

SOURCE: Current Population Surveys, March 1989, 1993, and 1997.

NOTE: Baseline column denotes the population ages 61-64 in 1997. Scenario One projects health insurance coverage based on extrapolation of trends from 1989-1997 to 1997-2005. Scenario Two projects health insurance coverage adjusting the percentage of persons working full time, so that coverage rates for persons ages 61-64 in 2005 are the same as those for persons ages 61-64 in 1997. Scenario Three projects health insurance coverage holding constant the probability of having health insurance coverage, given full-time employment. Scenario Four projects health insurance holding constant the probability of having health insurance for those not working.

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likelihood that full-time workers will hold health insurance is expected to be somewhat lower than today, because rates of private coverage among full-time working persons ages fifty-three to fifty-six have fallen over the past eight years. Similarly, the sharp drop in coverage among nonworkers ages fifty-three to fifty-six over the past eight years is expected to translate into a lower rate of coverage among nonworkers ages sixty-one to sixty-four in 2005. This baseline projection yields a rate of private health insurance coverage that is 4.5 percentage points lower than today's rate. Since the size of the population ages sixty-one to sixty-four is also expected to increase by 26 percent, this lower rate of coverage translates into an increase of 1.25 million in the number of persons ages sixty-one to sixty-four who lack private coverage.

How will this forecast be affected by changes in the labor-force or health insurance experience of older workers? Changes in Social Security rules or retirement policies, for example, could encourage more older workers to remain in the labor force full time. Scenario Two maintains all of the health insurance propensity projections as in Scenario One and

measures how high full-time employment rates would have to be to restore the private health insurance coverage rate to its 1997 level. Full-time employment would have to increase by nearly 50 percent over today's rate to hold coverage constant—an implausibly high figure. Even under this extremely optimistic scenario, under which the rate of coverage actually increases, growth in the size of the older population would lead to an increase of nearly 800,000 in the number of people lacking private coverage.

A slowdown in the rate of growth of health insurance costs might stem the declines in private coverage among older full-time workers. Scenario Three examines the effect on expected private coverage levels of holding health insurance coverage among full-time workers at today's rates. This change would have a small effect on coverage, reducing the number of people lacking private coverage by just under 100,000.

One component of President Clinton's proposal for coverage expansion is to increase coverage among nonworkers. The effect of such a change is illustrated in Scenario Four. If retiree coverage rates remained at today's

levels (nearly 50 percent), the decline in private coverage among the population ages sixty-one to sixty-four between now and 2005 would be less. Scenario Four is extremely optimistic, assuming that the expected declines in private coverage among nonworkers holding private coverage in 2005 would be offset by a point increase in coverage among full-time workers. Furthermore, the ability of public programs to provide coverage might lead more people to leave the labor market and change their private coverage.

POLICY IMPLICATIONS

Under most plausible scenarios, the number and the percentage of persons who lack private coverage are likely to rise over the next decade. Private coverage among persons three to fifty-six years old in 1997 were among the highest in the population, and these lower rates are expected to continue into the future. These declines could come even more sharply if rates of employment decline among older workers.

These results suggest that the loss of eligibility for Social Security benefits among a large number of older workers could have a large impact on private coverage eligibility for persons ages sixty-one to sixty-four. Projections suggest that the decline in employment among older workers is expected to be significant.

Conversely, the decline in employment among older workers could make a significant impact on the ability of older workers to afford private coverage. The decline in private insurance coverage among older workers could be offset by an increase in Medicare coverage.

Age 61-64

Scenario Year	Scenario Rate
3.5%	38.5%
10.4	10.4
6.1	56.1
3.3	81.3
0.5	70.5
1.7	48.7
6.5	62.4
357.52	3803.616

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levels (nearly 50 percent), there would be no decline in private coverage rates among the population ages sixty-one to sixty-four between now and 2005. Again, this assumption is extremely optimistic. Prior cohorts experienced declines in the percentage of nonworkers holding private insurance over time. This scenario would require a five-percentage-point increase in this percentage as the cohort aged. Furthermore, an increase in the availability of public coverage for nonworkers might lead more people to leave the labor market and change the balance of public and private coverage.

POLICY IMPLICATIONS

Under most plausible scenarios both the number and the percentage of older Americans who lack private insurance coverage are likely to rise over the next decade. Rates of private coverage among persons ages fifty-three to fifty-six are lower today than they were among this age cohort eight years ago, and these lower rates are likely to continue into the future. This problem is likely to become even more severe over time because rates of employer-sponsored health insurance coverage among baby boomers have been declining steadily over the past fifteen years.⁴

These results suggest that raising the age of eligibility for Medicare in tandem with the Social Security eligibility age is likely to leave a large number of older Americans without private coverage. Although raising the age of eligibility for pension benefits will encourage more older Americans to work, our projections suggest that implausibly large increases in employment would be needed to offset the expected declines in coverage.

Conversely, expanding Medicare by permitting older Americans to buy in is unlikely to make a significant dent in the number of near-elderly uninsured persons. The decline in private insurance coverage is especially severe among the least-educated members of older cohorts.⁵ This group is unlikely to be able to afford to pay actuarially fair premiums for Medicare coverage. Furthermore, increasing Medicare eligibility might even crowd out

some existing private coverage.

New policy initiatives are needed to ensure that older Americans, especially those who are not working, can maintain health insurance coverage until they become eligible for Medicare. These could include new public coverage alternatives or policies that would encourage the purchase of long-term, non-employer-sponsored private retiree coverage.

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This research was supported by an Investigator Award (to Sherry Glied) from the Robert Wood Johnson Foundation.

NOTES

1. P. Cunningham, *Next Steps in Incremental Health Insurance Expansions: Who Is Most Deserving*, Issue Brief (Washington: Center for Studying Health System Change, April 1998), 12; and T.A. Waidmann, "Potential Effects of Raising Medicare's Eligibility Age," *Health Affairs* (March/April 1998): 156-164.
2. Patterns of coverage among full-time workers (or nonworkers) in a cohort may be affected by changes in the composition of the full-time working (or nonworking) portion of the cohort. As Exhibit 3 suggests, less-educated workers, who have a lower propensity to hold private coverage, tend to retire earlier than better-educated workers do. This pattern means that the actual decline in private coverage among those continually employed full time is likely to be greater than that described.
3. Recent research suggests that increases in the availability of public coverage can crowd out private coverage. D. Cutler et al., "Does Public Insurance Crowd Out Private Insurance?" *Quarterly Journal of Economics* (May 1995): 391-430. Some of the decline in private coverage may be a consequence of expanded public coverage, but we cannot say how much using these data.
4. S. Glied and M. Stabile, "Graduation to Health Insurance Coverage: 1981-1996," NBER Working Paper no. 6276 (Cambridge, Mass.: National Bureau of Economic Research, 1997).
5. If the relationship between education and private health insurance coverage remains unchanged, the decrease in the number of poorly educated Americans might mitigate some of the losses in coverage. We also predict coverage rates into the future, accounting for the changing educational makeup of the population. Predicted insurance rates are within 0.4 percentage points of our reported predictions.

Public Opinion, Knowledge, And Medicare Reform

Most Americans think of Medicare as a basic right, but few understand the implications of specific policy changes.

by Jill Bernstein and Rosemary A. Stevens

ABSTRACT: A review of public opinion and focus-group research reveals consistently inadequate understanding of Medicare by the public and misinterpretation of public opinion information by policy advocates. Closer analysis of apparent conflicts in values related to self-sufficiency, personal responsibility, and government, however, reveals strong support for the basic premises of social insurance embodied in Medicare. The likelihood of meaningful policy discussions about Medicare depends, in part, on whether the policy and research communities can find ways to provide the electorate with the knowledge they need to understand the implications of reform.

