Employer-Sponsored Health Insurance and Mandated Bene t Laws

GAIL A. JENSEN and
MICHAEL A. MORRISEY

Wayne State University, Detroit; University of Alabama, Birmingham

IN THE 1990S NUMEROUS REGULATIONS FOR THE content of private health insurance in the United States have newly emerged at both the state and federal levels. Currently, well over 1,000 coverage mandates are in place across the states, and lawmakers are considering whether to become even more involved in regulating group insurance markets (Employee Bene t Research Institute 1998; National Conference of State Legislatures 1999). Many state-mandated bene t laws require coverage of particular types of providers or services. Others deal with the guaranteed issue and renewal of policies, waiting periods, and treatment of preexisting conditions (Blue Cross/Blue Shield Association 1997). More recently, many states have passed laws that specify a minimum number of covered hospital days following certain medical procedures or detail the nature of the provider networks that managed care rms can establish (Stauffer and Levy 1999).

In addition to these state actions, the federal government is intensifying its regulatory oversight of the content of private plans. After a ten-year lull in major federal mandates for private insurance plans, Congress in 1996 passed the Health Insurance Portability and Accountability Act (HIPAA), the Mental Health Parity Act, and the Newborns and

The Milbank Quarterly, Vol. 77, No. 4, 1999

Mothers Protection Act. All three set coverage requirements for most group plans nationwide. Congress is considering even more mandates, as evidenced by the ongoing debates over proposals for a Patients' Bill of Rights."

At this juncture, it is important to assess what is known about mandated bene t laws. We have written this paper with three main purposes in mind: The rst is to describe the nature and extent of these laws, which have not been summarized since Gabel and Jensen did so in 1989, and much has changed during the last decade. The second is to use economic analysis to explain both why the laws have come to exist and how they in uence private insurance markets and individuals. The third is to review existing empirical research on the causes and consequences of mandating requirements for health plans. Our review of this literature is organized around the hypotheses suggested by theory.

Current Scope of Group Insurance Regulation

The content of health plans is regulated by the government at both the state and federal levels. We will begin with the state laws, which are much more extensive. We have categorized them as conventional mandates and line-of-business mandates. The former are mandatory-inclusion and mandatory-option laws that specify the particular providers, services, and/or subscriber cohorts that are to be covered in the insurance contract. They typically apply to all carriers in the state and all lines of group coverage offered by the carriers. The line-of-business mandates relate to the following topics:

1. small-group reform laws
2. speci cs of coverage laws
3. provider network laws

These laws apply only to particular submarkets of group health insurance or speci c types of health plans. Federal statutes affect the applicability of all of these state laws. The Employment Retirement Income Security Act (ERISA) exempts self-insured plans from the regulations. Overall, the percentage of insured workers enrolled in self-insured plans was 50 percent in 1998, up from 46 percent in 1995 (Jensen, Morrisey, Gafney, et al. 1997; Gabel, Hurst, Whitmore, et al. 1999).

State-Level Mandates

State governments have been relying on conventional mandates to regulate the terms of coverage in the plans sold by private insurers for over three decades. These laws initially consisted of mandatory-inclusion provisions. If insurance was sold in the state, it had to include coverage for the legislated provider type, service, or subscriber cohort. Massachusetts enacted the first mandate in 1956. It required that dependent coverage under private plans include insurance for mentally and/or physically handicapped children. Mandates in other content areas and other states did not appear until the mid-1960s (Blue Cross/Blue Shield Association 1989). Some states then began requiring that private plans automatically extend coverage to certain groups of persons who might otherwise find it difficult to obtain insurance. Handicapped children and newborns from date of birth were two such groups. Legislative activity was minimal and largely restricted to mandates that broadened beneficiary cohorts until the early 1970s, when several states began to require that insurance policies cover various nonphysician practitioners, such as psychologists, podiatrists, and dentists. Mandates for the coverage of particular services were not common until the late 1970s and early 1980s. Over time, the scope of state mandates for private health plans has expanded greatly.

Mandatory-option laws began to appear in the early 1970s. These require that the insurer offer coverage for particular types of providers, services, and/or cohorts, but the employer need not purchase them. Initially, mandated-option laws evolved for coverage of alcoholism and drug abuse treatment, mental health care, and hospice care. More recently, some states have adopted them when mandating well-child services.

Table 1 reports the most common state conventional mandates for purchased group plans in 1996. Although there are also mandates for individual insurance coverage in most states, our focus is on group coverage requirements. A number of organizations have developed compendiums of state mandates for group plans (e.g., Health Insurance Association of America 1988; Blue Cross/Blue Shield Association 1989; *Mandated Benefits Manuel* 1992; and *Health Benefits Letter* 1994). Their inventories, however, sometimes differ in definition, purpose, and/or interpretation of the state legal codes. Also, the scope of benefit areas covered under these compendiums varies slightly; some cover a few more aspects of plan coverage than do others. The data for table 1 were drawn from the most recent available inventory, which was compiled by the Blue Cross/Blue Shield Association (1997). Table 1 counts only the laws that

TABLE 1
Most Common State Conventional Mandates in 1996

Required coverage	Number of states with a mandate	Number requiring	
		Mandatory inclusion	Mandatory option
Provider mandates:			
Chiropractors	41	39	2
Psychologists	41	40	1
Optometrists	37	35	2
Dentists	34	35	1
Bene t mandates:			
Mammography screening	46	42	3
Alcoholism treatment	43	27	16
Maternity length of stay	34	34	0
Mental health care	32	18	14
Extension mandates:			
Conversion to nongroup policy	39	38	1
Continuation coverage for employees	38	37	1
Continuation coverage for dependents	35	34	1
Handicapped dependents	34	34	0

Source: Blue Cross/Blue Shield Association (1997).

apply to all insurers in a state. Mandatory-inclusion laws were clearly the most common. Mandatory-option laws were common only for speci c services.

Figure 1 shows the trend in conventional mandates enacted across all the states since 1970, based on this same inventory. The tally is a count across 41 different types of health plan mandates (16 categories of services, 19 categories of providers, and 5 types of bene ciary groups). It suggests that the number of state mandates increased at least 25-fold between 1970 and 1996. In these 41 bene t areas alone, the number of mandates rose from 35 to 860.

The states have adopted widely varying philosophies toward mandates, as indicated by gure 2. Some states, like Delaware, Idaho, and Wyoming, have enacted relatively few laws, whereas others, like California, Connecticut, Florida, and New York, have passed more than

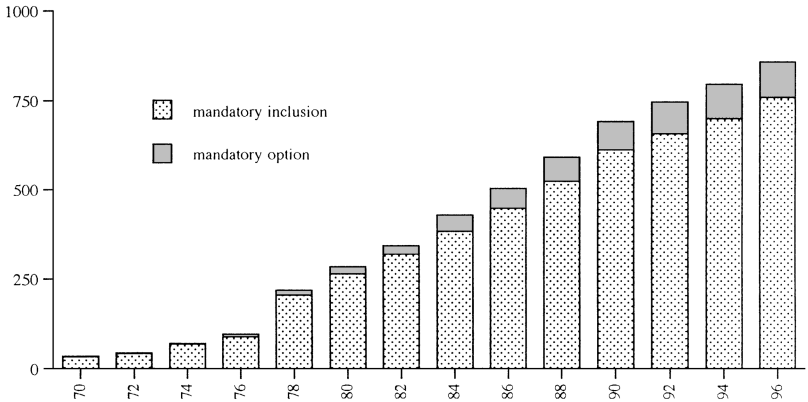

FIG. 1. Growth in states' conventional mandates, 1970–96. Data re ect a collective count of conventional mandates across all states, which pertain to 41 aspects of plan coverage. *Source:* Blue Cross/Blue Shield Association (1997).

25. States with the most were the ones that got an early start enacting them. (Explanations of the reasons for the proliferation of mandates in some states and not in others appear in a later section.)

In the mid- to late 1980s, some states enacted measures to review the merits of proposed insurance mandates more carefully and to exempt some small rms from conventional mandated-bene ts laws. The required evaluation" laws subjected the nancial or social impact of a proposed mandate to scrutiny before enactment. The impact of these laws is questionable. States that formally evaluate their legislation appear to have adopted new mandates as rapidly after the evaluation requirement as before. In Arizona, Oregon, and Pennsylvania, for example, which passed evaluation reforms in 1985, 1985, and 1986, respectively, more mandatory-inclusion mandates were enacted in the four years following passage of required evaluation than in the four years preceding it.

The mandate exemption" laws allowed certain categories of small employers to purchase mandate-waiver" coverage. As of 1995, 43 states had enacted waiver provisions; all but one did so after 1988 (Marcus, Ladenheim, and Atchison 1995). In most states, the rm size cut-off was 25 workers, and only rms that did not previously offer insurance were eligible. Eligible rms did not have to adopt most, or even any, mandated coverage. However, many of the laws also speci ed hospital coverage for the mandate-exempt" policies that may have been too thin to appeal to workers (Families USA Foundation 1993).

