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ISSUE BRIEF
AMERICAN ACADEMY of ACTUARIES

Health Coverage Issues: The Uninsured and the Insured

The availability and adequacy of medical coverage in the United States is an important issue among consumers, healthcare providers, employers, insurers, and policymakers, and one that is difficult to resolve. According to the most commonly used estimates, there are currently between 38 million and 41 million people under the age of 65 who are uninsured.[i] Another 10 million or more are transitionally uninsured — that is, without coverage for some portion of the year.[i] The number of transitionally uninsured is significantly affected by national and local economies.

As Congress and the states tackle the problem of the uninsured, it is important to understand both the sources of coverage for those who are insured, as well as the characteristics of those who are not. This issue brief provides an introduction to the uninsured problem and discusses who the uninsured are and why they are uninsured. To help clarify the reasons why people lack insurance and to aid in our discussions in future briefs, we have subdivided the uninsured into five categories:

1. Financially Uninsured – Voluntary
2. Financially Uninsured – Unaffordable
3. High-Risk
4. Eligible for Public Programs
5. Poor Non-Citizens

This is the first in a series of issue briefs from the American Academy of Actuaries on the topic of the uninsured. It establishes the direction for future issue briefs that will provide insights on fundamental questions facing policymakers and health coverage sponsors, such as:

- What is health insurance coverage?
- What are ways to provide health care for the uninsured?
- What are the roles of individuals, employers and government in health care financing?

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This discussion is presented in the context of medical coverage and does not include other personal insurance products such as disability or long-term care. Terms utilized, such as, *medical coverage*, are intended to be generically inclusive unless specifically stated. *Insured* is used throughout this paper to include those individuals with insured medical coverage, including HMOs, as well as those individuals covered by *self-insured* employer or union medical plans and public programs, such as Medicaid. Throughout this paper, the focus will be directed at the active pre-Medicare eligible civilian population. This paper also recognizes that there are "counting" differences in the sizes of various uninsured and Medicaid populations, but those differences do not affect the underlying issues.[i]

Where Do Americans Get Their Insurance Coverage?

While Medicare provides nearly universal health insurance coverage to elderly Americans, the under-65 population obtains health insurance coverage through a variety of private and public sources (Table 1).

Table 1
Sources of Health Insurance Coverage Among the Non-elderly

	2000		2001	
Source of Coverage	Number (in millions)	Percent	Number (in millions)	Percent
TOTAL	243.6		248.3	
Employer	166.1	68	164.9	66
Other Private	13.8	6	14.2	6
Medicaid/SCHIP	25.3	10	28.3	11
Other Public	12.2	5	13.0	5
Uninsured	38.4	16	40.9	16

Derived from: www.census.gov

As is typical with such studies, the numbers in Table 1 total 261 million in 2001 (256 million in 2000) whereas the actual total non-elderly U.S. population is 248 million. This disparity is due to overlap among the groups. For example, a disabled individual might be eligible for both Medicare and Medicaid coverage, and therefore could be counted in both categories.

Categories may also be collected differently, defined differently by different analysts, and represent different points in time. The American Academy of Actuaries herein is not attempting to reconcile counts from other sources and government agencies, all of which have invested substantially in the tabulation process. We have shown the numbers in Table 1 as they were reported by the Current Population Survey (CPS). The CPS estimates are the most commonly used estimates of the uninsured. As outlined in endnote i, the Congressional Budget Office estimated that for 1998 between 21 million and 31 million people were uninsured for the entire year; that some 40 million were uninsured at a specific point in time in the year; and that approximately 60 million may have been uninsured at any time during the year.

In many cases, being aware of overlaps and alternative definitions in categorizing the insured and uninsured and being aware of how the populations are counted helps identify policy issues that need to be addressed. In measuring the size of such populations, it is important to factor in this overlap and to identify the source from which an individual obtains primary coverage.

- *Employment-Based Coverage.* Most of the insured have employment-based coverage, either through their own employer or union, or as a spouse or dependent. About 165 million, or 66 percent of the under-65 population, had employer group coverage in 2001.

