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MEDICARE

The Stability of Medicaid Coverage for Low-Income Dually Eligible Medicare Beneficiaries

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Summary

Over 7 million Medicare beneficiaries rely on Medicaid to fill the gaps in their Medicare coverage.[1] Dual eligibles are among the most vulnerable Medicare beneficiaries in terms of lack of economic resources, poor health status, and high utilization of medical services.[2] Meeting their needs is an administrative challenge because responsibility for paying for their care is split between the Federal and state governments. The Medicare Modernization Act (MMA) adds to the challenge by shifting drug coverage from Medicaid to Medicare effective January 1, 2006.[3] But eligibility rules for subsidized Part D coverage are interlaced with Medicaid entitlement decisions, meaning that otherwise identical beneficiaries residing in different states will not have the same benefit options. The MMA also requires, at a minimum, annual redetermination of Medicaid eligibility. Frequent eligibility determinations raise the risk that individuals with relatively small changes in economic circumstances could lose their Part D drug subsidies. They are also costly to conduct, stressful to recipients, and may not be needed if dual eligibles have stable enrollments.

This paper addresses the stability of dual eligibility using data from the 1997 to 2000 Medicare Current Beneficiary Surveys. The study focuses on the duration of dual eligibility, rates of gain and loss of Medicaid coverage over the four years, sources of Medicare supplementation (if any) preceding and following periods of Medicaid enrollment, and factors that might explain gain or loss of coverage. Our results indicate that Medicaid is a very stable source of Medicare supplementation. The primary reasons for turnover in the program are new entrants and death, not loss of coverage due either to voluntary withdrawal or administrative disentitlement. In fact, dual eligibles had annual rates of Medicaid disenrollment that averaged only 5.4% each year. The cumulative probability of recipients losing Medicaid over the entire four years was just 17%. Moreover, almost 40% of individuals who lost Medicaid coverage regained it within a year.

Unlike younger, non-disabled Medicaid recipients, the dual eligible population experiences minimal churning due to changes in income or assets. This stability suggests that annual redetermination of Medicaid entitlement for Part D subsidies may be excessive. Less frequent redeterminations could save money and administrative resources and ease the burden on beneficiaries to produce the necessary financial documentation as well as reduce the time costs and uncertainty associated with the redetermination process.

The findings from this research also have implications for Medicare beneficiaries enrolling in Medicaid or the Part D low income subsidy (LIS) program from 2006 onward. We found that approximately 10 percent of all dual eligibles in any given year were new enrollees. This rate of influx is likely to rise in the future given the Federal requirement that beneficiaries seeking low income subsidies for prescription coverage

must enroll in Medicaid if they meet state eligibility requirements. Increased Medicaid take up rates raise the specter of a repetition of the enrollment delays and miscommunication with dual eligibles that characterized the initial transition into Part D. Careful monitoring of the enrollment process is thus critical to the success of the program.

Background

The passage of the Medicare Modernization Act guarantees that all beneficiaries entitled to both Medicare and full Medicaid benefits are eligible for subsidized prescription benefits under Part D. The subsidy includes payment of any plan premiums and coverage of all cost sharing except minimal copayments on brand and generic drugs (albeit recipients may be subject to formulary restrictions and utilization management tools including prior authorization, step therapy, and quantity limitations). These subsidized benefits are not strictly contingent on Medicaid status; most full duals would presumably meet the income and asset tests for the highest level of subsidy under the MMA irrespective of their Medicaid status. However, without the mantle of Medicaid, these individuals would be subject to additional eligibility determinations which some would fail. This is particularly problematic in the 19 states that offer full Medicaid benefits to higher-income recipients of the Medicare savings program.[4] In these jurisdictions, the protection the law provides to full duals depends heavily on their maintaining Medicaid entitlement.

The law requires that for purposes of Part D, state Medicaid redeterminations be made within 12 of initial enrollment.[5] This requirement is intended to identify Part D recipients whose economic circumstances have improved and therefore no longer meet the strict income and asset tests for program eligibility. This process makes sense for working age people, but may be less compelling for aged and disabled dual eligibles. The conventional wisdom is that once Medicare beneficiaries qualify for Medicaid, they stay on it for life. If that is true then annual (or more frequent) eligibility redetermination after the initial year of enrollment will impose a needless financial burden on the system and added psychological costs to recipients. If, on the contrary, dual-eligibility is a passing phase for many low-income Medicare beneficiaries, then frequent redeterminations may be justified, but at cost of creating financial hardships for beneficiaries who lose subsidized drug coverage.

There are few statistics available on the stability of dual eligibility. Most of the research on dual eligible enrollments is focused on annual counts of enrollees and rates of participation among putatively eligible beneficiaries.[6] The only study we are aware of that actually tracked dual eligibles over time used 1995 and 1996 data from the Medicare Current Beneficiary Survey (MCBS).[7] The authors found that nationally, 84% of Medicare beneficiaries who were enrolled in Medicaid in January 1995 maintained eligibility through December of the following year. We designed the current study to provide more up to date national information on dual eligibles and to track their eligibility status for longer than two years.