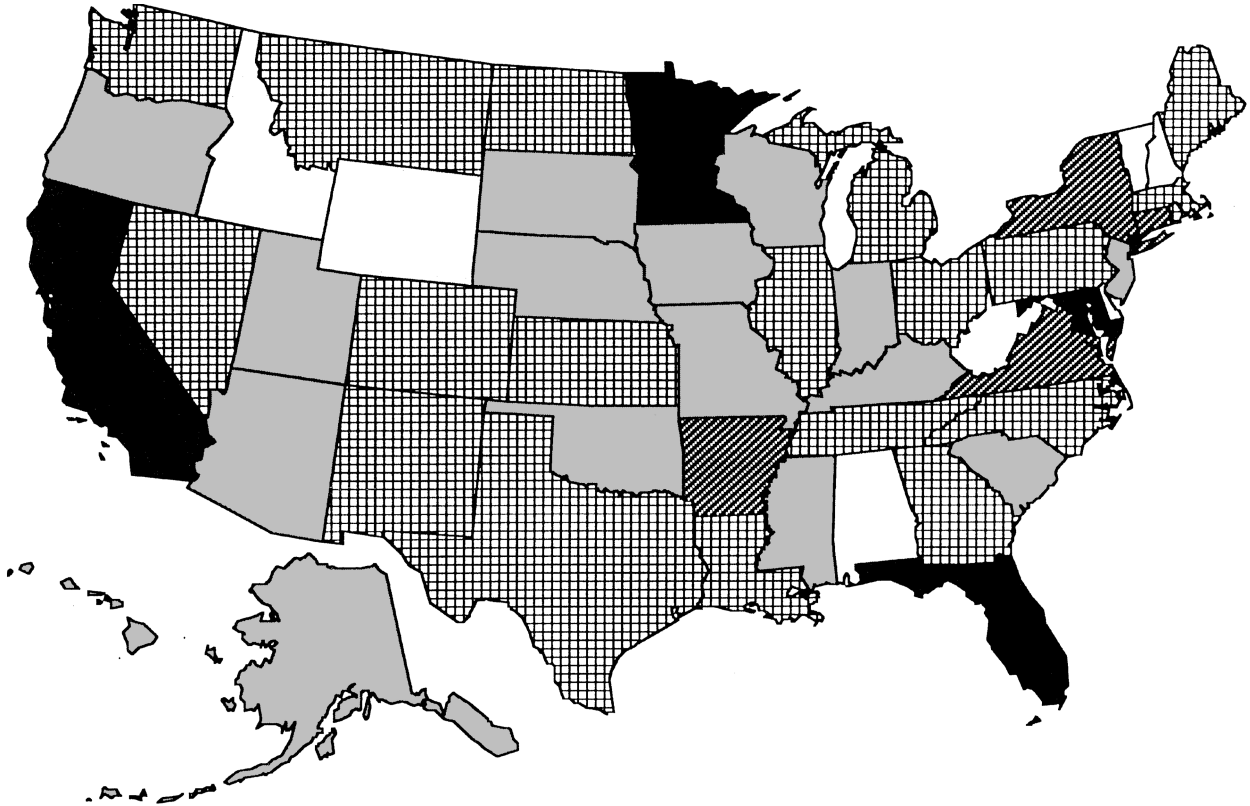

FIG. 2. Conventional mandated bene ts by state, 1996. Data re ect count of conventional mandated bene ts across 41 aspects of plan coverage. □, 6–10; ▒, 11–16; ▦, 17–21; ▨, 22-27; ■, 28–33.

TABLE 2
State Small-Group Insurance Reforms

Type of measure	Number of states that had enacted the measure by			
	1989	1991	1993	1995
Mandate-waiver plans can be sold	1	9	31	43
Guaranteed issue requirements	0	5	30	38
Guaranteed renewal requirements	1	18	40	43
Portability of coverage requirements	3	16	40	43
Limits on waiting periods for coverage of preexisting conditions	11	25	43	45
Premium rating restrictions	1	20	42	45

Source: Jensen and Morrisey (1999).

In the 1980s states also attempted to expand coverage to uninsurables," specifically, to high-risk individuals who had been turned down for coverage by one or more insurers (Employee Benefit Research Institute 1995). As of 1995, 27 states enacted legislation that created a state high-risk insurance pool (Employee Benefit Research Institute 1995). Although these programs cover individuals, not groups, enrollee premiums are often subsidized by taxing group insurers in these states.

In the late 1980s and early 1990s, states began to legislate new forms of insurance mandates that targeted the small-group market for improvements, specified service obligations within coverage, and delineated the nature of managed care networks.

Table 2 summarizes the scope of small-group reform statutes. In addition to the mandate-waiver provisions discussed above, the small group reforms typically focused on guaranteed issue and guaranteed renewal statutes, portability of coverage, preexisting-condition clauses, and premium rating restrictions. Guaranteed issue and renewal provisions required insurers to extend coverage, and permit its renewal, for any small firm willing to pay the premium. The preexisting-condition laws specified the maximum time period, typically 12 months, during which an employee could be denied coverage for treatment of a preexisting

condition. The portability laws made it easier to move from one in-state company to another without incurring a new wait for preexisting-condition coverage. Rating restrictions either required the insurer to report proposed premium increases to the state or limited the range of premiums charged to different customers. By 1995, 45 states had enacted one or another of these sets of laws; 36 had enacted them all (Hing and Jensen 1999).

The 1990s ushered in yet another wave of state mandates. In addition to more conventional mandates, states began enacting laws dealing speci cally with the coverage offered by managed care plans. Nineteen states currently establish a standard de nition of the need for emergency-department care. Typically these laws have adopted the prudent layperson" standard, which, for example, says that an emergency is determined by what an average person reasonably thinks constitutes an emergency, given his or her condition (Employee Bene t Research Institute 1998). Hospital length-of-stay mandates, which now exist in 35 states, set minimums for hospital care coverage following certain procedures, such as normal childbirth, cesarean delivery, and mastectomy (Employee Bene t Research Institute 1998). Gag rules, which now exist in 39 states, prohibit clauses in the provider contracts of managed care plans that might restrict communication between patients and their physicians about treatment options, including those not covered by the plan (Employee Bene t Research Institute 1998).

Many states have also recently enacted one or another of several laws designed to delineate the nature of the provider panels created by managed care rms. The best known of these are the any-willing-provider (AWP) and freedom-of-choice (FOC) laws, but they also include direct-access laws, which are designed to allow subscribers to use speci c types of within-plan specialists without rst obtaining a referral from the primary care physician.

Table 3 summarizes the growth and extent of AWP and FOC laws. AWP laws require a managed care rm to include in its network any covered provider that is willing to abide by the terms and conditions of the network contract. FOC laws require that managed care subscribers be allowed to obtain service from any licensed provider, provided they pay a larger out-of-pocket fee when they use a provider from outside the network. Some apply only to HMOs, others only to PPOs; often they apply to both. Laws covering pharmacies are most common, although AWP laws applicable to physicians exist in 11 states.

TABLE 3
States with Alternative Any-Willing-Provider and Freedom-of-Choice Laws

	Provider covered		
Type of law	Physician	Hospital	Pharmacy
Any-willing-provider laws			
HMO			
1989	5	3	7
1995	11	9	25
PPO			
1989	7	3	7
1995	11	7	22
Freedom-of-choice laws			
HMO			
1989	3	4	4
1995	5	5	16
PPO			
1989	4	4	6
1995	6	5	18

Source: Calculated from Ohsfeldt et al. (1999).

Direct-access mandates allow subscribers to bypass their physician gatekeepers to see certain types of specialists, but those specialists must be in-network providers. More than half the states (29) now mandate direct access for OB/GYNs; a few mandate direct access for network dermatologists, ophthalmologists, psychiatrists, or chiropractors (Employee Bene t Research Institute 1998).

Federal Mandates

Whether purchased or self-insured, all plans are subject to several federal mandates, including the 1978 Pregnancy Discrimination Act, the Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA), the 1996 Health Insurance Portability and Accountability Act (HIPAA), the 1996 Mental Health Parity Act, and the 1996 Newborns and Mothers Health Protection Act (NMHPA).

The Pregnancy Discrimination Act, which established nondiscrimination rules for pregnant women, requires health plans to provide

coverage for prenatal and maternity services that is comparable to their coverage for other conditions (Gruber 1994a). The plans offered by very small rms (those with fewer than 15 workers) are exempt.

COBRA requires insured rms with 20 or more workers to provide group continuation rights to persons who might otherwise be uninsured after separation from the rm. Employees, and their dependents, who lose coverage when they leave the rm can participate in the company plan for 18 months. Spouses and dependent children who lose coverage because of divorce, separation, or the death of the employee are allowed to participate for 36 months. The premium charged to COBRA enrollees cannot exceed 102 percent of the plan's group rate.

