

The Impact Of Increased Cost Sharing On Medicaid Enrollees

Changes in the Oregon Health Plan have caused an exodus among its poorest members.

by **Bill J. Wright, Matthew J. Carlson, Tina Edlund, Jennifer DeVoe, Charles Gallia, and Jeanene Smith**

ABSTRACT: Many state Medicaid programs are implementing cost-saving mechanisms, but little is known about the impact of those strategies on low-income people. Recent increases in cost sharing for Oregon Health Plan (OHP, Oregon's Medicaid program) members have created a natural experiment that is ideal for examining such impacts. Early results from an ongoing cohort study suggest that cost-sharing increases led to a large reduction in OHP membership. Those who left OHP because of the cost-sharing increase reported inferior access to needed care, used primary care less often, and used hospital emergency rooms more often than those who left OHP for other reasons.

THE RECENT ECONOMIC DOWNTURN has forced all fifty states to implement cost containment strategies in their public insurance programs. Analysis of twelve Community Tracking Study (CTS) sites published in 2004 showed that early cuts largely avoided direct harm to beneficiaries' access to care.¹ However, as many states face continued budget shortfalls, more extensive cost-cutting mechanisms have been implemented. For example, in fiscal year 2004, nineteen states reduced benefits, including vision, dental, and mental health; twenty-one states restricted eligibility by tightening administrative rules or expanding premiums; and twenty states expanded or added new copayments.² During this period, the Oregon Health Plan (OHP) implemented cost-saving strategies of its own, including benefit reductions and increased cost-sharing requirements for many of its members.

To help understand the impact of such changes on Medicaid beneficiaries, a longitudinal cohort study was launched in 2003, following a representative sample of the Oregon Medicaid population. Its objectives are to assess the short- and

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long-term effects of policy changes on individuals' insurance coverage, access to and use of health care, financial solvency, and health status. The findings presented here are results from the baseline survey, conducted six months after Oregon's policy changes were implemented.

■ **The Oregon Health Plan.** In 1989 Oregon obtained one of the first federal waivers of traditional Medicaid rules under Section 1115 of the Social Security Act. Oregon's new waiver created OHP, which was designed to expand coverage to families and childless adults up to 100 percent of the federal poverty level while controlling costs with a managed care delivery system and a prioritized list of services. Enrollment began in 1994, and in the first year 120,000 new members qualified under the expanded eligibility rules.³ Oregon's uninsurance rate fell from 18 percent in 1994 to 10 percent in 1998.⁴

More recently, budget shortfalls have forced lawmakers to implement cost-controlling mechanisms. In 2003 Oregon developed OHP2, which included two distinct benefit packages: OHP Plus and OHP Standard. OHP Plus was designed to serve the categorically eligible Medicaid population (Temporary Assistance for Needy Families, TANF, populations and the disabled), offering benefits similar to the original OHP. OHP Standard was designed to serve the "expanded eligibility" population; it pairs a slimmer benefit package with increased cost-sharing requirements for members.

The cost-sharing increases implemented with OHP2 included both premiums and copays. The amount of the sliding-scale premiums remained the same for single people but nearly doubled for couples, with the new premiums ranging from \$6 to \$20 per month. Additionally, administrative changes eliminated previous premium exemptions for the homeless; those with zero income; and people who had experienced crime, domestic violence, natural disasters, or a death in the family. Finally, strict rules were put in place requiring a six-month lockout for people who missed even a single monthly payment.

The addition of copays was a new idea to members; OHP did not have a copay structure before 2003. Under OHP2, the new copays ranged between \$5 for an outpatient physician visit, \$50 for an emergency department (ED) visit, and \$250 for an inpatient hospital admission.