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OPINION

PUBLIC OPINION POLLS SHOW strong intergenerational support for Medicare and a desire to ensure the financial well-being of the program.¹ The evidence suggests that the public's views about Medicare have reflected a fairly constant set of values about fairness and government responsibility. These values seem to have survived despite skepticism about the efficiency of government, the trustworthiness of the health care industry, and serious gaps in the public's understanding of virtually all policy-relevant aspects of the Medicare program—from how it is organized and financed to what options are available to beneficiaries.²

As a new round of public debate about the future of Medicare takes shape, the public's views will once again be tapped and appraised—and probably misrepresented in the media.³ Our purpose here is to review data on public attitudes toward Medicare in the

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1990s, to provide a more coherent framework for Medicare reform.

■ **Methods and approach.** A computer search of public opinion polls since 1990 found more than a thousand surveys that included questions on Medicare; we scanned more than 400 to get some sense of the breadth and depth of polling data on the general topic.⁴ We then reviewed in greater depth a range of opinion polls conducted by research organizations—including work commissioned by the National Academy of Social Insurance (NASI) as part of its ongoing project, Restructuring Medicare for the Long Term—and by public policy and advocacy organizations.⁵

Anyone working with poll data knows how slippery the results seem to be. In an attempt to be more precise, NASI developed a second set of questions about public perceptions and understanding of Medicare policy options. Some of these were explored in a series of ten focus groups, conducted by Kleimann Communication Group in three California regions in February 1998.⁶ The focus groups provided an opportunity to hear in some detail about individual experiences in the evolving Medicare marketplace, with its array of choices among managed care options and physician groups contracting with multiple health plans. Where relevant, we draw from these materials too.

We have divided our review into five areas: (1) the program's importance to beneficiaries and their families in terms of financial and social security; (2) views about the role of government and individuals in securing access to appropriate health care; (3) understanding of and experience with the benefits and plan options available to beneficiaries; (4) understanding of problems facing Medicare in the near and long term; and (5) options for Medicare reform.

Views About Medicare: A Review Of Surveys

■ **How Important Is Medicare to beneficiaries and their families?** If there is one "absolute" in polls about Medicare, it is that Americans place a very high value on the program. A 1994 national poll found that three-fourths of Americans consider the Medicare program important to their own families.⁷ A 1996 national survey conducted for the American Association of Retired Persons (AARP) found overwhelming support for Medicare. More than 80 percent of respondents agreed that Medicare makes it possible for retirees to remain independent, and only 22 percent believed that persons age sixty-five and older are likely to be able to afford private health insurance. Slightly more than half of the baby-boomer respondents (ages thirty to forty-nine) expressed complete agreement with the view that "older people would really suffer in terms of financial security without Medicare," and the same percentage completely

agreed that they were "glad to have Medicare because taking care of parents is too much of a burden without Medicare."⁸ A 1996 survey for the Cato Institute found that 72 percent of respondents had a favorable view of Medicare.⁹ A national news poll conducted in December 1997 reported that 51 percent of respondents believed that Medicare was "very important" to them personally.¹⁰

The 1997 NASI poll found that people under age thirty were somewhat more likely to agree that the federal government has a basic responsibility to guarantee that the elderly and disabled have adequate health insurance (57 percent strongly agreed; 32 percent agreed) than were respondents age sixty-five or older (54 percent strongly agreed; 23 percent agreed).

Beneficiaries participating in the California focus groups were clear in their support for and deep appreciation of Medicare. In most sessions beneficiaries said that if they could send a message back to people in Washington about the future of Medicare, it would be that they want the program to be there for their grandchildren.

■ **Public versus private responsibility for health care: how does Medicare fit?** Americans have regularly expressed strong support for health care as a basic right for everyone, not just the elderly or disabled.¹¹ Even after the failure of the Clinton administration's health care reforms, polls have found significant support for government involvement in health care.¹²

Views about the role of government are rooted, at least in part, in egalitarian values, namely, that everyone should have equal access to health care. Polls have shown that Americans are not comfortable with the notion that access to or quality of care should be a function of one's ability to pay. A 1992 Employee Benefit Research Institute (EBRI) poll found that 41 percent of respondents strongly agreed, and an additional 47 percent agreed, with this statement: "Everyone should be entitled to the same amount and quality of health care, whether or not they can pay for that care."¹³

Medicare is clearly viewed as a government promise to its citizens that Medicare represents a "social contract" that must be honored. In the 1996 AARP poll there was virtually no difference in the proportion of retirees (76 percent) versus nonretirees (77 percent) who expressed agreement or strong agreement with a statement that Medicare represented a "commitment made a long time ago that cannot be broken."¹⁴

However, views about ability to pay can be cast in very different ways. Polls conducted in 1986 and 1990 found that a majority of Americans agreed with the statement that "payments for the elderly

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one-third agreed with the alternative statement, that Medicare patients should "be reimbursed for their health care regardless of how rich or poor they are."¹⁵ The reaction to the Medicare Catastrophic Coverage Act of 1988, on the other hand, suggests that increasing cost sharing among higher-income beneficiaries can evoke a strong negative response in at least some sectors of the population.¹⁶

In a 1995 poll Robert Blendon and colleagues reported that about one-third of the public believed that if people paid their taxes, they were entitled to benefits when they retired, no matter what their incomes. Another 23 percent thought that Medicare benefits should be income-tested and that high-income beneficiaries should be required to buy their own health insurance (and not receive any Medicare benefits); 42 percent said that Medicare benefits should go to all retirees but that higher-income retirees should pay more.¹⁷

The 1997 NASI survey sought levels of agreement or disagreement with the statement: "People who can afford to pay more are entitled to receive higher quality medical care than people who rely only on Medicare or other (publicly supported) programs." Thirty-eight percent strongly agreed or agreed, 16 percent somewhat disagreed, and 43 percent strongly disagreed.

Unfortunately for the pollster seeking clarity, any person may simultaneously hold strongly felt but seemingly conflicting views about equality of opportunity and personal responsibility. Lawrence Jacobs and colleagues' comprehensive review of health care surveys showed that the view that persons should be responsible for their own health care has coexisted for decades with the view that the government is (ultimately) responsible for securing access to care for all Americans.¹⁸ A 1992 EBRI poll that found that 88 percent agreed that everyone is entitled to health care regardless of ability to pay also found that 88 percent agreed that everyone should be expected to pay something toward the cost of their health care.¹⁹

The NASI 1997 poll found that almost 40 percent of respondents who strongly agreed about government's responsibility for insuring the elderly and disabled also somewhat or strongly agreed that people should be responsible for setting aside enough money to pay for their own health care when they retire. It is not too difficult, therefore, to design a poll that will support either a strong role for government in guaranteeing health insurance or a libertarian view of personal responsibility. Either would, however, tell only half of the story.

■ **How well does the American public, or the average beneficiary, understand Medicare?** For more than thirty years, only

to date); and the increase in the elderly's out-of-pocket spending for health care despite the increases in the costs borne by Medicare (showing an increase from 9 percent of elderly's income in 1975 to 18 percent in 1994). The researcher remained available to answer technical questions during the group discussion. Persons responding to opinion polls usually have none of this background readily available.

■ **How do people translate values into opinions about Medicare policy options?** Comparisons among polls asking about Medicare policy options reveal striking consistencies but also instructive variations. Polls by NASI (May 1997), the *Los Angeles Times* (September 1997), Gallup (June 1997), and Pew (June 1997) found virtually identical reactions to the proposal to raise the Medicare eligibility age to sixty-seven (about two-thirds were opposed).³¹ But when asked about a proposal to make high-income seniors pay more for Medicare, the polls varied in the way that they asked the question, which was associated with different responses. Key issues here are the concept of "higher incomes," a fuzzy notion until operationalized; how income (or wealth) is actually measured; and how increased payments are assessed (for example, through surcharges on income tax, higher premiums payments, higher copayments, or higher deductible charges).