Methods

This study used MCBS data from 1997 through 2000. The MCBS is a nationally-representative survey of Medicare beneficiaries conducted under the auspices of the Centers for Medicare and Medicaid Services (CMS). The MCBS uses a rotating panel design with a new cohort of survey respondents enrolled every fall. Once enrolled, beneficiaries are followed for up to three full years and are then retired. There are three active rounds of survey respondents in any given year representing approximately 12,000 beneficiaries. After the initial fall entry survey, each respondent is interviewed three times a year in their own homes (or long-term care facility if institutionalized) utilizing computer assisted personal interviewing (CAPI) techniques. Survey response rates are typically around 84% upon first interview. Loss to follow up over the ensuing three years typically reduces the sample by 8% to 10%.[8] The interviewers collect information on a wide range of socio-demographic characteristics, health and functional status, medical conditions, Medicare supplementation, and health service use and cost. The survey comes linked to administrative records on Medicare and Medicaid enrollment and bill information from Medicare claims.

The sample for this study comprised all beneficiaries recruited for the MCBS round 19 continuing survey in the fall of 1997[9] (n=4,640). Baseline characteristics for the study cohort were taken from the 1997 MCBS Access to Care (ATC) file. The ACT sample is representative of the "always enrolled" Medicare population for the year in question (it excludes new program entrants and decedents). We then followed the round 19 cohort from 1998 through 2000 using the MCBS Cost and Use (CAU) files. The CAU files are representative of the "ever enrolled" Medicare population; that is, beneficiaries who die during the year are included in the sample. The combination of ACT and CAU files permitted us to track the Medicaid experiences of the study cohort for up to four full years. We used unique identifiers common to both files to follow our cohort over time. From 1997 through 2000, 725 study subjects died and 368 were lost to follow up.

Dual eligibility status was determined from monthly Medicaid indicators. Individuals counted as dual eligibles included both state Part A and/or Part B buy-in participants as well as recipients of the Medicare savings program (primarily Qualified Medicare Beneficiaries, QMB, and Specified Low Income Beneficiaries, SLMB). We made no distinction between traditional Medicaid recipients and those entitled as QMBs or SLMBs. To assess the stability of Medicaid enrollment we classified dual eligibles into three groups: (1) continuous Medicaid enrollment from January 1997 (or before) to month of death, loss to follow up, or December 2000, whichever came first, (2) gained Medicaid after January 1997, and (3) had Medicaid at some time during the study period but lost it prior to death, loss to follow up, or December 2000. A small number of duals both gained and lost Medicaid coverage during the period and were counted in both categories. We also captured the number of months of Medicaid enrollment for each dual eligible individual and then computed duration of enrollment as a percent of months observed (48 months for survivors who participated in the MCBS throughout the 1997-2000 period, less for decedents and those lost to follow up). Over 20% of the sample (1,051 individuals) had some period of Medicaid enrollment over the four years.

We conducted a series of descriptive and multivariate analyses. First we computed Medicaid enrollment rates for the study cohort by year (1997-2000) and continuity-of-coverage status (maintaining, gaining or losing entitlement). Next, we profiled baseline (1997) characteristics for the entire cohort.[10] Baseline socio-demographic characteristics included age, gender, race, income, education, marital status, residence (community dwelling or long-term care facility), and coverage with a Medicare supplement other than Medicaid (self-purchased Medigap plans, employer-sponsored plans, Medicare+Choice plans, and other public plans). We included several geographic variables: census region, metropolitan status, and residence in a state extending full Medicaid benefits to QMB beneficiaries. To capture differences in health and functional status, we included variables for self-reported health, number of ADL limitations, and a mortality indicator.

Our multivariate analysis consisted of several regression models designed to identify baseline factors predictive of Medicaid enrollment status over four years. We consider the findings from these models to be suggestive rather than definitive explanations of the stability of Medicaid coverage. Had the dataset contained monthly or even quarterly measures of such important variables as health and functional status, marital status, and income, we could have estimated dynamic models that linked Medicaid enrollment to changes in individual circumstances. However, with only annual observations available for these measures, a dynamic approach was not feasible. Our first model is a logistic regression estimating the conditional odds of having any Medicaid enrollment over the four years as a function of the socio-demographic, geographic, and health status measures described above. Second is an OLS regression designed to identify factors predictive of duration of Medicaid coverage. Our final models are two logistic regressions that identify factors predicting gain and loss of Medicaid, respectively.

One characteristic for which monthly observations were available in the MCBS CAU files is Medicare supplementation. Because private health insurance or other public coverage may substitute for Medicaid benefits for those otherwise entitled to them, we would expect to see a close correlation between changes in Medicare supplementation and gain or loss of Medicaid. To test this proposition, we tracked the proportions of beneficiaries with no supplementation, private policies, and other public coverage for all beneficiaries who either gained or lost Medicaid coverage between January 1998 and December 2000.[11] For Medicaid gainers, we indexed the month of first entitlement as 0 and then characterized various sources of coverage backwards in time for each month up to a year prior to first enrolling in Medicaid. For those losing Medicaid entitlement, we reversed the procedure, indexing the month of loss as 0 and characterizing sources of supplementation for each month up to a year after losing first Medicaid entitlement.[12] We then charted the monthly progression of sources of coverage for each group to show how Medicare supplementation patterns changed in the run up and aftermath to Medicaid enrollment.

