Health Care Coverage and Use of Preventive Services Among the Near Elderly in the United States

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ABSTRACT

Objectives. It has been proposed that individuals aged 55 to 64 years be allowed to buy into Medicare. This group is more likely than younger adults to have marginal health status, to be separating from the workforce, to face high premiums, and to risk financial hardship from major medical illness. The present study examined prevalence of health insurance coverage by demographic characteristics and examined how lack of insurance may affect use of preventive health services.

Methods. Data were obtained from the Behavioral Risk Factor Surveillance System, an ongoing telephone survey of adults conducted by the 50 states and the District of Columbia.

Results. Many near-elderly adults least likely to have health care coverage were Black or Hispanic, had less than a high school education and incomes less than $15 000 per year, and were unemployed or self-employed. Health insurance coverage was associated with increased use of clinical preventive services even when sex, race/ethnicity, marital status, and educational level were controlled.

Conclusions. Many near-elderly individuals without insurance will probably not be able to participate in a Medicare buy-in unless it is subsidized in some way. (*Am J Public Health.* 1999;89:882–886)

In the United States in the first half of 1996, an estimated 44.5 million persons younger than 65 years were without health insurance.[1] The number of Americans with no coverage is a long-standing policy concern because research findings indicate a relationship between lack of health insurance and use of preventive services, delay in seeking medical care, and poor health status.[2,3] Previous research findings suggest that being uninsured may be associated with declines in health status.[4] In addition, hospitalized patients who have no coverage may receive fewer inpatient services and may be at higher risk of dying than those who are insured.[5,6] For these reasons, lack of health insurance coverage may result in substantial increases in the number of people with chronic conditions and the cost of providing care for such individuals.

Lack of health insurance is a particularly serious problem for persons aged 55 to 64 years. This group is more likely than younger adults to be in fair or poor health, to face high individual health insurance premiums when coverage is available, and to risk financial hardship if they incur a major medical expense.[7] Because they are at increasing risk of chronic conditions such as heart disease and cancer as they age, forgoing preventive health care for reasons of cost can place them at risk of expensive but preventable hospitalizations.[8] Those without health insurance coverage are less likely to receive clinical preventive services or adequate maintenance care for chronic conditions and more often lack a regular source of continuing care, which places them at even higher risk for major illness.[2,9–11]

Davis[7] estimated that 2.5 million Americans aged 55 to 64 years are uninsured and that almost 1 million of these individuals are in fair or poor health. Also, this age group has been disproportionately affected by declines in employer-based coverage, because employers are less inclined to maintain health insurance for retirees than in the past.[7] For example, from 1988 through 1994, the percentage of retirees 55 years and older who received health coverage from a previous employer fell from 44% to 34%, a 23% decline.[12] That percentage is expected to continue declining because employers are becoming more aggressive in controlling their health care spending.[13] In 1996, an estimated 8 million people aged 55 to 64 years were not covered by an employer health plan; another 1 million people in this age group took Social Security cash benefits at 62 years of age and were not covered by an employer plan.[14]

Adults in this age group who retire early are often forced to purchase individual insurance coverage at a much higher cost than employer-sponsored health care coverage. Individual coverage is often less comprehensive, and exclusionary underwriting and marketing practices are more common, than employer-sponsored coverage.[13] After separating from a job, an older worker may have difficulty finding another job with health care coverage. There is evidence that companies providing health insurance coverage are less likely than other companies to hire older workers, who are more costly to insure.[15,16]

Policymakers need to know as much as possible about the uninsured among this age group to determine whether allowing the near elderly to buy into Medicare will assist those who are currently uninsured or simply

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This paper was accepted November 23, 1998.

offer more affordable health insurance to those who are already insured. The continued growth of the near-elderly population raises questions about how the health care needs of this large group will be met. This group is projected to increase from 21 million to 35 million in the next 12 years and to nearly double between now and the year 2020, jumping from 8% to 13% of the US population.[13]

In this study, we assessed the demographic characteristics of 55- to 64-year-old adults with respect to health care coverage, examined the effect of health insurance coverage on the use of clinical preventive services, and explored the reasons for lack of health insurance coverage. We also studied the association of health insurance coverage with health status and cost as a barrier to obtaining health insurance.