The *Los Angeles Times* asked if, to keep Medicare solvent, high-income seniors should pay more for Medicare, whereas the Pew poll specifically asked if single seniors earning more than \$50,000 per year or couples earning more than \$75,000 per year should pay a larger share of medical bills. The NASI poll asked whether wealthier people eligible for Medicare should be required to pay more (for Medicare) than people with lower incomes. Sixty percent favored or strongly favored higher payments for the high-income group specified in the Pew poll, but more than half of respondents in the *Los Angeles Times* and NASI polls were opposed to having "wealthier" people pay more.³² In both the *Los Angeles Times* and NASI polls, seniors were more likely to support higher cost sharing by wealthy beneficiaries than were younger respondents.

In the NASI poll there were some fairly clear associations between values and opinions about policy. For example, respondents who strongly agreed with the statement that people should be responsible for setting aside money for their own health care needs were more likely than others were to support privatization of Medicare. Strong support for the view that the government is responsible for guaranteeing that the elderly and disabled have health insurance was positively correlated with support for increasing taxes to bolster the Medicare program. However, agreement with the concept that cuts now mean fewer benefits for those becoming eligible for

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Medicaid) benefits, distinctions between the programs were not well understood. People generally knew that they paid payroll taxes that went to Medicare when they were working, but they were not clear about the program's status as something guaranteed to everyone who was eligible, regardless of income or health care need. This is quite consistent with Blendon's 1996 survey results on understanding of entitlements.²⁷

■ **How do people view the problems facing Medicare?** The public appears to be aware of and concerned about Medicare's looming financial problems. According to polls conducted in late 1994 and 1995, four of five Americans thought that Medicare was in financial trouble, and six of ten believed that these problems were "serious."²⁸ Most Americans younger than age sixty-five have doubts about whether the program will be there for them when they become eligible.²⁹

Poll data suggest that the public tends to focus on a different set of problems affecting Medicare than many policy experts do. The 1995 surveys found that Americans primarily attribute shortfalls in Medicare finances to excessive charges by providers, fraud and abuse, and poor management by government and insurance companies. The 1995 and 1996 AARP polls found that an overwhelming majority (87 percent) of respondents believed that Medicare funding would be sufficient to meet all program needs if fraud, waste, and abuse were eliminated. About half of those questioned in Kaiser/Harvard polls in 1994-1995 thought that the growing number of retirees was a contributing factor, and about 30 percent cited costs of new drugs, treatments, or tests.³⁰

Based on this evidence and field experience, the research staff designing the NASI focus groups believed that it was necessary to build a brief educational component into each focus-group session, to provide a basic overview of Medicare as the foundation for discussion of policy options. The topics addressed the serious gaps in knowledge perceived in the poll reviews: what the difference is between Medicare fee-for-service and Medicare HMOs; and how Medigap, employer-sponsored retiree supplements, and MediCal fit together in the California context. Four charts were used to present four aspects of the Medicare problem: the growth in the number of Medicare beneficiaries projected to 2030 (showing that the number of beneficiaries will double); the number of workers per Medicare beneficiary (showing that the worker/beneficiary ratio will fall by half over the next sixty years); the projected increase in Medicare costs per beneficiary, based on past rates of increase (showing a hypothetical increase from \$5,000 to \$45,000 per beneficiary per year in thirty years if costs continue to increase at the rates they have

cently, managed care.²⁰ Blendon and colleagues' review of poll data from 1994 and 1995 found that the public as a whole was not well informed about Medicare benefits. Many are unclear about what services are actually covered. Most Americans do not know that Medicare does not pay for long-term nursing home care or outpatient prescription drugs. Medicare financing also is poorly understood; fewer than one-third of survey respondents knew that different funding sources, including separate trust funds and general budget funds, pay for Medicare.²¹

Managed care has introduced a whole new dimension to the complexity of the information that beneficiaries need to sort through if they are to make "good choices" in the marketplace.²² A survey completed in 1998 found that even beneficiaries living in areas with high health maintenance organization (HMO) penetration in the Medicare market had a very limited understanding of how Medicare managed care differs from traditional Medicare.²³

The NASI focus groups, although not representative or generalizable, also revealed some potentially serious gaps in beneficiaries' understanding of Medicare and managed care. First, many focus-group participants were unclear about what health plan they were in or whether it was a supplemental policy or a Medicare HMO.²⁴ Consistent with other Medicare focus groups conducted in the past five years, beneficiaries told us that they had difficulty understanding or comparing the plan options available to them, and they often depended on information from the health plans or personal recommendations when choosing a health plan or supplemental insurance policy.²⁵

Second, there was a widespread perception, reflected in all of the sessions with seniors, that when beneficiaries enroll in a Medicare managed care plan, they are no longer "in Medicare." Some appeared not to know that they retained Medicare appeal and grievance rights when they joined HMOs. Several participants explained that "when you join a health plan, you are no longer in Medicare, and you can't change plans for a year." A significant number of the beneficiaries also believed that the monthly payment of \$43.80 (subtracted from their Social Security checks) was payment in full for their enrollment in the plan.²⁶

Third, there was a fairly widespread conception, particularly among lower-income participants, that Medicare is not used by people who can afford other insurance. It was assumed that supplemental insurance that people bought themselves or had from their former employers was in fact the "real" insurance for wealthier people, who "don't need to use Medicare." Although a significant proportion of participants also were receiving MediCal (California

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Medicare later was not associated with greater support for increasing taxes to save Medicare.

The ten NASI focus groups provided an opportunity for asking how values interact with opinions about policy reforms. About half of each two-hour session was devoted to discussion of possible policy changes. To begin the discussion, the group was presented with a brief overview of four sets of proposals focused on reducing Medicare costs, adding money to Medicare, increasing costs to beneficiaries, and making Medicare more like employer-sponsored insurance. After a short explanation of each set of options by NASI staff, the group moderator discussed each set. Unlike a poll, the focus-group format did not require, or even allow, participants to pick a single issue or option; they talked about all of them. In fact, some people changed their minds about policy options as they discussed them.

For example, when focus-group participants began to discuss reducing payments to doctors and providers, there were often strong reactions on both sides of the argument. Some participants immediately said that it would be a bad idea, because if payments were cut too much, doctors would stop seeing Medicare beneficiaries. This same concern was noted as an emerging trend in Blendon's review of poll results from 1995; a 1995 news poll found 47 percent opposed and 45 percent in favor of reducing Medicare fees to secure savings.³³ One or more participants in many of the focus groups pointed out that physicians have to go to school for a long time, accumulating major debt, and that they deserve to be paid a lot of money. This view appeared to be more pronounced in groups with lower-income participants. Others were concerned, however, that hospital and doctor bills seem excessive. Persons in most sessions reshaped their arguments as the discussion progressed. Most of the groups ended up agreeing that categorically cutting doctor and hospital payments was undesirable and unfair to providers but felt the need to address inappropriate pricing and billing practices and other abuses of the payment system by providers and beneficiaries.

The concept of fairness arose again and again in discussions of policy options such as raising the eligibility age for Medicare, increasing revenues, and increasing beneficiary cost sharing, although one person's "fairness" may not be that of another. Some focus-group participants thought it unfair to raise payroll taxes on young persons with families in low-wage jobs while wealthier retirees were not paying their "fair share."³⁴ Seniors in most of the groups stressed the importance of everyone, including beneficiaries, helping out. Concerns were raised about the problems many seniors already have in making ends meet and the hardships that would result from any increase in beneficiary cost sharing. There was fairly strong

support for proposals to increase costs for higher-income beneficiaries in most groups, but it was difficult to come to agreement about what people meant by "wealthy." Most groups generally settled on income levels of about \$40,000-\$50,000 as the boundary for increased cost sharing, consistent with the NASI poll, in which \$50,000 annual income was the most common threshold identified as defining "wealthy."³

Virtually all of the groups easily came to consensus that fraud was a major problem in Medicare, but discussion about how to address it was inconclusive. In several groups people talked about their personal knowledge of various questionable practices on the part of providers, suppliers, and insurance companies, but generally these were seen not as a "Medicare" problem but as pervasive in the entire health care system. On abuse, there was enthusiasm about the potential for savings that could come from the more appropriate use of health care services. There appeared to be widespread support for programs to educate patients and practitioners about preventive care and how and when to use health services.

