

THE SYNTHESIS PROJECT

NEW INSIGHTS FROM RESEARCH RESULTS

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Expanding the individual health insurance market: Lessons from the state reforms of the 1990s

Also see companion Policy Brief available at www.policysynthesis.org

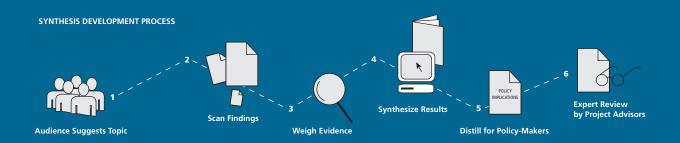
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THE SYNTHESIS PROJECT (Synthesis) is an initiative of the Robert Wood Johnson Foundation to produce relevant, concise, and thought-provoking briefs and reports on today's important health policy issues. By synthesizing what is known, while weighing the strength of findings and exposing gaps in knowledge, Synthesis products give decision-makers reliable information and new insights to inform complex policy decisions. For more information about the Synthesis Project, visit the Synthesis Project's Web site at www.policysynthesis.org. For additional copies of Synthesis products, please go to the Project's Web site or send an e-mail request to pubsrequest@rwjf.org.



Introduction

Many policy-makers support expanding health insurance coverage by providing tax credits to individuals with low or modest incomes to help them purchase insurance directly from insurers. Directly purchased insurance—known as individual or nongroup insurance—now covers 6.7 percent of the under age 65 population (11).

How a tax credit is used and who benefits the most from it will be determined by how the individual insurance market operates and is regulated, leading to several critical questions. Are state insurance market reforms likely to make individual insurance more available and affordable? Would community rating and guaranteed issue requirements increase the effectiveness of tax credits in reducing the numbers of uninsured? Would such reforms make tax credits more effective in expanding the rate of coverage for older and sicker individuals?

In the 1990s, many states enacted laws designed to increase the availability and affordability of individual health insurance. Some states were responding to the possibility of an implosion of their individual insurance markets; others were hoping to reduce the uninsured rate or at least keep it from growing. State efforts met with mixed results, and in some cases, backfired.

This research synthesis distills lessons learned from these prior state reform efforts to inform today's questions. We weigh available research findings, draw conclusions based on those findings, and note where evidence on a particular issue is lacking or inconclusive. We draw primarily from studies that meet professionally accepted standards for social science research. However, other studies that may not be as strong methodologically but have helped influence how people think about state insurance reforms are also examined, and we note their weaknesses.

Before examining the effects of state reforms, the synthesis first addresses basic questions about the nature of the individual insurance market.

- What is the individual insurance market?
- Who sells individual health insurance coverage?
- How much does individual insurance cost?
- What role do state high-risk pools play in the individual market?
- Who buys individual coverage?
- Why did states enact individual insurance market reforms?
- What are state reforms designed to do?

The synthesis then summarizes research findings on the following questions:

- Did reforms increase the availability of individual insurance? Did the changes in state law make individual insurance more available (i.e., were there policies available for purchase), especially to people with higher-risk characteristics? Could anyone who wanted to buy an individual insurance policy, regardless of health status, prior use of health services, or other risk characteristics?
- **Did reforms raise or lower the cost of coverage?** How did state insurance reforms affect the cost and affordability of individual insurance? What happened to premiums for average, low- and high-risk applicants?
- **Did more people obtain insurance after reforms?** What were the effects of the state reforms on coverage rates? What were the effects of state reforms on the risk characteristics (e.g., age, sex, and health status) of the population insured? Did the state insurance reforms expand coverage rates for high-risk people?

Introduction

Figure 1. Major types of state insurance reforms

Availability

- Guaranteed issue, guaranteed availability or open enrollment
- Restrictions on use of pre-existing condition exclusions and waiting periods
- Guaranteed renewability

Affordability

- Rating bands
- Modified community rating
- Pure community rating

Risk Spreading

- Insurer of last resort
- High-risk pool
- Reinsurance pool

See glossary of insurance terms (Appendix III)

Evidence on these issues is contained in studies taking one of two approaches: (1) case studies of one or more states, usually involving analyses of relevant laws and regulations and interviews with regulators, insurers, brokers and agents, and other stakeholders; or (2) quantitative analysis of the effects of the 50 different state laws on rates of insurance coverage and other outcomes that control for other factors. The quantitative (multivariate) studies mostly look at the effect of specific insurance reforms (e.g., community rating or guaranteed issue) or a bundled set of such reforms (e.g., guaranteed issue, community rating, and limits on pre-existing condition exclusions) on total, public, and private insurance coverage rates, as well as uninsured rates. Only a few analyze whether the reforms increased or decreased the number of insurers participating in the individual insurance market. Fewer still investigate the effects of reforms on the age and health status of those insured in the individual market.

Discerning the effects of state regulation on the availability and affordability of individual health insurance presents a difficult challenge. Only a small number of quantitative analyses provide point estimates of the effects of a specific type of reform or group of reforms.³ Moreover, as discussed in Appendix II, significant methodological hurdles make it difficult to tease out the effects of state laws on a market also affected by many other variables, such as changes in federal Medicaid requirements or state economic performance. In addition, the reforms occurred at the same time and interact with each other, making it difficult to isolate the impact of each reform. Another problem is limited data allowing comparisons between pre- and post-reform markets. Information on the price of policies in the individual market is also especially weak, making it problematic to examine responses of both insurers and consumers to the different state regulatory initiatives. Finally, the evidence presented generally shows weak or no impact of less comprehensive reforms. It is unclear, however, if the limited reforms had no impact, or if the impact of these more limited changes could not be measured.

Despite these methodological challenges, findings across both the qualitative (case study) and quantitative analyses are relatively consistent about the effects of different types of reforms on overall insurance coverage rates. This strengthens confidence in the findings. The picture is less clear, however, on the questions of availability and affordability of individual insurance, and the risk characteristics of those who are insured by these policies.

SETTING THE STAGE: BACKGROUND ON THE INDIVIDUAL MARKET

What is the individual insurance market?

About seven percent of the under-65 population, or 17 million people nationwide, buy health coverage through the individual market. This rate has declined slightly since the mid-1990s.⁴ The individual insurance market is really 51 different markets, since insurers (carriers and managed care organizations) selling such coverage are regulated primarily by the states.⁵ Shadowed by the much larger group insurance market, the individual market nonetheless plays an important role as a source of health insurance for those who do not have employment-based coverage and are not enrolled in public programs (e.g., Medicare or Medicaid).

Who sells individual health insurance coverage?

In 2001, Blue Cross Blue Shield (BCBS also known as the "Blues") plans covered 57 percent of the individual insurance market (Figure 2), with the remainder of the market split between commercial insurers (23 percent) and HMOs (20 percent).⁶ About seven percent fewer insurers were selling policies in the individual market in 2001 than in 1997, a result of acquisitions, mergers, and the departure altogether of some insurers (4). While hundreds of insurance companies and health plans still sell in the individual market, only a few insurers account for 50 percent or more of the market in any state.⁷

Figure 2. Individual market share by type of insurer (total U.S.), 1997 and 2001

		arket share		
Insurer type	1997 2001 Percentage point change 1997–200			
BCBS	50%	57%	+7	
HMOs	26%	20%	-6	
Commercial insurers	24%	23%	-1	
U.S. Total	100%	100%	-	

Source: Chollet, 2003

How much does individual insurance cost?

Reliable information on the prices of individual insurance is not available. Most advertised premiums—shown on insurance Web sites, for example—are for average risks at initial issuance, and do not reflect "rate up" charges that may be added after an applicant's risk characteristics are assessed. Prices charged by a given insurer vary dramatically for the same package of benefits by geography, age, and sex, as well as claims experience, health status, prior medical history, and related factors such as occupation. The wide range of benefit packages and cost-sharing requirements offered in the market also make meaningful comparisons difficult. A further complication is that renewal premiums may be higher than premiums charged for newly issued policies.

People with major health problems pay higher premiums for individual market coverage than people who are healthy. Figure 3 illustrates simulated premiums for individual insurance policies for two age groups, young adults and 55-year olds, with different family size and health status characteristics. The annual premium for a healthy single 25-year-old male without children is about \$1,200. For a family of two adults who are 55, have major health problems, and have two children, both with health problems, the annual premium may be over \$14,000.