HIPAA sets federal standards for preexisting condition clauses and requires portability. It limits the duration of preexisting-condition clauses to a year and requires that plans waive such clauses for persons who move from one employer plan to another, provided they have already satis ed the waiting period for coverage under the rst plan. In addition, HIPAA stipulates that plans can neither deem pregnancy a preexisting condition nor subject newborns or adopted children who are insured within 30 days of birth or adoption to the plan's preexisting-condition clause.

Under the Mental Health Parity Act, employer health plans that include coverage for mental health care must provide the same annual and lifetime reimbursement ceilings for such care that they offer for other (non–mental health related) ailments. The law does not apply to rms with fewer than 50 workers, rms that choose not to provide mental health coverage, and rms whose premiums increase by more than one percent as a result of bene t changes made to satisfy the law. For an exemption under the third category, however, a plan must rst implement the law and then document the cost change.

The NMHPA mandates that health plans cover at least a 48-hour hospital stay for the mother of a newborn and her baby following vaginal delivery and at least a 96-hour hospital stay following cesarean section. This Act and the Mental Health Parity Act took effect in January, 1998.

With the exception of the recent mental health bene t mandates, the existing federal laws are of the conventional mandatory-inclusion variety. The mental health parity requirements, however, are similar to the newer state mandates that specify conditions of service if the bene t is provided. Moreover, most of the federal mandates were preceded by a ood of state mandates in these same areas of coverage. The exception, of course, is COBRA, which extended continuation coverage well beyond

the provisions in the existing state laws at the time (Hewitt Associates 1985). In most cases, the federal laws represent new mandates for only a minority of states. With HIPAA, for example, 36 states had already enacted HIPAA-equivalent state reforms by 1995, and only six had no small group reforms whatsoever (Hing and Jensen 1999).

The federal mandates are signi cant in two respects. First, they supersede ERISA and apply to self-insured plans as well as purchased products. Second, as Nichols and Blumberg (1998) have speculated, they may be a harbinger of federalism" in health insurance regulation. Until 1996, regulation had been left mainly to states. Even though Congress could have asserted federal authority in such matters, for the most part it chose not to. Federal lawmakers continue to introduce mandated bene t legislation for consideration (Employee Bene t Research Institute 1998). Some of the bills are single-issue proposals, whereas others, like the much debated Patients' Bill of Rights" proposed in 1998, are multipronged. Recent congressional actions signal the likelihood of more federal mandates in the future.

Why Choose to Mandate?

Why are the states and the federal government passing so many laws that regulate health insurance? One view of mandates, or laws more generally, is that they spring from aws in the market. Two rationales typically are considered in insurance markets.

First, workers or their employer-agents may underestimate the value of a particular coverage or treatment. If so, many workers and their employers will forgo the coverage. A mandate would force them to adopt it and, after the fact, they would discover themselves to be better off. Second, there are potential problems of adverse selection. When adverse selection is present, the price of a special coverage, say of alcoholism treatment, tends to re ect the claims costs of higher-risk buyers. This is so because groups with higher rates of alcoholism are more likely to demand the coverage, other things being equal. Under this condition, lower-risk groups may either opt for less extensive coverage than they would prefer or forgo alcohol treatment coverage entirely. As Rothschild and Stiglitz (1976) argue, if the degree of adverse selection is great enough, and the price difference suf ciently large, low-risk workers will be unable to purchase the coverage at prices they are willing to pay. In

this circumstance, the presence of a mandate may improve the situation of workers. However, if workers or their employers are reasonably well informed, and if the adverse selection-price effects are not large enough, then enacting a mandate will worsen workers' situation.

Although it is possible to estimate the effects of mandates in reducing the potential problems in the insurance market (and we review the literature in a subsequent section), these explanations of market shortcomings have not lent themselves to empirical testing of the enactment of legislation. Economists, and increasingly political scientists, have come to analyze legislation enactment as the result of the interplay of competing interest groups, the nature of local political competition, ideology, and the role of political elites. (See Feldstein [1988] for a straightforward discussion, Meier [1988] for a comparison of the differing approaches of economists and political scientists, and Crain and Tollison [1990] for a chronology of the theory that has come to be called public choice.")

The public choice theory of legislation and regulation stems from the work of Stigler (1971), Posner (1974), and Peltzman (1976), among others. Legislators seek election and re-election. To that end, they provide services to their constituents. Individuals and groups seek legislative services—that is, laws. They trade their political support, in the form of votes, publicity, campaign assistance, and contributions, for those laws. In general, individuals and groups have a position on virtually every issue. However, they are also economically rational. For most issues, the expected gain or loss is smaller than the costs of political activity. Hence, they do nothing.

Individuals consume thousands of different goods and services annually. Suppliers of these commodities tend to specialize in producing a few. Thus, the relevant proponents and opponents of the legislation tend to be suppliers, whose potential gains or losses are large enough to warrant the costs of political action. Further, because suppliers are fewer than consumers, it is less costly for them to organize to support or oppose a bill. Government is not captured by a single group of suppliers. In general, a group gets less than it wants because other groups of suppliers are harmed by the proposed action. The legislation seeks a compromise among the opposing interests.

This theory has been tested in the health care arena, either by the use of case studies or by more formal analyses. Two studies have examined the enactment of AWP and FOC laws. AWP and FOC laws arguably prevent managed care rms from negotiating low prices with providers. When any provider can get the agreed-upon price, none has an incentive

to offer a low price to attract the contract. Marsteller, Bovbjerg, Nichols, et al. (1997) conducted a careful review of the scope of these laws and categorized them as weak or strong. After analyzing the factors that predicted enactment of strong programs, the authors concluded that, despite the fact that the laws were typically touted as mechanisms to overcome unfair competition by HMOs or to curb the erosion of the physician–patient relationship, they were usually enacted in states with low HMO penetration. In most states, HMO enrollees represented less than ve percent of the state population when the AWP or FOC laws were passed" (Marsteller et al. 1997, 1165). Moreover, higher penetration was associated with weaker forms of the law. They concluded that AWP and FOC laws were preemptive strikes by service providers to ward off managed care selective contracting and increased price competition.

This group's analysis suffers from the fact that a simple comparison of managed care penetration and the presence of the law does not permit a determination of whether the law kept penetration low or, conversely, whether low penetration allowed the law to be enacted. Ohsfeldt, Morrisey, Johnson, et al. (1999) also examined the enactment of AWP and FOC laws during the early to mid-1990s. The extent of managed care penetration is not part of their model. They analyzed the enactment of laws applicable to hospitals, physicians, and pharmacies. Consistent with the public choice theory, they found that a higher percentage of large employers in the state (who would ordinarily be expected to oppose the mandates) was associated with a smaller probability of enactment. The presence of more hospitals and specialists in the state was associated with a higher probability of enactment. However, the effects on the enactment of hospital laws predominated. The model provided little support for a public choice view of physician or pharmacy laws.

Only one study has attempted empirically to investigate the enactment of conventional mandates. Lambert and McGuire (1990) used a public choice model to examine the determinants of state mandates for minimum coverage of psychotherapy (mental health services) and psychologists' services. Using state data from the mid-1970s, they attempted to ascertain whether each of these mandates was enacted by 1983. Two measures of mandates were used: whether the law was enacted and whether the law was of the mandated-option variety. Their general model made legislation a function of proponent strength, opponent strength, the political environment, and state demographics. They found that different measures explained the enactment of mental health and psychologist mandates and that the results were sensitive to the

precise sets of variables examined. However, they came to the following conclusion:

> A number of groups in uence whether or not mental health mandates and FOC [freedom of choice to choose a psychologist] laws were passed. Most groups act in their own interest, and some groups act in the public interest. The political activity of psychologists, the need of community mental health centers for additional revenues, and the history of a state in passing insurance mandates in other areas had estimated effects bordering on or close to the conventional level of signi cance. (Lambert and McGuire 1990, 183)

The direct evidence regarding the enactment of insurance mandates is weak but generally consistent with the view that the laws re ect provider efforts. A much wider empirical literature on health legislation reaches the same general conclusion.

For example, with respect to federal regulation of hospitals, Feldstein and Melnick (1984) examined congressional voting on the Gephardt amendment to President Carter's hospital cost containment legislation. The amendment effectively gutted the Carter effort to place mandatory limits on hospital revenues. Feldstein and Melnick measured hospital support for the amendment by the rate of increase in hospital costs in the year before the vote. They argued that hospitals in states with the largest increases had the most to lose from enactment. Higher shares of the state budget going to Medicaid implied that the state and its programs would be helped more by the Carter plan. Feldstein and Melnick found that the hospital variable had the largest impact on the probability that a member of Congress would vote to adopt the amendment and thereby reject the Carter spending limits on hospitals. These results are consistent with a public choice view of health regulation. As another example, Mueller (1986) examined congressional voting on nine separate health policy issues over the course of the 1970s. He concluded that the major predictors of enactment were the in uence of physicians, as measured by AMA membership, and the size of the state's Medicaid program.

Studies have also examined the enactment of state certi cate of need programs (Wendling and Werner 1980), state rate setting of hospital prices (Fanara and Greenberg 1985; Cone and Dranove 1986), and restrictions on the practice of optometry (Begun and Feldman 1990). In each case, stronger provider support was associated with a greater probability that the law would be enacted.