■ **Insurance, enrollment, and access in low-income populations.** Research suggests that changes to cost-sharing structures in public health insurance can affect participation in the system, along with access to and use of care. Evidence from an analysis of Medicaid enrollment data in four states, for example, found that as premiums rose from 1 percent to 5 percent of annual family income, estimated participation rates among the uninsured declined from 57 percent to 18 percent.⁵ Likewise, data from the RAND Health Insurance Experiment, the Medical Outcomes Study, and more recent studies suggest that requiring copays reduces both appropriate and inappropriate use of health care and medications, especially among people with low incomes or chronic conditions.⁶ Some of this may reflect voluntary opt-

ing out by families who believe they are healthy enough to do without insurance; however, findings from the National Survey of America's Families (NSAF) suggest that many simply cannot afford even modest cost-sharing arrangements.⁷ Access to affordable insurance is especially important for low-income populations. An abundant literature demonstrates that the uninsured, especially those with low incomes, have higher unmet health care needs and poorer health than the insured.⁸ In contrast, people with insurance have better access to care, are more likely to have a usual source of care, and have better overall health outcomes.⁹

Although research on cost sharing has shown a negative impact on enrollment and use, few recent studies have focused explicitly on low-income populations or attempted to disentangle the effects of premiums, copays, and benefit reductions on their willingness and ability to maintain coverage and use health care.¹⁰ Given the importance of insurance and the critical role that cost plays in determining whether people maintain it, any policy change that introduces or increases cost barriers for low-income people should be subject to careful evaluation.

The prospective cohort study from which these data are drawn seeks to capture the impacts of Oregon's Medicaid cost containment strategies on people enrolled in OHP at the time of these policy changes. With nearly half of all states implementing cost containment strategies similar to those in Oregon, the findings from this study should provide valuable lessons for policymakers around the nation.

Study Data And Methods

■ **Study population and sampling.** This study followed a cohort of adults, age nineteen and older, who were enrolled in OHP for at least thirty days before the initial wave of program changes in February 2003. A stratified random sample of 10,600 potential cohort members was drawn from Medicaid eligibility files, divided evenly between adults in OHP Standard and OHP Plus. Oversampling was used to ensure adequate representation among African American, Native American, and Spanish-speaking populations, with results weighted back to true population proportions. After people who were deceased, had moved out of state, or had no current address were excluded, 8,260 people were eligible for recruitment.

Sampled members were mailed an explanation of the cohort study, a consent form, and a baseline survey to return if they were willing to participate. A three-wave mail methodology was employed, with reminder cards and a second packet sent to nonrespondents. A total of 2,783 adults (34 percent of those approached) returned the materials and consented to join the study panel. Respondents who agreed to join the panel were demographically similar to nonresponders (Exhibit 1). Because cost sharing was implemented only for OHP Standard enrollees, this paper focuses only on the 1,378 respondents who were enrolled in OHP Standard at the time cost sharing was implemented.

■ **Survey.** A custom survey instrument, with a design informed by several widely validated data collection tools, was employed for this study.¹¹ To minimize recall

EXHIBIT 1
Comparison Of Study Respondents With Eligible Sample, Prospective Cohort Study Of Oregon Health Plan (OHP) Members, 2003

	Eligible sample (n = 8,260)	Respondents (n = 2,783)
Percent female	60.6%	67.3%
Race/ethnicity		
Asian	3.5%	2.1%
African American	10.0	8.1
Hispanic	14.1	11.4
Native American/American Indian	9.5	9.3
White	62.8	69.1
Primary language		
English	87.9%	92.1%
Spanish	7.6	5.9
Other	4.5	1.7
Eligibility category		
OHP Plus	51.6%	50.5%
OHP Standard	48.4	49.5

SOURCE: Oregon Health Plan Administrative Data Records.

bias, the survey asked respondents about their experiences in the past six months. Cognitive pretesting was conducted with a small sample of OHP members who agreed to participate in a validation interview. Spanish-language surveys were translated and then independently “back-translated” to ensure fidelity. The baseline surveys entered the field in November 2003.

■ **Key measures.** *Insurance status.* Respondents were asked whether they had been continuously enrolled in OHP over the past six months; those who responded “no” were asked to indicate the main reasons for losing coverage. Those who selected at least one of the following reasons—could not afford premiums, could not afford copays, or owed premiums from a prior eligibility period—were defined as having lost coverage because of cost sharing. Other reasons included “program-appropriate” loss of eligibility because of income increases or acquisition of other coverage, returning paperwork too late, or leaving because a desired benefit was cut. Finally, we assessed current insurance status by simply asking respondents what (if any) kind of insurance they had at the time of the survey.