The popularity of employer-based programs has been heightened by the tax-favored status to both employer and employee, and the generally lower personal contribution requirement from the employee. Employer contributions and the resulting benefits (insured or self-insured) are a tax-deductible business expense and are not taxable income to the employee. Employee contributions can be structured to be payable on a pre-tax basis. In addition, economies of scale reduce administrative loads and stabilize various risks, especially for larger groups.

- *Other Private Coverage.* Other private coverage provides the primary source of health coverage for 14 million individuals. The majority of individuals in this category have been reported as self-employed or workers (and their families) who do not have access to employer group coverage.

  While self-employed individuals can deduct premiums from their income taxes, the remaining workers and their families who do not have access to employer group coverage must purchase their health plans with less favorable tax treatment.

- *Medicaid and SCHIP.* Medicaid and the State Children's Health Insurance Program (SCHIP) are federal programs implemented at the state level that provide medical care to much of the nation's poor. Medicaid provides health coverage to certain categories of low-income adults and children. SCHIP provides health coverage to children in low-income families whose incomes exceed Medicaid eligibility requirements. Within broad federal guidelines, each state has flexibility when determining its own Medicaid and SCHIP eligibility guidelines and benefits. As a result, the programs vary greatly across states, including the income levels that determine eligibility. Together, Medicaid and SCHIP cover about 28 million children and adults, or about 11 pecent of the non-elderly population.[ii]

- *Other Public Coverage.* Other public programs such as Medicare and TRICARE are sources of health coverage for specific populations. Medicare, which provides coverage to the population aged 65 and older, also provides coverage to some disabled individuals and to those with end-stage renal disease. TRICARE (formerly CHAMPUS) provides coverage for active duty and retired military members and their families, and CHAMPVA provides coverage to dependents of disabled veterans. Together, other public programs cover about 13 million, or 5 percent, of the under 65 population. Throughout this paper, the focus will be primarily directed at the active non-Medicare eligible populations and incidentally on the public program-eligible populations and those covered as a result of active military status.

- *Uninsured.* In the most recent years, it is estimated that about 41 million, or some 16 percent, of the under-65 population lacked health coverage for an entire year. The sections that follow provide additional information on the characteristics of the uninsured population.

Who Are The Uninsured?

Table 2 on page 4 shows uninsured categories for 2000 and 2001 and the estimated number in each from a study done by the Kaiser Commission on Medicaid and the Uninsured.

If you add the population in each category of Table 2 you will get a number approaching twice the total estimated uninsured population, 38 million in 2000 and 41 million in 2001. Again, the reason for this is overlap: an individual can be counted in more than one category. Also, the categories in Table 2 can be and are defined differently by different analysts.

To better describe the characteristics of the uninsured, we have split the population into major categories related to the principal reasons for the lack of health insurance. Figure 1 shows the distribution of the uninsured into five categories. The illustration is meant to facilitate discussion of the issues. We discuss these categories as if they are mutually exclusive (no overlap between them) even though a person may have characteristics of more than one category and even though different readers may have a different view as to the primary reason this person is uninsured. An understanding of these characteristics may lead to the development of solutions.

To develop these categories, we started with the estimates from the Kaiser report, and then used information from other studies and surveys to develop observations regarding the underlying cause of the uninsured status. Our por-

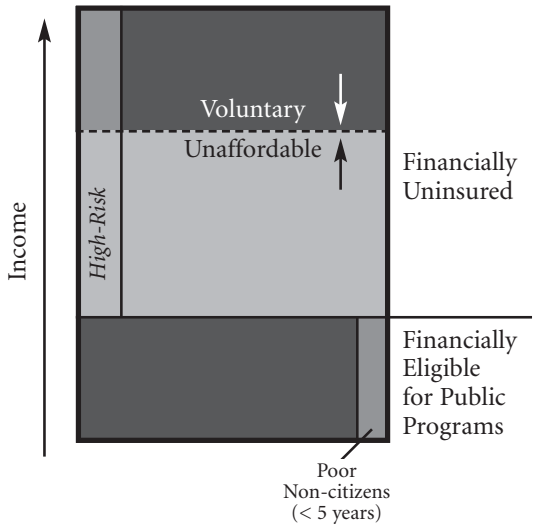
Table 2
Characteristics of the Uninsured