Results

Table 1 shows the annual distribution of Medicaid enrollees by continuity-of-coverage status between 1997 and 2000. Slightly more than 20% of the cohort had some Medicaid coverage during the study period with aggregate enrollment rates increasing each year from 16.5% in 1997 to 18.8% in 2000. The average duration of Medicaid enrollment among those observed for the entire four years was 35.9 months, with 60% continuously enrolled. Among all Medicare beneficiaries represented in the sample, 6.6% gained Medicaid entitlement at some point during the four years. Between 4% and 7% of those with Medicaid in any given year lost their benefits. The probability of loss was not much higher (between 8% and 10%) over any given two-year period (data not shown). Indeed, the cumulative probability of losing Medicaid over the entire four year period was only slightly over 17%.

Table 2 compares baseline (1997) characteristics for dual eligibles to Medicare beneficiaries with no Medicaid exposure. As one would expect, duals tend to have lower incomes and poorer health. They also are older, less well educated, and more likely to be female, non-white, non-married, and residents of long-term care facilities. By and large, Medicare beneficiaries who gained Medicaid during the study period shared similar characteristics with those maintaining continuous benefits. Those losing Medicaid coverage were a unique group (albeit, some of the characteristics reported in Table 2 may be unreliable given small cell sizes) made up predominately of under age 65 disabled beneficiaries (54.3%). By comparison, SSDI recipient rates were 25.5% for those maintaining continuous Medicaid coverage and just 10.8% of those with no Medicaid enrollment. The high SSDI recipient rate helps explain the small proportion of beneficiaries aged 70+ and higher proportions of males and married beneficiaries among those losing Medicaid coverage. Surprisingly, almost a quarter (24.1%) of those losing Medicaid were divorced or separated, which is a higher percentage than among those gaining Medicaid coverage (18.2%). Both gainers and losers had higher average incomes and higher rates of Medicare supplementation than those with continuous Medicaid enrollment. It is interesting to note, however, that over 18% of those with continuous Medicaid coverage also had evidence of a private or other public Medicare supplement.

Because this is a cohort study, the characteristics of the sample changed over time due to aging, mortality, and loss to follow up. An appendix table shows how the characteristics of the entire study cohort changed from 1997 through 2000. While the age profile shifts predictably upward, the percent non-white fell slightly, perhaps due to higher mortality rates within this group. Mortality also explains the rising proportion of widows. Self-reported health status became more concentrated over time with lower proportions of survivors reporting either excellent or poor health. The average number of reported ADLs rose as did the proportion residing in long-term care facilities.

Results from the regression studies are summarized in tables 3 and 4. Table 3 presents regression findings on the probability of Medicaid enrollment and duration of coverage. For the most part, the same factors that predict any Medicaid enrollment also predict duration. For example, SSDI recipients under age 44 were significantly more likely to

have some Medicaid experience than beneficiaries aged 65-70; after they enrolled, their duration of Medicaid coverage was 9% longer on average. Higher income beneficiaries were less likely to be on Medicaid and their stays were much shorter if they did enroll. Having a private Medicare supplement both reduced the probability of having any Medicaid and shortened the duration of enrollment. Perhaps the biggest surprise in these findings compared to the descriptive characteristics in Table 2 is the strong geographic pattern in enrollment. Other things being equal, the odds of having Medicaid were about two-thirds lower for beneficiaries in the South, Midwest, and Northeast compared to the West. Likewise, beneficiaries in the West had longer duration of Medicaid enrollment by between 7% and 13%.

Table 4 presents our regression findings on the probability of gaining and losing Medicaid benefits. Not surprisingly, the strongest predictors of new Medicaid enrollment are very similar to those predicting any Medicaid exposure: receipt of SSDI benefits, female gender, income below $10,000, residing in the West and in rural areas, not having a private Medicare supplement, and living in a long-term care facility. Because of the small number of sample beneficiaries losing Medicaid, there are few significant coefficients in the final regression model. The conditional odds of losing Medicaid were highest for individuals with incomes between $15,000 and $20,000 per year and residing in the Midwest. Older age and having 3 or more activity limitations significantly reduced the odds have losing Medicaid.

Figures 1 and 2 present descriptive findings from our analysis of changes in Medicare supplementation before and after Medicaid enrollment. For gainers (Figure 1) there is a trend in reduced Medicare supplementation rates in the months leading up to Medicaid enrollment, but the tipping point into Medicaid is not at all obvious. In fact, even in the month immediately prior to gaining Medicaid, nearly half of the sample (48.6%) had other support covering at least some of the gaps in Medicare benefits. There was a very slight decline in the proportion with other Medicare supplements in the year prior to Medicaid entitlement (from 50.1% in month -12). Another small fraction, averaging between 8.7% and 16.1% of the sample, had previous Medicaid experience.

The pattern for duals losing Medicaid (Figure 2) paints a very different picture. In the month following lost coverage, only 28.1% had another source of Medicare supplementation. This percentage remained remarkably constant for up to a year later (month +12) when 28.8% had alternative coverage. The trend here is toward gradual reinstatement of Medicaid coverage, from 19.8% of the sample in month +2 to 39.4% in month +12. The ability to regain Medicaid coverage meant that by month +3 less than half of the former duals had no Medicare supplementation whatever; but the relatively slow pace of reinstatements left almost 32% of former duals with no supplemental health insurance benefits a year after losing their Medicaid coverage.