Access to care. We used three principal measures of access: First, respondents were asked if, at any time in the past six months, they needed care but failed to receive it. Second, they were asked if they were unable to afford prescription drugs at any time in the past six months. Finally, they were asked if they had a “usual source of care” and to identify that source.

Use of care. Respondents were asked how many times they had a routine visit with a health care provider, other than hospitals and EDs, in the past six months. Respondents were also asked to identify how many times they had been to a hos-

pital ED or admitted as a hospital inpatient in the past six months.

Financial impacts. Respondents were asked to indicate how much debt they owed to a provider, credit cards, or other loan companies for medical expenses.

Income. Self-reported annual household income was obtained using categorical response options ranging from \$0 to \$50,000 or more, in increments of \$2,500. A measure of income as a percentage of the federal poverty level was calculated by using the midpoint of the income category selected as a point estimate for actual income and adjusting for household size.

This analysis examines the effects of the cost-sharing increase by comparing two groups of OHP Standard beneficiaries who left the system in the six months after the program changes were implemented: those who left for cost-sharing reasons, and those who reported losing coverage for reasons not related to cost sharing. The principal outcomes being compared are insurance status, access to care, use of care, and financial status.

Study Results

■ **Enrollment and insurance status.** OHP Standard experienced a dramatic decline in enrollment after cost sharing was increased in early 2003. Nearly half (44 percent) of the 1,378 OHP Standard members in our cohort left OHP in the six months after the program changes were implemented. This result is consistent with administrative data, which show a 46 percent drop, from 88,874 to 47,957 covered lives, between February and December 2003. This decline stands in stark contrast to the same time period one year earlier and prior to the policy changes; then, OHP Standard enrollment went from 93,722 (February 2002) to 91,174 (December 2002), a decline of less than 3 percent.¹²

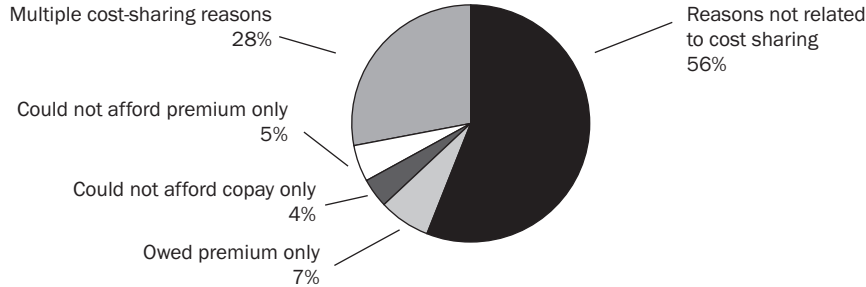
Survey results suggest that increased cost sharing was an important contributor to this large-scale exodus. Of those who reported leaving OHP ($n = 614$), 44 percent identified one of the cost-sharing reasons (inability to afford the new premiums or copays, or owing back premiums) as the main reason they left (Exhibit 2).

Increased cost sharing disproportionately affected the most economically vulnerable OHP members. Of leavers who reported “zero income,” 68.2 percent identified cost sharing as the major reason for leaving, compared with only 38.7 percent of those earning 26–100 percent of poverty and 23.9 percent of those whose income exceeded 100 percent of poverty ($p < .01$, two-tailed chi-square test).

For the vast majority of those who left, leaving OHP meant becoming uninsured: Very few found other insurance by the time of our survey. This was particularly true for those who left because of cost sharing: Only 18 percent of them had found other insurance by the time of the survey, compared with 40 percent of those who left for other reasons ($p < .001$, two-tailed chi-square test).

■ **Access to health care.** Those who left OHP because of cost sharing were far more likely than those who left for other reasons not to have received needed care in

EXHIBIT 2
Reasons For Leaving The Oregon Health Plan (OHP) Among Former OHP Standard Members, 2003



SOURCE: Authors' survey of current and former OHP members.
NOTE: N = 614.