Participants had the most difficulty discussing policies that would make Medicare look more like employer-sponsored insurance. With the exception of persons who worked for the state of California, most participants had little or no experience during their working lives with systems that offered much choice among competing health plans. Opinions about turning the management of retirement medical savings accounts over to the private sector were more illuminating. Although participants generally agreed that the private sector might do some things more efficiently, that was not true uniformly across the groups. However, there was significant consensus on two points: (1) Participation in any system of private insurance (during one's working life) to be used after retirement would have to be mandatory for everyone, because otherwise young persons would not contribute; and (2) there would need to be government oversight of such a system, because private plans could disappear, taking people's money with them. Several participants described a model such as the banking system, in which private institutions handle people's money but government plays a strong regulatory role.

Implications For Policy

■ **Reform with care.** The consistency of findings from polls throughout the decade about the high value placed on Medicare should provide some broad guidance about general policy directions for Medicare reform. At minimum, it suggests caution about making changes in Medicare's role as social insurance. The majority of

Americans support the Medicare program, a basic element of the social insurance system. Americans are not sure that either the current system or any alternative can be trusted to support Medicare. Americans are not sure that Medicare really goes to the heart of the problem with the basic program in Medicare since

Matters become more complex when we look at opinions about specific ways to reform Medicare. Americans' views on how to "use" Medicare, how it is financed or how to share costs, and what voters are looking for in holding down program costs are all based on their attitudes

■ **Use polls to guide reform.** This review is the first of its kind for policy guidance. The review reveals lack of consensus fostered by misinformation. The review advocates a complex policy proposal (which is the subject of the next section) and what it asks: "Can the Medicare program be reformed to that question?"

Pragmatically, people want to know what level—knowing the concerns. Politicians in which they can be most useful identify those

Americans support the underlying principles of Medicare as a public program, a basic right, and a "social contract." Pervasive ideas about the importance of personal responsibility for health and its financing coexist with general views about government responsibility. Americans think that health care is too expensive, and they are not sure that either the private health care industry or the government can be trusted to address some of the abuses that plague the system, but they do not want to underpay physicians. They believe that everyone, including seniors, should do their part and pay taxes to support Medicare as long as the tax system is fair and the money really goes to Medicare. All of these expectations are consistent with the basic premises of social insurance that have been embodied in Medicare since its implementation in 1966.

Matters become more complicated, however, when we examine opinions about specific policy changes, for we must ask how and in what ways lack of understanding of the program distorts Americans' views. If many believe that "wealthy" people do not "need" or "use" Medicare, and if Americans do not understand how Medicare is financed or health care providers are paid, how do we sort out what voters are actually saying when they express opinions about holding down program costs, raising the eligibility age, increasing beneficiary cost sharing, or requiring beneficiaries to contribute based on their ability to pay?

■ **Use polls cautiously.** A second inescapable conclusion from this review is that polls currently available are inadequate vehicles for policy guidance about specific program changes. Current opinion reveals lack of understanding of how Medicare works. This is fostered by misinterpretation of public-opinion information by policy advocates and the media. People respond to questions about complex policy options based on what they understand about the proposal (which may or may not be reflected accurately in the question) and what they know about Medicare. The troubling question arises: "Can there be meaningful public and political debate about Medicare's programmatic future?" If we rely on polls to tell us what the American people want regarding Medicare reform, the answer to that question seems to be "No."

Pragmatically, it could be argued that polls are designed to ask people what they think about policy options on an abstract level—knowing that the answers may reflect some basic misunderstanding of the underlying facts—to get a "sounding" of public concerns. Politicians can then adjust their policy proposals or the way in which they are presented. We argue, alternatively, that polls may be most useful in helping the research and policy communities to identify those deficiencies in public understanding that are conse-

quential for the public policy process. We believe that Americans do not need to understand the intricacies of Medicare policy to make informed choices about major policy changes. At issue is what basic facts the public actually needs to make decisions consistent with individual values and social expectations. Discovering this is an urgent task for health services research and policy, not only to ensure that political change rests on public support, but also to avoid opposition from an awakened public once change is implemented. We do not need yet another example of failed reform blamed on misunderstanding and manipulation of public opinion.

■ **Need for education.** The third conclusion from this review is that there is a glaring need for public and media education. If the level of interest we saw in attending and participating in the focus groups we conducted (every person we contacted who met the screening criteria elected to participate) is at all reflective of the rest of the country, working people as well as retirees want to be informed. They want to know the options being considered, to be able to think them through and let policymakers know what they are thinking. The level of interest in Medicare might actually provide a relatively rare opportunity for improving public involvement in political discourse more generally. Based on the genuinely conscientious, concerned discussions in the NASI focus groups, meaningful debate does seem possible if people are provided with clear, unbiased information and opportunities to ask relevant questions and get answers to them.

The Health Care Financing Administration (HCFA) has never had the resources to support health and retirement benefits education and assistance programs comparable to those found among large employers in the public and private sectors. The detailed information that Medicare provides in the *Medicare Handbook* or other brochures or on its Web site focuses on coverage, benefits, beneficiary rights, appeals, and so on. There is, however, no "usual source" for the information people need to understand what Medicare was designed to do, the challenges facing the program, or what Medicare reforms could mean for them and their families. It is easy to say that there is no money to pay for effective public education, or that if there were, we would not know how to use it (the focus-group experience suggests that we do). In contemplating changes that may have broad consequences across the social fabric, an uninformed (or misinformed) electorate may be a particularly false economy. The challenge for the research and policy communities is to figure out how to provide beneficiaries and the rest of the American electorate with the information they need to decide about Medicare's future in ways that are easy to understand, accurate, and fair.

The views expressed are those of the authors and are not necessarily those of the Robert Wood Johnson Foundation.

NOTES

1. L.R. Jacobs and R.Y. Shapiro, "The Views of Americans Know about Medicare: Preparing for the Future," *Health Affairs* (1997): 111-116; and R.J. Butler, and J.R. Lave, "The Views of Americans Know about Medicare: Preparing for the Future," *Health Affairs* (1997): 288-293. Results of the "School of Public Health Policy Debate?" (Mer 1998) was released as consistent with those of the NASI.
2. C. Jajich-Toth and B.V. Shapiro, and E.C. Schick, "The Views of Americans Know about Medicare: Preparing for the Future," *Health Affairs* (1997): 111-116; and R.J. Butler, and J.R. Lave, "The Views of Americans Know about Medicare: Preparing for the Future," *Health Affairs* (1997): 288-293. Results of the "School of Public Health Policy Debate?" (Mer 1998) was released as consistent with those of the NASI.
3. L.R. Jacobs and R.Y. Shapiro, "The Views of Americans Know about Medicare: Preparing for the Future," *Health Affairs* (1997): 111-116; and R.J. Butler, and J.R. Lave, "The Views of Americans Know about Medicare: Preparing for the Future," *Health Affairs* (1997): 288-293. Results of the "School of Public Health Policy Debate?" (Mer 1998) was released as consistent with those of the NASI.
4. Roper Center for Public Opinion Research, 1998. Review of questions about Medicare and Public Opinion, April 1998, when the NASI poll was conducted.
5. Many of the relevant polls; most had sample sizes of 1,000 or more. Some surveys included analysis of the results.
6. The NASI poll, conducted by Research, Inc., for the NASI, had 1,000 respondents about how Americans assess Medicare. Respondents were directed at shoring up the program.

The views expressed are those of the authors and not the institutions with which they are affiliated. The authors thank Michael Gluck, Susan Kleimann, Ken Keiser, and the members of the National Academy of Social Insurance Study Panel on Medicare's Larger Social Role for their contributions and assistance; and the Robert Wood Johnson Foundation, the Pew Charitable Trusts, and the California HealthCare Foundation for their support of the study panel's work.