Discussion

These finding demonstrate that most Medicare beneficiaries who qualified for Medicaid between 1997 and 2000 experienced stable episodes of dual eligibility. Over the four year time span, 60.5% of the Medicaid enrollees in the sample maintained continuous coverage, 22.0% gained and kept it, 7.2% left it, and 10.2% both gained and lost coverage. Although there was significant turnover in the Medicaid population over the four years, the primary causes were new Medicaid entrants (32.1%) and deaths among enrollees (19.9%), rather than loss of entitlement (17.4%). Measured over shorter periods, the stability of dual eligibility is corresponding greater. On average, only 5.4% of duals left Medicaid each year of the study and nearly 40% of these regained it within a year.

The regression analyses hint at some of the major predictive factors for new Medicaid enrollment: SSDI (particularly under age 44), female, annual income below $10,000, less than an 8th grade education, no other source of Medicare supplementation, residing in a long-term care facility, and living in the West. Our findings on factors associated with loss of Medicaid coverage are less robust than those for gainers because of the small numbers involved. These associations are all based on a static comparison of baseline characteristics and do not account for changes in factors like income and health spending that can directly affect Medicaid eligibility. Nonetheless, the findings are consistent with the characteristics of dual eligibles described in other studies.[13]

The percentage of duals we report to have lost Medicaid coverage is somewhat lower than Stuart et al. reported for 1995 and 1996.[14] This is probably an artifact of different study methods rather than to a trend toward greater program stability. The earlier study estimated loss rates for a cohort that excluded decedents. We found that the rate of mortality among duals who left Medicaid (12.1%) was almost half that of beneficiaries maintaining (21.1%) or gaining coverage (21.8%) Excluding decedents has the effect of raising the proportion of beneficiaries losing coverage compared to survivors. However, we also found that mortality itself played no independent role in predicting Medicaid status in any of our models. This is due in part to the presence of other control variables that are themselves correlated with a higher probability of death (e.g., poor health status, long-term care resident), and in part to the way we measure duration of Medicaid enrollment (% of months observed).

These findings should be interpreted in the light of several important limitations. First, although data on Medicaid enrollment was drawn from administrative records included with the MCBS, we did not have any direct information on the reasons for gaining or losing Medicaid benefits. This lack of knowledge is particularly noteworthy for those losing coverage, as we cannot distinguish voluntary from administrative disentitlements. Second, the small numbers of duals losing Medicaid coverage in our sample means that characteristics of this population are estimated with greater error than for beneficiaries with continuous or new Medicaid entitlement. Third, we made no distinction between traditional Medicaid recipients and QMB and SLMB recipients, nor did we distinguish QMB/SLMB recipients entitled to full Medicaid benefits (QMB/SLMB-Plus) and those entitled only to the statutory benefits provided by the Medicare savings plans. Medicaid

enrollment is obviously more valuable to Medicare savings plan enrollees in QMB/SLMB-Plus states. However, our sample contained too few recipients to present meaningful subdivisions by traditional Medicaid, QMB/SLMB only, and QMB/SMLB-Plus status. Moreover, the number of states offering full Medicaid benefits to QMBs and SLMBs increased over the study time frame, which meant that some subjects gained full Medicaid benefits without changing their entitlement status. A fourth limitation is that our results are presented as unweighted sample characteristics. Both the ATC and CAU MCBS files contain sample weights that enable researchers to generate national estimates from their analyses. However, the CAU files include only cross-sectional weights and the ATC longitudinal weights apply only to the ATC samples that exclude decedents. In short, there was no meaningful way to weight our cohort data to be strictly nationally representative.

Implications for Policy

Despite these limitations, our findings have important policy implications for the new Medicare Part D prescription drug benefit. People who are dual eligibles experience minimal churning due to changes in income or assets, unlike younger, non-disabled Medicaid recipients. This stability suggests that annual redetermination requirements for Medicare savings programs and for Part D low-income subsidies may be excessive. Less frequent redeterminations could save money and administrative resources and ease the burden on beneficiaries to produce the necessary financial documentation as well as reduce the time costs and uncertainty associated with the redetermination process.

The findings from this research also have implications for Medicare beneficiaries enrolling in Medicaid or the Part D low income subsidy (LIS) program from 2006 onward. We found that approximately 10 percent of all dual eligibles in any given year were new enrollees. The prospect of new, annual enrollees raises the specter of a repetition of the enrollment delays and miscommunication with dual eligibles that characterized the initial transition into Part D. Careful monitoring of the enrollment process is thus critical to the success of the program.

