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Supplemental Insurance: Medicare's Accidental Stepchild

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The majority of Medicare beneficiaries supplement the basic Medicare benefit package with additional insurance. This article reviews the literature on Medicare supplemental insurance. Supplemental insurance plays a significant role in protecting Medicare beneficiaries from financial risk. The two major sources of coverage for beneficiaries—former employers and individual purchase—differ in benefit structure and characteristics of policy holders. Employer-sponsored policies tend to provide broader coverage with more cost sharing than individually purchased policies, and holders of employer policies tend to be younger, wealthier, healthier, and better educated. Supplemental insurance policies have been shown to be associated with higher Medicare expenditures, but there is no consensus on the cause of the higher expenditures. Some studies attribute the increase to adverse selection of policies; other studies point to the moral hazard effect of insurance.

Over the past decade, reform of the publicly funded Medicare program has been a topic of consistent interest. Medicare has struggled to contain costs in its fee-for-service (FFS) program while simultaneously trying to integrate new options, such as managed care. But while public discussion has centered on the government-controlled portion of the program, just beneath the surface lurks the complex supplemental health insurance market. Efforts to change or reform Medicare are greatly complicated by the myriad of health insurance

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combinations created by individuals, employers, unions, and state governments in their efforts to supplement the basic Medicare benefit package.

The importance of Medicare supplemental insurance to Medicare beneficiaries and the Medicare program has not gone unnoticed. Over the past two decades, a significant literature has developed on the interaction between Medicare and supplemental insurance. This article reviews this literature on supplemental insurance and discusses the advantages and disadvantages of the current system for the beneficiary and for Medicare.

NEW CONTRIBUTION

This article is the first to systematically review the supplemental insurance literature. The purpose of this article is to examine the sometimes contradictory literature on supplemental insurance and identify and discuss the major areas of agreement and disagreement. A total of 118 articles and reports published between 1973 and 1999 are reviewed and discussed. First, this article briefly describes Medicare's structure and explains how supplemental insurance arose and its purpose for beneficiaries. Next, the extensive literature documenting the characteristics of supplemental insurance policies and policy sources is presented, and then articles examining the factors that affect the purchase of supplemental insurance are summarized. Finally, the many studies that empirically investigate the linkage between supplemental insurance and Medicare expenditures are critically reviewed and compared.

MEDICARE STRUCTURE AND SUPPLEMENTAL INSURANCE: WHY BUY MORE INSURANCE?

Medicare is the publicly funded health insurance program for the elderly in the United States. All Americans over age 65 who worked at least 10 years in Medicare-covered employment (and their spouses) are eligible to receive Medicare benefits, as are certain other disabled populations, such as individuals receiving kidney dialysis and disabled workers (*How the new 1996 social security changes affect you* 1995). Medicare was created to increase access to care and to reduce the financial burden of medical care for the elderly, particularly for minorities and the poor. It has been largely successful in achieving its original goals (Rowland 1991; Blumenthal 1988; Link et al. 1982).

Medicare was designed to mimic privately sold health insurance for the working population in 1965 (Blumenthal 1988). Part A provides in-patient hospital insurance coverage but includes extensive cost-sharing. Total potential out-of-pocket liability under Part A is unlimited. For any hospitalization,

the Part A deductible is \$776 (in 2000). Beyond the initial deductible, the principal limitation of Part A coverage is for the extremely unusual hospitalization: one in excess of 60 days or which results in an extended stay in a skilled nursing facility. An individual using all covered Medicare Part A hospital and posthospital benefits (150 days of hospital care, 100 days of skilled nursing facility care, 3 pints of blood) in a single benefit period in 2000 would pay \$37,636 in cost-sharing.

Part B, like Part A, has unlimited beneficiary liability. Beyond the annual deductible of \$100, Medicare covers 80 percent of Medicare fees for medically necessary outpatient care. Physicians "accepting assignment" agree to accept the Medicare fee as payment in full; otherwise, the physician may "balance bill" the beneficiary (Health Care Financing Administration 1996), although balance billing is now generally limited to 15 percent above the Medicare approved rate.

The beneficiary also faces significant exposure to out-of-pocket liabilities for uncovered services, including most routine preventive care, immunizations, dental care, hearing aids, eyeglasses, outpatient prescription drugs, and long-term care (Miller 1992; Chulis et al. 1993c; Sofaer and Davidson 1990; Rice and McCall 1985). Omitted benefits such as eyeglasses and preventive care, which typically are included in non-Medicare health insurance packages, reflect Medicare's origin as a 1960s FFS insurance package when coverage for these services in employer-based plans was unusual (Schlesinger and Wetle 1988).

Medicare pays an average of 62 percent of the beneficiary's total noninstitutional health care expenses, with 23 percent paid for by other payers (Medicaid and other forms of supplemental insurance) and 15 percent paid for out of pocket (Medicare Payment Advisory Commission 1999). Medicare paid for 70 percent of hospital bills and 61 percent of physician services; private sources paid for 37 percent of the total (Physician Payment Review Commission 1997). Of Medicare beneficiaries, 5 percent paid more than \$4,675 out of pocket for medical care (excluding long-term care) in 1995, while 1 percent spent more than \$8,805 (Medicare Payment Advisory Commission 1999). Average out-of-pocket expenditures in 1999 were equal to \$2,430, or 19 percent of median income (Gross and Brangan 1999). The single largest expense was for private insurance premiums (27 percent of out-of-pocket spending), followed by Part B premiums (19 percent) and prescription drugs (17 percent). Out-of-pocket spending is projected to rise to 29 percent of median income in 2025 (Moon 1999).

When Medicare was originally crafted, coverage was only proposed for hospital services and individuals were expected to purchase supplemental insurance to cover outpatient expenses. In the background guide for House

Resolution 1 in 1965, which introduced the Medicare legislation (entitled "Hospital Insurance for the Aged through Social Security"), it was written that Medicare "left a substantial place for private insurance for nonbudgetable health costs, [particularly for] physicians' services" (Marmor 1973). During the ensuing legislative struggle over Medicare, Part B was added, and it was believed that there was little room for private supplemental insurance (Part B was copied from the federal employees' health insurance plan, and federal employees did not purchase supplemental insurance). But the federal employee health insurance program was designed to cover acute illness; little consideration was given to the differences between young and old or chronic and acute illness (Schlesinger and Wetle 1988). Cost-sharing provisions that were appropriate and not burdensome for a working-age population were inappropriate for the elderly. By the late 1960s, more than 45 percent of Medicare beneficiaries held private insurance in addition to Medicare (Cafferata 1985).

By purchasing supplemental insurance, Medicare can be effectively upgraded to a higher quality health insurance package. Beneficiaries with supplemental insurance report consistently higher levels of satisfaction with health care than those without (Adler and Phil 1995). The high cost sharing is a barrier to access for those without supplemental insurance, who are typically lower income. Although the elderly have lower poverty rates than other age groups, a higher proportion of the elderly have incomes between 1.0 and 2.0 times the poverty line; this near-poverty group is financially vulnerable to unexpected medical expenses (Holden and Smeeding 1990). In 1999, 9 percent of Medicare beneficiaries were below the poverty line, but 26 percent were in the near-poverty group (Gross and Brangan 1999).