Methods

Data were obtained from the Behavioral Risk Factor Surveillance System (BRFSS), a state-based survey of noninstitutionalized adults in the United States 18 years or older. The BRFSS is a random-digit-dialed telephone survey that collects information on a variety of risk behaviors related to chronic disease, infectious disease, and injury. Details on sampling methods,[17] system purpose,[18] and methods of analysis have been described previously.[19–21] Data are weighted to reflect each respondent's probability of selection, as well as the age, sex, and racial/ethnic distribution of the census estimate for the respondent's state of residence.

Data from the 1993 through 1996 versions of the BRFSS were combined across participating states over the 4-year period to provide a sufficient number of respondents for analysis. With 3 exceptions, all states and the District of Columbia participated in the survey each year. The exceptions were Wyoming in 1993, Rhode Island in 1994, and the District of Columbia in 1995.

The health insurance status of each respondent was determined through a series of questions. First, respondents were asked whether they had any kind of health care coverage, including prepaid health plans (e.g., health maintenance organizations) and government plans (e.g., Medicare). Those who reported no health care coverage were asked, "About how long has it been since you had health care coverage?" Respondents also were asked whether, during the previous year, they had been unable to see a doctor because of cost and how long it had been since they had a routine checkup. Because only a small proportion (2%) of the population had been uninsured for less than 1 year, we combined all uninsured individuals into a single category.

TABLE 1—Demographic Characteristics of US Adults Aged 55 to 64 Years: Behavioral Risk Factor Surveillance System, 1993–1996

Characteristic	Sample, No. (%)
Sex	
Female	29 164 (52.7)
Male	20 440 (47.3)
Race/ethnicity	
White	42 370 (85.2)
Black	3 860 (9.0)
Hispanic	1 807 (5.8)
Educational level	
Less than high school	9 253 (18.8)
High school/some college	29 528 (58.4)
College graduate	10 732 (22.8)
Marital status	
Unmarried	17 483 (26.3)
Married	32 051 (73.7)
Employment status	
Wage earner	20 549 (42.5)
Self-employed	5 419 (10.8)
Unemployed	1 527 (3.2)
Retired	12 660 (25.5)
Other[a]	9 028 (18.0)
Income level,[b] $	
<15 000	8 810 (17.9)
15 000–25 000	9 722 (20.9)
25 000–35 000	7 436 (17.2)
>35 000	16 358 (44.0)

[a]Includes homemakers, students, and those unable to work.
[b]Household income per year.

We then examined demographic characteristics, physical health status, health insurance status, cost as a barrier to health care, and use of selected clinical preventive services. We estimated the prevalence of underinsurance among the near elderly. Underinsurance was defined as having health insurance and reporting that cost is a barrier to obtaining health care.

We used logistic regression modeling to produce odds ratios (ORs) adjusted by sex, race/ethnicity, educational level, and marital status. In each model, health insurance status was defined as currently covered or not covered. We used Survey Data Analysis (SUDAAN) software to calculate confidence intervals (CIs), taking the complex survey design into account.[22] For all data presented, point estimates and confidence intervals were based on weighted data. As a result of small numbers, we did not consider separately the 2% of persons who had been uninsured for less than 12 months. We did not adjust for health status because it is strongly associated with health care coverage.