NOTES

1. L.R. Jacobs and R.Y. Shapiro, "Public Opinion's Tilt against Private Enterprise," *Health Affairs* (Spring 1 1994): 285-298; R.J. Blendon et al., "What Do Americans Know about Entitlements?" *Health Affairs* (September/October 1997): 111-116; and R.J. Blendon, "Public Opinion and Medicare Restructuring," in *Medicare: Preparing for the Challenges of the 21st Century*, ed. R.D. Reischauer, S. Butler, and J.R. Lave (Washington: Brookings Institution Press, 1998), 288-293. Results of a 1998 poll by the Kaiser Family Foundation/Harvard School of Public Health, "National Survey on Medicare: The Next Big Health Policy Debate?" (Menlo Park, Calif.: Kaiser Family Foundation, 20 October 1998) was released as this article went to press. The findings were quite consistent with those presented here.
2. C. Jajich-Toth and B.W. Roper, "Americans' Views on Health Care: A Study in Contradictions," *Health Affairs* (Winter 1990): 149-157; L.R. Jacobs, R.Y. Shapiro, and E.C. Schulman, "The Poll—Poll Trends: Medical Care in the United States—An Update," *Public Opinion Quarterly* 57 (1993): 394-427; R.J. Blendon et al., "The Beliefs and Values Shaping Today's Health Reform Debate," *Health Affairs* (Spring 1 1994): 274-284; and DYG, Inc., *Social Security and Medicare: An Ongoing Study of Public Values and Attitudes*, Social Security and Medicare Anniversary Study for the American Association of Retired Persons (Washington: AARP, Fall 1996).
3. L.R. Jacobs and R.Y. Shapiro, "Pollwatch: The Media's Reporting and Distorting of Public Opinion toward Entitlements" (Presented at the American Science Association meeting, Washington, D.C., September 1997).
4. Roper Center for Public Opinion Research, DIALOG® file, Dialog Corporation, 1998. Review of File 468: Public Opinion, limited to polls including questions about Medicare, yielded 1,226 "hits" between January 1990 and April 1998, when the analysis was done. There were 404 polls included under Medicare and Public Opinion between January 1996 and April 1998.
5. Many of the relevant polls were designed as random-digit dialing telephone polls; most had samples of approximately 1,000 and thus were generally estimated to be accurate within 3-4 percent at the 95 percent confidence level. Some surveys included larger sample sizes that allow for some subgroup analysis.
The NASI poll, conducted between 27 May and 7 June 1997 by National Research, Inc., for the Study Panel on Medicare's Larger Social Role, asked 1,000 respondents a battery of questions about Medicare and, more broadly, how Americans assess collective and individual responsibility for health insurance. Respondents also were asked about a set of broad policy alternatives directed at shoring up or restructuring Medicare.
6. The focus-group project was supported by the California HealthCare Foundation. Five were held in the Los Angeles area, three in San Jose, and two in the Sacramento area. Seven focus groups were made up of Medicare beneficiaries age sixty-five or older; of these, two were conducted in Spanish and one in

Chinese (Cantonese); three groups were made up of persons ages fifty to sixty-four (predominantly nonbeneficiaries but including several disabled persons in each group who were receiving Medicare benefits). The groups included low- and middle-income beneficiaries (about one-third with annual incomes under \$9,000). A description of the methodology is included in *Medicare Choices in California*, Report to the California HealthCare Foundation, Grant no. 97-501, submitted by NASI (Washington: NASI, June 1998).

7. R.J. Blendon et al., "The Public's View of the Future of Medicare," *Journal of the American Medical Association* (22/29 November 1995): 1645-1648.
8. DYG, *Social Security and Medicare*.
9. See K. Bowman, "Public Opinion and Medicare Restructuring," in *Medicare: Preparing for the Challenges of the 21st Century*.
10. Hart-Teeter, Study no. 4085, NBC News/Wall Street Journal, December 1997, fax communication from Hart-Teeter, Washington, D.C., 11 August 1998.
11. Gallup polls sponsored by the Employee Benefit Research Institute (EBRI) from 1990 through 1993 consistently showed that a majority (56 percent in 1990, 60 percent in 1991, 63 percent in 1992, and 58 percent in 1993) believed that the federal government should guarantee health insurance for all Americans. See Jacobs and Shapiro, "Public Opinion's Tilt against Private Enterprise."
12. A national survey conducted for the National Coalition on Health Care in early 1997 found that 72 percent completely agreed or somewhat agreed that the federal government can play an important role in making health care more affordable, and 69 percent, that government can play an important role in making health care better. In contrast, 40 percent agreed with the statement that the government should stay out of health care altogether, compared with 57 percent who disagreed. International Communications Group, *How Americans Perceive the Health Care System: Report on a National Survey*, conducted for the National Coalition on Health Care (Washington: NCHC, January 1997).
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17. Blendon et al., "The Public's View of the Future of Medicare."
18. In nine National Opinion Research Center (NORC) General Social Surveys conducted between 1975 and 1991, about one-third of respondents agreed strongly that it is the responsibility of the government to help people pay for doctor and hospital bills and that people should take care of themselves. Jacobs et al., "The Poll—Poll Trends."
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20. A 1989 survey conducted by Mathematica Policy Research for the Physician Payment Review Commission (PPRC) found that about 9 percent of beneficiaries had paid bills themselves rather than filing claims. Among those stating that they had not filed claims for bills of \$75 or more, the most commonly cited reasons were that filing the claim was too complicated or time consuming. PPRC, "Assignment and the Participating Physician Program: An Analysis of Beneficiary Awareness, Understanding, and Experience," Background Paper no. 89-1 (Washington: PPRC, September 1989). See also Institute of Medicine, *Improving the Medicare Market: Adding Choice and Protections*, ed. S.B. Jones and M.E. Lewin (Washington: National Academy Press, 1996).
21. Blendon et al., "The Public's View of the Future of Medicare."
22. HMO officials interviewed about Medicare consumer issues for an IOM study all pointed out that "the first task of the health plan in communicating with Medicare beneficiaries is to educate them about Medicare." IOM, *Improving the*

- Medicare Market*
23. Thirty percent of beneficiaries have adequate knowledge of Medicare. J.H. Hibbard, "Public Opinion on Health Affairs."
24. In several studies, the model for the model.
25. See IOM, *Improving the Medicare Market: Adding Choice and Protections*. Beneficiary issues for Medicare. Findings from the (NCQA) Medicare Quality Improvement Study (Washington: NCQA, 1997). Groups concerned with Family Foundation.
26. Medicare program.
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28. Blendon et al.
29. A Kaiser Family Foundation survey of 1997 public opinion shows that five percent of respondents believe that they become more of the Health/Social Security Agenda" (Rosen and worded). percent of respondents get most of their information from that future.
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33. Blendon et al. "Public Opinion on Medicare: Challenges and Opportunities."
34. There was a trend toward wealthier beneficiaries to use it as a supplement to private insurance.
35. This level of public opinion is unpublished.

- Medicare Market.
23. Thirty percent of Medicare beneficiaries knew almost nothing about managed care; only 11 percent could answer most questions developed to assess adequate knowledge for making decisions about Medicare health plan options. J.H. Hibbard et al., "Can Medicare Beneficiaries Make Informed Choices?" *Health Affairs* (November/December 1998): 181-193.
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 34. There was a belief among a number of participants in many of the groups that wealthier seniors did not actually need to use Medicare at all. In some of the sessions the moderator needed to explain that most Americans on Medicare use it as their primary insurance and that their private or retiree insurance supplements Medicare, so that the discussion could proceed usefully.
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Reexamining The Delivery System As Part Of Medicare Reform

Executives from a large health care system that treats many elderly patients offer their view of what Medicare reform needs to accomplish.

by Nancy A. Whitelaw and Gail L. Warden

ABSTRACT: Medicare is more than a payment system. As the nation's largest public payer of health care, Medicare dictates the way health care is delivered to elderly and disabled persons. Health care and health outcomes cannot make substantial improvements until the delivery system is changed. Medicare reform must support a coordinated health care delivery system (in place of hospital-centered, fragmented care) and proactive chronic disease management (in place of episodic, reactive care). Consumers, government, community-based agencies, employers, health plans, and others need to develop a shared understanding of what outcomes we want to obtain, what delivery system reforms are required, and how financing can support those reforms.