SOURCES OF COVERAGE AND POLICY CHARACTERISTICS

Typically, private supplemental insurance is either provided by employers as a retirement (group) benefit or purchased by individuals. The proportion of Medicare beneficiaries who have supplemental insurance depends on the definition of supplementary insurance. Medicaid is often, but not always, considered a supplemental insurance policy. And although health maintenance organizations (HMOs) are clearly not synonymous with supplementary insurance, individuals enrolled in HMOs typically have benefits beyond the basic FFS package. Thus, one definition of supplemental insurance would consider beneficiaries with Medicaid or who were enrolled in HMOs to have supplemental insurance. This definition would serve to define the percentage of the total Medicare population without additional coverage. An alternative

definition would be to use the same sample but not to consider HMOs or Medicaid to be supplemental insurance. This definition would provide the proportion of the Medicare population with private FFS supplementary insurance. A third approach would be to exclude the HMO and Medicaid populations from the sample and to look at supplemental coverage among those in the FFS sector who are not qualified for public assistance.

Using the first definition (including the HMO and Medicaid populations in the sample and considering them to be supplemental insurance), in 1995, 89 percent of the Medicare population had supplementary coverage (Eppig and Chulis 1997). If the HMO and Medicaid populations are included in the sample but not considered to be supplemental insurance (the second definition), then 63 percent of the Medicare population has supplemental insurance. Finally, using the third definition (excluding the HMO and Medicaid populations from the sample), the percentage of the nonpoor FFS population with additional coverage becomes 84 percent, with 16 percent lacking additional coverage. All of these different definitions have been used in studies describing the Medicare population.

Within the supplemental insurance market, employer-sponsored supplemental insurance (ESSI) and individually purchased supplemental insurance (IPSI) policies have experienced slow declines. Combined, the policies cover 3 percent less of the Medicare population in 1996 than they did in 1992 (Eppig and Chulis 1997). In part this is due to increased enrollment in Medicaid (from 17 percent to 18 percent) and Medicare HMOs (from 6 percent to 13 percent), but the proportion of the population only covered by Medicare increased from 11 percent in 1992 to 13 percent in 1996.

EMPLOYER PLANS

Employers began providing supplemental Medicare insurance immediately after the creation of Medicare. Initially, the coverage was provided in response to pressure from unions, particularly the United Auto Workers (Dopkeen 1987). Eligibility for ESSI is usually dependent on the employee's age and length of service with the firm and often mirrors early retirement rules (Dopkeen 1987). Occasionally, policies are issued by groups other than employers (such as fraternal, religious, or other voluntary associations), but surveys have found that 94 percent of those over 65 with group policies received them through former or current employers (Garfinkel, Bonito, and McLeroy 1987).

In recent years, companies have become more concerned about the potential liability associated with the promise of retiree health coverage. As health care costs have continued to increase faster than inflation and the ratio of

retired workers to active workers has increased for many companies, the cost of providing retiree benefits has increased. In addition, firms' ability to make unilateral changes in retiree benefits has been limited in a series of judicial decisions (Clark, Ghent, and Headen 1994). The Financial Accounting Standards Board began requiring firms to report accrued health care liabilities in their financial disclosure statements after December 1992, forcing companies to be more conscious of the potential costs of promising benefits (General Accounting Office 1993; Lillard, Rogowski, and Kington 1997). A recent survey found that more than half of employers that offer coverage have taken steps to control costs; the most common approaches were to end the promise of coverage to current employees and to increase the cost sharing by current retirees (Battagliola 1994). Among large firms, the proportion offering retiree health coverage declined from 80 percent to 67 percent from 1991 to 1998 (McArdle et al. 1999); the overall percentage of the Medicare population with employer-sponsored supplemental insurance declined slightly, from 34 percent to 33 percent between 1992 to 1996 (Eppig and Chulis 1997).

The most common way to increase the contribution of current retirees is to increase the required health insurance premium contributions (General Accounting Office 1993; Shea and Stewart 1994). A study using 1987 data found that 80 percent of beneficiaries with employer policies had at least half the premium paid for by the employer (Vistnes and Banthin 1997-1998). Other studies from the 1980s also found high employer subsidization of premiums, with estimates of the percentage of "free" policies ranging from 56 percent (and 47 percent of policies for which spouses were also subsidized; Dopkeen 1987) to 60 percent (with 15 percent paying the full cost and 25 percent paying part; Clark and Kreps 1989). By 1996, the average annual premium paid by retirees from large firms was \$948; the employer paid the full cost of the policy for 29 percent of retirees, while 28 percent of retirees received no employer subsidy for employer policies (Physician Payment Review Commission 1997). In 1997, only 27 percent of policies were fully subsidized, with an average annual premium of \$1,008 for single-person plans requiring a contribution (National Bipartisan Commission on the Future of Medicare 1999).

The trend of increasing the proportion of the total cost borne by retirees is likely to continue as the expense of providing the benefits increases (Clark and Kreps 1989). The ERISA statute gives employers the right to make changes in retiree plans (but not eliminate the plans), provided that the employers have reserved the right to do so, which most do (Dopkeen 1987; Clark and Kreps 1989; General Accounting Office 1993). Large employers are increasingly tightening eligibility standards, capping employer liability, and trying to move retirees into HMOs (McArdle et al. 1999).

ESSI plans can be quite different from IPSI plans. IPSI plans are designed to be integrated with Medicare, while ESSI plans are often extensions of medical insurance provided for active workers (Clark and Kreps 1989; Clark, Ghent, and Headen 1994). Generally, Medicare is considered the primary payer; there are several different methods available to coordinate benefits. Under the most common method (carve-out), the retiree will still face some portion of Medicare deductibles (Dopkeen 1987; Clark and Kreps 1989; Jensen and Morrissey 1992; General Accounting Office 1993).¹ For this reason, beneficiaries with supplemental insurance through their employer typically still pay some portion of Medicare deductibles and face greater point-of-service cost sharing than those with individually purchased supplemental policies (Jensen and Morrissey 1992).² ESSI plans are more likely to include prescription drug coverage (one study found that over 90 percent of employer policies contain drug coverage; Rice, McCall, and Boismier 1991), chemical dependency treatment, vision coverage, dental coverage, and "catastrophic expenses" caps, whereby total out-of-pocket liability is capped (Jensen and Morrissey 1992; General Accounting Office 1994). Although ESSI plans have traditionally been more comprehensive (Feder and Holahan 1979), employers have been reducing covered benefits, including prescription drug coverage (Kuttner 1999). Despite this, ESSI plans are still the major source of prescription drug coverage for the Medicare population (Poisal et al. 1999). The prescription drug benefit from large employers typically features a \$300 deductible, a 20 percent retiree copayment, and total retiree liability of \$1,750 (McArdle et al. 1999). ESSI plans also have higher loss ratios than IPSI plans due to economies of scale in purchasing insurance (General Accounting Office 1998).

