# ABSTRACT

Objectives. The purpose of this study was to analyze duration of coverage among new Medicaid enrollees.

Methods. The 1991 Survey of Income and Program Participation was used to examined the duration of coverage for individuals who did not have Medicaid in January 1991 and obtained coverage by May 1993.

Results. Of new Medicaid enrollees, 38% (90% confidence interval [CI] = 34%, 42%) remained covered 1 year later; 26% (90% CI = 21%, 31%) remained covered at 28 months. Of those older than 65 years, 54% (90% CI = 31%, 77%) retained Medicaid for 28 months, vs 20% (90% CI = 14%, 26%) of children. Of people who lost Medicaid, 54% (90% CI = 31%, 77%) had no insurance the following month.

Conclusions. Almost two thirds of new Medicaid recipients lose coverage within 12 months. It is unlikely that Medicaid managed care will enhance continuity of care for new recipients. (Am J Public Health. 1998;88:464–466)

# Can Medicaid Managed Care Provide Continuity of Care to New Medicaid Enrollees? An Analysis of Tenure on Medicaid

Olveen Carrasquillo, MD, MPH, David U. Himmelstein, MD, Steffie Woolhandler, MD, MPH, and David H. Bor, MD

## Introduction

Both Democratic and Republican politicians favor moving Medicaid beneficiaries into managed care. By June 1996, 13.3 million Medicaid beneficiaries (40.1%) were enrolled in managed care, up from 2.7 million (9.5%) in 1991. Sixteen states have obtained waivers from the Health Care Financing Administration (HCFA) to undertake statewide mandatory managed care programs, and other states are awaiting waivers. While this move to Medicaid managed care is usually motivated by cost concerns, many also argue that it will improve access to and continuity of care.

Previous studies on poverty have shown that most people who become poor have a short stay in poverty. 5.6 In addition, since most managed care plans restrict patients' choice of doctor and hospital, shifts into or out of managed care organizations often force patients to change providers. Hence, if new Medicaid recipients are covered only briefly, managed care may compromise continuity of care. Moreover, monitoring the quality of care may be difficult if the denominator population is labile. In this paper we examine Medicaid tenure among new enrollees.

### Methods

We analyzed data for January 1991 through May 1993 from the 1991 Survey of Income and Program Participation (SIPP), a US Census Bureau longitudinal survey of approximately 44 000 persons in 14 000 households representative of the noninstitutionalized US population. Each household was interviewed 8 times at 4-month intervals to collect monthly information on demographic, social, and economic characteristics, including health insurance coverage. 8,9

We studied recipients newly enrolled in Medicaid during the 28 months of the study. If a recipient lost and then regained Medicaid, each new enrollment episode was analyzed separately. We also examined data on a cohort of recipients enrolled at the outset of the study period. Finally, we analyzed subsequent health insurance coverage for new recipients who lost Medicaid during the first 24 months.

To derive population estimates, we used the SIPP longitudinal panel weights, which account for the complex sample design. To calculate 90% confidence intervals (CIs) for percentage data, we used the formula  $SE = \sqrt{(bp\ (100-p))/x}$ , where p = percentage estimate, x = base of the percentage, and b = a parameter estimate supplied by the Census Bureau. Methods that incorporate weights in life table estimates were used to calculate the probability of remaining on Medicaid. To obtain variance estimates, we used Greenwood's formula and inflation factors to account for multiple spells and SIPP parameter estimates.  $^{10}$ 

The reported spells of insurance coverage clustered at multiples of 4 months, that is, interviewees tended to report the same coverage for all 4 months covered by a single interview. Hence, we present spell lengths in 4-month increments. We used SAS software (SAS Institute Inc, Cary, NC) to analyze data.

#### Results

We identified 1685 individuals in the unweighted SIPP sample who did not have Medicaid in January 1991 and obtained it during the ensuing 28 months. Using the SIPP weights, we estimated that these individuals represented 14.5 million people and 17.9 million new enrollment episodes. Med-

At the time of the study, all authors were with the Department of Medicine, The Cambridge Hospital/Harvard Medical School, Cambridge, Mass.

Requests for reprints should be sent to Olveen Carrasquillo, MD, MPH, Division of General Medicine, Columbia Presbyterian Medical Center, PH 9E Room 105, New York, NY 10032. E-mail: carraso@medicine1.cpmc.columbia.edu.

This paper was accepted September 25, 1997.

icaid enrollees were more likely than the general population to be female, to be young, and to come from minority groups (Table 1).

Figure 1 shows new enrollees' probabilities of retaining Medicaid coverage. The probability of remaining on Medicaid was 38% (90% CI = 33%, 43%) at 12 months and 26% (90% CI = 21%, 31%) at 28 months. While 54% (90% CI = 31%, 77%) of those aged 64 years and older and 39% (90% CI = 26%, 52%) of those aged 35 through 64 years remained on Medicaid, only 24% (90% CI = 16%, 32%) of those aged 16 through 34 years and 20% (90% CI = 14%, 26%) of those younger than 16 years remained covered for all 28 months (Figure 2). The probability of retaining Medicaid was similar for both sexes in the under-16 and over-34 age groups. However, in the 16- to 34-year-old age group, women retained Medicaid longer; 31% (90% CI = 21%, 41%) had Medicaid at 28 months, vs 10% (90% CI = 0%, 22%) of men. There were no significant differences in the probability of retaining Medicaid by race or ethnicity.