Figure 3. Predicted premiums (dollars) by family characteristics, pooled data from 1998–2001

	Premiums-25 year old (\$)		Premiu	ms-55 year old (\$)
Health characteristics	Single male	Two adults, two children	Single male	Two adults, two children
Non-smoker, family members in good health policyholder has:	,			
Excellent health, no chronic	1,201	3,827	1,451	4,805
conditions				
Minor health problems	1,384	4,412	1,673	5,540
Major health problems	1,909	6,805	2,308	7,640
Smoker, wife has health children in fair or poor h policyholder has:				
Excellent health, no chronic conditions	1,387	7,215	1,677	9,059
Minor health problems	1,599	8,318	1,934	10,443
Major health problems	2,207	11,473	2,667	14,404

Source: Hadley & Reschovsky, 2003

Another characteristic of individual insurance is that it generally provides lower value per premium dollar than group and especially large group coverage in terms of benefits provided (29). For example, one study found that employer group health insurance paid an average of 75 percent of all incurred health care costs for an individual while nongroup policies paid only 63 percent (12). The lower value is due, in part, to the higher costs of marketing, underwriting, enrollment, and claims administration associated with individual policies.

What role do state high-risk pools play in the individual market?

High-risk pools—available in 30 states in 2002—are an alternative source of health insurance for people who cannot obtain affordable individual coverage (9). Such pools are also referred to as "uninsurable" risk pools. Originally established by some states as the insurer of last resort when other sources of individual insurance were unavailable, state high-risk pools are now used by over half of the states to meet the guaranteed availability requirement under the Health Insurance Portability and Accountability Act (HIPAA). Eligibility rules vary, but many states require enrollees to have been denied coverage from insurance carriers or to have certain high-cost conditions. For individuals who are not HIPAA-eligible because they are either uninsured or insured under an individual policy, state laws vary on risk pool eligibility.

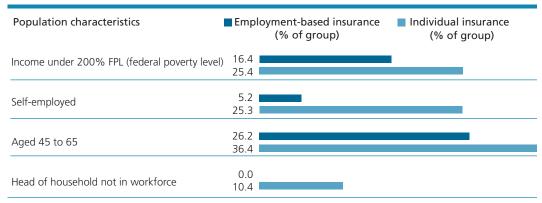
Enrollment in state high-risk pools is modest, totaling 153,000 people in 2002—less than one percent of the individual market. Five state pools (California, Minnesota, Illinois, Wisconsin and Texas) account for 60 percent of that total. However, risk pools may become an increasingly important source of health insurance coverage for dislocated workers as a result of the Trade Act of 2002.¹⁰

At its least expensive, coverage through a high-risk pool is 25 to 50 percent more expensive than conventional individual insurance for an average risk person.¹¹ Healthy individuals are almost always able to find less expensive coverage in the conventional market. However, individuals with high expected health expenditures who qualify for state high-risk pools may pay less than market premiums because the pool premiums are subsidized. While a number of factors are responsible for keeping high-risk pool enrollment low (e.g., some state pools have enrollment caps), a major reason is that premiums are often unaffordable, especially for lower-income families.¹²

Who buys individual coverage?

People who buy individual insurance are more likely to have lower incomes and to be self-employed, older, and not in the workforce compared to people with group coverage (Figure 4). A sizable portion are early retirees not yet eligible for Medicare. Although not shown in Figure 4, rural (nonmetropolitan) populations are more likely to have individual coverage than people living in more urbanized areas (5, 29). Compared with the uninsured, those covered by individual insurance are more likely to be older, work full time and be self-employed, have higher incomes, and live in rural areas. More detailed results are shown in Appendix IV.

Figure 4. Comparison of the population characteristics of nonelderly with employment-based and individual insurance, 1997



Source: Chollet, 2001

A relatively high proportion of individual policyholders also report having group coverage in the same year, evidence of the fluidity in this market (7,12).¹³ This may occur because individual insurance serves as a stopgap measure for individuals who are between jobs or between school and their first job. For others, individual coverage may be the only option when they lose eligibility for Medicaid.

Most insurers view the individual market as a residual one covering people who cannot purchase health insurance through a group. This might occur because a person is unable to work due to illness, age, or disability, or because they are self-employed. People also tend to wait to apply for individual coverage until they need medical care, and then drop it when they do not. In contrast, a person's decision to enroll in a group policy is usually unrelated to medical need but tied to the start of a new job or an employer's decision to change insurers. This difference helps explain why individual insurers usually assess the health status and risk factors of each applicant at initial enrollment and renewal, but only do such medical underwriting in the group market for the smallest of groups.¹⁴

Where permitted by regulation, insurers may deny coverage to higher-risk individuals, accept them at higher premiums, or exclude pre-existing conditions. Recent studies have documented the challenge that people with pre-existing medical conditions can face in trying to obtain individual insurance (25, 30, 31, 38). Conversely, the lowest-risk applicants, including healthy young adults, are often able to find much more affordable individual policies.¹⁵

People with individual coverage are more likely to report being in excellent or very good health than the rest of the population, and especially compared to people who are uninsured or covered by public insurance (Figure 5 and references 5 and 13). This finding makes sense considering that insurers in many states can charge higher premiums or refuse to write coverage for people with pre-existing health conditions or other high-risk characteristics. A multivariate analysis of self-reported health status and the existence of chronic conditions by Hadley and Reschovsky¹⁶ concludes that the lower purchase rate of individual insurance by people with chronic conditions or poor health is due in part to significantly higher premiums (43 to 50 percent higher) charged to people with health problems (13).

Figure 5. Health status by type of insurance (nonelderly adults), pooled data 1998–2001

	Туре	Type of insurance (% of group)			
Health characteristics	ndividual insurance	ESI ^a	Uninsured	Public ^b	
Policyholder's health	%	%	%	%	
Excellent, no chronic conditions	23.6	17.7	15.3	8.9	
Excellent, 1+ chronic conditions	8.8	6.6	5.7	5.8	
Very good or good, no chronic conditions	28.6	30.2	28.5	20.0	
Very good or good, 1+ chronic conditions	16.4	18.0	13.6	12.9	
Very good or good, 2+ chronic conditions	15.7	8.5	15.5	21.4	
Fair or poor	6.9	9.0	21.4	31.0	
Spouse's health ^c					
Excellent, very good or good: no chronic con	ditions 54.2	48.2	42.6	41.4	
Excellent, very good or good: 1+ chronic con		42.9	35.1	35.6	
Fair or poor	6.2	8.9	22.3	23.0	

Source: Hadley & Reschovsky, 2003.

Why did states enact individual insurance market reforms?

Rising health care costs and the desire to make coverage more affordable motivated many states to reform individual markets. Increasing health care costs and the downturn in the economy in the early 1990s led to a rising uninsured rate. Pressures on state elected officials for a solution were often intense. Reforms to insurance underwriting and pricing were a common response, with the goal of making private insurance more available and affordable. While most states made significant changes to the regulation of their small group markets, a more modest number took the additional step of also changing their individual insurance laws.¹⁷

^aESI = employer-sponsored insurance.

^bPrimarily Medicaid, but also includes similar programs funded by state revenues.

^cMarried people only.

Some states were motivated to reform their individual markets by the financial deterioration of BCBS plans, which served as insurers of last resort (15, 21). In New Jersey, for example, a crisis occurred when insurers and businesses challenged the way BCBS losses were subsidized as well as other state mechanisms for spreading the costs of uncompensated care. The Blues—the state's only insurer accepting high-risk applicants—threatened to withdraw from the nongroup market if the subsidies paid by other insurers and employers were reduced or eliminated. Fearing the loss of insurance for thousands of people, state lawmakers responded with comprehensive changes to how the individual market was regulated, including a new pay or play reinsurance mechanism requiring insurers selling in the government market to also sell in the individual market or pay a share of the losses incurred by insurers who were participating (37). Although the reforms did not reduce the overall costs of insuring high-risk enrollees, they created a financing arrangement that was more agreeable to the state's major stakeholders, at least for the short term.

Additional state regulation of the individual market was spurred by HIPAA's (Health Insurance Portability and Accessibility Act) requirements that states establish coverage mechanisms for people moving from group to individual insurance and that all insurers in the individual market write coverage on a guaranteed renewable basis. Although more recent activity has occurred in some states—including rollbacks or repeals of provisions enacted in the 1990s—analyses of these HIPAA-related developments are generally not yet available.

What are state reforms designed to do?