Table 1: Proportions of Study Subjects Enrolled in State Medicaid Programs by Continuity of Coverage, 1997-2000

Medicaid Enrollment Status	Year				
	1997	1998	1999	2000	1997-2000
All Medicare beneficiaries in the cohort	4,640	4,640	4,163	3,774	4,640
Percent with any Medicaid enrollment	16.5%	17.5%	18.4%	18.8%	20.6%
Average duration of enrollment*	11.3 months	11.4 months	11.4 months	11.4 months	39.5 months
Percent with continuous Medicaid enrollment	14.2%	15.4%	16.2%	16.5%	12.5%
Percent with non-continuous Medicaid enrollment	2.4%	2.1%	2.2%	2.4%	8.1%
Average duration of enrollment*	7.3 months	6.7 months	7.0 months	7.2 months	27.1 months
Percent gaining Medicaid enrollment**	1.4%	1.3%	1.6%	1.5%	6.6%
Percent losing Medicaid enrollment**	1.2%	0.9%	0.7%	1.1%	3.6%

* Estimated over the fraction of duals observed for 48 months (i.e., excludes decedents and persons lost to follow up)
**Gaining and losing Medicaid are not mutually exclusive. Approximately 0.2% of each group annually represent Medicaid recipients with coverage gaps (i.e., they both gained and lost coverage within the year).
Source: Medicare Current Beneficiary Survey Access to Care file (1997) and Cost and Use files (1998-2000)

Table 2: Baseline (1997) Characteristics of the Study Cohort by Medicaid Enrollment Status (N=4,640)

Characteristics	No Medicaid Enrollment	Continuous Medicaid Enrollment	Gained Medicaid Enrollment	Lost Medicaid Enrollment
Age in years				
≤44	3.3%	23.7%	19.5%	36.8%
45-64	7.5	11.8	16.0	17.5
65-69	25.8	11.9	11.1	15.7
70-74	17.7	11.4	11.1	9.0#
75-79	17.7	10.4	10.1	4.8#
80-84	16.1	12.3	14.0	9.6#
85+	11.9	18.5	18.2	6.6#
Female	54.6	65.9	62.9	54.8
Non-White	11.9	34.8	26.7	28.3
Income*				
< $5,000	2.9	11.1	7.8	13.9
$5,000 – $10,000	14.1	72.3	60.9	55.4
$10,000 – $15,000	19.1	11.9	18.2	16.9
$15,000 – $20,000	15.1	1.7#	6.8	9.0#
> $20,000	48.9	2.9#	6.2	4.8#
Educational attainment				
8th grade or less	15.7	41.2	32.9	33.5
Some high school	16.7	25.2	20.7	23.0
High school graduate or higher	67.6	33.6	46.4	43.5
Marital Status				
Married	54.8	16.1	24.1	25.9
Widowed	32.8	41.0	39.1	21.1
Divorced/separated	7.2	16.1	18.2	24.1
Never married	5.2	26.5	17.9	28.3
Geographic region				
Northeast	20.7	19.6	13.7	11.5#
Midwest	25.0	17.1	24.1	28.3
South	35.8	42.2	45.6	44.6
West	18.5	21.1	16.6	15.7
Rural residence	26.5	33.2	35.5	36.1
Residence in QMB Plus state*	41.0	46.0	37.1	33.1
Supplemental health insurance*				
Private	85.5	10.7	41.7	25.9
Other public	6.1	7.8	8.1	9.0#
General health status				
Excellent	17.3	6.2	9.1	8.4#
Very good	26.8	10.7	15.0	10.2#
Good	28.5	27.0	25.7	27.7
Fair	19.2	34.1	29.6	30.1
Poor	8.0	21.5	19.5	22.3
ADL limitations				
0	68.3	44.3	43.5	56.0
1-2	19.9	25.0	29.7	27.1
3+	11.8	30.7	26.8	16.9
Long-term care facility resident	3.7	23.2	19.2	9.6#
Mean Medicare expenditures	$3,500	$6,500	$6,500	$5, 000
Died (1998-2000)	14.4%	21.1%	21.8%	12.1%

*Based on 1998 data

Cell size< 20.

Source: Medicare Current Beneficiary Survey Access to Care file (1997) and Cost and Use files (1998-2000)

Table 3: Regression Results for Baseline Factors Associated with Medicaid Enrollment and Duration of Coverage

Characteristics	Any Medicaid Enrollment (N=4,640)		Duration of Medicaid Coverage[1] (N=954)	
	Odds Ratio	Standard Error	β	Standard Error
Age in years				
≤44	5.64**	1.27	9.24**	3.40
45-64	1.42	0.29	0.39	3.41
70-74	1.07	0.21	1.77	3.48
75-79	0.97	0.20	8.23*	3.67
80-84	0.93	0.18	-2.20	3.50
≥ 85	1.08	0.22	-0.31	3.55
Female	1.94**	0.24	2.08	1.96
Non-white	1.45**	0.18	2.41	1.89
Income				
$10,000 – $15,000	0.27**	0.04	-10.99**	2.54
$15,000 – $20,000	0.13**	0.03	-23.67**	4.46
> $20,000	0.06**	0.01	-12.91**	4.24
Educational attainment				
8th grade or less	2.01**	0.28	6.34**	2.19
Some high school	1.78**	0.25	4.59*	2.33
Marital Status				
Widowed	0.92	0.13	-2.56	2.78
Divorced	1.25	0.23	-5.61	3.16
Separated	1.99*	0.69	0.53	4.64
Never married	1.38	0.27	-1.73	3.09
Geographic region				
South	0.34**	0.05	-9.56**	2.46
Midwest	0.34**	0.06	-13.26**	2.81
Northeast	0.35**	0.06	-7.30**	2.79
Rural residence	1.22	0.15	-0.52	1.96
Residence in QMB Plus state	1.26*	0.14	0.94	1.83
Supplemental health insurance				
Private	0.14**	0.02	-24.28**	2.15
Other public	0.70	0.13	-2.16	3.11
General health status				
Very good	1.27	0.27	5.47	3.82
Good	1.50*	0.29	5.51	3.42
Fair	1.64*	0.33	6.84*	3.44
Poor	2.00**	0.46	5.70	3.71
ADL limitations				
1-2	1.19	0.16	-1.75	2.17
3+	1.14	0.19	2.55	2.53
Long-term care facility resident	3.09**	0.66	4.33	2.79
Mean Medicare expenditures	1.01*	0.01	0.06	0.06
Died in 1998-2000	1.08	0.16	-1.56	2.43