Despite the growing body of literature consistent with the public choice view of health care legislative enactment, it has become more dif cult to test the theory empirically. The nature of the laws has become more diverse and complex, making it harder to identify variables that adequately measure proponents and opponents.

The Economics of Mandates and Employer-Sponsored Health Insurance

The economics of risk and insurance is based on the work of Friedman and Savage (1948). Essentially, insurance can exist because purchasers are willing to pay more than their expected claims to avoid the nancial consequences of a bad event. It is this potential willingness to pay over and above expected claims that provides an opportunity for an insurer to incur the costs of running a plan and generating a pro t. Friedman and Savage (1948) put forth three general principles: First, people who are more risk averse will buy more health insurance. Second, people will be more likely to buy insurance against events that have large nancial consequences. Third, people are less likely to buy insurance for events that are either very likely or very unlikely to occur.

However, most people who purchase health insurance in the United States do so through their employer. A fundamental tenet of labor markets is that people generally are paid what they are worth. Strictly speaking, they are paid the value of the extra output they produce. Workers can be paid in a variety of ways: pure wages; wages and a pension; wages, health insurance, and parking. However, the total cost of compensation cannot exceed the value of the worker to the rm. Thus, if compensation includes insurance, some other element of the pay package must be reduced.

Workers have to value health insurance if employers are to offer it. They are giving up wages or a more generous pension for the health insurance coverage. If they do not value the coverage, they can improve their circumstances by working for a rm that offers only wages (and perhaps the pension).

Health insurance is generally less expensive to obtain through an employer for three reasons: First, federal and state tax codes do not treat health insurance as part of a worker's taxable income. Thus, a worker in a 27 percent tax bracket will nd that if she purchases health insurance through her employer, she buys it with pretax dollars, reducing

the cost of the insurance policy effectively by 27 percent. Second, employed persons tend to be healthier and to have lower claims experience than persons who are not employed. Finally, administrative and search costs may be lower when coverage is purchased through an employer (Pauly and Herring 1999).

Given these realities, economics suggest that employers will offer health insurance plans that are valued by their workers. If not, employers will face higher labor compensation costs because the workers do not value the coverage and/or they can do better by working elsewhere (Goldstein and Pauly 1976). An employer whose workers have very diverse preferences would be likely to offer multiple plans, provided that the added administrative costs are offset by the workers' higher valuation of these multiple insurance options (Jensen 1986).

In the light of these considerations, the economics of insurance mandates are straightforward. Consider rst mandatory-inclusion laws. Suppose a new coverage—for example of eyeglasses—is mandated. Obviously, if a rm already offers the coverage, there is no effect. Only when the mandate requires coverage that the workers do not suf ciently value do labor and insurance market effects occur.

The new coverage will necessarily raise the price of the insurance plan, leading to adjustments in the labor market. Wages may be reduced to pay for the new bene t. Other nonmandated bene ts may be eliminated. In this smoothly functioning, neoclassical labor market, the situation of workers necessarily worsens. They now have to pay for an eyeglass bene t that they previously did not value enough to pay for. *This is the rst implication of a mandate:* Wages, other health bene ts, or bene ts unrelated to health will be reduced to pay for the new coverage.

Proponents of mandated bene ts argue that the new coverage bene ts workers. They are generally correct. However, as in the eyeglass example, it is not that the coverage is worthless, but that it is just not worth the full extra premium. The burden of the mandate to workers is only the cost of the coverage over and above what they were willing to pay for it.

It may be that the worker nds the new insurance–wage package unattractive. This will lead her to look for an employer that does not offer the new coverage (an impossibility in this example) or even to nd an employer that does not offer health insurance at all. *This leads to the second implication of mandates:* Employees will have an incentive to seek out rms that do not offer the additional coverage or to drop coverage entirely if their costs increase suf ciently .

The employer has another option to try to mitigate the effect of the mandate. Under the 1974 ERISA, it can self-insure. ERISA exempts self-insured plans from the reach of state insurance laws. *This is the third implication of mandates:* Firms will seek to become self-insured to avoid the costs of the mandated coverage faced by their workers.

The ability to self-insure under ERISA has other implications for labor and insurance markets. *It leads to the fourth implication of mandates:* In the presence of ERISA, a state mandate will not necessarily result in substantially more people being covered by the bene t. Many may be excluded by virtue of coverage through self-insured plans that do not offer the mandated bene t; some may move to self-insured rms.

Insurance risk declines as the size of the insurance pool grows. Therefore, smaller employers will face more risk in self-insuring than will larger rms. Thus, *the fth implication of mandates:* Small employers will be disproportionately affected because they are less able to avoid the mandate by self-insuring. This, in turn, implies that health insurance will be more expensive for small rms (because they must include the new bene t), and they will be more likely not to offer insurance. They will also tend to attract workers who value insurance coverage the least. Federal mandates are likely to have greater implications for the wage–bene t trade-off than state mandates because the federal mandates apply to self-insured plans as well.

These employer–labor market effects apply to all mandatory inclusion laws. Mandatory option laws have decidedly fewer effects because rms can decline the coverage if they so choose.

Laws that apply to only one type of insurer have the additional effect of changing the attractiveness of one type of plan relative to another. AWP or FOC or gag rules that apply only to PPOs, for example, will raise their premiums relative to conventional plans, HMOs, and point of service (POS) plans. *This is the nal implication to draw from the economics of mandates:* Laws that restrict only particular types of plans will reduce the attractiveness of those plans.

Evidence of the Effects of Mandates

Who Is Affected by Employer Mandates?

Most federal mandates cover all group health plans, whether self-insured or purchased, but some exclude certain plans from compliance. Because

61 percent of Americans are covered by private group health insurance (U.S. Bureau of the Census 1997), approximately 61 percent are entitled to most federally mandated bene ts. Medicare, Medicaid, and other government plans, as well as individually purchased policies, are excluded from compliance with most federal mandates.

Moreover, group plans not subject to federal mandates vary, depending on the law. For example, COBRA does not apply to employers with fewer than 20 workers or to health plans offered by churches or the District of Columbia, and the Mental Health Parity Act does not apply to employers with fewer than 50 workers or to employers choosing not to offer mental health bene ts.

In contrast, under a state-level employer mandate, the majority of a state's population is unaffected because the laws only apply to privately purchased plans. A state mandate does not cover persons who lack employer coverage to begin with, who are covered only by Medicare, Medicaid, or another government program, or who are enrolled in a self-insured group plan. A state mandate that applies to private group plans will cover, on average, only 33 percent of a state's population, whereas one that applies to all private plans, whether group or individually purchased, will cover about 42 percent of a state's population. These estimates were derived from 1995 Current Population Survey (CPS) data (U.S. Bureau of the Census 1997) and KPMG Peat Marwick data on the distribution of employer coverage in 1995 by type of plan and self-insurance status (Jensen, Morrisey, Gafney, et al. 1997; KPMG Peat Marwick 1998).

The numbers are so low for several reasons. First, 30 percent of the population has Medicare, Medicaid, some other public coverage, or no coverage at all. They are not subject to state mandates. Second, even among persons who have private coverage (70 percent), much of it is beyond the reach of state laws. Nine percent have individual coverage. Although there are state laws specifying the nature of these plans, they are typically not covered under group mandates. Next, among all persons with private group coverage (61 percent) in 1995, self-insurance covered 63 percent of conventional plan enrollees, 60 percent of PPO enrollees, 53 percent of POS plan enrollees, and 10 percent of HMO enrollees (Jensen et al. 1997).

Of the 33 to 42 percent of persons in plans subject to state mandates, only those who were not already receiving the bene t gain access to it as a result of a new mandate law. These will typically be workers and their families in plans offered by smaller rms, which tend to purchase their coverage (and not to self-insure), thereby becoming subject to state

mandates; their bene ts tend not to be as rich as those offered by large rms (Jensen et al. 1997).

Not all plans that should comply with state mandates actually do so. Two recent studies examined compliance with state mandates for chiropractic coverage and mental health bene ts, respectively. Nationwide, about 17 to 23 percent of enrollees in employer plans subject to a mandate for chiropractic coverage lacked such coverage in 1993, even though their state required it (Jensen, Roychoudhury, and Cherkin 1998). In the case of mental health mandates, the comparable rate of noncompliance" was about 10 to 15 percent, based on 1995 data (Jensen, Morrisey, and Bulycheva 1998). Many states have not inaugurated a system that checks on whether insurers abide by these laws, nor are penalties imposed for noncompliance.

Thus, although one might assume that state mandates affect most of a state's population, in reality the opposite is true. Less than half of a state's population belongs to plans affected by the laws.

What Do Mandates Cost?

In a general sense, the full costs of mandated bene ts are broad because they encompass not only the added expense to premiums but also the ef ciency costs" of these compulsory bene ts. Ef ciency costs are consequent changes in access to health insurance, the nature of coverage, worker compensation, and possibly even a rm' s hiring practices, that decrease the welfare of individuals or rms in any way. Fewer health bene ts for employees is one component if mandates cause some rms not to offer coverage or add to the dif culties of participating in a plan, for example, by requiring higher premium contributions or tightening eligibility rules. An increase in self-insurance is another if mandates have encouraged rms to self-insure as a way of avoiding them.