State reforms of the 1990s ranged from those that placed few restrictions on insurers' underwriting and pricing to more comprehensive reforms that required insurers to accept all applicants and charge them the same premiums. Most common were laws requiring that individual policies be sold on a guaranteed renewable basis or limiting the use of pre-existing condition exclusions and waiting periods. Least common were laws to require guaranteed issue, rating bands, and pure community rating (Figure 6).

Figure 6. Number of states with reform enacted by type and year, 1990–1998, 2000

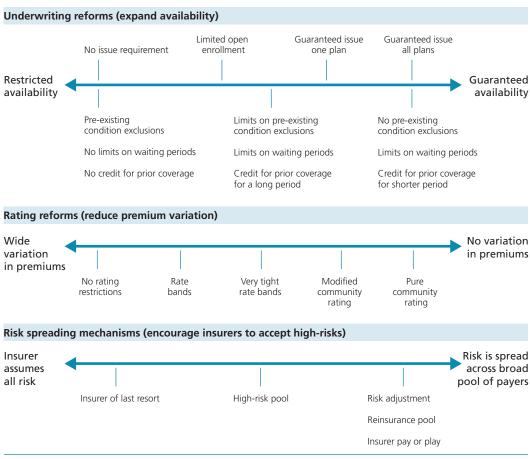
Year	Guaranteed issue	Guaranteed renewal	Limits on pre-existing condition exclusions	Rating bands	Modified community rating	Pure community rating
1000	0	0	0	0	0	0
1990	0	0	0	0	0	0
1991	0	0	2	1	0	0
1992	3	4	6	2	2	1
1993	6	8	11	3	4	1
1994	9	11	14	4	5	2
1995	11	17	23	7	6	2
1996	13	23	27	8	7	2
1997	13	33	29	8	7	2
1998	14	42	29	8	(9	1 _/
2000	12	50	31	6		11

Sources: Pauly & Allison, 2000; Blue Cross and Blue Shield Assoc., 2001

Figure 7 illustrates the range of reforms that a state could enact, from the most limited to the most comprehensive. Three categories of reforms—underwriting, rating, and risk spreading—are shown. Underwriting reforms are designed to make insurance more accessible to applicants through such approaches as guaranteed issue and renewal and limiting pre-existing condition exclusions and waiting periods.

The rating reforms explicitly affect the range of premium variation found in the individual market. The reforms to the left of Figure 7 impose no constraints on what the insurer can charge an enrollee, resulting in wide variation in premiums based on age, sex, health status, and other factors. Premiums for young and healthy enrollees are likely to be relatively inexpensive whereas premiums for older and sicker enrollees are likely to be relatively expensive. Moving toward the right, the range of premium variation is increasingly constrained. At the far right—pure community rating—an insurer must charge all enrollees the same premium for the same policy.

Figure 7. Continuum of state individual insurance reform laws



Source: Fuchs, 2004

The underwriting reform laws and the rating reforms closest to the left side of the page permit significant segmentation of the individual market because there is minimal pooling of risks; the ones farthest to the right require the most pooling of risks. Less pooling and more risk segmentation allows the insurer to price its policies at or close to what it anticipates it will

experience in claims and overhead costs for each applicant. But the greater the risk segmentation, the more likely those individuals or groups falling into the higher-risk pools will be priced out of the market.

Risk spreading mechanisms, the last type of reform shown in Figure 7, affect both the availability and affordability of health insurance. They range from those that require one insurer to serve as an insurer of last resort or safety net insurer—typically in return for favorable tax treatment by the state—to high-risk pools, which are subsidized by assessments on insurers (or sometimes through broader funding mechanisms such as general revenues). Additional risk spreading mechanisms include risk adjustment, reinsurance, and insurer pay or play mechanisms. With these latter risk-spreading mechanisms, the private commercial insurers continue to provide coverage directly to insured enrollees but a portion of their costs for high-risk enrollees is borne by other insurers or by a broader group of payers (e.g., taxpayers).

FINDINGS FROM THE RESEARCH LITERATURE

What were the effects of the state individual insurance market reforms?

In this section we assess the findings of the research literature on the following questions:

- Did the changes in state law make individual insurance more available (i.e., were policies available for purchase), especially to people with higher-risk characteristics? Could anyone who wanted to buy an individual insurance policy, regardless of health status, prior use of health services, or other risk characteristics?
- How did state insurance reforms affect the cost and affordability of individual insurance? What happened to premiums for average, low- and high-risk applicants?
- What were the effects of the state reforms on coverage rates? What were the effects of state reforms on the risk characteristics of the population insured? Did the state insurance reforms expand coverage rates for high-risk people?

Comparisons are drawn between comprehensive reform states (Figure 8) and those with more modest individual market reforms (Iowa, Minnesota and Ohio). A more detailed treatment of the research literature is provided in Appendix V (see Tables A. Multivariate Analyses of Effects of State Individual Market Reforms on Coverage Rates and Cost of Coverage, and B. State-Specific Findings of Synthesis Studies).

Figure 8. Comprehensive reform states*



Did the changes in state law make individual insurance more available (i.e., were policies available for purchase), especially to people with higher-risk characteristics? Could anyone who wanted to buy an individual insurance policy, regardless of health status, prior use of health services, or other risk characteristics?

In states that adopted the most comprehensive underwriting reforms—guaranteed issue often combined with other reforms such as guaranteed renewability and strict limits on exclusions for pre-existing conditions—individual insurance became more widely available. That is, policies were available for people to purchase. The case studies indicate that access to individual insurance policies for people at high-risk clearly increased in the comprehensive reform states of New Hampshire, New York, New Jersey, Vermont and Washington. The effect on availability in the other comprehensive reform states was unclear (20, 23).

For states adopting more modest reforms, such as guaranteed renewability and restrictions on pre-existing condition exclusions, the implications for expanded availability are unclear. Few of the case studies focused on these states, and those that did generally failed to tease out the effects of the reforms on availability other than to report continued use of exclusion riders and other practices that result in screening out high-risk applicants (8).

Even in states with guaranteed issue and renewal, coverage was not necessarily available to everyone. Guaranteed issue laws in some states only required carriers to sell one policy (and not all policies) to all applicants. In other states, guaranteed issue laws did not in practice mean that everyone had to be accepted. Guaranteed renewability also could be applied restrictively. In some states it was applied only under certain conditions or at much higher premiums (17). Finally, in almost every state, insurers were still permitted to require waiting periods before they would cover pre-existing conditions, especially for individuals who lacked recent prior coverage.

Comprehensive underwriting reforms generally resulted in carrier departures from individual insurance markets and less choice of insurance products. Guaranteed issue is thought by many to reduce the availability of insurance options in the individual insurance market because many insurers will not sell in states with that requirement. The picture emerging from the research on this issue is mixed. In states that enacted both guaranteed issue and guaranteed renewability, the choices of insurers tended to decline or remain about the same. A significant decline in insurers, however, was more likely in states that also imposed community rating or tight rating bands. In Kentucky and Washington, states that initially imposed guaranteed issue, community rating, and very tight limits on the use of pre-existing condition exclusions, only one or two insurers remained in the market. A major exception is New Jersey where the reforms led to a significant increase in the number of insurers offering individual coverage, a result attributed to the state's pay or play requirement (37).

Insurance carrier departures could have been due to other factors. Whether the departure of carriers was entirely a response to the new insurance laws or to other factors—such as a need to consolidate in order to improve competitive position in other markets—is less clear, however. Moreover, in some states, the carriers that left the market accounted for a small percentage of individual policy enrollees (6).

Guaranteed issue reforms may have promoted faster HMO penetration in individual markets. In New York and Massachusetts (15, 20, 21), for example, HMO coverage became more widely available and indemnity coverage less available or entirely unavailable. Some researchers hypothesize that where permitted by state law, insurers remaining in guaranteed issue states—where community rating or rating bands severely limited the allowable variation in premiums—made this switch to HMOs intentionally as a subtle means to discourage less healthy individuals from choosing their policies. People with chronic conditions or serious health conditions tend to prefer indemnity policies because they provide freedom of choice of providers. Confirming this hypothesis is difficult, however, because of the more general movement by insurers to managed care during the 1990s in response to health care cost pressures. Lo Sasso and Lurie provide some evidence in support of this notion in an unpublished study. Controlling for the more general increase in managed care, they found a significant increase in HMO penetration in the individual insurance markets of comprehensive reform states compared to those without such reforms (22).