[1] Duration of coverage defined as: (number of Medicaid months/total number of months observed)*100

* p<0.05; ** p<0.01

Reference categories for categorical variables are: age 65-69 years, male, white race, income $10,000 or less, high school graduate or higher, married, western geographic region, metropolitan residence, no Medicare supplement, excellent general health, no ADL limitation, community resident, and survivor.

Source: Medicare Current Beneficiary Survey Access to Care file (1997) and Cost and Use files (1998-2000)

Table 4: Regression Results for Baseline Factors Associated with Gain and Loss of Medicaid Coverage for Study Subjects with Some Medicaid Enrollment, 1997-2000

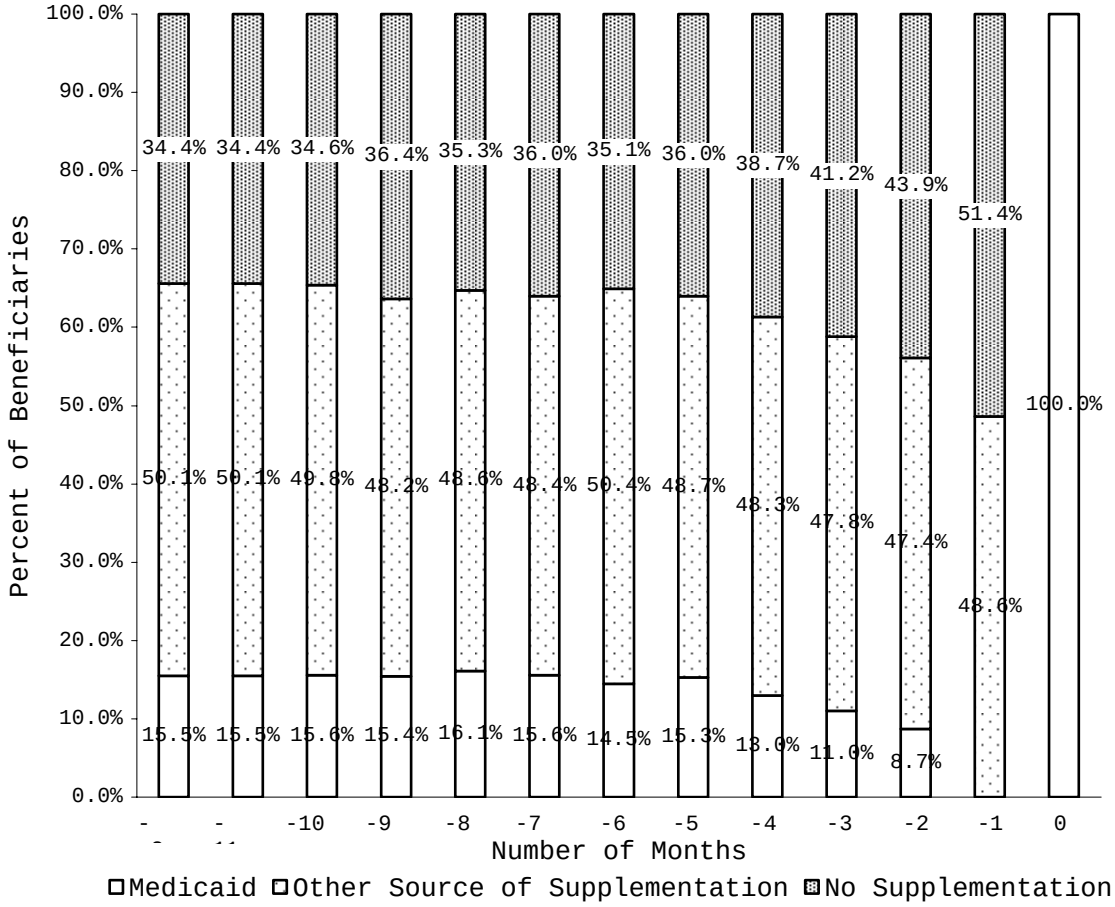
Characteristics	Gained Medicaid Coverage (N=4,062)		Lost Medicaid Coverage (N=954)	
	Odds Ratio	Standard Error	Odds Ratio	Standard Error
Age in years				
≤44	4.68**	1.39	1.41	0.47
45-64	2.32**	0.62	1.12	0.38
70-74	1.24	0.33	0.60	0.22
75-79	1.13	0.31	0.39*	0.17
80-84	1.14	0.30	0.65	0.24
≥ 85	1.33	0.37	0.38*	0.17
Female	1.52**	0.24	0.91	0.19
Non-white	1.24	0.21	0.88	0.18
Income				
$10,000 – $15,000	0.34**	0.06	1.28	0.34
$15,000 – $20,000	0.20**	0.05	3.40**	1.41
> $20,000	0.07**	0.02	1.18	0.54
Educational attainment				
8th grade or less	1.49*	0.26	1.09	0.25
Some high school	1.17	0.22	0.89	0.22
Marital Status				
Widow	0.97	0.19	0.71	0.22
Divorce	1.31	0.30	1.31	0.41
Separate	0.94	0.46	0.84	0.40
Never married	0.96	0.25	0.73	0.23
Geographic region				
South	0.62*	0.13	1.57	0.44
Midwest	0.54**	0.12	2.56**	0.78
Northeast	0.43**	0.11	0.91	0.31
Rural residence	1.35*	0.21	0.91	0.19
Residence in QMB Plus state	1.07	0.16	0.69	0.14
Supplemental health insurance				
Private	0.40**	0.06	1.48	0.34
Other public	0.73	0.19	1.01	0.33
General health status				
Very good	1.12	0.30	0.64	0.26
Good	1.06	0.26	0.83	0.29
Fair	1.07	0.28	0.70	0.25
Poor	1.35	0.39	0.89	0.34
ADL limitations				
1-2	1.35	0.23	0.76	0.17
3+	1.26	0.27	0.53*	0.15
Long-term care facility resident	3.18**	0.81	0.87	0.30
Total Medicare expenditures	1.01*	0.01	0.99	0.01
Died in 1998 - 2000	1.14	0.22	1.05	0.33