INDIVIDUAL PLANS

Medicare beneficiaries can also individually purchase supplementary coverage. Making a sensible choice of supplemental insurance is challenging for many beneficiaries. There is strong evidence that Medicare beneficiaries do not fully understand basic insurance concepts, let alone Medicare's benefits and limitations (LaTour, Friedman, and Hughes 1986; Schlesinger and Wetle 1988; McCall, Rice, and Sangl 1986; Hagen 1986; Hibbard et al. 1998; Meiners 1983; Sofaer and Davidson 1990; Sofaer, Kenney, and Davidson 1992). Beneficiaries often do not understand standard insurance terms such as deductible, copayment, pre-existing condition, or assignment (Wattenberg and McGann 1984; Sofaer and Davidson 1990). In one study, Medicare beneficiaries correctly answered an average of 8.5 of 15 true/false questions about Medicare

benefits and only 4.9 of 11 true/false questions about health insurance in general (Lambert 1980). Subsequent studies have had similar findings. Wattenberg and McGann (1984) reported that respondents correctly answered an average of 2.8 of 5 questions on Medicare benefits; Sofaer, Kenney, and Davidson (1992) found that only 50 percent of respondents to a survey were able to correctly categorize more than half of a list of benefits as covered or uncovered, and Hibbard et al. (1998) reported that Medicare beneficiaries correctly answered only 42 percent of questions designed to test knowledge of Medicare's basic structure. Without understanding Medicare, it is impossible to select an appropriate supplemental insurance package to coordinate with Medicare.

In addition to not understanding Medicare, many beneficiaries do not understand the benefits or limitations of their particular supplemental policy (Sofaer, Kenney, and Davidson 1992; Schlesinger and Wetle 1988; Wattenberg and McGann 1984). Surveys have found wide variations in coverage per premium dollar, suggesting that consumers struggle to evaluate policies (Feder and Holahan 1979).

LEGISLATIVE INITIATIVES

In 1978, hearings before the Congressional Select Committee on Aging detailed marketing abuses (Rice, Graham, and Fox 1997). Marketers of supplemental insurance policies were reported to have pressured consumers to purchase policies, misrepresented the nature of the issuer of the policy, misrepresented policy contents and competitors' policies, and engaged in rollover (forcing subscribers to change policies frequently) to increase policy commissions (McCall, Rice, and Hall 1987; Fox, Rice, and Alecxih 1995; Sofaer and Davidson 1990; Hagen 1986; Feder and Holahan 1979).

In response, Congress enacted two major reforms of the supplemental insurance industry. The first, in 1980, was the Voluntary Certification of Medicare Supplemental Health Insurance Policies, commonly known as the Baucus Amendment (Public Law 96-265, Sec. 507). The Baucus Amendment attempted to reduce fraud by outlawing the knowing sale of multiple policies, setting minimum coverage standards, and requiring higher loss ratios (Cafferata 1985; McCall, Rice, and Hall 1987; Short and Vistnes 1992). Compliance with the Baucus Amendment was voluntary, but 46 states adopted its standards into law (Rice, McCall, and Boismier 1991; Fox, Rice, and Alecxih 1995).³ The Baucus Amendment failed to achieve its policy goals. For example, a decade after its enactment, more than one third of the policies failed to meet the established loss ratios (General Accounting Office 1991). Anecdotes

provided to the 95th Congress described beneficiaries with 30 supplemental policies (Stettner 1983).

The second reform was contained in the Omnibus Budget Reconciliation Act of 1990 (OBRA-90), Section 1882 of the Social Security Act (Rice and Thomas 1992; Morrissey 1993). Unlike the Baucus Amendment, the OBRA-90 reforms were mandatory (Fox, Rice, and Alecxih 1995). OBRA-90 changed the industry in several significant ways. First, it required the National Association of Insurance Commissioners (NAIC) to develop 10 model policies, which were the only new Medigap policies allowed to be sold after July 30, 1992.^{4,5,6}

The model policies range from a relatively bare-bones policy with only a set of core benefits to a more generous package that, in addition to the core benefits, includes prescription drug coverage, preventive medical care, and medical coverage in foreign countries (Rice and Thomas 1992). The core benefits included in all policies require coverage for the Part A hospital daily copayments for days 61 through 150, the 20 percent Part B coinsurance on physician charges, and the first three pints of blood received each year, as well as coverage for an additional 365 days of hospital care. In addition to the core benefits, the model policies (typically labeled policies A through J) feature various combinations of eight benefits. Policy A is the least generous (with only the core benefits), while B includes coverage for the Part A deductible as well. The most common benefits are the Part A deductible (included in 9 of the 10 model policies, B through J) and coverage for the skilled nursing facility (SNF) copayment and foreign travel (both included in C through J). Only 2 of the 10 plans cover the Part B deductible (C and F), but together these two plans included 54.7 percent of the market in 1990 (Fox, Rice, and Alecxih 1995) and 50.9 percent in 1994 (McCormack et al. 1996). Two of the standard benefits, preventive care and coverage for at-home recovery, appear to be notably unpopular with consumers (McCormack et al. 1996). Under the model policies, there are two versions of a prescription drug benefit; both are very limited. The low version (Plans H and I) has a \$250 annual deductible and a 50 percent coinsurance rate, with a maximum benefit of \$1,250. The high version (Plan J) is similar, but increases the maximum benefit to \$3,000. In contrast to ESSI plans, where over 86 percent of plans include a prescription drug benefit, only 29 percent of purchased IPSI plans include prescription drug coverage (Poisal et al. 1999).

OBRA-90 also established consumer counseling programs, increased loss ratio requirements, prevented the sale of duplicate policies (by requiring a written statement from the consumer about existing policies), limited agents' commissions, and required a 6-month open-enrollment period (Rice and Thomas 1992; Short and Vistnes 1992; Fox, Rice, and Alecxih 1995).

The 6-month open-enrollment period allows beneficiaries to purchase IPSI without regard to health status, with guaranteed renewal of the policy (Physician Payment Review Commission 1997). The enrollment window opens when the beneficiary initially enrolls in Part B. After expiration of the 6-month window, some policies (although not all policies) become experience-rated or medically underwritten (General Accounting Office 1996). A survey of six companies that used medical underwriting in 1995 found that the rejection rate ranged from 1 percent to 54 percent (General Accounting Office 1996).

OBRA-90 did not require conversion of existing policies to meet the new guidelines (Chulis et al. 1993c), and pre-OBRA-90 policies still constituted the majority of IPSI plans owned in 1997 (National Association of Insurance Commissioners [NAIC] 1999). A survey of 13 of the 20 largest commercial insurers (including nearly two thirds of all individually sold policies) found that the only significant common pre-OBRA-90 benefit not included in the model policies was private-duty nursing (Rice and Thomas 1992). Several benefits available in model policies were uncommon before OBRA-90, particularly vision coverage (less than 1 percent of policies), preventive care, and home health care (which was uncommon and inconsistent in benefits). Prior to OBRA-90, 94 percent of plans covered the Part A deductible, 92.5 percent covered copayments for hospital days 61 to 150, and 91 percent covered the 20 percent Part B coinsurance (Vistnes and Banthin 1997-1998). Two other features—the SNF copayment and travel outside the United States—were included in more than 75 percent of pre-OBRA-90 policies. Prescription drug coverage before OBRA-90 varied tremendously. The OBRA-90 changes appear to have increased the generosity of the typical IPSI prescription drug benefit (Rice and Thomas 1992).