The research thus gives us some confidence that guaranteed issue of all policies assures the availability (for purchase) of policies to anyone regardless of risk factors, such as age or health status. However, the number of insurers selling such coverage may decline, especially if guaranteed issue is paired with strict rating restrictions. Moreover, the market is more likely to offer more HMO products than in the absence of such regulation.²⁰ Generalizations about the effects of more modest reforms are less obvious.

How did state insurance reforms affect the cost and affordability of individual insurance? What happened to premiums for average, low- and high-risk applicants?

Many analysts predicted that when states adopted guaranteed issue and pure community rating, premiums in the individual market would increase for low-risk enrollees and decrease for high-risk enrollees. Because a few high-risk enrollees account for the vast amount of spending, average premiums would increase. If premiums for low-risk enrollees increased significantly, an adverse selection spiral could result.

Average premiums did generally increase in states with community rating although the evidence is largely qualitative and not quantitative. In states that adopted rate bands (which allow greater premium variation based on risk factors), the literature mostly fails to find significant effects on average premiums.

Swartz and Garnick found that average premiums declined for the first two years after reforms were enacted in New Jersey, but then increased. As expected, premiums also went down for high-risk individuals, and up for low-risk enrollees who had previously been buying coverage though the one-person group market and now could only get their coverage through the individual market (37). However, an adverse selection spiral did not occur, perhaps in part because people who could afford to purchase the post-reform individual policies were, on average, healthier than those who did not choose to enroll, "probably because the latter could not afford insurance" (35).

Hall found that, in New York, individual premiums increased overall for comprehensive indemnity policies and somewhat more moderately for managed care policies (15). Not detailed, however, was how premiums may have changed for below-average and above-average risk enrollees. In Vermont, Hall found higher average premiums, and no evidence of an adverse selection spiral, perhaps averted because community rating was phased in and the Blues had already been using community rating. In addition, the Blues had agreed to serve as a "safety net," offering to continue coverage to anyone whose insurer left the market. This

measure initially helped reduce the rate increases that these people would otherwise have experienced, encouraging them to remain insured (16). In Washington, average premiums also increased, but evidence on how premiums varied by risk characteristics was not provided (21).

Where rating restrictions were phased in, average premium increases tended to be more moderate than in states where community rating or very restrictive rating bands were implemented all at once. This finding is suggested by the more general reviews of state insurance reforms (8). Such studies also observe that in states that allowed insurers to use pre-existing condition exclusions or that required insurers selling in the group market to also sell in the individual insurance market (a form of risk-spreading, see below for discussion), there was less likelihood of an adverse selection spiral.

Use of risk-spreading mechanisms also helped avert adverse selection. In states providing mechanisms that either spread risk among insurers selling individual insurance (such as risk adjustment or reinsurance) or spread the risk across a wider set of payers (such as taxpayers), severe adverse selection was less likely than in those community rating and guaranteed issue states that failed to adopt such mechanisms. New Jersey's post-reform pay or play mechanism and New York's risk adjustment mechanism appear to have helped moderate the rise in premiums, at least over the short run, preventing the selection spiral that some reform critics predicted (15, 36).

In summary, community rating resulted in higher premiums on average, lower premiums for higher-risk individuals, and higher premiums for lower-risk enrollees. More modest reforms, such as rating bands, had no clear effect on average premiums or on the premiums paid by higher or lower-risk enrollees. If the goal of community rating was to spread the costs of the sick across a wider pool of insured persons, then they succeeded, at least over the short run. But by reducing the cost of individual insurance for those most in need while raising it for lower-cost enrollees, they discouraged younger and healthier people from buying individual insurance, a result that becomes more evident in addressing the next question.

What were the effects of the state reforms on coverage rates?

Using Current Population Survey data from the U.S. Census Bureau, many of the studies were able to determine whether total state insurance coverage increased or decreased after the reforms were enacted. Few such studies, however, were able to conclude with any statistical certainty that the reforms—as opposed to other factors such as changes in Medicaid or the economy—were responsible for the changes in coverage rates. The evidence on the effects of state individual market reforms on the risk characteristics of the pool of insured was even more tentative.

States with more comprehensive reforms experienced a decrease in overall coverage rates, thus failing to achieve a common reform goal. However, the studies supporting these conclusions have a variety of methodological shortcomings. Common limitations are the grouping of different state reforms together that, in fact, are quite different and examining the effects of the reforms over too brief a period of time. The full effects of reforms may not be realized in three or four years, the timeframe for most of these studies. Additional shortcomings are discussed in Appendix II. That said, with one exception, the studies are consistent in the direction of their findings—total coverage declined—but not in the strength or size of their findings. States that enacted less comprehensive reforms experienced modest or no changes in coverage.

Zuckerman and Rajan found that, controlling for other factors, a combination of reforms including guaranteed issue, guaranteed renewal, rating restrictions and pre-existing condition exclusion restrictions were related to lower coverage rates, with the decline coming in private insurance coverage rates (both individual and group coverage). In addition, guaranteed issue considered in isolation of the other reforms was found to decrease coverage rates, although a finding of no change in private coverage makes this finding suspect. More limited reforms were found to produce a reduction in private coverage but not in overall state coverage rates (41). Similarly, Sloan and Conover found that the likelihood of being insured declined in states that required community rating (34). Marsteller and her colleagues found that guaranteed issue together with premium rating restrictions worked together to decrease private coverage as well as overall coverage rates (24). On the other hand, Buchmueller and DiNardo, looking at how coverage rates changed in a comprehensive reform state, New York, compared with two states that did not enact such reforms, Pennsylvania and Connecticut, found that New York's community rating law was not responsible for changing the rate of coverage but was responsible for changing the nature of individual insurance from largely indemnity to HMO coverage (2).

Several of the case studies also examined the effects of insurance market reforms on coverage rates but provided more qualitative and cautious assessments of whether changes were likely due to state insurance reforms, other factors, or a combination. In some states—Massachusetts and Minnesota, for example—concurrent changes in the laws governing small group insurers may have led to shifting from individual to group policies, but resulted in no changes in overall coverage rates.²¹ In other states, factors unrelated to the reforms—changes in unemployment, for example—may have been the cause of changes in coverage rates.

Some states adopted high-risk pools in lieu of other underwriting reforms such as guaranteed issue or annual open enrollment. Although the descriptive literature on state high-risk pools is rich, few studies have attempted to measure whether the presence of a high-risk pool in a state increases the probability of being insured. One study done for the Health Insurance Association of America concluded that the presence of a state high-risk pool results in a slight increase in the likelihood of being insured (10). But two studies produced by independent analysts concluded that the presence of a state high-risk pool had no effect on coverage rates (3, 24).

What were the effects of state reforms on the risk characteristics of the population insured?

After reforms in New York and New Jersey, average age increased, but the health status of enrollees did not necessarily change. In New York, the risk pool changed—claims and average age increased—after guaranteed issue and renewability reforms, although the finding is based on incomplete data from insurers and interviews of stakeholders (15). In New Jersey, the evidence suggests a more complicated picture: one in which age increased but the health status of enrollees remained relatively good. Swartz and Garnick compared the self-reported health status, age and other risk characteristics of enrollees in individual policies compared with the state's uninsured and employer-covered populations after the New Jersey reforms were implemented. They found that enrollees with individual coverage were more likely to be older and female than the uninsured but also more likely to be healthier. Concerned that income differences could be confounding the analysis—because many low-income people were assumed to be unable to afford individual policy premiums—the analysts then controlled for income. The risk pool of individually insured people then looked the same as those who were uninsured and those who were covered by employer-sponsored insurance.

The researchers concluded that the state's insurance reforms did make it possible for more high-risk people to obtain individual coverage. However, only those with higher incomes were doing so and they tended to be, on average, healthier than those who did not enroll, probably because many who did not could not afford insurance. The researchers speculated that adverse selection in New Jersey's individual market might worsen over time. Moreover, the risk pool would probably deteriorate if safety net services for the uninsured (e.g., free clinics) became scarcer. Then more high-risk uninsured would need individual coverage to get health care. (35)

Did the state insurance reforms expand coverage rates for high-risk people?