	Number (in millions) 2000	2001
Estimated Total Uninsured	38.4	40.9
Characteristics		
Workers and Their Families		
Full Time	27.6	27.1
Part Time	4.4	4.6
Low Income Adults and Children	24.5	26.7
Low Income Children Eligible for Medicaid/SCHIP	5.6	5.7
Adults and Children in Poor Health	3.5	3.8
Poor Non-citizens in U.S. 5 Years or Less	2.3	2.4

Source: Kaiser Commission on Medicaid and the Uninsured, 2000 and 2001 Data Updates "Health Insurance Coverage in America", published February 2002 and January 2003

trayal in Figure 1 is based on these observations and relative proportionality would shift if our observations changed. In some cases, what is considered an appropriate assumption might also vary, depending on political and social factors. The illustration makes it easier to visualize the issues; if the actual value underlying any one category is higher or lower by some number/percent it still does not eliminate the problem. The categories illustrated in Figure 1 are discussed below.

Figure 1
Uninsured Population



Note: The income level at which an individual becomes eligible for public programs varies by state.

Generally, mandating coverage for many uninsured individuals by adding them to a pool or block of privately insured individuals, or even a government program, may increase the population's cost more than the proportion of persons added. The new enrollees may bring higher initial costs in the short run due to accumulated neglect, pent up demand, or anti-selection (i.e., the propensity for people to purchase insurance only when they most need it). Many may have chronic conditions requiring immediate care. After this pent up demand is alleviated, the future costs of these newly covered individuals may reduce.

Financially Uninsured

Those individuals not eligible for public programs who choose not to purchase insurance on their own or through their employer are considered financially uninsured. The financially uninsured can be broken into two categories: (1) Voluntary: those who choose not to purchase insurance, and (2) Unaffordable: those who wish to purchase insurance but cannot afford it (they do not have the resources). Determining which category an individual falls into requires some assumptions about how many at each income level could conceivably buy health coverage but choose not to. Many political and social factors impact the decision about where to draw the line between these two groups.

Some people in this category work either full time or part time and decline employer-offered coverage due to affordability or choice. This also includes those that are not offered coverage by an employer, and do not purchase other private coverage, for the same reasons. Studies have shown that part-time workers are less likely to be eligible for employment-based coverage, even if their firms offer coverage. Uninsured full-time workers (and their families) are more likely to be working in firms that don't offer or don't subsidize health insurance coverage.

"Affordability" raises issues of priority, attitude, and expectations in a U.S. population, which for the most part, has been used to obtaining their coverage through an employer. In many cases, they do not understand the size of the total health premium expenditure or the fee levels that hospitals or physicians charge for services. Individual health insurance available for sale frequently involves relatively high deductibles and less expansive coverage than offered by large employers. These health benefit plans often do not sell well because they are unattractive to individuals seeking coverage more like that offered by employers. However, employer-like individual health benefit plans have much higher premiums because of the breadth of benefits covered, among other things. In order to determine which individuals cannot afford health insurance, three policy questions must be addressed by policymakers. We believe these questions can benefit from an actuarial perspective.

1. What is health insurance coverage?
2. What expenditures should be considered essential, and what should be considered discretionary?
3. What is a reasonable amount or percentage of income for an individual or family to pay for health care and for health care coverage, and should this vary by demographics or income level?

The answers to these questions are outside the scope of this introductory issue brief, but must be answered to address the issue of uninsurance for those individuals who truly cannot afford health insurance coverage. These issues will be discussed in future issue briefs.

High-Risk

This category consists of those people who are not eligible for employer sponsored coverage and are financially uninsured due to expensive medical conditions, e.g., the expensive medical condition results in high priced health insurance.

In a typical large group of covered individuals (employers, HMOs, etc.), a small percentage generates a substantial proportion of covered benefits. For example, in one very large employer group, approximately 5 percent of the individuals generate 35 percent to 50 percent of the total medical expenses, and 5 to 10 individuals out of 100,000 could be expected to each have expenses greater than $250,000 in a year. In another example, an HMO population, approximately 3 percent of that HMO's population generated approximately 45 percent of the total cost. When the risk profile of the group is different from a typical group, such as if the majority of the individuals are high utilizers of medical expenses, then the expected cost for the covered group and individuals increases significantly. If the group is privately insured, premiums must also increase, sometimes to a prohibitively high level.