Although IPSI plans fill in gaps in Medicare coverage, many policies offer little coverage beyond the Medicare benefit package. In general, nonhospital prescription drugs and long-term care, the two most significant omissions in Medicare coverage, are not covered by supplemental policies (Feder and Holahan 1979; Morrissey 1993). Prescription drugs are included in the most expensive IPSI policies, but long-term care is not included in any of the model plans. Per capita spending by the elderly on prescription drugs was \$691 in 1995 (Davis et al. 1999), with 67 percent of the cost of prescription drugs paid for out-of-pocket (Rogowski, Lillard, and Kington 1997).

The OBRA-90 policy standardization appears to have had a major impact on the IPSI market. The range of premiums offered by different insurers for the 10 plans narrowed significantly from 1991 to 1993, suggesting that the changes have increased ease of comparison between insurers and forced competitive pricing (Rice, Graham, and Fox 1997). The simplification has also dramatically lowered the search costs for beneficiaries seeking coverage and increased

consumers' ability to understand and evaluate different supplemental insurance policies (Fox, Rice, and Alecxih 1995; McCormack et al. 1996; Rice and Thomas 1992). Prior to OBRA-90 it was suggested that it was virtually impossible for most beneficiaries to assess the multiple options and make optimal choices because of the sheer number of choices (Firman 1985; Sofaer and Davidson 1990). However, the number of insurers selling supplemental insurance declined after OBRA-90 (McCormack et al. 1996).

IPSI premiums have increased rapidly in the past several years. The average annual premium for IPSI plans sold in 1991 was estimated to be \$664 (Chulis et al. 1993b); by 1997, it was estimated to be about \$1,300 (Physician Payment Review Commission 1997). Premiums for the plans offered by the American Association of Retired Persons (the largest sponsor of individual policies) increased by 26 percent in 1996, and were expected to increase by a further 13 percent in 1997 (General Accounting Office 1996; Families USA 1996). Premiums for the two most popular plans (C and F) increased an average of 9 percent and 4 percent annually between 1992 and 1996 and are expected to begin increasing at rates of more than 10 percent annually (National Bipartisan Commission on the Future of Medicare 1999). Overall, from 1994 to 1998, premiums increased an average of 35 percent, with premiums in 1998 increasing between 20 percent and 50 percent nationwide (NAIC 1999).

It has been suggested that the rapid premium increases may be leading to a death spiral for supplemental insurance policies, where healthier members of the risk pool drop coverage, leaving ever-increasing premiums and sicker risk pools until the insurer is forced to discontinue coverage (Kuttner 1999). This may be driven in part by the managed care market as HMOs draw healthier beneficiaries from the FFS sector and, by extension, the IPSI market (National Bipartisan Commission on the Future of Medicare 1999).

Three methods are used to set prices for policies issued within the 6-month window: community, age-at-issuance, and age-attained rating (Fox, Rice, and Alecxih 1995; Physician Payment Review Commission 1997; Rice, Graham, and Fox 1997). Outside the window, policies may be experience rated, although the American Association of Retired Persons community rates their policies (except for those with drug coverage). Policies with age-attained premiums are lower cost for those in the 65 to 75 range, but community rating becomes cheaper after age 75 within markets with policies of both types (Kendig 1994). One study has found substantial premium differences by age group for Plan C (National Academy of Social Insurance 1999). Since OBRA-90, the number of carriers using age-attained rating has increased (McCormack et al. 1996).

The Balanced Budget Act of 1997 (BBA97) also made changes to the Medigap market. The BBA97-extended guaranteed issue requirements to several additional groups, including beneficiaries who lose access to their managed care plan (National Bipartisan Commission on the Future of Medicare 1999). BBA97 provided guaranteed issue of several IPSI policies to individuals who disenrolled from Medigap plans, enrolled in a Medicare HMO, then subsequently disenrolled from the HMO within 12 months of initial enrollment (with some restrictions). Also, individuals who lose access to their supplemental coverage (EPSI or IPSI) or HMO are guaranteed access to several IPSI plans (again, with restrictions), as are individuals who immediately enroll in an HMO upon becoming eligible for Medicare but disenroll from Medicare within 12 months.

MULTIPLE POLICIES

Some individuals hold multiple supplemental insurance policies. Multiple policies may be held if an individual accrued sufficient tenure in multiple jobs to receive multiple employer policies, if an individual purchases multiple IPSI policies, or if an individual possesses an employer policy and an individual policy. As already discussed, a series of laws have been enacted to try to prevent Medicare beneficiaries from being sold multiple, duplicative individual policies.

An individual with employer coverage may purchase an individual policy if the employer offers a policy that lacks attributes the individual desires or the individual fears that the employer policy may be withdrawn in the future. For example, many employer policies cover spouses, but few explicitly discuss what happens to the spouse's coverage if the policyholder dies (Morrisey, Jensen, and Henderlite 1990). Of those discussing the matter, one third discontinue coverage at some point (Morrisey, Jensen, and Henderlite 1990).

Past studies have found no relationship between the purchase of multiple policies and either knowledge of Medicare or level of education (Rice, McCall, and Boismier 1991). Policies purchased to supplement an employer supplemental policy appear to be selected to fill in gaps in the employer policy (Chulis, Eppig, and Poisal 1995). Multiple policies are most likely to be purchased by those with higher incomes, women, and by more educated beneficiaries (Jensen and Morrisey 1992; Morrisey 1993; Short and Vistnes 1992). Spouses of retired workers appear to buy the policies to protect themselves in the case of the death of the policy holder (Morrisey 1993). Beneficiaries with the most generous employer coverage (coverage with the most favorable coordination schemes, prescription drug coverage, etc.) are least likely to buy additional supplementary coverage (Vistnes and Banthin 1997-1998).

OTHER OPTIONS: DREAD DISEASE AND HOSPITAL-BASED INSURANCE

Another option for consumers is “dread disease” insurance. These policies cover expenditures associated with a specific illness, such as cancer. These policies are widely considered to be of little value because they typically have low loss ratios and benefit payouts and duplicate the benefits of standard plans (Cropper 1997; Hagen 1986). One survey found that only one of six beneficiaries with cancer coverage and cancer received benefits greater than the premiums (Stettner 1983). These policies have been outlawed in a number of states (Hagen 1986).

There are also other variations that have been introduced with limited success. Some hospitals have sold “insurance” policies whereby the hospital waives the Part A cost sharing (Taravella 1992). Another form is a hospital indemnity policy, whereby the hospital pays a fixed sum per diem (Rice 1987).