Self-insurance raises ef ciency issues for a number of reasons. First, some research suggests that premiums are actually higher in self-insured than in purchased plans, even after controlling for the content of coverage (Jensen, Feldman, and Dowd 1984; Jensen and Morrisey 1990). One explanation is that employers may simply not be as ef cient as insurers at processing claims. They may also be less able to negotiate price discounts with area providers or less willing than insurers to deny payment of claims in instances of questionable coverage. Any of these factors would tend to make self-insured coverage more expensive. Second, self-insurance increases the nancial risks borne by rms. Third,

any decreases in workers' wages or reductions in nonmandated coverage within plans that can be traced to mandates are components of ef ciency costs that need to be recognized as well. In general, if a regulation causes the equilibrium in a market to veer away from" what consumers would have preferred, and could have attained, absent the regulation, then ef- ciency costs have resulted. A full evaluation of any regulation must account for its associated ef ciency costs.

In this section, however, our focus is on the narrower notion of the extra premiums that stem from mandated coverage. These are important because the consequent changes in the cost of insurance are what give rise to ef ciency costs in other arenas. If premium increases are negligible, we can expect few ef ciency costs, whereas if they are large, ef ciency costs too are likely to be substantial.

Most research on how mandates affect premiums has examined state-regulated bene ts. With the exception of COBRA, few studies have looked at federal mandates; indeed, most of the current federal laws have only recently taken effect. Studies have employed a variety of cost measures and estimation methods, and nearly all have focused on the costs to employer plans.

One common approach to an examination of state mandates has been to calculate from data on insurance claims in the state the share of claims associated with the required provisions. This method uncovered the following statistics: mandated bene ts in Virginia were found to account for 21 percent of claims; in Maryland, 11 to 22 percent of claims; in Massachusetts, 13 percent of claims; in Idaho, 5 percent of claims; and in Iowa, also 5 percent of claims (Ralston, Power, and McGinnis 1988; Dyckman and Anderson-Johnson 1989; Blue Cross/Blue Shield of Massachusetts 1991; R.B. Mathews, Senior Vice President, Blue Cross/ Blue Shield of Virginia 1991: personal communication to GAJ).

However, the full share of claims cannot be attributed to mandates because some coverage likely would have been provided anyway. As an example, nearly all workers with employer coverage now have bene ts covering inpatient mental health care (93 percent in 1995), yet fewer than half the states mandate it, Maryland and Virginia included.

The more appropriate measure is the mar ginal cost" of mandates: the difference between actual costs and the costs that would have resulted absent the mandates. We know of only one study that has employed this concept to measure the costs of these regulations. Using a nationwide cross-section of insured rms in 1989, Acs, Winterbottom,

and Zedlewski (1992) found that state-mandated bene ts signi cantly raised premiums. Among rms that offered insurance, premiums were 4 to 13 percent higher as a direct result of these laws, after controlling for characteristics of the rm and basic aspects of plan coverage.

Jensen and Morrisey (1990) provided information on the marginal cost of including speci c types of coverage based on the actual experience of plans, which is also useful in gauging the cost of mandates. The reason is that, given any particular mandate, its marginal cost is either zero, if the bene t is already included in the plan, or the price of newly adding such coverage. Marketwide, marginal cost is the product of the number of rms newly adding the coverage and the price per plan of adding it. Thus, knowledge of the marginal cost of a speci c coverage provides half the information needed to assess the marketwide marginal cost of mandating it.

Several widely mandated bene ts proved to be expensive. Chemical dependency treatment coverage increased a plan's premium by 9 percent on average. Coverage for a psychiatric hospital stay increased it by 13 percent. Adding bene ts for psychologists' visits increased it by 12 percent, and adding bene ts for routine dental services, by 15 percent. These estimates may overstate slightly an employer's cost of having to begin complying with a mandate in one of these areas because the sample of rms in this study offered very generous bene ts all around, which may have amounted to a more substantial package than a state would typically prescribe. The estimates nonetheless suggest that mandates may be costly for some rms.

There are a number of studies on employers' experiences under COBRA, the 1986 federal continuation-of-coverage requirements. A survey conducted every spring by Charles D. Spencer & Associates, Inc., covering 1.4 million workers in approximately 200 rms, has consistently found that persons who elect COBRA coverage cost much more to insure than active workers. Average claims per COBRA enrollee in 1996, for example, were 68 percent higher than average claims per active worker ($5,591 vs. $3,332) (Hugh 1997) (g. 3). Among employees who were eligible for COBRA coverage in 1996, 28 percent elected it, and among spouses and dependents who were eligible, 15 percent elected it.

Workers are clearly paying a huge subsidy for each continuation enrollee, and such adverse selection is bound to raise group premiums. We can calculate directly the incremental premium actually attributable to COBRA by taking the information on COBRA enrollees as a percentage

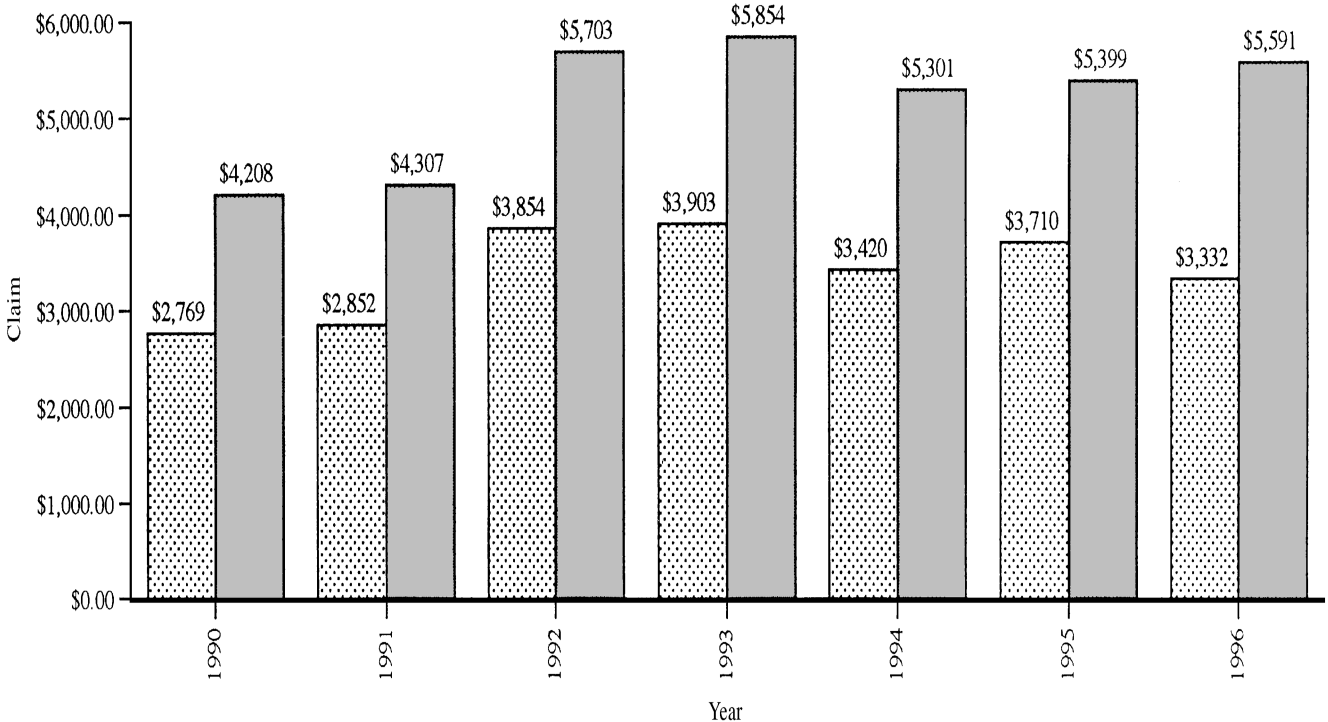

FIG. 3. Employers' experiences with adverse selection under COBRA, 1990–96. Average claim: ▨, active employees; ▩, COBRA employees. *Source:* Hugh (1997, 36–44).

of all enrollees and comparing the claims experience of these two groups. Because COBRA enrollees on average comprise 2.2 percent of all plan enrollees (Hugh 1997), premiums per normal enrollee are 4 percent higher than they would be were it not for the COBRA mandate.

COBRA also imposes the cost of communicating continuation rights to eligibles, collecting premiums from these enrollees, and, in some cases, monitoring their right to continued eligibility. Although probably small in relation to incremental premiums, these costs in 1990 were in the range of $150 to $240 annually per COBRA enrollee (Charles D. Spencer and Associates 1990).

Are Wages Reduced As a Result of Mandates?