The individuals in the high-risk category incur medical costs significantly higher than the average person. The medical costs of some estimated 0.5 to 3.5 million people in this category could be as much as the costs of 10 million or more individuals of average health. The higher costs associated with providing voluntary health coverage to

a pool of high-risk individuals require very high premiums, which likely makes the coverage unaffordable without external subsidies. Funding through additional charges to the other groups' private health insurance pools may result in reduced participation overall due to an increase in premiums, again negatively affecting the current insured population.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) increased the ability of this segment of the population to obtain health insurance, in part by guaranteeing the right to purchase coverage to certain individuals who lose job-related coverage.[iii] While HIPAA does guarantee the availability of coverage to these individuals, it may or may not limit the amount an insurer can charge for that coverage when coupled with varying state legislation. If a state adopts a funding or pooling mechanism for high-risk individuals, such as risk pools, risk spreading or subsidization occurs. However, if the state does not adopt such a funding mechanism, there is no limit on the cost of these high-risk individuals. Emerging data under the portability coverage of HIPAA confirm the higher cost for individuals in this segment. We have heard examples of companies experiencing costs per person about twice that of the pool average.

Eligible for Public Programs

Currently, Medicaid and SCHIP provide coverage to more than 28 million people under 65. (As discussed in endnote ii, CMS Medicaid Program personnel have counted up to 39 million enrollees for 2002.) However, available data provides strong indications that these programs are not reaching all the people they are designed to serve. Many uninsured are unaware of Medicaid and SCHIP programs, or are unaware that they and/or their children qualify. Administrative, language and cultural barriers also contribute to under-enrollment. States are increasing their outreach efforts, and are trying to reduce the administrative hassles associated with applying for Medicaid or SCHIP. Even with these improvements, Medicaid and SCHIP may not always be accessible to all of this segment.

The inevitable barrier encountered when trying to reduce this segment of the uninsured population is the need for additional funding. Medicaid and SCHIP estimated expenditures in 2002 totaled approximately $249 billion for about 44 million people, including the elderly. Of this amount, about $75 billion was for the medical expenses of children and adults of all ages. The portion of the $75 billion attributable to those below age 65 (i.e., non-elderly) cannot be determined from available data.

Another consideration is that eligibility for these programs varies by state. One state's income threshold may be lower or higher than another state's. As a result, the same individual could be eligible for Medicaid or SCHIP in one state but not in another. Raising thresholds in one of the lower threshold states might result in a burden on the state that it is unable to bear.

Poor Non-Citizens (< Five Years)

The poor non-citizen (< five years) uninsured population consists of legal immigrants who are not eligible for Medicaid or SCHIP coverage since they have not lived in the United States for five years. Financially, they may meet the criteria for Medicaid or SCHIP coverage but are excluded because of their resident status. Those uninsured non-citizens eligible for Medicaid are included in the Eligible for Public Programs category.

Illegal immigrants generally fall outside the systems that provide insurance coverage and attempts to include them in any of the uninsured categories would likely understate their numbers. If they receive care, it is through community health care safety nets or through private providers. Illegal immigrants are not usually included in discussions about the uninsured, but in states with large numbers of illegal immigrants performing low paying work, they impose a huge burden on the safety net providers in the community.

Transitional Uninsured

This category is not part of the 38 million to 41 million long-term uninsured. These are individuals who are uninsured for less than a year and are therefore not included in most attempts to count the uninsured. These people include:

- Those between jobs who do not purchase COBRA coverage for the transition period, and those newly unemployed who drop individually purchased coverage or COBRA coverage, possibly due to a substantial reduction in income;

- College or graduate students who, because of their age, are no longer eligible for coverage under their parents' policy;
- Early retirees not yet eligible for Medicare whose employers do not provide post-retirement health coverage;
- Those marginally poor who no longer qualify for Medicare or SCHIP due to a small increase in income;
- New employees waiting for their employer coverage to start; and
- Those other individuals who had coverage and lost it due to some event over which they had no control. Examples would be the state changing its eligibility requirements for SCHIP, the employer deciding not to provide group health insurance for any employees, dependents, or retirees, or an insurance company withdrawing from the individual market.