HMOs

Medicare’s efforts to include HMOs on the beneficiary health plan menu are impacted by FFS supplements, both directly and indirectly. Directly, FFS supplements are a competitor to HMOs; those with supplemental policies are less likely to enroll in HMOs than those without (Garfinkel et al. 1986). What Medicare HMOs offer—reduced cost sharing and covered services beyond the basic benefit package—is precisely what FFS supplements offer. HMOs entice beneficiaries to enroll by offering, in effect, a free or low cost supplement. Also, 95 percent of HMOs offer some degree of prescription drug benefit (Davis et al. 1999). Some employers also tailor their supplemental insurance benefit around Medicare HMO benefits.

But there is an indirect effect from supplemental insurance onto HMOs as well. As described by Dowd et al. (1992), if FFS supplements increase average costs in the FFS sector, HMO reimbursement, which is based on average FFS cost, will increase.⁷ HMOs then use this increased reimbursement to offer improved benefits to beneficiaries. Almost one quarter of Medicare HMO enrollees hold either an ESSI or IPSI plan (National Bipartisan Commission on the Future of Medicare 1999).

SUPPLEMENTAL INSURANCE: THE PURCHASE DECISION

The mechanisms that change the policy seeker into the policy holder vary across the insurance source. Past studies have examined factors that predict

who will purchase a supplemental policy. Most early studies of the demand for supplemental insurance failed to distinguish between ESSI and IPSI. By combining the two policy sources together, researchers implicitly assumed that the relationship between independent factors and insurance status was similar. However, there is evidence that the differences between the two policy sources are empirically significant. Shea and Stewart (1995) estimated demand for supplemental insurance using three different models: one with only ESSI, one with only IPSI policies, and one with the two groups combined, using the same independent variables. The only significant independent variables in the employer-only equation were being divorced or separated (negative relationship), income (positive), and income squared (negative). All three of the variables that were significant in the employer equation were insignificant in the individual purchase equation, while race, gender, poor health, and wealth were all significant, suggesting that the independent variables influencing the two policy sources are different.

The distinction between the policy sources is important from a policy perspective as well. Employer-based policies are more difficult to regulate; the failure of the 1988 Medicare Catastrophic Coverage Act was due, in part, to the presence of the employer-sponsored policies (Morrisey, Jensen, and Henderlite 1990). The 1988 act provided benefits of little or no value to those with ESSI policies, but increased the cost of Medicare for all beneficiaries. Although ESSI policies may not be covered by the ERISA statutes, it appears likely that changes in the employer policies will be more difficult to enact than changes in other sectors (Morrisey 1993).

The factors that have been found to influence the purchase decision can be grouped into three broad categories: demographic, health, and other characteristics.

DEMOGRAPHIC CHARACTERISTICS

Among the studies that combine the two policy sources, "better off" individuals appear to be more likely to hold non-Medicaid supplemental insurance. Factors associated with increased probability of purchasing insurance include being younger, white, and married, and having more education, a usual source of care, higher family income, contingency assets, and wealth; those not purchasing tend to be male and nonwhite (Browne and Doerpinghaus 1994-1995; Christensen, Long, and Rodgers 1987; Chulis et al. 1993b; Davidson, Sofaer, and Gertler 1992; Del Bene and Vaughan 1992; Dowd et al. 1994; Garfinkel, Bonito, and McLeroy 1987; Hill et al. 1992; Hurd and McGarry 1997; Landerman et al. 1998; Long, Settle, and Link 1982; Morrisey, Jensen, and Henderlite 1990, Morrisey 1993; Rice and Gabel 1986; Rice and

McCall 1985; Rice, McCall, and Boismier 1991; Short and Vistnes 1992; Wolfe and Goddeeris 1991). Not smoking has also been found predictive of a supplemental policy (Hurd and McGarry 1997), as has living in an urban area (Saag et al. 1998). Some of these factors have been contradicted by other studies. One study found no relationship by marital status (Rice and McCall 1985); several others found that income had no relationship after controlling for Medicaid eligibility (Long, Settle, and Link 1982; Morrisey 1993).

In studies that have looked only at individually purchased supplemental policies (excluding employer policies), holders of policies were found to be older (Jensen and Morrisey 1992; Morrisey 1993; Short and Monheit 1987; Vistnes and Banthin 1997-1998), female (Ettner 1997; Jensen and Morrisey 1992; Morrisey 1993; Short and Monheit 1987), more educated (Ettner 1997; Vistnes and Banthin 1997-1998; Lillard, Rogowski, and Kington 1997), white (Ettner 1997; Morrisey 1993; Jensen and Morrisey 1992; Vistnes and Banthin 1997-1998), middle income (Jensen and Morrisey 1992; Morrisey 1993) or wealthier (Ettner 1997; Lillard, Rogowski, and Kington 1997) with greater asset income (Vistnes and Banthin 1997-1998), more knowledgeable about Medicare (Rice, McCall, and Boismier 1991), and less likely to smoke (Ettner 1997; Vistnes and Banthin 1997-1998).

HEALTH STATUS: IPSI POLICIES

Studies looking at the relationship between health status and the purchase of individual supplemental insurance have found mixed results. A series of articles have found that healthier individuals are more likely to buy insurance (Del Bene and Vaughan 1992; Ettner 1997; Hill et al. 1992; Landerman et al. 1998; Short and Vistnes 1992; Vistnes and Banthin 1997-1998) or that low- and high-risk beneficiaries buy similar amounts of insurance (Browne and Doerpinghaus 1994-1995; Lillard, Rogowski, and Kington 1997). Yet there has also been a consistent finding that some specific chronic illnesses, such as heart disease (Ettner 1997; Hill et al. 1992; Vistnes and Banthin 1997-1998), diabetes (Lillard, Rogowski, and Kington 1997), cancer (Ettner, 1997; Hill et al., 1992), or overall chronic illness (Garfinkel, Bonito, and McLeroy 1987) are associated with the purchase of supplemental insurance. Other studies have found no relationship between self-rated health and the purchase decision (Rice and McCall 1985). One study showed that healthier individuals were more likely to purchase supplemental Medicare insurance with low levels of knowledge of Medicare benefits and limitations (Davidson, Sofaer, and Gertler 1992). However, at higher levels of knowledge sicker beneficiaries became more likely to purchase supplemental insurance, and the supplemental insurers experienced adverse selection.

There appears to be a complex relationship between the beneficiary's knowledge of Medicare, health status, policy characteristics, and supplemental insurance decision. This may explain why chronically ill beneficiaries are more likely to hold supplemental insurance. Chronically ill beneficiaries will be more knowledgeable about Medicare benefits and limitations due to frequency of contact with the health care system. These individuals use their knowledge to pick an optimal insurance package.

Long (1994), Fox, Rice, and Alecxih (1995), McCormack et al. (1996), and Atherly (1998) all found evidence of adverse selection into supplemental insurance policies which included any type of pharmaceutical benefit. The American Association of Retired Persons only experience rates policies with prescription drug benefits, and community rates all other supplemental policies (due to adverse selection concerns). This combination of adverse selection, experience rating, and a very limited standard benefit package for prescription drugs suggests that the ISPI drug market may be of limited value to beneficiaries.