A central prediction of the economics of employer-sponsored health insurance is that workers pay for the coverage in the form of reduced wages or other bene ts. Early empirical research did not support this hypothesis. Leibowitz (1983) and Monheit, Hagan, Berk, et al. (1985) estimated cross-section wage regressions in which the presence of health insurance was an explanatory variable. They found that wages were typically higher, not lower, in the presence of health insurance.

There are several possible explanations for these results (Morrisey 1993). One expects that more productive workers will receive both higher wages and health insurance. If the researcher is unable to control for differences in productivity, the presence of health insurance in the equation can serve as a proxy for greater productivity, leading to the perverse effect of apparently higher wages when insurance is present. Second, the progressive nature of the federal tax system, and of many state systems, means that tax rates rise with income, making employer-sponsored insurance less expensive as the worker's income rises.

More recent research on workers' compensation insurance suggests that wages are lower in the presence of other bene ts. Viscusi and Moore (1987) and Gruber and Krueger (1991) examined workers' compensation. These studies are particularly important because, like health insurance mandates, workers' compensation coverage is mandated by state law. These studies were able to render a careful account of the size of the bene ts received by an injured worker and had particularly good measures of the risk of injury. Gruber and Krueger found that over 86 percent of the cost of workers' compensation insurance was borne by workers in the form of lower wages. Viscusi and Moore found that all the costs were borne by workers.

The only study examining the effects of health insurance mandates on worker wages is that of Gruber (1994a). He examined the effects of state maternity mandates implemented during 1976 and 1977 in Illinois, New Jersey, and New York prior to the federal mandate. Gruber argued that the laws would affect single and married women aged 20 to 40 and single women in the same age range. Older workers and single men would be unaffected. Thus, the theory of compensating wage differentials implied that only the affected groups would incur wage reductions. He tested this by comparing the wages of each cohort before and after the enactment of the laws in these states and in ve control states that did not enact the laws. His results, statistically signi cant at the usual levels, indicated that the affected cohorts paid the full cost of the mandates. The difference in wages of married women, aged 20 to 40, for example, was 4.3 percent lower in Illinois, New Jersey, and New York after the mandate than was recorded for similar women in the control states. This is strong evidence that workers pay for mandates in the form of lower wages. (For an extensive and readable discussion of compensating wage differentials and employer-sponsored health insurance, see Pauly [1997].)

Do Some Workers Lose Coverage As a Result of Mandates?

If mandates increase the cost of coverage, it is possible that some buyers, whether rms or individuals, will decide that health insurance simply is not worth it, in which case the number of purchasers will decline.

Sloan and Conover (1998) found that the higher the number of state coverage requirements for plans, the higher the probability that an individual was uninsured, and the lower the probability that he or she would have any private coverage, including group coverage. The probability that an adult was uninsured rose by 0.004 with each mandate present.

The authors used this nding to extrapolate its implications for the uninsured rate nationally. They suggested that eliminating bene t mandates entirely might reduce the proportion of uninsured adults by over 0.04. Given that the proportion of adults in their sample without health insurance was 0.18, this suggests that between one- fth and one-quarter of the uninsured problem is due to the presence of state mandates. The caveat to this estimate is that it uses a marginal impact at the individual level to infer the aggregate effect of these laws. Because it entails extrapolating outside the range of actual data (since there are no states without

mandates), it should be interpreted as suggestive, not de nitive. Interestingly, an earlier study by Goodman and Musgrave (1987), based on state-level data, derived a roughly similar estimate of the proportion of individuals who lack coverage because of mandates, namely, 14 percent.

The effects of the new mandate exemption laws and preexisting condition limitations on insurance provision have also been examined. As noted earlier, in states that have passed mandate exemption laws, small businesses that previously did not offer insurance can now purchase a plan without most, or any, of the state's mandated coverage. If mandates have priced some small businesses out of the market, conceivably the mandate waiver laws might encourage them now to purchase a more affordable, bare-bones" type of plan. Most studies, however, have found that these laws have had no effect on insurance purchases (Sloan and Conover 1998; Jensen and Morrisey 1999; Gruber 1994b). The exception is a study by Hing and Jensen (1999), which found that the laws had a slight impact, particularly among small rms in red-lined industries.

In the Sloan and Conover (1998) study cited above, the presence of state limits for preexisting conditions that applied to either small groups or individual policies was unrelated to the probabilities that an individual was uninsured, had private coverage, or had group coverage.

In general, there is convincing evidence that conventional mandates have indeed priced some purchasers out of the health insurance market.

Have Mandates Encouraged Firms to Self-Insure?

Because ERISA exempts self-insured plans from state regulation, it is conceivable that state-mandated bene ts have spurred some rms to self-insure as a way of avoiding the requirements. The role of mandates in self-insurance decisions has been the subject of several studies.

Using data on 274 rms observed between 1981 and 1984–85 and on 219 rms observed between 1984 and 1987, Jensen, Cotter, and Morrissey (1995) estimated the impact of state mandatory-inclusion mandates on the decisions of mid- to large-sized rms (50 or more workers) to convert to self-insurance during the early and mid-1980s. Most conventional mandated bene ts had a positive, but statistically insigni cant effect, on the likelihood of conversion. Even when considered collectively, conventional mandates did not explain the conversions to self-insurance that occurred in the 1980s.

Greater premium taxation of purchased plans, however, strongly encouraged self-insurance. Both premium taxes and state risk pool taxes had positive and signi cant effects on the likelihood of converting. Between 1981 and 1984–85, the presence of a state continuation-of-coverage requirement also signi cantly encouraged self-insurance but was not a factor by the end of the decade. One interpretation is that when COBRA took effect in early 1986, self-insurance was no longer an escape route to avoid offering continuation rights; hence the incentive effect of the state laws dissipated. As noted earlier, continuation bene ts tend to raise premiums substantially (e.g., by 4 percent).

Gar nkel (1995) discovered that in 1989 the probability of self-insurance was higher in the presence of an alcohol treatment mandate but lower in the presence of a mental health mandate. His second result is puzzling. He did not examine the combined impact of these mandates, however, and it is possible that in the aggregate these effects would have "washed out" because many states with one of these laws also had the other. Using data from the 1994 National Employer Health Insurance Survey, Park (1998) found that state mandates were not strongly associated with self-insurance decisions in that year.

The effects of any-willing-provider and freedom-of-choice legislation on employers' decisions to self-insure their managed care products has also been investigated, at least in preliminary fashion. Based on employer data for 1993 and 1995, Jensen Morrisey, and Bulycheva (1998) calculated that self-insurance for these types of plans was unrelated to the presence of AWP and FOC laws.

Does Mandating a Bene t Make It More Likely to Be Included in Plans?

A mandate increases a particular provision in insurance plans only if workers and their employers add it to the bene t package as a result of the mandate. Some studies have examined whether mental health bene ts, alcohol treatment coverage, and drug abuse treatment coverage are less common in states without mandates. For all three, inclusion in employer plans was just as likely in states without a mandate as it was in states that had one (Morrisey and Jensen 1993; Jensen, Rost, Burton, et al. 1998). These ndings, however, speak only to whether some coverage for these services was offered at all, not to whether the actual content of the bene ts differed. Conceivably, state requirements could have broadened the scope of the bene ts.

Studies have also examined whether self-insured plans are less likely to offer mandated coverage. The ndings are mixed. Recent data (for 1993 and 1995) reveal that, in states where chiropractic coverage or mental health coverage is mandated, self-insured plans were just as (if not more) likely to include such bene ts in their plans (Jensen, Roychoudhury, and Cherkin 1998; Jensen, Rost, Burton, et al. 1998). Although self-insurance is certainly more common in larger rms, these results were not simply an artifact of rm size; even controlling for that factor, the ndings continued to hold.

A study of self-insured plans nationwide in 1993 conducted by Acs, Long, Marquis, et al. (1996) also found that the coverage offered by self-insured plans was nearly identical to that contained in purchased plans. Two state-speci c studies (one for Iowa, the other for Wisconsin) likewise found that self-insured plans tended to offer bene ts in mandated areas equal to, or greater than, those found in purchased plans (Power and Ralson 1989; Krohm and Grossman 1990).

Earlier studies, based on data from the 1980s, however, found that some self-insured plans did avoid mandated coverage. Conventional self-insured plans were less likely than purchased plans to include alcohol and drug abuse coverage, mental health bene ts, and home health services (Jensen and Gabel 1988; Morrisey and Jensen 1993). A study in Minnesota likewise found that nearly all small rms opting to self-insure in 1987 tended to exclude from their policies ve of the state's mandates that were covered in the survey (State of Minnesota 1988).

Taken together, these studies suggest that, whereas some self-insured plans may have avoided areas of mandated coverage a decade ago, they are now catching up."

Do Mandates Disproportionately Affect Small Firms?