Few studies directly examine this question, but one study concludes that reforms increased the coverage rate for the unhealthy, but decreased it for the healthy. Lo Sasso and Lurie offer potentially generalizable but preliminary results in their unpublished analysis of data from the Bureau of the Census' Survey of Income and Program Participation (SIPP).²² Comparing data for states with these reforms versus those without them, the authors concluded that community rating "made healthy people less likely to be insured by nongroup policies and unhealthy people more likely to be insured by nongroup policies. At the same time, the healthy were more likely to be uninsured and the unhealthy were less likely to be uninsured." Their findings also indicate that enrollees in individual policies in community rating states "as a group, were sicker as a result of the community rating laws" (22).

While the overall coverage rate may decline, reforms such as community rating coupled with guaranteed issue can improve the likelihood that higher-risk people will buy individual policies. However, they do not result in premiums that are necessarily low enough to be affordable for low-income people, who make up a sizable portion of any state's uninsured population.

Most of the evidence suggests that in those states electing to implement guaranteed issue and community rating, enrollees in the individual insurance market are, on average, older and sicker than in other states. However, this is an area where the findings are mixed and the research is in need of better data.

Implications for Policy-Makers

Health insurance tax credits play a central role in many proposals to expand coverage to the uninsured. Some proponents believe that the credits themselves will be sufficient to stimulate the types of changes in the insurance market necessary to achieve significant reductions in the uninsured. Others believe that tax credits should be accompanied by changes in the regulation of the insurance market, including reforms to the rating and underwriting of individual policies. From either perspective, lessons can be learned from states' reform efforts of the 1990s. Perhaps the most important lesson is that efforts to reform the individual market can sometimes produce unexpected and unintended consequences.

The research reviewed for this synthesis permits tentative conclusions about the effects of state insurance reforms on availability and cost of individual coverage and offers a few specific lessons. Availability for high-risk persons expanded, at least in the few states that adopted both guaranteed issue and community rating. But the gains in access to coverage for high-risk people were modest at best, most likely because these reforms did not bring down the cost of insurance low enough to attract large numbers of uninsured. Where states adopted guaranteed issue and community rating but did not provide for risk spreading mechanisms, such as reinsurance pools, the proportion of younger and healthier individual policyholders declined (i.e., adverse selection occurred). The coverage rate either remained unchanged or decreased. More modest state reforms, such as annual open enrollment, rate bands, and high-risk pools, produced weak or no statistically significant effects on rates of coverage. The few specific state case studies suggest that they at least did no harm, and may have increased the number of insurance options available to high-risk individuals.

In all, if policy-makers rely on the types of state reforms that were enacted in the 1990s to make the individual insurance market a realistic option for people of low and modest incomes, they may be disappointed. It may even be the case that for the younger and healthier uninsured, a largely unregulated insurance market (with respect to rating and underwriting practices) is more likely than a regulated market to offer inexpensive policies. In such a market, however, people of modest incomes who happen to be older, have a pre-existing medical condition, or have some other characteristic identifying them as high-risk, are unlikely to be able to obtain individual insurance.

Some people argue that the individual insurance market would become a more viable market if tax credits were made available to help lower-income uninsured people gain access to it (19). According to this argument, the credits would lower the effective premiums of individual insurance, making it more affordable. Moreover, if tax credits were made available, many people, including many healthy people who might otherwise remain uninsured, would seek individual coverage. As more healthy people entered this market, say these analysts, insurers would gradually grow less concerned about adverse selection and would accept more applicants with less restrictive underwriting. With this increased quantity and stability of demand for individual policies, insurers might price such policies low enough to be affordable for tax-credit recipients. In other words, insurers would follow the money, especially if there were few regulations to restrict their rating and underwriting practices.

Implications for Policy-Makers

The brief experience with the health insurance component of the Earned Income Tax Credit (EITC-HI) (enacted in 1990 and repealed in 1993) suggests that the market will indeed produce policies to respond to tax credit amounts. But as was the case with the EITC-HI, the policies that emerge are likely to offer limited benefits or significant enrollee cost sharing. Such policies may not be adequate for the population most in need of insurance (39, 40).

For tax credits to achieve significant reductions in the uninsured, they may need to be combined with comprehensive market reforms or other measures to assure access to health insurance for credit-eligible people. While the individual market reforms of the 1990s had only a modest impact on coverage rates of higher-risk people, it is possible that similar reforms, if combined with substantial subsidies (through tax credits), would have a greater impact.

The Need for Additional Information

A number of issues are suggested for additional investigation and study. Anticipating further discussions of tax credits, the most important question is what premiums the uninsured might face in the individual insurance market and how such premiums would vary by age, health status, and state of residence.²³ In addition, to what extent are state high-risk pools a viable alternative to the conventional individual insurance market for high-risk and other individuals? Although an extensive descriptive literature on state high-risk pools exists, providing information on the prices, benefits, and financing of their policies, little analysis exists to judge their effectiveness in expanding coverage.

Looking backward to the state reforms of the 1990s, additional questions include:

- How did the state reforms of the 1990s affect the adequacy of coverage, including exposure to out-of-pocket costs, exclusions for the treatment of specific conditions or diseases, etc.? Did states requiring standardized benefit packages experience different results from those that allowed benefit flexibility? How did state individual market reforms affect the choice of policies available in the individual market?
- How did small group and individual market reforms interact?
- How does the individual market work in those states that enacted no reforms or the least comprehensive reforms?
- Now with six or seven years' experience, what effect did HIPAA and state conforming laws have on the availability and affordability of individual coverage? On coverage rates? Did the effects of HIPAA (intended or unintended) persist over time or did they change?

Endnotes

- 1. The centerpiece of President Bush's proposal to expand health insurance is a refundable tax credit that would give eligible uninsured individuals a credit scaled to income to pay for a percentage of the insurance premium up to a specific amount (\$1,000/\$3,000 in the first year, then indexed for inflation). Other Congressional proposals call for different credit amounts but are structured similarly. Still other Congressional proposals would expand upon the Trade Adjustment Act of 2002, which provides refundable tax credits to certain workers who lost employer-sponsored health benefits as a result of U.S. trade agreements.
- 2. The numbers in parentheses refer to reference articles from Appendix I.
- 3. Only a subset of these studies appear in peer-reviewed publications. A decision was made to include an article if it was sufficiently explicit about its methodology to assess the validity and reliability of its conclusions.
- 4. The percentage of the nonelderly population covered by individual health insurance policies was about 7 percent in 1989, rising to a high of 7.7 percent in 1993, and declining pretty steadily thereafter to 6.7 percent in 2002. See reference no. 11 (Figure 1, p. 5) in Appendix I.
- 5. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) established federal minimum requirements related to group-to-individual portability and guaranteed renewability of individual insurance products. Otherwise, individual insurance is governed by the laws of the state in which it is sold, or if sold in the nation's capital. by the District of Columbia.
- 6. However, during the early to mid-1990s, which is the focus of this research synthesis, the HMO share of the individual market increased relative to traditional indemnity insurance in many states.
- 7. See reference no. 4 (p. 5) in Appendix I. Note that in some states, individuals without a group source of coverage may obtain insurance through association health plans, formed by local chambers of commerce, trade associations, or other groups to achieve administrative economies and potential premium savings. Enrollment data for association plans are generally unavailable. These plans are often subject to different insurance laws and regulations than individual insurers but nevertheless are a source of coverage for a significant number of people in some states. See reference nos. 1 and 21 in Appendix I.
- 8. These are simulated and not real premiums, based on a statistical model using data from two waves (1998–1999 and 2000–2001) of a nationally representative survey. Included in the model are variables to measure the effects of health, age, and family structure on premiums. See reference no. 13 in Appendix I.
- 9. This provision requires that a state have a mechanism by which a person moving from continuous group coverage to individual insurance can buy insurance that does not have any pre-existing condition exclusion waiting period.
- 10. This law provides refundable tax credits to subsidize 65 percent of the insurance premiums for some individuals who have lost job-related health insurance due to trade agreements or the termination of their retiree health plan and payments of pension benefits through the Pension Benefit Guarantee Corporation. A state may elect from several options to use for insurance coverage that is qualified for the premium subsidy, one of which is a state high-risk pool. This legislation also established a small grant program to the states to help encourage the establishment of high-risk pools or to help finance existing pools.
- 11. Because the premiums collected from high-risk pool enrollees are insufficient to cover their claims, states rely on a variety of mechanisms, such as assessments on individual insurers, to supplement the premiums.
- 12. For example, the monthly premium for the least expensive Minnesota risk pool policy option (\$2,000 deductible) for a family of four (two adults between 30 and 34 years old and two children) was \$513 in 2003. A family at 200 percent of the federal poverty level would have to pay almost 17 percent of its income to pay for this policy.
- 13. Chollet's analysis of the March 1998 Current Population Survey found that about one-third of people with individual insurance also reported having employer coverage. See reference no. 7 in Appendix I.
- 14. Many insurers impose medical underwriting for employers with 10 or fewer employees; some insurers do it for groups of up to 25 or 50. Group insurers also assess the overall insurability of the group on the basis of the prior year's claims experience. This assessment is used to determine what the insurer will charge in premiums for that group's coverage if the insurance is experience-rated.