* $p<0.05$; ** $p<0.01$

Reference categories for categorical variables are: age 65-69 years, male, white race, income $10,000 or less, high school graduate or higher, married, western geographic region, metropolitan residence, no Medicare supplement, excellent general health, no ADL limitation, community resident, and survivor.

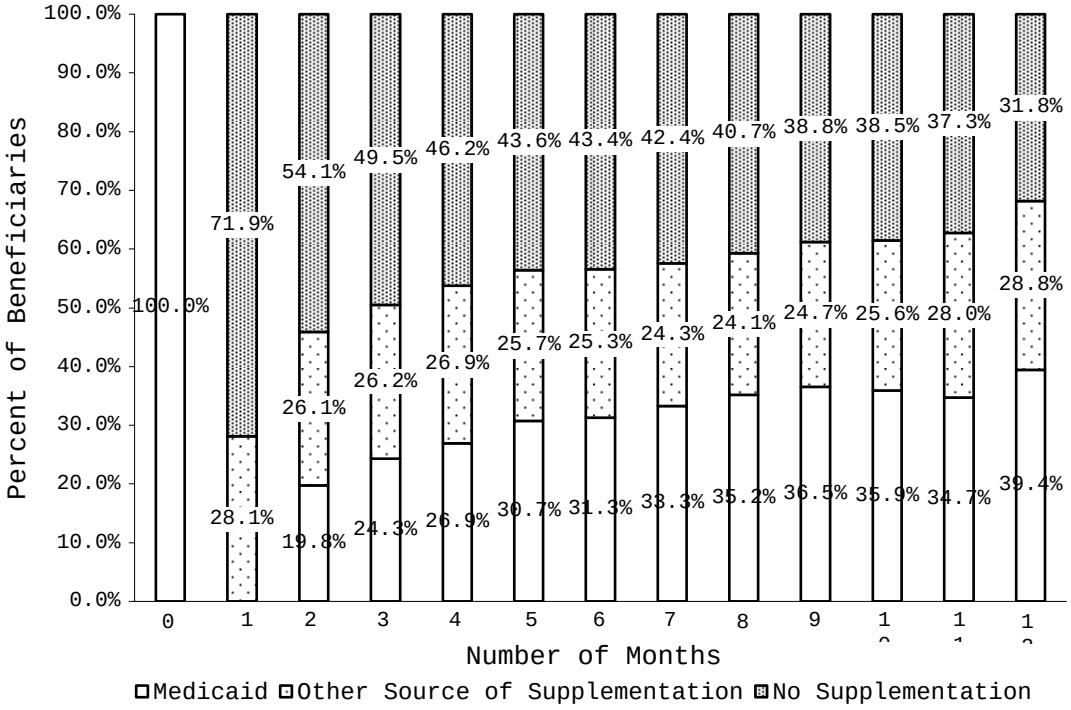
Source: Medicare Current Beneficiary Survey Access to Care file (1997) and Cost and Use files (1998-2000)

Figure 1: Monthly Trends in Medicare Supplementation for Study Subjects up to 12 Months Before Gaining Medicaid Coverage



Source: Authors' analysis of Medicare Current Beneficiary Survey Cost and Use files, 1997-2000.

Figure 2: Monthly Trends in Medicare Supplementation For Study Subjects up to 12 Months After Losing Medicaid Coverage



Source: Authors' analysis of Medicare Current Beneficiary Survey Cost and Use files, 1997-2000.