IF YOU ASK MOST AMERICANS, "What is Medicare?" you will get a simple answer: It pays for health care for the elderly. This statement is true but fails to capture the full scope of Medicare's role in this nation's health care system and in the lives of thirty-six million elderly and disabled beneficiaries. Medicare provides coverage for 95 percent of the population age sixty-five and older and thus directly affects the health status of virtually every older American. It pays for more than half of all health care for the elderly and is the largest public payer of health care in the United States.¹ As such, Medicare does not simply pay for health care; it actually determines the organization of health care delivery.

In this paper we describe how Medicare looks from the trenches of health care delivery and how its regulations can adversely affect our efforts to deliver cost-effective care of high quality that satisfies

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"Medicare rewards planning and disability"

the beneficiary. Dozens of payment levels and risk-adjusting regulations, various benefits, inconsistent and decreasing funding, and expectations for outcomes are discussed in this volume.

The payment system is given to how Medicare and impedes the type of care that would improve both the quality of care for the elderly and disabled persons. The current payment system we leave to policy and the Henry Ford Health System challenges confronting

Little improvement in outcomes of that care. The Administration (HCF) is organized to achieve better outcomes, we argue, it is difficult to see how the vision should begin with a new delivery system that spans the national chronic disease management

A Case Study Of

The Henry Ford Health System, the founding of Henry Ford Health System, a nonprofit, integrated health care system in the country. The HFHS offers a continuum of long-term care to a community. Our system includes physicians; six hospitals; and hospice, home care, and Health Alliance Plan (HMO). Offerings are a Medicare program, and Medicaid. In 1997 the HFHS

"Medicare rewards a disease-based model, not systematic care planning and disability management."

the beneficiary. Dozens of issues affect delivery systems, including payment levels and risk adjusters, support for medical education, conflicting regulations, difficulties in determining eligibility for various benefits, inconsistencies between Medicare and Medicaid, and decreasing funding coupled with increasing paperwork and expectations for outcomes. These issues are the subject of other papers in this volume.

The payment system clearly is crucial, but attention also needs to be given to how Medicare shapes the way health care is delivered and impedes the type of delivery system changes that are needed to improve both the quality and cost-effectiveness of care to elderly and disabled persons. Rather than examining difficulties with the current payment system and suggesting ways to change it (which we leave to policy and financing experts), we use our experience at the Henry Ford Health System to provide a case study of current challenges confronting delivery systems.

Little improvement in how delivery systems provide care or in the outcomes of that care will occur until the Health Care Financing Administration (HCFA) builds a vision for how care should be organized to achieve better health outcomes. Without such a vision, we argue, it is difficult to evaluate various payment models. This vision should begin with commitments to a coordinated health care system that spans the continuum of care and to proactive, longitudinal chronic disease management.

A Case Study Of An Integrated Delivery System

The Henry Ford Health System (HFHS), established in 1915 with the founding of Henry Ford Hospital, is fairly typical of the large, nonprofit, integrated health systems now developing around the country. The HFHS offers preventive, primary, specialty, acute, and long-term care to a diverse population in southeastern Michigan. Our system includes 1,000 staff physicians and 1,800 affiliated physicians; six hospitals; thirty medical centers; two nursing homes; and hospice, home health, behavioral, and pharmacy services. Health Alliance Plan, an HFHS-sponsored health maintenance organization (HMO), serves more than 500,000 members. Among its offerings are a Medicare risk program, a Medicare supplement program, and Medicaid managed care.

In 1997 the HFHS served about 800,000 Michigan residents, pro-

viding 2.5 million patient visits and 70,000 inpatient stays. Elderly patients made half a million visits to HFHS facilities and accounted for 25,000 hospital stays. Our views about the current challenges confronting Medicare are based on our many and varied experiences with the program while serving these patients.

Moving Toward A Coordinated Delivery System

In 1965 the primary purpose of Medicare was to provide coverage for hospital care. This coverage was expected to be equivalent to the types of coverage available to the working population. The working population, however, typically required acute care services for accidents and injuries. In trying to duplicate the health care coverage received by employees for coverage to elderly and disabled persons, we reinforced an approach to care that is fundamentally inappropriate for persons with serious, chronic disease. In the mid-1960s hospitals not only were the centerpiece of care for persons with serious illness, they often were the only places for such care.

The nation is slowly coming to recognize that hospitals should not be the centerpiece of health care. Hospitals are acute care settings, but the dominant health problems of the Medicare population are chronic illnesses. Hospitalization of the older adult often results in decline unrelated to the progression of the acute problem that led to the admission.² In general, less attention is needed on how to reduce inpatient days; more study is required on how to provide high-quality care in the most appropriate setting at the optimal time.

At Henry Ford and elsewhere, providers are attempting to build coordinated health care systems that focus on patient care in the clinic and the home, where chronic disease can be managed and disability delayed. Making this transformation is challenging: Our systems encompass many facilities and providers that have not worked together in the past. Our job is made even more difficult, however, by the ways in which Medicare policy reinforces fragmentation and hospital-centeredness. Examples from primary care, medication management, home health, and nursing home care illustrate our difficulties.

■ **Primary care.** Primary care financing is woefully inadequate for good geriatric care. Medicare rewards a disease-based model, not systematic care planning and disability management. That model involves repeated brief visits, each addressing a single disease, minimal follow-up, high use of ancillary services and specialists, and multiple treatment regimens prescribed by multiple providers.

We know that there is a better way to provide geriatric care.³ Under an effective primary care model, an interdisciplinary primary

DELIVERY SYSTEM

DELIVERY SYSTEM

care team would conduct a comprehensive assessment of the patient's health status, develop a care plan that builds upon the patient's assets and needs, and implement the care plan. The team would coordinate patient care. The team would assess the patient's needs and family wishes. The care plan would include monitoring, home visits, nutritional assessment, and preventive services to sensory deficits and prevention of falls.

Successful examples of this model can be found elsewhere, but the model cannot be applied to the Medicare population. Comprehensive primary care for the elderly (PACE) has been developed in a small number of care centers and provides comprehensive team-based care, including geriatric primary care, inpatient and loss of specialty care. At these centers, geriatric primary care workers, pharmacists, clinic staff, and other professionals are providing team-based care.

■ **Medication management.** An integrated approach to medication management is especially important for elderly and disabled persons. Medication management is a complex task, especially for persons age sixty and older. Medication management is responsible for 25 percent of all prescription drug costs. Medication management is a complex task, especially for persons age sixty and older. Medication management is responsible for 25 percent of all prescription drug costs.

Medicare's failure to cover long-term care for chronically ill elderly is a major barrier to the development of a coordinated health care system. Medicare's failure to cover long-term care for chronically ill elderly is a major barrier to the development of a coordinated health care system.

HEALTH AFFAIRS

care team would conduct a comprehensive assessment of the patient's health status, develop an interdisciplinary care plan that builds upon the patient's assets and is focused on delaying disability, and implement the care plan in a progressive, coordinated manner. The team would coordinate specialty care and consult on inpatient care. The patient and family would be actively engaged in the assessment and care planning process, assuring that the plan meets their needs and committing themselves to comply as much as they can. The care plan would include advance directives or end-of-life wishes. Primary care services also would include frequent telephone monitoring, home visits, nutrition screening and support, attention to sensory deficits, and preventive physical therapy, among others.