OTHER FACTORS: IPSI POLICIES

In contrast to the extensive research into the relationship between demographic/health factors and the demand for supplemental insurance, relatively little attention has been focused on other factors, such as attitudes toward risk. Vistnes and Banthin (1997-1998) found that attitudes toward risk are significant predictors of the demand for Part A deductible coverage and that attitudes toward medical care (e.g., perceived knowledge and capability of physicians) are significant predictors of overall demand for supplemental insurance. The effect size of attitudinal variables is comparable to that of health status, income, and education. The inclusion of the attitudinal variables had no effect on the coefficients for demographic or health variables, suggesting that attitude is a separate dimension of the demand for supplemental insurance. Landerman et al. (1998) found that those without supplemental insurance were not more likely to engage in risky behavior, but were more likely to be overweight, cook with fat, and to live in inadequate housing or in an unsafe neighborhood.

EMPLOYER POLICIES

For individuals to hold an ESSI policy, two events must occur. First, the employer must offer the individual a policy. Second, the individual must accept the offer. Some studies that have examined this issue have looked at the employer offer and the employee-accept decisions separately, while others

have ignored this process. Among studies which have looked at predictors of individuals holding ESSI but ignored the offer/accept process, it has been found that holders of the policies tend to be higher income (Chulis et al. 1993b; Clark, Ghent, and Headen 1994; Ettner 1997; Jensen and Morrisey 1992; Morrisey 1993; Short and Monheit 1987), more educated (Ettner 1997; Clark, Ghent, and Headen 1994; Lillard, Rogowski, and Kington, 1997), the young-old (Jensen and Morrisey 1992; Morrisey 1993; Short and Monheit 1987), male (Jensen and Morrisey 1992; Morrisey 1993; Lillard, Rogowski, and Kington 1997), married (Short and Monheit 1987), white (Short and Monheit 1987), and to not smoke (Ettner 1997). Job characteristics associated with holding an employer policy include being in a union (McArdle and Yamamoto 1997; Clark, Ghent, and Headen 1994); having a white-collar job; working for a government agency or a large firm; and working in the mining, manufacturing, communications, or private utilities industries (Clark, Ghent, and Headen 1994). Individuals with ESSI policies also tend to have had longer tenure in their final job before retirement (Lillard, Rogowski, and Kington 1997).

Studies that have looked at the employer decision to offer coverage have found that supplemental insurance is less likely to be offered to those who worked in construction, retail, agriculture, and small firms, and more likely in transportation, communications, public utilities (Clark and Kreps 1989; Clark, Ghent, and Headen 1994), and the government (Loprest, McBride, and Zedlewski 1992; Shea and Stewart 1995; Morrisey, Jensen, and Henderlite 1990). Bigger and unionized firms are also more likely to offer coverage (Dopkeen 1987; Morrisey, Jensen, and Henderlite 1990; Clark, Ghent, and Headen 1994; Loprest, McBride, and Zedlewski 1992; Shea and Stewart 1995). Administrative and professional workers are more likely to be offered coverage than technical, clerical, sales, and production workers (Clark and Kreps 1989; Clark, Ghent, and Headen 1994; Dopkeen 1987; Morrisey 1990), as are high-skill workers (Loprest, McBride, and Zedlewski 1992; Shea and Stewart 1995). Individuals holding a pension from the armed forces with more than a high school education and long job tenure were more likely to be offered supplemental insurance by an employer (Loprest, McBride, and Zedlewski 1992; Shea and Stewart 1995). Coverage is also more likely to be offered in the Northeast and North Central and less likely in the West, with mixed evidence about the South (Clark, Ghent, and Headen 1994; Morrisey, Jensen, and Henderlite 1990). Firms are more likely to offer coverage if they offer HMO plans to active workers (Morrisey, Jensen, and Henderlite 1990). In contrast to the individual market, age, gender, and health did not predict an offer, with mixed evidence regarding race (Loprest, McBride, and Zedlewski 1992; Shea and Stewart 1995).

Only two studies have looked at factors influencing offer acceptance. Shea and Stewart (1995) found that the only significant individual variables predicting acceptance of an offered policy were being divorced or separated and income. Loprest, McBride, and Zedlewski (1992) found significant positive associations with income, being a single female, being a married male, and being nonwhite.

THE EFFECT OF MEDICARE SUPPLEMENTAL INSURANCE ON MEDICARE SPENDING

Over the past 18 years, several studies have examined the relationship between Medicare supplemental insurance and Medicare expenditures. These studies have drawn samples from widely differing sources with varying sample sizes, time frames, and populations. The only consistent finding across the studies is that supplemental insurance policies are associated with increased Medicare expenditures. However, the size, nature, and cause of the effect differs from study to study.

Past studies differ in three key areas: the sample date, the characterization of the policy types, and the approach to self-selection. As already discussed, there have been two major reforms of the supplemental insurance industry in 1980 and 1990. Because of the likelihood of a structural shift in the market (particularly following the 1990 reform), studies with data prior to 1990 may not reflect the current relationship between supplemental insurance and Medicare's costs.

If unobserved biased selection occurs in the supplemental insurance market, then an analysis of the relationship between expenditures and supplemental insurance using standard analytic techniques will yield biased estimates. How one views the problem of selection drives both the theoretical and econometric model.

Table 1 summarizes previous studies of the literature. Both of the previous studies that used data from prior to the first reform in 1980 used a single indicator variable for insurance status and did not attempt to correct for biased selection found large insurance effects. Link, Long, and Settle (1980) found an increase of 33 percent for Part A and 42 percent for Part B, and Christensen, Long, and Rodgers (1987) found an increase of 24 percent for Part A and 24 percent for Part B.

Among the studies that have attempted to correct econometrically for selection, results have varied. The major difficulty in correcting for selection is the location of an identifying variable—a variable related to the decision to purchase insurance but unrelated to the level of expenditures. Khandker and McCormack (1999) alluded to the endogeneity issue, but attempted no

TABLE 1 The Relationship between Supplemental Insurance and Medicare Expenditures

<i>First Author</i>	<i>Sample Size</i>	<i>Part A Effect</i>	<i>Part B Effect</i>	<i>Data Post-Baucus</i>	<i>Data Post OBRA</i>	<i>Checked for Adverse Selection</i>	<i>Found Adverse Selection</i>	<i>Employer/Individual Separated</i>	<i>National Sample</i>
Atherly	17,699	17.7% ^{↑a}	13.1% ^{↑a}	✓	✓	✓	✓	✓	✓
Cartwright	4,409	14% to 96% ^{↑b}				✓			✓
Christensen ^c	7,799	23.8% [↑]	24.3% [↑]	✓					✓
Christensen	2,363	34% ^{↑d}	17% ^{↑d}	✓	✓			✓	
Ettner	8,561	\$89 [↑]	\$159 [↑]	✓	✓	✓	✓	✓	✓
Hill	5,923	\$162 ^{↑e}		✓					
Hurd	7,237	3% ^{↑f}	4% ^{↑f}	✓	✓				✓
Khandker	15,879	22.4% ^{↑g}	37.4% ^{↑g}	✓	✓			✓	✓
Lillard	942,587	None	None ^h			✓			
Link	8,239	33% ^{↑j}	42% ^{↑j,k}						✓
McCall	2,335	31.1% ^{↑l}	35.9% ^{↑l}	✓		✓			
Taylor	13,500	None ^m	39% ^{↑m}					✓	✓
Wolfe	2,059	None	None			✓	✓		✓