Endnotes

- 15. Some people who may be able to afford individual coverage may not seek it because they think it will be too expensive, when, in fact, low-cost policies are available. See reference no. 27 in Appendix I.
- 16. Although insurers have claims and other data to assess the risk of applicants and enrollees, researchers usually have to rely on national surveys of self-reported health status to assess the risk of people with individual coverage.
- 17. A few states adopted at first even more sweeping reforms to contain costs as well as expand health insurance coverage, such as employer mandates and universal coverage requirements, but for a variety of reasons, later scaled them back. For example, Washington State enacted community rating and a cap on private insurance premiums as part of larger reforms in 1993 but scaled them back shortly thereafter, in part, because insurers had either exited the market or stayed but incurred significant financial losses. See reference no. 33 in Appendix I.
- 18. Under New Jersey law, the Blue Cross and Blue Shield plan served as the insurer of last resort, meaning that it took applicants that no other insurer would accept. In return, a portion of its underwriting losses (claims paid in excess of premiums collected) was covered by assessments on other insurers. See reference no. 37 in Appendix I.
- 19. For example, people in Iowa who would otherwise have had only high-risk pool coverage as an option could now find policies in the conventional individual insurance market. However, to qualify for guaranteed issue, they had to have had prior coverage (group, individual, or high-risk pool) for a year or a qualifying event within the previous 30 days. See reference no. 18 in Appendix I.
- 20. Projecting these lessons to the current insurance market, where preferred provider organizations (PPOs) have become more prevalent than HMOs and indemnity coverage represents a small fraction of the market, it is likely that insurers would respond to quaranteed issue and rating restrictions by designing their policies to include higher cost-sharing, including higher coinsurance for out-of-network providers. This could be seen as a means to manage the health care needs of high-cost individuals and moderate the rise in premiums. Alternatively, it may be viewed as a means to discourage enrollment of less healthy individuals.
- 21. The most likely small group reform to produce this effect changed the minimum threshold for a small group from two employees to one employee.
- 22. These researchers used self-reported health status as proxy data for claims to assess the effects of pure and modified community rating requirements (and guaranteed issue) on the age and health status of enrollees in individual insurance.
- 23. A good start towards answering this question can be found in reference no. 13 in Appendix I.

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Appendix II Methodological Discussion

Case studies help us understand the complexities of insurance reforms and how they affect state insurance markets but they do not allow for generalizations across states. What was true for New York was true for New York. Some of the case studies examined for this synthesis also failed to distinguish at crucial junctures whether the discussion related to a state's individual market or small group market reforms.

The quantitative literature presented a number of challenges, reinforcing a common sense view that determining cause and effect or even statistical associations with any confidence in such a complex arena as state insurance reforms is a high-risk enterprise. Because multiple state reforms often were implemented simultaneously and other changes independent of insurance reforms were also occurring concurrently, a general problem of endogenous and confounding variables limits the explanatory confidence of the multivariate analyses. In addition, achieving a fully-specified model is problematic since many of the variables affecting the individual market may be difficult or impossible to quantify. More specifically, many of the studies of the individual market, and most especially those using multivariate analysis, are weakened by one or more of the following methodological problems:

- Underspecification of the models: Variables that play an important role in explaining rates of
 coverage in a state are not adequately captured in the models. The response by insurance agents
 and brokers to changing regulations is often studied but difficult to measure and important control
 variables may not be included. Coverage rates may have more to do with economic conditions
 (e.g., unemployment or changes from an industrial to a service-sector based economy) or transformations of the health care market (e.g., managed care penetration and increased self-insurance)
 than regulatory changes.
- Oversimplified specification of models by using dummy variables. The use of binary variables for specific reforms does not adequately capture the range of variation that exists. For example, studies often considered rating reforms as either present or not when, in fact, the effects of varying degrees of premium restrictions imposed by rating bands are likely to be different.
- Inaccurate or incomplete data on the state laws and regulations: Some of the studies rely on one
 source, of a summary nature, to reflect the different state reforms. But this source is not consistently accurate and does not reflect subtle differences that may be critical in explaining coverage
 effects. Moreover, lack of data on association health plans, discretionary groups, and purchasing
 groups in all states means that the analyses cannot tell the whole story.
- Inadequate and noncomparable state-specific data on sources of coverage, premiums and benefit packages prior to reform renders it difficult to do pre- and post-reform analyses. The most basic information on pre-reform enrollment and premiums tends to be sketchy at best.
- State laws were not in effect long enough for effects to be reflected in the variables used in the models. Some of the studies rely on very few observations of regulatory change during a study period. A change in one or two states could drive all of the measurable effects.

¹ These include changing economic and employment conditions affecting the availability of employer-sponsored coverage, expansions in Medicaid eligibility, the increased competition from managed care organizations and the decline in indemnity insurance, and the acquisition and merger of many insurance companies leading to increased market concentration.

Appendix III Glossary of Terms

- Adverse selection—Adverse selection is the phenomenon by which people who anticipate high medical care costs will be the most likely to purchase health insurance. Insurers are wary of adverse selection because it causes them to underestimate premium revenues needed to pay claims and thus results in financial losses. To avoid or reduce adverse selection, insurers will often adopt selection (underwriting) practices designed to screen out applicants who they expect will be high users of medical services.
- Adverse selection spiral—An adverse selection spiral can result when an insurer raises premiums to reflect an increase in the pool's average claims experience. If the insurer raises the premium to everyone in the pool that includes people with a range of risks, low-risk enrollees will drop the plan, leaving a smaller pool of enrollees with higher average health care costs. This sequence, a rate increase followed by worsening average experience necessitating another rate increase, is called an adverse selection spiral. Insurance pools in an adverse selection spiral will usually eventually fail and then be pulled from the market.
- **Association plans**—Association plans are insurance plans sponsored by a trade or professional association, chamber of commerce or other type of group.
- **Blocks of business**—Insurers traditionally categorize their products in blocks or books of business, according to the basic type of policy and the manner in which it is marketed. For example, a health insurer might maintain separate blocks of business for its individual policies, its small-group policies, and insurance sold to trade associations.
- Community rating—Community rating is a requirement that all policyholders of an insurer be charged the same premium for the same coverage (note that different insurers will have different community rates). Under pure community rating, an insurer can vary the premium based only upon where the enrollee lives (geographic location), specific benefit package selected, and the family size (or total number of people covered under a family policy).
- Adjusted/modified community rating—Unlike pure community rating, adjusted/modified community rating allows an insurer to vary premiums for coverage based on specified demographic characteristics (age, gender, location) but not to vary premiums based on the health status or claims history of policyholders.
- **Guaranteed issue**—Guaranteed issue is a requirement that insurers accept applicants when they apply initially for a policy generally without regard to their health status or previous claims experience. Separate provisions of law may or may not regulate the premiums that the insurer charges. State law may require that all individual policies be sold as guaranteed issue, or as is more common, that a carrier offer one or two guaranteed issue products. Some states only require carriers to accept all applicants during a specified and usually limited open enrollment period.
- **Guaranteed renewability**—Guaranteed renewability is a provision of an insurance policy or law that prohibits an insurer from canceling an enrollee's policy at renewal for reasons other than failure to pay premiums or fraud. The health insurer generally is permitted to change the premium rates at renewal. A carrier may choose not to renew all of its individual policies by exiting a state's market but the insurer is usually then prohibited from reentering the market for at least some number of years.