We noted earlier that mandates have increased the uninsured population by pricing some small rms out of the group coverage market altogether, thereby forcing workers either to remain uninsured or to buy their own coverage. Jensen and Morrisey (1999) documented the effects of the laws on small- rm coverage. They modeled the effects of state mandates, as well as other insurance regulations, on the decision by small rms to offer health insurance over the 1989–95 period. Small rms were de ned as those with fewer than 50 workers. Each additional mandate signi - cantly lowered the small rm' s probability of offering health insurance by

0.017. If we extrapolate for a rough estimate of the total effect" of these laws, the ndings suggest that eliminating all mandates might raise the proportion of small rms offering coverage by 0.094. To put it another way, roughly 18 percent of businesses that are currently uninsured would likely sponsor coverage were it not for mandates. The same caveat that applied to the Sloan and Conover extrapolation, however, applies to this one: it is suggestive rather than de nitive.

An earlier study by Jensen and Gabel (1992) examined the separate effects of different types of bene t mandates on the small rm' s offer decisions. Although most individual mandates had negligible effects, they found that, even in the mid-1980s, state mandates accounted for 19 percent of small rms' failures to offer coverage. The most troublesome mandates were state continuation-of-coverage rules. These pre-COBRA state mandates allowed terminated workers to buy into the rm' s plan. The presence of this type of mandate lowered the rm' s probability of offering a plan by 0.09. Because continuation mandates give rise to acute adverse selection, they inevitably result in higher premiums. In small rms, which typically have high worker turnover, these effects may be severe.

In contrast, Gruber (1994b) found that mandates had no effect on either the propensity of small rms to offer insurance or an individual's receipt of insurance, based on his analysis of small-employer data (for 1985 and 1989) and CPS data (for 1979, 1983, and 1988). His coef- cients on the mandate variables were negative as expected, but they lacked signi cance.

Finally, Uccello (1996) and Jensen and Morrisey (1999) found that small rms were no less likely to offer coverage in states with preex- isting condition mandates. One explanation is that problems with in- surer restrictions on the coverage of preexisting conditions were never widespread to begin with, so the laws, in effect, were nonbinding" lim- its. Indeed, for years the coverage of preexisting conditions in small rms has been about the same as in large rms (Jensen and Morrisey 1998).

Are Plans That Face Mandates Disadvantaged in the Market?

Finally, many new state mandates apply to speci c types of health plans. Any-willing-provider and freedom-of-choice laws, for example, often apply to HMOs and/or PPOs. To the extent that they raise costs for

these plans, one would expect that they would garner a smaller share of the market.

Two studies have addressed this issue. Sheils, Stapleton, and Haught (1995) examined state-level HMO penetration over the period 1985 to 1994. They concluded that the rate of growth in HMO enrollment was 6.9 percentage points lower in states with AWP or FOC laws. However, Morrisey, Ohsfeldt, and Johnson (1998) argued that state-level HMO market share and state managed care mandates may be simultaneously determined. If so, the estimate by Sheils's group may be too large. In preliminary work Morrisey et al. (1998) examined Metropolitan Statistical Area markets over the period 1989 to 1995. They also controlled for political factors associated with the enactment of the laws. They found that the laws had mixed effects. The presence of AWP laws applicable to physicians reduced HMO market share by four percentage points. FOC laws and AWP laws applicable to other providers had no statistically signi cant effect. Overall, these limited studies suggest that the line-of-business mandates may be limiting the ability of managed care plans to compete successfully in the market.

Summary and Discussion

Four conclusions emerge from our review: First, both conventional mandates specifying coverage for particular providers, services, and subscriber cohorts, and line-of-business mandates covering small-employer markets and managed care plans have expanded dramatically over the 1980s and 1990s. Federal laws regulating the nature of health coverage have also grown. Although many of the federal measures have tended to mimic similar state laws already in place, they potentially have a larger impact because they affect the coverage of subscribers in self-insured plans.

Second, most state mandates affect less than half of a state's population. Thus, state efforts to increase access to particular bene t provisions can only have limited success. Moreover, the effect of the laws falls disproportionately on workers in small rms because these rms are less able to self-insure and avoid the consequences of the mandates.

Third, mandated bene t laws have important effects. There is clear evidence that the increase in numbers of uninsured Americans can be partly tied to mandates. The best work on this topic has been done

by Sloan and Conover (1998), indicating that a fth to a quarter of the uninsured are without health insurance because of state mandates. Federal mandates are likely to have an even greater impact. Federal mandates supersede the ERISA exemption for self-insured plans. If premiums rise as a result of the federal measures, more persons may give up coverage. The Congressional Budget Of ce has estimated that every one percent increase in health insurance premiums leads to 200,000 more uninsured Americans. Thus, it is clear that the laws carry a hefty price indeed.

Finally, and perhaps most important, both economic theory and a growing body of empirical evidence suggest that workers pay for health insurance mandates in the form of lower wages. Workers and their employer-agents may be able to avoid some of the new costs by switching to less desirable plans or by self-insuring (in the case of new state mandates). To the extent that they cannot, wages or other forms of compensation will tend to decrease.

Mandates are attractive. Their proponents argue that they guarantee access to particular coverages, expand bene ts, and enhance quality. Moreover, the costs do not appear as explicit items in state or federal budgets. However, economic theory and a growing body of careful empirical research suggest, as in all things, that mandates are paid for by workers and their dependents, who absorb lower wages or lose coverage altogether.

References

Acs, G., C. Winterbottom, and S. Zedlewski. 1992. Employers' Payroll and Insurance Costs: Implications for Play or Pay Employer Mandates. In *Health Bene ts and the Workforce.* Washington, D.C.: U.S. Department of Labor.

Acs, G., S.H. Long, M.S. Marquis, and P.F. Short. 1996. Self Insured Employer Health Plans: Prevalence, Pro le, Provisions, and Premiums. *Health Affairs* 15(2):266–78.

Begun, J.W., and R. Feldman. 1990. Policy and Research on Health Manpower Regulation: Never Too Late to Deregulate? *Advances in Health Economics and Health Services Research* 11:79–110.

Blue Cross/Blue Shield Association. 1989. State Mandated Bene t Laws Enacted through 1988. Washington, D.C.: Of ce of Government Relations.

Blue Cross/Blue Shield Association. 1997. *State Mandated Health Insurance Bene t Laws Enacted through 1996*. Washington, D.C.: Of ce of Government Relations.

Blue Cross/Blue Shield of Massachusetts. 1991. Mandated Bene ts: Impact on Group Master Medical Rates (based on second quarter 1991). Boston.

Cone, K.R., and D. Dranove. 1986. Why Did States Enact Hospital Rate-Setting Laws? *Journal of Law and Economics* 29:287–302.

Crain, W.M., and R.D. Tollison. Eds. 1990. *Predicting Politics: Essays in Empirical Public Choice.* Ann Arbor: University of Michigan Press.

Dyckman, Z., and J. Anderson-Johnson. 1989. The Cost of Mandated Health Insurance Bene ts: The Maryland Experience. Paper Presented at the 1989 American Public Health Association Annual Meeting, Center for Health Policy Studies, Columbia, Maryland.

Employee Bene t Research Institute. 1995. *EBRI Databook on Employee Bene ts.* Washington, D.C.

Employee Bene t Research Institute. 1998. Issues of Quality and Consumer Rights in the Health Care Market. *EBRI Issue Brief* no. 196. Washington, D.C.

Families USA Foundation. 1993. *No Sale: The Failure of Barebones Insurance.* Washington, D.C.

Fanara, P., and W. Greenberg. 1985. Factors Affecting the Adoption of Prospective Reimbursement Programs by State Governments. In *Incentives vs. Controls in Health Policy*, ed. Jack Meyer, 144–56. Washington, D.C.: AEI Press.

Feldstein, P.J. 1988. *The Politics of Health Legislation: An Economic Perspective.* Ann Arbor: Health Administration Press.

Feldstein, P., and G. Melnick. 1984. Congressional Voting Behavior on hospital Legislation: An Exploratory Study. *Journal of Health Politics, Policy and Law* 8:686–701.

Friedman, M., and L.J. Savage. 1948. The Utility Analysis of Choices Involving Risk. *Journal of Political Economy* 61:279–304.

Gabel, J.R., and G.A. Jensen. 1989. The Price of State Mandated Benets. *Inquiry* 26:419–31.

Gabel, J., K. Hurst, H. Whitmore, S. Hawkins, C. Hoffman, and G. Jensen. 1999. *Health Bene ts in 1998 for Small Employers*. Palo Alto, Calif.: Henry J. Kaiser Family Foundation.

Gar nkel, S.A. 1995. Self Insuring Employee Health Bene ts. *Medical Care Research and Review* 52:475–91.

Goldstein, G.S., and M.V. Pauly. 1976. Group Health Insurance as a Local Public Good. In *The Role of Health Insurance in the Health Services Sector*, ed. R. Rosett. Chicago: University of Chicago Press.

Goodman, J.C., and G.L. Musgrave. 1987. *Freedom of Choice in Health Insurance*. Dallas: National Center for Policy Analysis.

Gruber, J. 1994a. The Incidence of Mandated Maternity Bene ts. *American Economic Review* 84:622–41.

Gruber, J. 1994b. State Mandated Bene ts and Employer Provided Health Insurance. *Journal of Public Economics* 55:433–64.