As expected, the 21.4 million people enrolled at the outset of the study were more likely than new enrollees to retain coverage, but even in this group turnover was high for young persons. While 86% (90% CI = 78%, 93%) of those older than 65 years who had Medicaid at the outset remained covered, only 55% (90% CI = 49%, 60%) of those younger than 16 years retained coverage for 28 months.

Finally, we examined subsequent health insurance coverage among those who newly received and then lost Medicaid. After losing Medicaid, 54% (90% CI = 48%, 58%) had no health insurance the following month, and 39% (90% CI = 34%, 44%) still had no insurance 4 months later. While all of those aged 65 and older had health insurance after losing Medicaid, only 61% (90% CI = 54%, 68%) of those younger than 16 and 52% (90% CI = 43%, 61%) of those aged 16 through 34 had insurance 4 months later. Hispanics had the highest rates of uninsurance 4 months after losing Medicaid: 58% (90% CI = 48%, 68%) of Hispanics were without insurance, vs 39% (90% CI = 28%, 50%) of Blacks and 31% (90% CI = 25%, 37%) of non-Hispanic Whites. Finally, of those who regained health insurance within 4 months of losing Medicaid, only 26% (90% CI = 21%, 32%) reenrolled in Medicaid.

#### Discussion

Almost two thirds of new Medicaid enrollees lose Medicaid coverage within 12

TABLE 1—Characteristics of Persons Newly Enrolled in Medicaid between January 1991 and May 1993

	% of Newly Enrolled Medicaid Recipients (n = 14.5 million) <sup>a</sup> (90% CI)	% of US Population (n = 252 million)
Sex: female	57.7 (54.0, 61.4)	51.2
Age, y	, , ,	
<16	44.2 (41.9, 46.5)	23.8
16–34	31.3 (29.1, 33.5)	30.4
35–64	18.2 (16.4, 20.0)	33.9
>64	6.4 (5.2, 7.6)	11.9
Race/ethnicity		
Non-Hispanic White	59.2 (55.5, 62.9)	75.6
Black	18.2 (15.7, 20.9)	10.9
Hispanic	19.5 (16.5, 22.1)	9.5
Other	3.3 (1.9, 4.7)	4.0

*Note.* Data are taken from the US Census Bureau's Survey of Income and Program Participation.<sup>8,9</sup> CI = confidence interval.

months. In contrast, among enrollees in employer-provided plans, about 1 in 3 involuntarily changed plans during the previous 3 years. Furthermore, more than half of those who lose Medicaid coverage are uninsured the next month, and more than one third are uninsured 4 months later. Loss of Medicaid may be due to several reasons. Previous research has shown that more than 85% of exits from poverty are due to changes in earnings (employment) and family composition (marriage).<sup>5</sup> Change in a person's status, for example, when children become too old to qualify or pregnant women give birth, may also lead to termination. Finally, administrative obstacles, such as failing to redocument eligibility, also play a role.

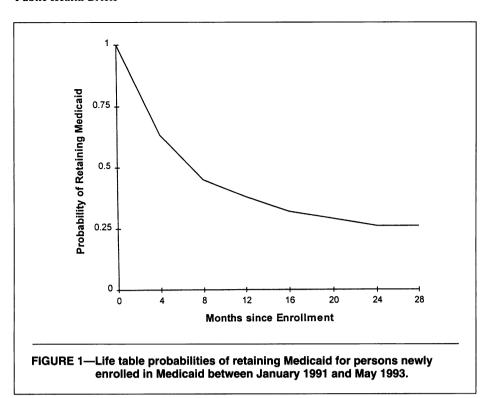
Our findings are consistent with an analysis using 1984 data, which showed that only 44% of the population enrolled in Medicaid in a 32-month period were covered the entire time. 11 Among the subset who obtained Medicaid in the fifth month of that study, only one third retained Medicaid for the next 27 months. Other studies have shown that disenrollees from Medicaid have longer uninsured spells than persons losing other types of health insurance. 12 Thus, despite recently broadened income eligibility requirements that led to a massive expansion of the Medicaid program, most new Medicaid recipients still have short tenure on Medicaid, and many go on to prolonged spells without insurance.