Appendix III Glossary of Terms

- Insurer Pay or Play—As used in this document, insurer pay or play refers to the type of risk spreading mechanism established under New Jersey's reforms. It required all insurers selling health insurance coverage in the state to either actively sell individual policies in compliance with the state laws or pay a share of the losses incurred by those insurers that sell individual policies and seek reimbursement of their losses.
- Medical underwriting—In the absence of state restrictions, carriers evaluate the health status of an applicant to determine whether an applicant's health status should result in an increase to the standard premium, the exclusion of a body part or system (e.g., circulatory system), the exclusion of an existing health condition, or the denial of the applicant altogether. This process is called medical underwriting.
- **Open enrollment**—Open enrollment is a certain period of time during which an individual can enroll in an insurance plan and the insurer must allow all eligible beneficiaries to join.
- Pre-existing condition exclusion—A pre-existing condition exclusion is a provision of an insurance contract that specifies the length of time that coverage can be denied for previously diagnosed problems. These exclusions are typically for a certain length of time (e.g., six or 12 months), for conditions diagnosed a certain number of months (e.g., three, six or 12 months) prior to the date the policy becomes effective. Sometimes, exclusions can be permanent and can be applied to body parts or body systems (e.g., circulatory or respiratory system).
- Rating bands—Rating bands are laws that restrict the difference between the lowest and highest premium that an insurer may charge for the same coverage. A law may specify, for example, that the highest rate an insurer may charge for a policy may not be more than 150 percent of the lowest rate charged for the same policy. The law may limit all factors by which rates vary, or may apply only to specified factors, such as health status, claims experience, age, or gender. In this synthesis, "restrictive rating bands" are those that permit the least variation for risk factors and come closest to community rating.
- Reinsurance—Used in this context, reinsurance is a mechanism by which insurers can pass on highrisk individuals to a centralized pool of insurers. It provides incentives to insurers to cover applicants who are perceived to be bad risks. Note that the term is also used to describe the transfer of risk from one insurer to another. Insurers will often buy reinsurance in the private market to protect themselves from the losses resulting from catastrophic claims.
- **Risk adjustment**—Under an administered risk adjustment system, payments are increased to an insurer for above-average risk enrollees and lowered for below-average risk enrollees.
- **Underwriting**—Underwriting is the process of identifying and classifying the risk represented by an individual or group.

The definitions in this glossary are based on several of the synthesis studies as well as the following: Claxton, Gary, How Private Insurance Works: A Primer, Kaiser Family Foundation, April 2002, www.kff.org; Hall, Mark A. Reforming Private Health Insurance. Washington, AEI Press, 1994; U.S. General Accounting Office, Private Health Insurance. Millions Relying on Individual Market Face Cost and Coverage Trade-Offs. GAO/HEHS-97–8, November 1996.

Appendix IV Sources of Health Insurance Coverage Among the Nonelderly

Sources of health insurance coverage among the nonelderly population, by selected characteristics of the insured individual: 1997

		Employment-based insurance Individual insurance		Unin	sured		
Population characteristics	Total population under age 65 (millions)	Percent of population	Percent of employer-insured population	Percent of population	Percent of individually insured population	Percent of population	Percent of uninsured
Age:							
Less than 18	70.8	63.7	28.8	5.1	22.9	15.0	25.0
18–24	24.9	56.8	9.1	6.0	9.5	30.2	17.6
25–44	82.8	69.4	36.3	5.9	31.1	20.0	38.9
45–54	34.0	74.3	16.2	8.2	17.9	13.8	11.0
55–64	22.2	65.7	10.0	13.0	18.5	14.1	7.4
Family income as a % of federal poverty level:							
0–99 percent	32.7	18.2	3.8	4.1	8.7	34.4	26.4
100–199 percent	41.1	47.7	12.6	6.3	16.7	32.1	31.0
200–299 percent	41.1	71.2	18.7	7.2	18.9	18.8	18.1
300–399 percent	35.7	81.5	18.6	7.1	16.2	11.3	9.5
400 percent +	84.2	86.2	46.4	7.3	39.6	7.6	15.1
Work status of family head:							
Full-time full-year worker	167.7	78.5	83.8	6.0	64.2	14.2	55.9
Part-time or part-year worker	44.4	46.5	12.9	8.9	25.4	28.5	29.7
Nonworker	23.2	20.1	0.0	7.0	10.4	26.4	14.4
Type of employment of family head:							
Wage or salary worker	194.8	73.7	91.8	5.1	64.2	16.6	76.1
Self-employed incorporated	8.3	69.6	3.7	18.4	9.8	12.8	2.5
Self-employed unincorporated	8.3	29.0	1.5	29.2	15.5	35.8	7.0
Unpaid workers or nonworker	23.3	20.1	3.0	7.1	10.5	26.4	14.4

Source: Deborah Chollet, Assessing the Individual Health Insurance market in the Post-HIPAA Era: A Review of the Literature, Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, June 2001, p. 6.

Totals do not add to 100% due to exclusion of the counts for public coverage.

Table A. Multivariate analyses of effects of state individual market reforms on coverage rates and cost of coverage

Study	Description	Cost of coverage	Coverage rates	Other findings/ comments
Buchmueller and DiNardo	Using CPS in 3 states (1986–1995), analyzed effects of NY's community rating laws on rate of group health insurance coverage and the prevalence of HMO versus indemnity coverage as compared with Connecticut and Pennsylvania which did not enact such reforms (i.e. control states).	Not analyzed.	No change as a result of community rating. Decline due to other factors. (Market changed to more managed care relative to Pennsylvania and Connecticut.)	
Chollet, Simon and Kirk	Using CPS for 1996–1998, analyzed effects of individual and group market regulation on coverage of adults.	Not analyzed.	Guaranteed issue of all products decreased probability of coverage by nine percentage points, controlling for all other factors. Rating bands and limits on pre-existing condition exclusions had no significant effect on coverage of individuals without employer or public coverage. High-risk pools also had no effect on coverage.	Paper for HHS/ASPE —not peer reviewed.
Custer	Using CPS 1998 (for coverage for 1997), analyzed effects of rating bands, community rating, and guaranteed issue on the probability of being uninsured.	Not analyzed.	Community rating and guaranteed-issue requirements increased the likelihood of being uninsured by 11.3 percent; rating bands and guaranteed issue increased the likelihood of being uninsured by 5.1 percent. A state highrisk pool decreased the likelihood of being uninsured by 1.5 percent.	Sponsored by advocacy organization and details of methodology not provided.
Lo Sasso and Lurie	Using the Survey of Income and Program Participation (SIPP) for 1990–2000 and the National Health Interview Survey (NHIS) for 1993 and 1994, analyzed effects of community rating on the composition of risk-pool and the penetration of HMO coverage in the individual market. (Used non-community-rating states as control states.)	Not analyzed. (Used age and health status as proxy for cost of coverage.)	Community rating decreased probability of healthy men (aged 22–35 with excellent or very good self-described health status) having individual coverage by as much as 54 percent and increased probability of unhealthy people (40 and over, no children, and poor self-described health status) having individual coverage by as much as 50 percent. Community rating produced a 21 percent increase in uninsured rate of healthy and 50 percent decrease in uninsured rate of unhealthy. Community rating increased HMO penetration rate in individual market by about 5.4 percent.	Unpublished study (newly completed November 2003); not peer reviewed; available from authors.
Marsteller, et al.	Using CPS from 1989–1995, analyzed effects of state reforms on rates of uninsured rates, private coverage, and Medicaid for nonelderly.	Not analyzed.	Guaranteed issue plus nongroup premium rating restrictions together work to decrease overall and private coverage. High-risk pools showed no effect on coverage once California was removed from model.	
Schriver and Arnett	Using CPS from 1989–1996, analyzed effect of individual market reforms on rates of uninsured, private market insurance, and individual insurance market coverage in 16 states compared with coverage rates in non-reform states (for nonelderly).	Some of the separate mini case studies included in this paper provide anecdotal data on changes in premiums after reforms enacted.	The uninsured rate grew faster or declined less in reform states between 1990 and 1996. Individual coverage declined faster in reform states than in states without reforms.	Analysis does not include control variables or tests of significance.