Finally, we used additional data collected by selected states through an optional module of the BRFSS. These data were collected by 10 states (Alabama, Colorado, Missouri, Nebraska, New York, North Carolina, North Dakota, Ohio, Oklahoma, and Virginia) in 1996 to provide additional information on respondents who reported being without health care coverage. Respondents were asked, "What is the main reason you are without health care coverage?" We collapsed 11 categories of reasons for noncoverage used to capture responses into the following 3 categories: (1) lost or changed job, or spouse or parent lost or changed job, (2) could not afford premiums, and (3) other (e.g., became divorced or separated, spouse or parent died, employer does not offer or stopped offering coverage, cut back to part-time or temporary work, benefits from employer or former employer ran out, insurance company refused coverage, lost Medicaid or medical assistance eligibility). Each state sample was representative of the state's population; however, states volunteered to participate and were not randomly selected.

Results

There were 49 604 respondents aged 55 to 64 years. The median response rate, calculated according to the methodology of the Council of American Survey Research Organizations,[23] averaged about 68% during 1993 through 1996. Before combining data for the 4

years, we examined the distributions of demographic variables (age, sex, race/ethnicity, marital status) for each year separately to confirm that there were no important year-to-year differences.

Table 1 describes the demographic characteristics of the population. The percentages of respondents with health insurance coverage, along with adjusted odds ratios, are shown in Table 2. Weighted estimates indicated that each year from 1993 to 1996, there were an average of 2.1 million uninsured near-elderly Americans (10%). An additional 5.9% were underinsured. Although the unadjusted prevalence showed that men aged 55 to 64 years were more likely than women to have health care coverage (90.7% vs 89.5%), this relationship was not statistically significant when adjustment was made for other demographic factors (Table 2). Whites were more likely to have health care coverage than Blacks or Hispanics (ORs = 0.59 and 0.36, respectively). Income and educational level were inversely related to lack of health insurance coverage. Those who worked for wages or were retired were more likely to have health care coverage than those who were unemployed and those who were self-employed. As a result of multicollinearity, adjusted odds ratios are not presented for employment and income.

Those who were insured were more likely to report being in excellent, very good, or good health than those who were not insured (OR = 1.3) (Table 3). The insured were much more likely to report having a regular source of medical care than those who were uninsured (OR = 4.1), and they were almost 8 times as likely to report that cost was not a barrier to obtaining needed health care (OR = 7.6). Having health care coverage was also associated with having had a routine checkup within the previous 2 years and receiving a variety of clinical preventive services (e.g., blood pressure and cholesterol checks for all respondents and Papanicolaou test, clinical breast examination, and mammography for women) (Table 3).

Supplementary data from 10 states (n = 186) were analyzed to examine the reasons for lack of health insurance among the near elderly. More than half (55.5%) of the uninsured respondents aged 55 to 64 years reported that the main reason for lack of health insurance coverage was the high cost of insurance premiums. The next most common reason was losing a job or changing employers (20.3%).

TABLE 2—Prevalence of Health Care Coverage Among US Adults Aged 55 to 64 Years and Adjusted Odds Ratios for Selected Demographic Characteristics: Behavioral Risk Factor Surveillance System, 1993–1996

	Sample, No (%)	Adjusted Odds Ratio	95% Confidence Interval
Sex			
Female (referent)	25896 (89.5)	...	...
Male	18326 (90.7)	0.95	0.83, 1.10
Race/ethnicity[a]			
White (referent)	38279 (91.9)	...	...
Black	3158 (81.8)	0.59	0.48, 0.73
Hispanic	1438 (74.6)	0.36	0.28, 0.46
Educational level[a]			
Less than high school	7310 (78.9)	0.22	0.17, 0.28
High school/some college	26664 (91.4)	0.51	0.41, 0.65
College graduate (referent)	10175 (95.5)	...	...
Marital status[b]			
Unmarried	14759 (83.6)	0.48	0.41, 0.55
Married (referent)	29403 (92.3)	...	...
Employment status[a,b]		...	...
Wage earner	19042 (93.4)		
Self-employed	4530 (84.5)		
Unemployed	985 (67.0)		
Retired	11560 (92.3)		
Other[c]	7731 (86.3)		
Income level,[a,b,d] $		...	...
<15000	6466 (72.1)		
15000–25000	8452 (86.6)		
25000–35000	6971 (94.8)		
>35000	15860 (97.2)		

Note. Respondents were asked "Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs (health maintenance organizations), or government plans such as Medicare?"
[a]Significant association between having health care coverage and demographic characteristic (χ^2 test, $P < .05$).
[b]Not included in logistic regression analyses.
[c]Includes homemakers, students, and those unable to work.
[d]Household income per year.