Successful examples of this model are in place at Henry Ford and elsewhere, but the model cannot thrive until Medicare supports comprehensive geriatric primary care. The Program of All-Inclusive Care for the Elderly (PACE) has operationalized a geriatric primary care model but serves a small population.⁴ Some geriatric primary care centers and internal medicine clinics are implementing comprehensive team-based care, despite the added primary care costs and loss of specialty and inpatient revenues that accompany good geriatric primary care. At these centers, nurse practitioners, social workers, pharmacists, clinic staff, physicians, and other health care professionals are providing team care to geriatric patients.⁵

■ **Medications.** An integral part of any primary care regimen, especially for elderly and disabled persons, is the appropriate use of medications. Persons age sixty-five and older consume more than 33 percent of all prescription drugs, averaging fourteen prescriptions per person annually. Recent estimates suggest that potentially inappropriate medications are being prescribed to about 25 percent of elders living in the community.⁶ Appropriate use involves expert assessment and access to the right drugs. Medication reviews by a pharmacist are not covered by Medicare, although researchers have documented the benefits of such reviews.⁷

Medicare's failure to cover prescription medications seriously undermines care for chronically ill patients. In Detroit 70 percent of older adults have annual incomes below \$25,000; a fifth of elderly households live below the poverty level. Many of our patients must choose between food and medications. Recent changes by the state of Michigan and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) in requirements for dispensing, recording, and labeling dispensed drug samples have forced delivery systems to eliminate sample medications from their clinics. Consequently, limited philanthropic dollars are used to provide medications to those who cannot afford them. An HFHS study indicated

that it would cost \$3,000,000 annually to provide just a ten- to thirty-day supply of medications to our patients whose medication costs exceed 25 percent of their income. Delivery systems are incapable of carrying this financial burden alone, but we cannot provide effective health care to persons with chronic disease who cannot obtain a regular supply of appropriate medications.

■ **Home care.** Home care services have been supported to reduce the likelihood of hospitalization or to shorten hospital stays. They have succeeded in doing this, but there now is concern with the rising number and intensity of home visits. To curb the use of home care, the Balanced Budget Act (BBA) of 1997 proposed changes whose result was to lower payments to efficient home care agencies rather than rewarding their efficiency. The Henry Ford Home Health Care (HFHHC) agency, which averages twenty-two visits per year for Medicare beneficiaries, well below the national average of eighty visits, must bear the financial loss.

Home health agencies now have little way of knowing in advance of delivering care if their services will be reimbursed. For example, at the HFHHC we develop and implement a care plan that includes number and frequency of visits, length-of-stay, and types of services. After the services have been delivered, HCFA can reject any portion or all of the plan and not make the payment. The current suspicion directed at home care agencies will cause us to become more conservative in our care planning, likely affecting health status negatively. For example, the types of services that Medicare will support in the home often are limited by the presence of family members, even if those family members are older and more frail than the patient. When home care is denied in these situations, both the patient and the family member are placed in jeopardy.

In working with our own home care agency, we have recognized the great potential of in-home services to improve the health status of chronically ill patients. Home health nurses can teach patients how to care for themselves and family members how to help the patient; they can do home safety checks; educate about medications and see that they are taken properly; customize a treatment regimen to the patient's circumstances; and ensure compliance with care plans. They can identify symptoms before they become serious problems and help patients to judge when medical care is necessary. These are the very services that can help patients to avoid acute exacerbations of chronic disease and losses in functional ability.

Under a new initiative at Henry Ford, we are trying to create an innovative home-based care management program for our capitated patients, using our home care agency. This program is not bound by HCFA's payment rules, but we are frustrated by the agency's regula-

tion of Medicare-certified home network that is unrelated to the physician's area of intervention (such as a mechanism is not able to gain the

■ **Nursing home.** Skilled health care setting. Approximately one- to five resides in a nursing home. expect to spend more than two death.* Nursing homes are a crucial offering twenty-four-hour care and most frail, and most isolated citizens stabilizing the health status of the stymied by conflicting messages between the artificial boundaries between

For example, Medicare expects that preventive care to minimize the types of physical decline is being skilled-care residents, even though expenses of basic-care residents (which however, Medicaid basic-care reimbursement of this type of "medical" service adequate costs of this service for Medicaid beneficiaries pay residents. Ironically, about a third will spend down to Medicaid coverage.

Nursing home residents receiving acute event, such as one requiring admission, must be hospitalized for three can provide them with skilled care. regulations reflect a hospital-centric medical care that skilled-care homes disrupt the frail, basic-care residents to an emergency room, hospitalize attendant risks of deterioration in then return her by ambulance to the

Residents needing skilled care Medicare rules. Length-of-stay during that nursing homes would keep until forced to do otherwise. Due resource utilization groups (RUGs)

tion of Medicare-certified home perwork that is unrelated to stance, HCFA mandates that interventions (such as the physician's area mechanism is not ability to gain the

■ Nursing home.

Health care setting. tion. Approximately one-fifth of the elderly population resides in a nursing home. They expect to spend more than two years in a nursing home before death.⁸ Nursing homes are a crucial part of the health care system, offering twenty-four-hour care and stabilizing the health status of the elderly is stymied by conflicting messages between Medicare and the artificial boundaries between skilled and basic care.

For example, Medicare expects nursing home services that preventive care to minimize the risk of pressure sores. Types of physical decline is being performed on both basic and skilled-care residents, even though Medicare does not cover expenses of basic-care residents (while Medicaid may do so). Often, however, Medicaid basic-care reimbursement does not reimburse this type of "medical" service adequately. To the extent possible, the costs of this service for Medicaid beneficiaries are shifted to private-pay residents. Ironically, about a third of these private-pay residents will spend down to Medicaid coverage levels before discharge.⁹

Nursing home residents receiving basic care who experience an acute event, such as one requiring antibiotic treatments for an infection, must be hospitalized for three days before the nursing home can provide them with skilled care, in the same facility. Again, these regulations reflect a hospital-centered view. Given the highly technical care that skilled-care homes can provide, it seems absurd to disrupt the frail, basic-care resident, transport her in an ambulance to an emergency room, hospitalize her for three days with all of the attendant risks of deterioration in mental and physical function, and then return her by ambulance to the original nursing home.

Residents needing skilled care are limited to 100 days under Medicare rules. Length-of-stay data show that in the past many patients were kept in skilled care until the 100 days expired, indicating that nursing homes would keep residents on Medicare coverage until forced to do otherwise. Due in large part to the application of resource utilization groups (RUGs), the average stay for a skilled-

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care patients in the organization
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care patient is currently twenty-six days, well under the 100-day limit. Linking skilled days to RUGs has provided a need-based rationale for length-of-stay that challenges the value of the 100-day limit. The elimination of the 100-day rule would be particularly beneficial for elderly stroke victims, who often take more than 100 days to reach maximum function.

Moving Toward Chronic Disease Management

Medicare is organized around discrete, disconnected service events that occurred in the past, and therefore it is fundamentally reactive. The payment system supports the production of service units (such as visits, tests, or stays) without a clear vision of how these service units combine to improve the health status of persons with chronic disease and disability. After a century of producing discrete service units, we know that providers and patients can generate very large numbers of them. The relationship of these service units to health status is more uncertain.

The reactive, episodic model is particularly inappropriate for Medicare beneficiaries, 88 percent of whom have at least one chronic condition.¹⁰ Chronic diseases are not curable but are amenable to management over time. Longitudinal management strategies should exist within a framework of population-based care, in which outcomes are measured over time. Such care includes defining and profiling a population, selecting desired outcomes, developing evidence-based guidelines and protocols, measuring processes and outcomes, and instituting improvements.

At the broadest level, Medicare beneficiaries can be grouped into two populations: those in relatively good health, for whom the goal is to maintain optimal health and functional status as long as possible, and those with disability, for whom the goal is to slow the progression of decline.¹¹ Disease-specific populations (for example, diabetics or persons with chest pain or depression) frequently are targeted for improvements in management and performance measurement.