Table A. Multivariate analyses of effects of state individual market reforms on coverage rates and cost of coverage (continued)

Study	Description	Cost of coverage	Coverage rates	Other findings/ comments
Sloan and Conover	Using 1989–1995 data, analyzed effects of small group and individual insurance reforms, Medicaid expansions, and benefit mandates on probabilities of having insurance, having private insurance, and having employer group insurance among nonelderly for 1989–1994.	Not analyzed.	Community rating of enrollees decreased the probability of having any insurance with an effect nearly significant at five percent level. Limit on individual pre-existing exclusion limits increased likelihood of any (public or private) coverage. Other variables (guaranteed issue, guaranteed renewal, limits on pre-existing condition exclusions) had no statistical effect.	No evidence of disenrollment resulting from state reforms.
Swartz and Garnick, 1999	Tested for adverse selection in the New Jersey individual insurance market after the reforms were implemented by comparing self-reported health status, age, and other risk characteristics of enrollees in those policies during 1995–1996 with two control groups: NJ adults without insurance and NJ adults with employer group insurance (using 1996 CPS).	Not analyzed.	Not analyzed.	People in individual insurance plans less likely than uninsured to be in fair or poor health, but more likely to be older and female. Removing low-income from analysis (since they would not be able to afford individual policies), health status, age, and sex differences disappear. Enrollees in individual policies are more likely to be older and female than group enrollees but have same health status. Differences disappear when lower-income excluded.
Zuckerman and Rajan	Using 1990–1996 CPS, examined the effects of specific state insurance reforms and packages of reforms on the rates of coverage and on the rate of private coverage for 1989–1995. Dependent variables: percent of state's nonelderly population that is uninsured, privately insured, Medicaid.	Not analyzed.	Broadest package of reforms (all four: guaranteed issue, guaranteed availability, rating restrictions, and pre-existing condition exclusion restrictions) related to higher uninsured rates with the decline coming in private coverage rates. Private coverage declined as a result of more limited package of reforms. When analyzed as individual variables, guaranteed issue decreased coverage overall, but had no effect on private insurance coverage rate. "An average state that adopts the full set of individual reforms could see its uninsured rates increase from the national average of 15 percent to 17.4 percent."	"Privately insured" does not differentiate between individual and group coverage. Argues for analyzing packages of reforms and not individual reforms due to multicollinearity problem.

Table B. State-specific findings of synthesis studies¹

State and years analyzed	Study	Key reforms	Rate of insurance coverage (overall and in individual market)	Average premium	Availability and market stability (for high-risk individuals)
lowa 1996 and 1997 laws	Hall, 1999 Chollet and Kirk, 1998	In general, rating bands apply among (not within) blocks of business (see glossary for definition of "blocks of business") and can vary for demographics, health status, claims experience and duration of coverage. Guaranteed issue of basic and standard plan for people moving from group to nongroup coverage with no variation for health status within block; limit on pre-existing condition exclusions (12 months/12 months), and mandatory risk adjustment for guaranteed issue basic and standard plans. (Nonguaranteed issue applicants can obtain coverage through high-risk pool.)	Unclear. (CPS indicates decline but limited by small sample size and only one year of post-reform data.)	Higher average premiums for guaranteed issue policies; no apparent change in premiums for non-guaranteed issue products.	Increased availability of options for those purchasing guaranteed issue policies (would have otherwise used high-risk pool). Number of insurers: stable.
Kentucky 1994, 1996, and 1998 laws (analyzed through 1999)	Kirk, 2000	1994: All products guaranteed issue, tight rating bands (not based on health status, claims experience, or gender); prior rate approval; standardized benefits; six-month pre-existing condition exclusion; purchasing alliance through which individuals could buy coverage. 1996: 12 month pre-existing condition exclusion, allowed gender as a rating factor and allowed wider rate bands; exemption from rating restrictions for association plans. 1999: Repealed all product guaranteed issue; standardized benefit packages; and rating restrictions.	Down.	Up. (Based on anecdotal information. No systematic pre-/post reform premium information.)	Unclear as to effects on increasing availability of options for high-risk subscribers. Significantly decreased number of insurers.
Massachusetts 1996 law	Kirk, 2000	Small group insurers with more than 5,000 lives had to guarantee issue any of three standardized products (HMO, PPO, indemnity) in the individual market; rating bands (age, location, family size but not health status) that become tighter over time; only those ineligible for group can apply and, with exceptions, can do so only during a two-month annual open enrollment period; no pre-existing condition exclusions or waiting periods.	Down but this could be due to shift to group market which redefined to groups of one or more. Data not available to determine.	Up, especially for indemnity.	Decreased indemnity options but increased managed care options. Number of insurers decreased at first and then increased.
Minnesota 1992 law (analyzed 1992–1994)	Institute for Health Policy Solutions, 1995	Rating bands, prohibits sale of individual policies to eligible employees of small employers that provide coverage.	No information on overall state coverage. Decline in number of people covered by individual insurance policies but could be due to movement to small group insurance.	No information.	No information on whether increased options for highrisk. Number of carriers offering individual coverage declined.
New Hampshire 1994 and 1998 laws	Department of Insurance, 2001 (includes results of an independent 1997 study). See also Feldvebel and Sky.	Modified community rating (age bands limited to 3:1, health status limited to 1.2:1); guaranteed issue; guaranteed renewability; limits on pre-existing condition exclusions (nine months/three months). 1998-subsidization mechanism via assessment on group carriers.	Reduction in uninsured but not attributed to individual market reforms. Decline in number of people covered by individual insurance but increase in number of people covered under small group insurance (defined to include 1–100 person groups).	Increased but not by large amount. Probably mostly due to nonreform causes.	Increased options for highrisk. Number of insurers declined, but insurance reforms (guaranteed issue and rating restrictions) only partly responsible.

¹ Suggested by table in: Nichols, Len, State Regulation. What Have We Learned So Far? Journal of Health Politics, Policy, and Law, vol. 25, no. 1, February 2000.

Table B. State-specific findings of synthesis studies (continued)

State and years analyzed	Study	Key reforms	Rate of insurance coverage (overall and in individual market)	Average premium	Availability and market stability (for high-risk individuals)
New Jersey 1993–1997 (with additional data for 1998–1999)	Swartz and Garnick, 2000	Pure community rating (but no rate review); all product guaranteed issue; standardized benefits; mandatory loss ratio; pay or play (a form of reinsurance) in which insurers had to sell in the individual market or pay an assessment that would be used to offset losses of the participating insurers.	Overall state coverage rates not reported. Increased number of individually insured for first few years, but then declined.	Down for first two years, and then up. (Down for high-risk, up over short-term for low-risk who previously bought through one-person small group or association plan markets.)	Up a lot.
New York (1993–1997)	Hall, 2000; Chollet and Kirk, 1998	Pure community rating and prior approval for significant rate increases; guaranteed issue (all products); limits on pre-existing condition exclusions (six months/12 months); exclusion riders	Down for individual market (up for small group market).	Up a lot for comprehensive indemnity coverage, more moderate	More HMO/POS options but no indemnity left. Number of insurers
		prohibited; guaranteed renewal; demographic (1993) and specific condition (1996) risk adjustment. Standardized HMO and Point-of-Service (POS) policies (no indemnity). To offer in group market, HMOs and PPOs have to offer in individual market. This requirement does not apply to indemnity insurers (1996).		increases for HMOs.	decreased but more available for high-risk. After first few years, only HMO or POS plans were available.
Ohio (1993–1994?) Data: 1992–1997	Hall, 1999	Open enrollment for some carriers and some policies with threshold limits. Unclear which were new reforms. (Premiums still subject to risk rating); limits on pre-existing condition exclusions (six months/12 months); mandatory reinsurance pool for open enrollment business (exceptions provided based on insurer's size).	Down overall but probably unrelated to nongroup reforms. Number of open enrollment nongroup policies increased very modestly.	Not clear.	Not clear. Number of insurers: some consolidation but unrelated to nongroup reforms.
Vermont (1993–1997)	Hall, 2000	All product guaranteed issue; pure community rating for HMOs and BCBS; tight rate bands (+/–20 percent) for commercial insurers but can't use health status; up to 12 month pre-existing condition exclusion period; standardized indemnity benefit (does not apply to HMOs); HMOs must offer in individual market. BCBS takes anyone whose insurer has left the state at no more than +/–15 percent annual premium increase.	Varies by source of data. Stable or possibly up somewhat both in rate of total coverage and insured by individual policies.	Up. (No evidence of adverse selection spiral.)	Up. Number of insurers: down.
Washington (1993 and 1995 laws, analyzed through 1998)	Kirk, 2000; Chollet and Kirk (1998)	Guaranteed issue (all products) with benefits similar to state's Basic Health Plan but could also offer own customized benefit packages; rate bands and modified community rating (4:1 for age, family, geography); limits on pre-existing condition exclusions (three months/three months); no exclusion riders; guaranteed renewal. Only HMOs and POS plans (effective 1996).	Possibly down. (Interviews, not hard data.)	Up (but pre-reform data not provided).	Up. Number of insurers: down.

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