Discussion

Identifying the characteristics of populations that lack health care coverage and analyzing and documenting the consequences of lack of coverage for the health and financial situation of individuals and society are important elements in evaluating proposed policies affecting health care coverage in the United States. Financial stresses on hospitals and other providers, combined with decreases in their ability and willingness to provide uncompensated care, are occurring at a time when the number of near-elderly persons is increasing. As this study indicates, at least 10% of the near elderly lack insurance, despite the fact that they are at greater risk of poor health. An additional 6% report that even though they are currently insured, cost is a barrier to obtaining health care. This is a public policy issue because of the relatively large number of Americans currently in the near-elderly group and because of the expectation that this group will increase dramatically in size as the baby-boom generation joins it at the turn of the century.

Our findings indicate that the near-elderly adults least likely to have health care coverage were Black or Hispanic, had levels of education (less than high school) and income (less than $15000 per year) in the low range, and were unemployed or self-employed. Our data showed that almost half of the near-elderly population is not in the workforce (25.5% are retired, 18% are homemakers or students or are unable to work, and 3.2% are unemployed). This is consistent with Current Population Survey data indicating that only 43% of the near elderly were employed full time in 1997. Thirteen percent worked part time, and 9% worked full time for part of the year. The remaining 35% were out of the labor force entirely owing to retirement, illness, or disability.[13]

We found that health insurance coverage was associated with higher rates of use of clinical preventive services, even when sex, race/ethnicity, marital status, and educational level were controlled. Finally, respondents who reported fair or poor health were less likely to have health care coverage than those

TABLE 3—Adjusted Odds Ratios for Insured vs Uninsured US Adults Aged 55 to 64 Years, by Selected Characteristics: Behavioral Risk Factor Surveillance System, 1993–1996

	Adjusted Odds Ratio[a]	95% Confidence Interval
Health status excellent, very good, or good[b]	1.26	1.07, 1.48
Regular source of care	4.05	3.06, 5.37
Cost not a barrier to care[c]	7.58	6.46, 8.91
Last routine checkup ≤ 2 years ago	4.14	3.54, 4.84
Last Papanicolaou test ≤ 3 years ago[d]	2.65	2.19, 3.21
Last mammogram ≤ 2 years ago[d]	3.71	3.12, 4.42
Last clinical breast exam ≤ 2 years ago[d]	3.15	2.56, 3.87
Last blood pressure check ≤ 2 years ago	4.68	3.48, 6.29
Last cholesterol check ≤ 5 years ago	2.89	2.34, 3.58

Note. Respondents were asked "Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs (health maintenance organizations), or government plans such as Medicare?"
[a]Adjusted for sex, race, educational level, and marital status.
[b]In comparison with those reporting fair or poor health.
[c]Respondents were asked "Was there a time in the last 12 months when you needed to see a doctor but could not because of the cost?"
[d]Female respondents.

in good, very good, or excellent health, even though the strength of the association was lower when we adjusted for sex, race, educational level, and marital status (crude OR = 1.97, 95% CI = 1.71, 2.27; adjusted OR = 1.26, 95% CI = 1.07, 1.48).