Note: Chulis et al. 1993b, was excluded from this table because no multivariate analysis was performed.

a. For individual policies without prescription drug coverage; for individual policies with drug benefits, increase of 21.2 percent and 15.8 percent; for employer policies, Part A increases of 10.5 percent no drug and 7.6 percent drug and Part B increases of 5.9 percent and 9.1 percent.

b. Combined Part A and Part B, with range based on health status and policy depth. c. Study from 1987. d. For nongroup coverage; for employer coverage, 14 percent and 19 percent increase, respectively. e. Combined Part A and Part B. f. Changes in probability of hospital visit and physician visit. g. Result for individually purchased plans. For employer-sponsored supplemental insurance (ESSI) plans, increases of 35.1 percent for Part A and 35.0 percent for Part B were reported. h. Increased probability of any expenditure. i. Panel data set from 1969 to 1990. j. A 47 percent and 50 percent increase for Medicaid. k. Physician visits, no chronic conditions. l. For self-rated health, fair-poor; for self-rated health, good-excellent. Part A decline of 4.8 percent and Part B increase of 15.2 percent. m. For nongroup plans; for group plans, increases of 30 percent and 26 percent.

correction due to a lack of identifying variables. McCall et al. (1991) (instruments: having a spouse work more than 20 hours per week, having the respondent retired from an industry more likely to offer supplemental insurance, and having been a housewife) found no evidence of selection. Similarly, Taylor, Short, and Horgan (1988) failed to reject the hypothesis of unbiasedness. Conversely, Wolfe and Goddeeris (1991) (instrument: lagged individual and insurance characteristics) found evidence of adverse selection and Atherly (1998) (instrument: state community rating laws for individual and industry, and labor market variables for employer policies) found evidence of biased selection that varied across policy source and type.

The differing results with regard to selection lead to differences in the estimated effect of supplemental insurance. McCall et al. (1991), Taylor, Short, and Horgan (1988), and Khandker and McCormack (1999) all found that supplemental insurance substantially increased Medicare costs (McCall et al. found changes ranging from -5 percent to 31 percent for Part A and 15 percent to 36 percent for Part B; Taylor, Short, and Horgan found increases of 30 percent in Part A and 39 percent in Part B for group plans and no Part A effect and 26 percent Part B increase for non-group-sponsored plans; and Khandker and McCormack found Part A increases ranging from 22 percent to 44 percent and Part B from 35 percent to 43 percent).⁸

In contrast, Wolfe and Goddeeris (1991) attributed increases in Medicare expenditures for Part A and Part B to adverse selection into plans and reported that there was no expenditure effect. Atherly (1998) found that there was unobserved favorable selection into employer policies, both with and without prescription drug coverage and for individual plans without prescription drug coverage. In contrast, individual plans with prescription drug benefits experienced adverse selection. Atherly (1998) found increases ranging from 8 percent to 22 percent for Part A (depending on policy type) and from 6 percent to 16 percent for Part B.

Two studies tried to use group policies to separate adverse selection from the insurance effect. Cartwright, Hu, and Huang (1992) used group status as an identifying variable. The estimated percentage increase in use of health services for less generous policies ranged from 14 percent for those in poor health to 48 percent for those in excellent health; for the most generous policies, the range was estimated as 28 percent to 96 percent.⁹ Ettner (1997) assumed that employer plans were randomly distributed (with regard to unobserved variables) and therefore attributed the increased usage associated with the employer plans to moral hazard. Differences in expenditures between the employer plans and the individual plans were labeled adverse selection. Significant differences were observed between the two plan types and between those with employer plans and those with no supplemental insurance, which

the author concluded shows the presence of adverse selection and moral hazard. The moral hazard effect for basic coverage on total reimbursement was estimated at \$281 per beneficiary per year.

Christensen and Shinogle (1997) included HMOs as a supplemental insurance option, but included only eight major metropolitan areas (to assure sufficient managed care enrollment). This study found that individually purchased supplemental policies increased use of outpatient services by 17 percent and inpatient services by 34 percent, while the percentages for employment policies were 14 percent and 19 percent, respectively.

Several other studies have also found increased expenditures associated with supplemental insurance. Hill et al. (1992), in a study looking at the impact of HMO enrollment on Medicare costs, found that supplemental insurance was associated with a \$162 annual increase in total Medicare expenditures per beneficiary. Hurd and McGarry (1997) found that private insurance increased the probability of a physician visit by 4 percent and a hospital admission by 3 percent; the overall per capita increase in physician visits was estimated as 0.24 annually. Chulis et al. (1993b) found that per capita Medicare spending varied from \$1,992 for those with no supplemental insurance to \$2,260 for those with employer sponsored insurance, to \$2,837 for those with individually purchased coverage, to \$4,379 for those with both Medicare and Medicaid.

There may be several reasons for the varying results shown in Table 1. First, although most studies use national data, a handful do not. It may be that the studies with nonrepresentative samples differ because of real differences between the sampled population and the national population. Second, major reforms of the supplemental insurance industry were enacted in 1980 and 1990. Many of the studies used samples from before 1980 and most used samples from before 1990. As the market matured and the reforms took effect, the relationship between supplemental insurance and Medicare may have changed. In the past, beneficiaries have had difficulty selecting policies that suited their needs. Choosing between Medigap policies has been considerably simplified. This may mean that there is more biased selection and that the purchasers of policies may have more inelastic demand for health care in later studies. Third, the characterization of the insurance choice has varied widely in terms of policy attributes and policy sources. Finally, the studies that have attempted to correct for adverse selection have varied in their theoretical approaches to identification, which lead to the use of quite different instruments and results.

Supplemental insurance has also been shown to significantly increase the probability of utilization of some particular services, such as mammography (Blustein 1995), cancer screening (Potosky et al. 1998), and prescription drugs

(Stuart and Grana 1998); for particular conditions, such as arthritis (Grana and Stuart 1996-1997); and for particular subgroups, such as the poor and near-poor (Berk and Wilensky 1985; Miller 1992). Other studies have concluded that supplemental insurance is associated with having any physician contact in a given year (Branch and Nemeth 1985; Wan 1982; Cafferata 1987) and visiting a specialist (Blustein and Weiss 1998), although at least one study found no relationship (Evashwick et al. 1984). Christensen, Long, and Rodgers (1987) simulated changes in utilization by using results from the Rand Health Insurance Experiment to estimate that supplemental insurance would lead to an additional \$8.1 billion expenditure by Medicare. In another simulation, Christensen (1992) estimated that if supplemental policies were eliminated, the reduction in Medicare expenditures would provide enough revenue to cover a prescription drug benefit and to place a cap on total individual out-of-pocket liability.

ARE MORE MEDICARE EXPENDITURES GOOD OR BAD?