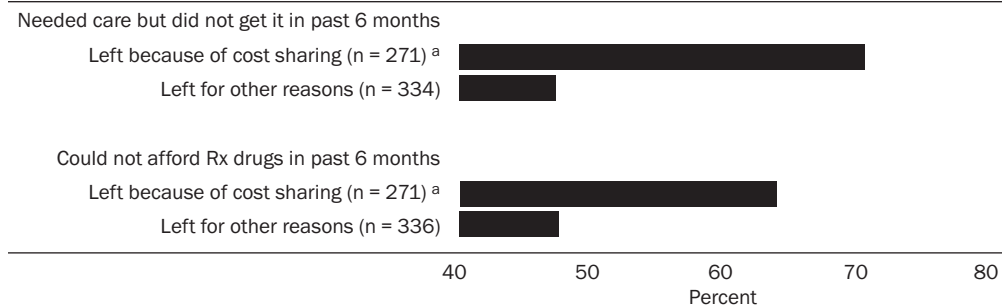
the previous six months (Exhibit 3). Similarly, those who left because of cost sharing were more likely to have skipped buying prescription medicines because of cost. When respondents were asked to identify why they did not get the care they needed, 81 percent of those who left OHP said that cost was the main factor.

Also, those who left because of cost sharing were significantly less likely than those who left for other reasons to have a usual source of care (Exhibit 4). They were also less likely to report having a private doctor's office as their usual source of care and three times more likely to report using the ED as their usual source of care.

■ **Use of health care services.** Those who left because of cost sharing were significantly less likely than those who left for other reasons to have had at least one primary care visit during the past six months and significantly more likely to have had at least one ED visit in those same six months (Exhibit 5).

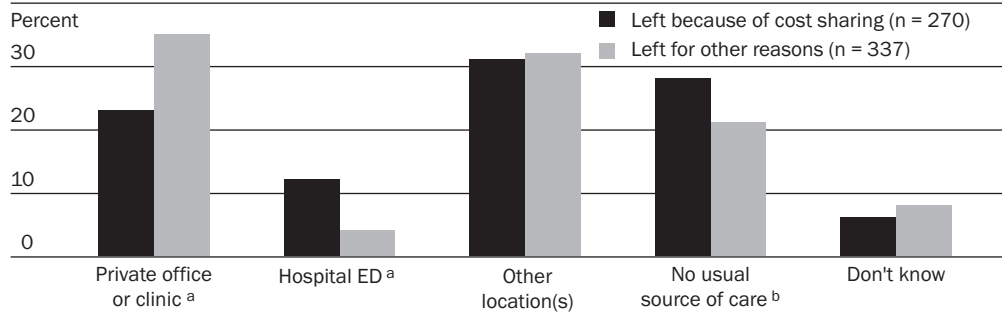
■ **Financial impacts.** Those who left OHP because of cost sharing were significantly more likely to owe \$500 or more in medical debt than those who left for other

EXHIBIT 3
Unmet Need For Care, By Reason For Leaving The Oregon Health Plan (OHP), 2003



SOURCE: Authors' survey of current and former OHP members.
^aSignificantly higher than among those who left for other reasons ($p < .001$, two-tailed chi-square test).

EXHIBIT 4
Usual Source Of Care, By Reason For Leaving The Oregon Health Plan (OHP), 2003



SOURCE: Authors' survey of current and former OHP members.

NOTE: ED is emergency department.

^a Those leaving because of cost sharing significantly different than those leaving for other reasons, ($p < .001$, two-tailed z-test).

^b Those leaving because of cost sharing significantly different than those leaving for other reasons, ($p = .01$, two-tailed z-test).

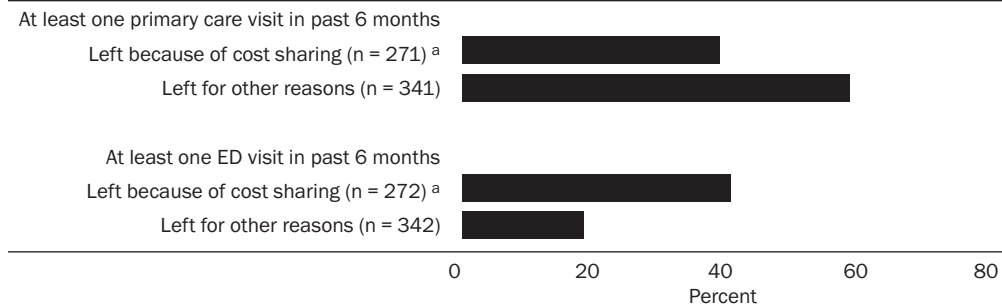
reasons (Exhibit 6). This increased debt burden may have negatively affected their access to care: Those who left for cost-sharing reasons were three times more likely than others to have been refused care in the past six months because they owed money to a provider.