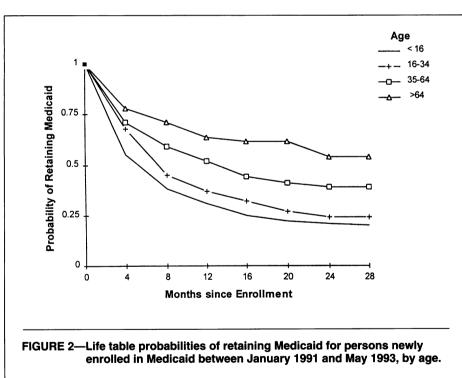
Few states have attempted to blend Medicaid recipients and the uninsured into a single program. Consequently, uninsured patients rarely have access to managed care providers. Conversely, the safety net providers who care for many of the uninsured are often excluded from managed care networks. Even people who leave Medicaid managed care for commercial managed care may be forced to change doctors, since many states are contracting with Medicaid-only health maintenance organizations (HMOs) or managed care plans in which Medicaid and commercial members see different panels of providers. For example, New York City's Public Advocate recently concluded: "Each of these [six] plans has two different lists of doctors—one for Medicaid recipients and one for everyone else." <sup>13</sup>

Moreover, the rapid turnover of Medicaid enrollees hampers monitoring of quality of care. For example, many indicators in the Medicaid Health Plan Employer Data and Information Set (HEDIS) require a denominator of recipients who were continuously enrolled during the reporting year. However, few new Medicaid enrollees will remain in a plan long enough for their care to be evaluated. While Medicaid HEDIS may be better than no monitoring at all, quality measures based on the care of the minority who remain continuously enrolled may not reflect the quality of care for the majority.

Several caveats apply to our findings. SIPP estimates are subject to sampling errors and non-sampling errors. Parameter estimates from the Census Bureau indicate the magnitude of sampling error. Non-sampling errors, such as nonresponse, misunderstanding of questions, differences in interpretations of questions, inability to provide correct information, and errors in the collection and processing of data, are minimized through quality control and editing procedures and adjustments for nonresponse.

<sup>&</sup>lt;sup>a</sup>Does not include 21.4 million persons who were Medicaid recipients in January 1991.





We performed our analysis at the event level. However, a reanalysis of our data using only each person's first episode of receiving Medicaid yielded almost identical results. Also, the SIPP is not intended to produce reliable estimates at the state level. Lastly, our estimates do not account for discontinuities that may occur as managed care plans move into or out of local markets or

change provider groups, and thus may underestimate the magnitude of the problem.

In summary, most new Medicaid recipients are covered only briefly. Such high turnover rates mean that managed care plans can profit by providing minimal care to their new Medicaid clients, as most will disenroll in less than a year. Clearly, national health insurance guaranteeing continuous coverage

to all is needed. However, if states adopt managed care programs, they should guarantee coverage for periods long enough for quality to be measured, include safety net providers in all Medicaid managed care networks (New York's recently approved HCFA waiver has provisions to help safety net providers compete for Medicaid managed care contracts<sup>3</sup>), or blend the uninsured and Medicaid recipients into a single plan. Without such provisions, most Medicaid managed care programs will not enhance, and may well impede, both continuity of care and quality monitoring efforts.

### References

- Iglehart JK. Health policy report. Medicaid and managed care. N Engl J Med. 1995;332: 1727–1731.
- Health Care Financing Organization. National summary of Medicaid managed care programs and enrollment: June 30, 1996 [cited August 18, 1997]. Available on the Internet at http://www. hcfa.gov/medicaid/trends1.htm.
- HCFA approves largest ever Medicaid waiver for New York. Washington, DC: Health Care Financing Organization; July15, 1997. Press release.
- Goldman B. Improving access to the underserved through Medicaid managed care. J Health Care Poor Underserved. 1993;4: 290-298.
- Bane MJ, Ellwood DT. Slipping into and out of poverty 1986. J Hum Resources. 1986; 21:1-23.
- Ruggles P, Williams R. Longitudinal measures of poverty. Rev Income Wealth. 1986; 35:225-244.
- Davis K, Collins KS, Schoen C, Morris C. Choice matters: enrollees' views of their health plans. *Health Aff (Millwood)*. 1995(summer): 99–112.
- 8. Survey of Income and Program Participation User's Guide. Washington, DC: US Dept of Commerce, Bureau of the Census; 1991: 2.1-2.12.
- 9. Survey of Income and Program Participation 1991: Technical Documentation. Washington, DC: US Dept of Commerce, Bureau of the Census; 1993:8.2–8.28.
- Mack S. Variance formulas for functions of survival rates. Washington, DC: US Dept of Commerce, Bureau of the Census, Demographic Statistical Methods Division; August 2, 1996. Internal memorandum.
- Short PF, Cantor JC, Monheit AC. The dynamics of Medicaid enrollment. *Inquiry*. 1988;25:504-516.
- Swartz K, McBride T. Spells without health insurance: distributions of durations and their link to point-in-time estimates of the uninsured. *Inquiry*. 1990;27:281–288.
- Two Lists: Commercial and Medicaid Managed Care Providers. New York, NY: Public Advocate for the City of New York; August 1995.
- Medicaid HEDIS: An Adaptation of NCQA's Health Plan Employer Data and Information Set 2.0/2.5. Washington, DC: National Committee for Quality Assurance; December 1995.