One of the key issues underlying the discussion of the relationship between supplemental insurance and Medicare expenditures is the question of whether increased expenditures is a good or bad outcome. Some observers take the economic view that decreases in health care spending associated with greater cost-sharing are a desirable outcome. Cost sharing is intended to discourage the use of services, while leaving health unaffected. As already discussed, cost sharing does appear to discourage the use of services. But supplemental insurance's effect on health is unclear, although there are several studies that attempt to examine this relationship.

Hillner et al. (1998) found that the pattern of care for incident nonsmall cell lung carcinoma was similar for Medicare beneficiaries with supplemental insurance and a commercially insured working-age population. This finding, combined with the studies which found that those without supplemental insurance are less likely to receive routine screening tests such as mammograms and cancer screenings, leads to questions regarding the effect of the reduction in services on beneficiary health. And several studies report that those without supplemental insurance are more likely to delay care or not see a physician when they have a health problem than those with supplemental insurance. (Trude and Colby 1997; United States Physician Payment Review Commission 1997; Rice and Bernstein 1999).

Landerman et al. (1998) used an epidemiological approach to test the effect of supplemental insurance on health status and found that lack of supplemental insurance was associated with an increased risk of disability. However, the

endogeneity of the insurance variable, particularly in light of other studies finding unobserved favorable selection into insurance plans, suggests that these results should be interpreted with caution.

CONCLUSIONS AND IMPLICATIONS

Several broad conclusions can be drawn from the supplemental insurance literature. It is crucial to distinguish between ESSI and IPSI policies from a policy perspective and a research perspective. ESSI policies are exempt from supplemental insurance regulation and generally offer a richer benefit package with greater cost sharing than IPSI policies. Individuals acquire ESSI policies through employment-related decisions that occur years before Medicare eligibility. ESSI policies are offered by large firms and government employers to individuals who are highly skilled and educated and tend to be younger, healthier, and wealthier than average.

The majority of IPSI policies are either 1 of the 10 model policies or a close substitute. IPSI policies are typically purchased by individuals who are healthier and wealthier than the average Medicare beneficiary. For plans without a prescription drug benefit, the evidence suggests that there is not only no adverse selection but there is instead favorable selection. However, there is also a consistent finding of adverse selection into IPSI policies with drug benefits. This adverse selection may be creating difficulties in selling prescription drug insurance to individual Medicare beneficiaries. It also suggests that discussions about expanding the Medicare basic benefit package to include a prescription drug benefit may be appropriate.

Supplemental insurance leads to increased Medicare expenditures, although the size of that effect varies from study to study due to variations in data, study methodology, empirical methodology, and legislative changes. One recent estimate of the overall increase in Medicare expenditures due to supplemental insurance was \$8.2 billion in 1995, or 4.6 percent of total Medicare expenditures (Atherly 1998).

Supplemental insurance constrains efforts to reform Medicare because many beneficiaries have a vested interest in the status quo. Individuals with ESSI policies paid for those benefits with forgone wages during their working years. These individuals will naturally be resistant to changes that diminish the value of their insurance asset. However, supplemental insurance may also make reform of Medicare easier. Medicare's cost-sharing structure has been heavily criticized, but reforms have always left it in place. The cost sharing has two effects on Medicare expenditures: a direct revenue effect and an indirect behavioral effect. Although the direct revenue effect is substantial (Medicare beneficiaries or their supplemental insurers paid \$26.6 billion in cost-sharing

in 1996, or 13.8 percent of total program expenditures), the stated purpose of the cost sharing is “to hold down costs by deterring the overuse of health care services” (Health Care Financing Administration 1998, 48). Yet only 11 percent of the Medicare population are in the FFS sector without additional coverage. So, for 89 percent of Medicare beneficiaries, the behavioral effect of cost sharing is blunted.

Reforming Medicare by lowering, but not eliminating, cost sharing may lead to a reaction in private supplemental insurance. Beneficiaries purchase supplemental insurance because of the substantial risk imposed by Medicare’s cost-sharing provisions. If the level of cost sharing is reduced, the incentive to insure against losses associated with supplemental insurance is also reduced. If reducing cost sharing eliminates or reduces supplemental insurance, then lowering cost sharing paradoxically could increase the out-of-pocket price faced by most beneficiaries.

A different approach to reform would be to modify the 10 model policies to minimize Medicare costs. The model policies were designed to try to mimic the most popular policies available in 1991. It has been found that ESSI policies have a smaller impact on Medicare costs than do IPSI policies; ESSI policies also tend to retain some degree of cost sharing, whereas the IPSI policies tend to provide first dollar coverage for Part A and Part B services. The optimal level of cost sharing (accounting for the gain from risk reduction and the loss from increased use) has been shown to be nonzero. This suggests that one way to retain the current supplementary insurance structure while reducing the cost of the policies to Medicare may be to redesign the model policies to include some cost sharing.

One other alternative that has been suggested is to force beneficiaries to internalize the true social cost of supplemental insurance by levying a tax on supplemental insurers equal to the increase in Medicare expenditures associated with the policy (Bachman et al. 1989). While this may increase economic efficiency, it would also risk undermining the supplemental insurance market if (as is likely) the tax is passed on to consumers as higher premiums.

There has been extensive rate regulation in the supplemental insurance market. OBRA-90 insures guaranteed renewals and limited premium protections; both OBRA-90 and the Baucus Amendments implemented minimum loss ratios. Also, states have imposed a myriad of regulations on top of the existing federal regulations. These regulations are intended to control premiums and increase access to policies. However, there is limited information available regarding the effectiveness of these policies. This would be a fruitful area for further research, particularly in light of the double-digit increases in premiums during the past several years.

NOTES

1. If the individual with employer-sponsored insurance is an active worker (as opposed to a retiree), then the employer's insurance is the primary payer and Medicare is secondary.
2. This excludes health plan premiums. Although holders of employer-sponsored supplemental insurance (ESSI) plans have greater cost sharing than those with individually purchased supplemental insurance (IPSI) plans, the employer premium subsidy causes average total health care expenditures for the ESSI group to be lower than the IPSI group (Gross and Brangan 1999).
3. The exceptions were Massachusetts, New York, Rhode Island, and Wyoming, each of which enacted slightly different legislation (Davidson 1988).
4. Three states have waivers from the 10-plan requirement; each of these states allow fewer plans than the federally mandated 10 (General Accounting Office [GAO], 1996).
5. In states that do not allow balance billing, plans F and G are redundant, so only eight plans are available (Anonymous 1993).
6. Employer-sponsored retiree coverage is not regulated by the Omnibus Budget Reconciliation Act of 1990 (OBRA-90), although it tends to conform to the standards (GAO, 1996).
7. Under the Balanced Budget Act of 1997, this link has been weakened.
8. McCall et al. (1991) also attempted to control for policy-specific characteristics. The authors found that supplemental policies with first-dollar coverage and policies with less generous coverage both stimulated the use of additional services, but policies with first-dollar coverage had a larger impact.
9. Medicare Part A and Part B expenditures were combined into total Medicare expenditures; given the very different nature of the coinsurance structures of the two policies, this may lead to biased results (Newhouse et al. 1980).

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