These findings should be useful to policymakers as they consider the effects of offering an opportunity for persons younger than 65 years to buy into Medicare. The annual per capita cost of the buy-in was estimated by the American Association of Retired Persons to be about $4570 for persons aged 62 to 64 years.[24] In comparison, individuals aged 62 to 64 years who were enrolled in employer-sponsored plans for workers paid an average of $420 per year toward the cost of their coverage, those with continuation coverage under the Consolidated Omnibus Budget Reconciliation Act (COBRA) paid an average of $2142 per year for group coverage, and some who purchased individual commercial coverage paid as much as $16 000 per year.[24]

Because of our findings, we suspect that the group of people who need health insurance most may be least likely to participate in a Medicare buy-in. Near-poor and near-elderly individuals who do not qualify for Medicaid may be unlikely to be able to pay the premiums to join Medicare even if it is offered. For example, we found that 19% of uninsured respondents had household incomes of less than $15 000 per year and that 21% had incomes between $15 000 and $25 000. This group will probably not be able to participate in a Medicare buy-in unless it is subsidized in some way. The group most likely to participate in a Medicare buy-in comprises those who have lost employer-sponsored health benefits through retirement, working part time, death of a spouse, or divorce. These individuals can pay for health insurance benefits but often find that premiums are extremely high, their existing health conditions are excluded from coverage, or they cannot find a company that will cover them.

Data collected in 10 selected states in 1996 indicated that the main reason adults aged 55 to 64 years lack health insurance is that they cannot afford the premiums (55.5%) or they lost their job or changed employers (20.3%). Data from these 10 states do not necessarily represent the US population; however, they do suggest that cost may be the main reason that people in this age group do not have health care coverage.

Another proposal recommends allowing the near elderly to buy into government employee insurance plans.[25] This approach, as well as the Medicare buy-in, would result in the near elderly being able to pay insurance premiums based on a large risk pool and avoid paying premiums based on their individual risk. Policymakers must examine any proposed solution to filling the health insurance gap for the near elderly in terms of potential effectiveness (health benefits), efficiency (costs), and equity (fairness).[26]

Conclusions

We estimate, on the basis of our survey, that each year at least 2.1 million near-elderly people lack health insurance coverage. This estimate may differ slightly from estimates in other studies, either because those who were insured at the time of the interview but had experienced a lapse in coverage during the previous 12 months were not counted among the uninsured[27] or because our results were based only on respondents living in households with telephones. For example, although telephone coverage averages 95% in the United States, there are variations by region and population. Persons without a telephone are more likely to be at low education and income levels and to be unemployed, and these factors are associated with the likelihood of being uninsured.[28] Furthermore, such individuals often have higher prevalences of health risk behaviors.[29] However, because this study focused on the relationship of lack of coverage with health status and health care use rather than the number of uninsured adults, this is not considered a major limitation. Estimates of effects can be expected to be biased in a downward direction.

Other limitations of this study must also be considered. For example, our estimates were based on self-reports and were not validated; thus, they may be subject to recall bias. Nelson and coworkers (written communication, April 1998) found that self-reports of health care coverage are highly accurate, whereas self-reports about source of coverage, type of coverage, and length of enrollment are much less accurate.

In summary, we found that 55- to 64-year-old adults with health insurance coverage are much more likely than those without coverage to have a routine checkup every 2 years, to have their blood pressure and cholesterol checked, and to have a source of regular care. Insured women are more likely to undergo a Papanicolaou test, clinical breast examination, and mammogram than uninsured women. Inadequate health insurance coverage can lead to "reverse targeting" of preventive care; the result is that populations at highest risk are least likely to be screened.[30] The present difficulties in meeting the needs of the uninsured in this age group suggest that the burden on individuals, families, and society will become increasingly less manageable if affordable health insurance coverage is not made available. □

Contributors

E. Powell-Griner, J. Bolen, and S. Bland jointly planned the study. E. Powell-Griner and J. Bolen wrote the paper and participated in the data analysis. S. Bland took the lead in data analysis and contributed to the writing of the paper. All 3 authors are guarantors for the integrity of the research.

Acknowledgments

We acknowledge the Behavioral Risk Factor Surveillance System coordinators in each state, Dr Betsy Thompson, Dr Deborah Holtzman, and Dr David Nelson for their assistance in reviewing this article.

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