Appendix Table: Characteristics of the Study Cohort by Year, 1997-2000

Characteristics	Year			
	1997*	1998	1999	2000
Sample size	4,640	4,640	4,163	3,774
Age in years				
≤44	7.5	7.0	6.4	6.0
45-64	8.7	8.5	9.0	9.1
65-69	23.0	19.3	14.5	9.1
70-74	16.3	17.0	20.1	24.2
75-79	16.1	16.5	17.5	17.5
80-84	15.4	16.5	15.7	15.5
85+	13.0	15.3	16.9	18.6
Female	56.6	56.6	56.6	56.8
Non-white	16.0	16.0	15.8	15.4
Income				
< $5,000	*	4.4	4.6	4.1
$5,000 – $10,000	*	25.0	24.0	22.7
$10,000 – $15,000	*	18.2	19.0	18.4
$15,000 – $20,000	*	12.8	10.8	11.9
> $20,000	*	39.7	41.6	42.9
Educational attainment				
8th grade or less	19.8	19.8	19.3	19.3
Some high school	18.2	18.2	18.5	18.5
High school graduate or higher	62.0	62.0	62.2	62.2
Marital Status				
Married	47.5	47.5	44.8	44.2
Widowed	33.9	34.0	34.6	37.3
Divorced/separated	9.3	9.3	8.3	9.3
Never married	9.1	9.1	8.9	9.1
Geographic region				
Northeast	20.0	20.0	19.7	19.5
Midwest	24.0	24.0	23.9	23.9
South	37.3	37.2	37.0	37.2
West	18.7	18.8	19.4	19.5
Rural residence	27.9	27.8	28.3	28.8
Supplemental health insurance				
Private	*	72.4	72.9	72.6
Other public	*	6.5	8.1	8.6
General health status				
Excellent	15.3	12.5	11.6	11.1
Very good	23.8	23.8	24.3	23.8
Good	28.2	31.2	31.4	33.0
Fair	21.9	21.7	21.7	22.1
Poor	10.5	10.4	10.5	9.7
ADL limitations				
0	63.6	64.6	62.7	62.8
1-2	21.3	19.5	20.4	20.0
3+	15.2	15.9	16.9	17.2
Long-term care facility resident	7.2	8.8	8.9	9.3
Died during the year	**	5.6	5.9	5.9

*Access to Care variable not comparable to Cost and Use file variables.
**The MCBS ATC file excludes decedents.
Source: Medicare Current Beneficiary Survey Access to Care file (1997) and Cost and Use files (1998-2000)

Endnotes

[1] Kasper J., Elias, R., Lyons, B. *Dual Eligibles: Medicaid's Role in Filling Medicare's Gaps.* Washington DC: Kaiser Commission on Medicaid and the Uninsured, 2004.

[2] Ibid; Shatto, A., *The Characteristics and Perceptions of the Medicare Population: Data from the 2000 Medicare Current Beneficiary Survey*, Office of Research Demonstrations and Information, Centers for Medicare and Medicaid Services, Baltimore, 2002

[3] PL 108-173, December 8, 2003

[4] The Medicare savings plans (MSP) comprise the following groups: Qualified Medicare Beneficiaries (QMB) with incomes up to 100% of the poverty level, Special Low Income Medicare Beneficiaries (SLMB) with incomes up to 120% of the poverty level, and certain Qualified Individuals (QI-1 and QI-2) with higher incomes yet. In 2004 the 19 jurisdictions providing full Medicaid coverage to some or all MSP participants were: California, the District of Columbia, Florida, Hawaii, Illinois, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Nebraska, New Jersey, North Carolina, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Utah, and Virginia.

[5] PL 108-173, Section 1860D-14(a)(3)(B)(ii). The statute only specifies that eligibility redetermination must be made within 12 months during the first year of the program. The statute is silent on the length of redetermination in future years.

[6] Kasper et al, op cit.; National Association of State Medicaid Directors. *Aged, Blind, and Disabled Eligibility Survey*, 2002; Bruen, B., "State Usage of Medicaid Coverage for Aged, Blind, and Disabled People," Washington DC: Urban Institute, 1999; Actuarial Research Corporation, *Dual Eligible Buy-In Status*, Report to the Centers for Medicare and Medicaid Services, 2001; Ellwood, M., and Quinn, B., "Background Information on Dual Eligibles in FY 1999," Mathematica Policy Research, Inc., February 28,2002.

[7] Stuart, B, Shea D., Briesacher, B., "Dynamics of Drug Coverage of Medicare Beneficiaries: Finders, Losers, Switchers, *Health Affairs* 20(2):86-99.

[8] *Medicare Current Beneficiary Survey: CY 1999 Cost and Use Public Use File Documentation*, Office of Strategic Planning, Information and Methods Group, Centers for Medicare and Medicaid Services, Baltimore, November 2001.

[9] In addition to the continuing survey sample, CMS enrolled an additional 2,000 Medicare HMO enrollees for a one-time survey in 1997. We did not include this supplementary sample in any of our analyses.

[10] Data on private and other public Medicare supplementation is not captured in the ATC files so we used insurance indicators from the 1998 CAU file instead. We were unable to find a listing of states offering full Medicaid benefits to QMBs and SLMBs in 1997, but did have a list available for 1998. We also used 1998 income measures from the CAU files rather than the less detailed 1997 ATC income variables.

[11] We excluded observations for 1997 because the MCBS ACT files do not contain monthly summaries of private and other public forms of Medicare supplementation.

[12] A total of 97 duals had more than one episode of gain and loss; for them we used the first episode to compute the monthly charts.

[13] Kasper et al., op cit; Shatto, op cit.

[14] Stuart et al., op cit.

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