Most people who choose to do without insurance coverage during one of these transitional episodes believe there is little risk of a major medical need during the period of no insurance. While the frequency of unanticipated risk is small, cost can be significant when it occurs. There are many examples of individuals suffering great financial distress because of an unexpected diagnosis or accident. These individuals may also find, due to ill health, that they are precluded from re-enrolling in individual coverage or being able to get a job which would normally provide coverage.

Conclusion

As policymakers consider various options for reducing the number of uninsured, it is important to understand the sources of current health coverage, and the characteristics of the uninsured. In this brief we have tried to identify who the uninsured in the United States are and why they are uninsured. The causes range from income level to citizenship. We discussed five categories of uninsured: the financially uninsured (both voluntary and unaffordable); high-risk individuals; those eligible for public programs but who are not enrolled; poor non-citizens; and the transitionally uninsured. While, in this paper, we treated each of these groups as if they were mutually exclusive, there may be multiple reasons why any one individual is uninsured.

Future issue briefs of the American Academy of Actuaries will look more closely at each of the uninsured categories identified in this brief and will raise issues associated with making coverage available to these groups. Additional briefs will include actuarial analysis of the cost of coverage of varying sub-populations, along with a discussion of the mechanics of access to financing of coverage for the uninsured. Fund sources include the individual, employer, state government, federal government, and carrier pooling arrangements. In all of these instances, there is the problem of how to encourage (or require) individuals and families to pay for coverage in a voluntary system in which the best risks may be unwilling to join and subsidize higher-cost participants. We will also provide insight on fundamental questions facing policymakers as well as currently insured health coverage sponsors:

- "What is health insurance coverage?"
- "What are ways to provide health care for the uninsured?"
- "What are the roles of individuals, employers and governments in health care financing?"

Endnotes

[i] Like most estimates of the uninsured, the numbers in this brief are based primarily on the Current Population Survey (CPS), a monthly survey of about 50,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics. The insurance questions in the CPS are conducted in March of each year and intend to capture any health coverage held during the previous calendar year. Those not covered by any source of insurance in the prior year are classified as uninsured, meaning they lacked insurance for the entire year. In other words, the finding that 41 million Americans lacked health insurance in 2001 (38 million in 2000) implies that these people were without insurance for the entire year. Because the CPS-based estimates do not include those who lacked insurance for periods shorter than a year, they will understate the number of Americans who lacked insurance during any point in a year.

In May 2003, the Congressional Budget Office (CBO) published an in-depth paper on "How Many People Lack Health Insurance and For How Long." That paper concludes that the CPS estimate of 40 million uninsured more closely approximates the number of people who are uninsured at a specific point in time. The CBO estimates that between 21 million and 31 million people were uninsured for the entire year in 1998 - the most recent year for which reliable comparative data was available. The CBO also estimates that there are approximately up to 60 million people who may be uninsured at any time during the year (including, for example, those between jobs). The CBO study also discusses challenges in counting the Medicaid and Medicaid-eligible population.

"NOTE: At the time of printing this Issue Brief, the Bureau of the Census released on September 30, 2003 an update in the estimated number of Uninsured under age 65 from 40.9 to 43.3 million for the year 2002 (also Table 1). We recognize that there are innumberable counts of the insured and uninsured in progress at any given point in time. Nevertheless this does not change any of the conclusions and observations of this Issue Brief. The updated numbers may serve to illustrate the impact of the economy on the number of the uninsured as discussed. We are not aware of a reconciliation with CBO numbers/differences noted above in the updated Census numbers. As of this printing we are unaware of an update in Kaiser's numbers (Table 2)."

[ii] As an illustration of "counting issues," the contributing actuaries to this paper had an informal discussion with actuaries at the Centers for Medicare and Medicaid Services (CMS) during which the Medicaid-Program actuaries referred to an estimated 39 million Medicaid and SCHIP enrollees in 2002. This would be a significant increase over the 2001 estimate in Table 1. The difference may be attributable to a number of issues: (1) the Medicaid/SCHIP population may be difficult for the Census surveyor to get at; or (2) perhaps, the CPS numbers inadvertently reflect those enrolled in the program at the time of the survey as opposed to any time during the year.

[iii] HIPAA also limits the use of pre-existing conditions, prohibits group plans from denying coverage or charging extra based on health status, and guarantees that employers or individuals who purchase coverage can renew that coverage regardless of any health conditions.