Gruber, J., and A.B. Krueger. 1991. The Incidence of Mandated Employer-Provided Health Insurance: Lessons from Workers' Compensation Insurance. In *Tax Policy and the Economy*, ed. D. Bradford, 111–44. Cambridge, Mass.: MIT Press.

Health Bene ts Letter. 1994. More States Mandate New Bene ts. *Health Bene ts Letter* (February 23):1, 7–11.

Health Insurance Association of America. 1988. *Compendium of State Insurance Regulations, Unpublished Document.* Washington, D.C.

Hewitt Associates. 1985. *Continuation of Group Medical Coverage: A Study of State Laws.* Lincolnshire, Ill.:

Hing, E., and G.A. Jensen. 1999. Health Insurance Portability and Accountability Act of 1996: Lessons from the States. *Medical Care* 37:692–705.

Hugh, S.A. 1997. COBRA Costs Continue to Be High, Erratic. *Employee Bene t Plan Review* (September):36–48.

Jensen, G.A. 1986. *Employer Choice of Health Insurance Bene ts.* Ph.D. dissertation, University of Minnesota, Minneapolis.

Jensen, G.A., and J.R. Gabel. 1988. The Erosion of Purchased Health Insurance. *Inquiry* 25:328–43.

Jensen, G.A., and J.R. Gabel. 1992. State Mandated Bene ts and the Small Firm's Decision to Offer Health Insurance. *Journal of Regulatory Economics* 4:379–404.

Jensen, G.A., and M.A. Morrisey. 1990. Group Health Insurance: A Hedonic Price Approach. *Review of Economics and Statistics* 72:38–44.

Jensen, G.A., and M.A. Morrisey. 1998. Managed Care and the Small Group Market, in M. Morrisey (ed.), *Managed Care and Changing Health Care Markets*, ed. M. Morrissey, 53–74. Washington, D.C.: AEI Press.

Jensen, G.A., and M.A. Morrisey. 1999. Small Group Reform and Insurance Provision by Small Firms, 1989–1995. *Inquiry* (forthcoming).

Jensen, G.A., K.D. Cotter, and M.A. Morrisey. 1995. State Insurance Regulation and an Employer's Decision to Self Insure. *Journal of Risk and Insurance* 62:185–213.

Jensen, G., R. Feldman, and B. Dowd. 1984. Corporate Bene t Policies and Health Insurance Costs. *Journal of Health Economics* 3:274–96.

Jensen, G.A., M.A. Morrisey, and M. Bulycheva. 1998. Employers' Managed Care Plans under Selective Contracting Laws. Working Paper, Wayne State University, Detroit.

Jensen, G.A., M.A. Morrisey, S. Gafney, and D.K. Liston. 1997. The New Dominance of Managed Care: Insurance Trends in the 1990s. *Health Affairs* 16(1):125–36.

Jensen, G.A., K. Rost, R.P.D. Burton, and M. Bulycheva. 1998. Mental Health Insurance in the 1990s: Are Employers Offering Less to More? *Health Affairs* 17(3):201–08.

Jensen, G.A., C. Roychoudhury, and D.C. Cherkin. 1998. Employer-Sponsored Health Insurance for Chiropractic Services. *Medical Care* 36:544–53.

KPMG Peat Marwick. 1998. *Health Bene ts in 1998*. Arlington, Va.

Krohm, G., and M.H. Grossman. 1990. Mandated Bene ts in Insurance Policies. *Bene ts Quarterly* 4:51–60.

Lambert, D.A., and T.G. McGuire. 1990. Political and Economic Determinants of Insurance Regulation in Mental Health. *Journal of Health Politics, Policy and Law* (spring):169–90.

Leibowitz, A. 1983. Fringe Bene ts and Employee Compensation. In *The Measurement of Labor Costs*, ed. J.E. Triplett. Chicago: University of Chicago Press.

Mandated Bene ts Manual. 1992. Alexandria, Va.: Scandlen.

Marcus, A.R., K. Ladenheim, and L. Atchison. 1995. *Small Group Reforms: A Snapshot of States' Experiences.* New York: Commonwealth Fund.

Marsteller, J., R.R. Bovbjerg, L.M. Nichols, and D.K. Verrilli. 1997. The Resurgence of Selective Contracting Restrictions. *Journal of Health Politics, Policy and Law* 22:1133–89.

Meier, K.J. 1988. *The Political Economy of Regulation: The Case of Insurance.* Albany: State University of New York Press.

Monheit, A.C., M.M. Hagan, M.L. Berk, and P.J. Farley. 1985. The Employed Uninsured and the Role of Public Policy. *Inquiry* (winter): 348–64.

Morrisey, M.A. 1993. Mandated Bene ts and Compensating Differentials: Taxing the Uninsured. In *American Health Policy: Critical Issues for Reform*, ed. R. Helms, 133–51. Washington, D.C.: AEI Press.

Morrisey, M.A., and G.A. Jensen. 1993. State Mandates, Self Insurance, and Employer Demand for Substance Abuse and Mental Health Insurance Coverage. *Advances in Health Economics and Health Services Research* 14:209–24.

Morrisey, M.A., R.L. Ohsfeldt, and V. Johnson. 1998. Effects of Any Willing Provider and Freedom of Choice Laws on HMO Market

Share. Working paper, University of Alabama, Lister Hill Center for Health Policy, Birmingham.

Mueller, K.J. 1986. An Analysis of Congressional Health Policy Voting in the 1970s. *Journal of Health Politics, Policy and Law* 11:117–36.

National Conference of State Legislatures. 1999. 1999 Health Care Activities: A State by State Mid-Year Review. World Wide Web at http://www.ncsl.org/public/hptsrpt.htm.

Nichols, L.M., and L.J. Blumberg. 1998. A Different Kind of New Federalism"? The Health Insurance Portability and Accountability Act of 1996. *Health Affairs* 17(3):25–42.

Ohsfeldt, R.L., M.A. Morrisey, V. Johnson, and J. Nelson. 1999. The Spread of Any Willing Provider Laws. *Health Services Research* (forthcoming).

Park, C. 1998. Self Insured Employer Sponsored Health Plans. Working paper. Hyattsville, Md.: National Center for Health Statistics.

Pauly, M.V. 1997. *Health Bene ts at Work: An Economic and Political Analysis of Employment-Based Health Insurance*. Ann Arbor: University of Michigan Press.

Pauly, M.V., and B. Herring. 1999. *Pooling Health Insurance Risks*. Washington, D.C.: AEI Press.

Peltzman, S. 1976. Toward a More General Theory of Regulation. *Journal of Law and Economics* 19:211–40.

Posner, R. 1974. Theories of Economic Regulation. *Bell Journal* 5:335–58.

Power, M., and A. Ralson. 1989. State Mandated Group Health Insurance Coverages. *Bene ts Quarterly* 5:1–10.

Ralston, A., M. Power, and S. McGinnis. 1988. State Legislatively Mandated Life and Health Insurance Coverages. Oakdale, Iowa: Legislative Extended Assistance Group, University of Iowa.

Rothschild, M., and J.E. Stiglitz. 1976. Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information. *Quarterly Journal of Economics* 90:629–49.

Sheils, J.F., D.C. Stapleton, and R.A. Haught. 1995. *The Cost of Legislative Restrictions on Contracting Practices: The Cost to Governments, Employers and Families.* Lewin-VHI.

Sloan, F.A., and C.J. Conover. 1998. Effects of State Reforms on Health Insurance Coverage of Adults. *Inquiry* 35:280–93.

Spencer, Charles D., and Associates. 1990. *Spencer Research Reports on Employee Bene ts.* Washington, D.C.

State of Minnesota. 1988. *Health Plan Regulation*. St. Paul: Of ce of the Legislative Auditor.

Stauffer, M., and D.R. Levy. 1999. *1999 State by State Guide to Managed Care Law*. New York: Panel.

Stigler, G.J. 1971. The Theory of Economic Regulation. *Bell Journal* 2:1–21.

Uccello, C. 1996. Firms' Health Insurance Decisions: The Relative Effects of Firm Characteristics and State Insurance Regulations. Washington, D.C.: Urban Institute.

U.S. Bureau of the Census. 1997. *Statistical Abstract of the United States, 1997.* Washington, D.C.

Viscusi, W.K., and M.J. Moore. 1987. Workers' Compensation: Wage Effects, Bene t Inadequacies, and the Value of Health Loses. *Review of Economics and Statistics* 69:249–61.

Wendling, W., and J. Werner. 1980. Nonpro t rms and the Economic Theory of Regulation. *Quarterly Review of Economics and Business* 20:6–18.

Acknowledgment: We gratefully acknowledge the nancial support we received from the Health Insurance Association of America (HIAA); however, the views expressed are those of the authors and do not necessarily re ect those of HIAA.

Address correspondence to: Gail A. Jensen, PhD, Institute of Gerontology, Wayne State University, 87 E. Ferry Street, Detroit, MI 48202 (e-mail: g.jensen@wayne.edu).