Integral to a chronic disease management approach is performance measurement. Performance measures designed for specific populations are the vehicle for moving away from reactive, episodic care. When we rely on costs per unit of service and numbers of units delivered to judge Medicare, health plans, or delivery systems, we undermine chronic disease management. Performance measurement is posing significant challenges but will be a necessary part of any strategy to provide cost-effective, high-quality care to Medicare beneficiaries.¹² HCFA has made some commitment to performance measurement for chronically ill populations but needs to move

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much more aggressively. It area and needs to lead oth in discovering innovative implement performance care services for the elder outcomes of its beneficiar

Henry Ford's experience that of the nation. David area as natural (inherent frequency of cases, long trol, and so forth) and ma information systems, o measures).¹³ Yet despite delivery systems are no satisfaction reports that tion reports in assessing fer from the usual short urement, outcomes, and start at setting perform and drawing comparis time we can ask, "What the same time that we a separate services such services?"

Measurement is on Working in concert wi that provide longitudi providers. Progress on has been slow, althoug paths offer promising HMOs (SHMOs) have ill and disabled patie relatively small numb at any given time.

To its credit, HCF/ tions. However, it ne tive financing model proaches to chronic have wide applicabil

"To truly contain costs, we need to transform the organization of care, regardless of payment-system changes."

much more aggressively. It has the most to gain from progress in this area and needs to lead other federal agencies and the private sector in discovering innovative ways to finance, study, prioritize, and implement performance measures. As the largest payer of health care services for the elderly, Medicare is accountable for the health outcomes of its beneficiaries.

Henry Ford's experience with performance measurement mirrors that of the nation. David Eddy has characterized problems in this area as natural (inherent to the measurement process, such as low frequency of cases, long time frames, outcomes the plan cannot control, and so forth) and man-made (such as funding levels, inadequate information systems, organizational complexity, and too many measures).¹³ Yet despite these difficulties, Henry Ford and other delivery systems are now producing clinical indicator and patient satisfaction reports that stand alongside our financial and utilization reports in assessing performance. Clinical indicator reports suffer from the usual shortcomings, including imperfections in measurement, outcomes, and population definitions. However, they are a start at setting performance targets, tracking outcomes over time, and drawing comparisons across clinics and systems. For the first time we can ask, "What is our clinical performance for diabetics?" at the same time that we ask, "What is the financial performance of our separate services such as hospitals, clinics, and long-term care services?"

Measurement is only a piece of chronic disease management. Working in concert with measurement are guidelines and protocols that provide longitudinal plans of care that can cross settings and providers. Progress on such guidelines for the geriatric population has been slow, although extended care pathways and clinical guidepaths offer promising approaches.¹⁴ Similarly, PACE sites and social HMOs (SHMOs) have guidelines for managing seriously chronically ill and disabled patients over time. However, these efforts reach relatively small numbers of geriatric patients in any given program at any given time.

To its credit, HCFA has supported PACE and SHMO demonstrations. However, it needs to see these programs not only as innovative financing models but also as laboratories for developing approaches to chronic disease management and measurement that have wide applicability. We are hopeful that the *Health Care Financing*

Review Medicare and Medicaid Statistical Supplement, 2005 will provide data on health outcomes for specific patient populations as well as use and cost data on the separate service types. When we know, for example, the outcomes for congestive heart failure patients, we will be better able to judge if they received too few or too many home care visits.

Skepticism Over The Need For Change

We are aware that some readers will be skeptical about the difficulties that delivery systems face in providing care to the elderly and disabled. Two reactions seem likely. First, delivery systems may be viewed as self-interested institutions, seeking ways to manipulate Medicare and other payers to support their inefficiencies. We will not defend the entire health care industry. As with any large industry with large amounts of money at stake, health care has a share of providers who take advantage of payers. Clearly, legislation, regulation, and oversight are needed to minimize opportunities for abuse.

Much of what outsiders view as inefficiency and waste, however, reflects our attempt to deal with uncertainty about the best way to help apprehensive patients and families cope with severe illness and disability. There are sure to be examples in our files—or any delivery system's files—of patients who might not have met the criteria for skilled care or who received extra home health visits. But often "overservice" reflects the distress and uncertainty our providers experience by working face-to-face with people who are suffering. Denying care is not a paperwork process for us; it is highly personal.

Could we do more to contain costs in the current organizational environment, without sacrificing quality? Presumably, we could, although short-term solutions are not obvious. There is scant documentation on whether health care provision is dominated by "errors" of commission or omission. Current attacks on quality under managed care overlook quality problems throughout health care. Our attention should be focused on the quality and appropriateness of health care, which are often unrelated to current changes in financial incentive.¹⁵

Furthermore, much of what we label "cost containment" is merely cost shifting: passing costs among payers and increasing the financial and care burden on families and patients. Older adults already are spending approximately one-fifth of their incomes on health care, compared with 8 percent for working Americans.¹⁶ Cutbacks in public funding for community-based programs such as special transportation, meals, and housekeeper and home repair services put additional pressures on health care providers and families. If we want to truly contain costs for all parties, we need to transform the

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organization of care, regardless of payment-system changes. The second likely reaction to our arguments will be that because so few patients are adversely affected by the current system, there is no reason to change it. We respond: The issue is not how many are affected but how seriously even a few are affected. The current financial problems of Medicare can be attributed to 5-10 percent of beneficiaries. These patients most desperately need interdisciplinary, proactive primary care, need an opportunity to develop an end-of-life plan with the help of family and practitioners, and need prolonged home care and other supportive services. Instead, these patients receive high-technology outpatient services and repeated hospitalizations. Without a coordinated approach to chronic disease management, the health or financial outcomes of these beneficiaries will improve little, if at all.

Next Steps

As we reflect on ways to improve Medicare in the next century, it is important to build from the valuable contribution that the program has made in the past. A fundamental goal of Medicare was to assure that the elderly have access to the same level of care enjoyed by insured, working persons.¹⁷ This was a radical idea in the early 1960s. Although the goal has not been fully achieved, the basic idea is now widely accepted. Reform discussions address the scope of, financing of, and eligibility for benefits, but the basic access principle is not seriously challenged. By improving access to care, Medicare has been instrumental in extending longevity and raising the quality of life for older and disabled Americans.

How can we build on this access principle to develop a new system of care? The first step is for HCFA and others to recognize that Medicare can no longer be viewed merely as a payment system. Medicare is the single most powerful force shaping the organization of health care in the United States. As long as attention on Medicare is focused on micromanaging the payment system, we will not see significant improvement in total health care costs or population health. Targeting the payment system can identify innovative ways to shift costs—moving costs to patients, families, delivery systems, employers, and other insurers—but is unlikely to dramatically improve the efficiency and quality of the overall system of care.

To be effective in the twenty-first century, HCFA will need to have the political support and the resources to change. Medicare is organized around a set of principles that are fundamentally inflationary and frustrate efforts to improve the health status of the elderly. There must be a willingness to risk parting with what we know does not work and to build organizational and payment sys-

tems based on coordinated systems of care and chronic disease management.

Making the transformation will also require an infusion of resources, no matter how politically unpopular that may be. Perhaps most importantly, HCFA needs to enter the information age. Managing chronically ill populations across the continuum of care and measuring changes in health status require sophisticated information systems. The technology is available; HCFA needs the resources to invest in it. Such a system would enable Medicare to reduce its case-by-case micromanagement of health care providers and build the capability to audit providers based on longitudinal care and improvements in health status.

No single organization is better positioned than HCFA is to take the leadership in framing a new approach to care of the elderly and disabled. Let us be clear: We are not advocating that HCFA assume all of the expense of caring for these populations. In fact, we believe that a new approach could reduce Medicare costs. But we do think that Medicare must take the initiative in building a national consensus around what level of health is achievable for elderly and disabled Americans, and how we can collectively reach that goal. All stakeholders need to be brought together—consumers, Medicare, Medicaid, delivery systems, community-based agencies, employers, and health plans—to develop a shared understanding of what we should be trying to achieve.

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