Discussion And Policy Implications

How did increased cost sharing affect OHP members? To date we have only the first wave of an ongoing cohort study to answer that question, but early findings point to some disconcerting trends.

First, increased cost sharing acted as a key driver of plan leaving. Among OHP members for whom cost sharing increased, administrative data show a 46 percent drop in enrollment in the year after the changes were implemented. Our survey suggests that nearly half of that reduction was driven by cost sharing and that the very poorest Medicaid members, those with incomes from zero to 25 percent of

EXHIBIT 5
Use Of Health Care, By Reason For Leaving The Oregon Health Plan (OHP), 2003

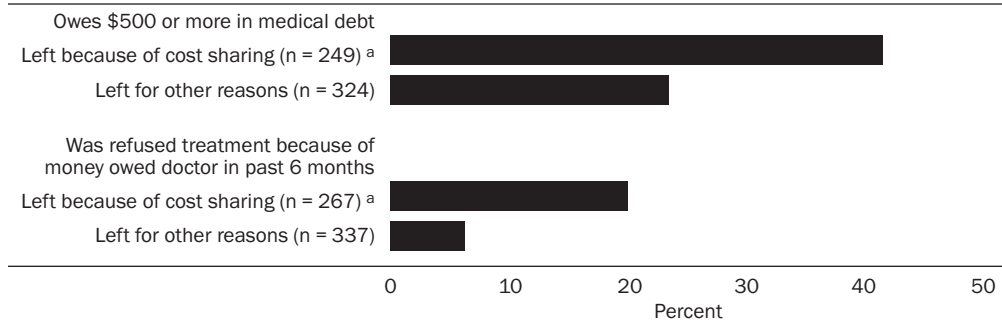


SOURCE: Authors' survey of current and former OHP members.

NOTE: ED is emergency department.

^aSignificantly higher than among those who left for other reasons ($p < .001$, two-tailed chi-square test).

EXHIBIT 6
Financial Impacts, By Reason For Leaving The Oregon Health Plan (OHP), 2003



SOURCE: Authors' survey of current and former OHP members.
^aSignificantly higher than among those who left for other reasons ($p < .001$, two-tailed chi-square test).

poverty, were the most likely to lose coverage because of cost sharing. This may indicate that one specific policy change—the elimination of the zero-income premium exemption—had a particularly telling impact on OHP enrollment.

The vast majority of those who left OHP because of cost sharing went on to become uninsured: 82 percent had not found other insurance by the time of our survey, six months after the program changes. Furthermore, it seems likely that the impact of cost sharing on insurance status cascaded into other outcomes as well. First, those who left OHP because of cost sharing had greater unmet need for care and were more likely not to buy prescription drugs because of cost than those who left for other reasons. Second, they were less likely to have a usual source of care and were more likely to use the ED as a usual source of care. Third, they had fewer primary care visits and more hospital ED visits over the six months after the policy changes were implemented. Finally, they had accumulated more medical debt and were more likely to have been refused care because of that debt.

■ Policy implications. The striking effects of increased cost sharing in Oregon highlight how important it is to deepen our understanding of the long-term impacts of Medicaid policy changes. It is certainly too early to conclude that this first wave of survey findings has captured the full impact of Oregon's Medicaid policy changes. Nonetheless, these early findings should give rise to a serious discussion about how to craft an effective Medicaid policy.

Oregon's policy change had profound, cascading impacts on access, utilization, and financial outcomes for those who were enrolled when the policy went into effect. Those who left because of the cost sharing were disproportionately very poor, with incomes ranging from zero to 25 percent of poverty. Although some proponents of cost sharing argue that even the very poor can pay a few dollars a month in premiums, our findings suggest otherwise. The very poor—those least likely to find other insurance—tended to experience reduced access, greater medical debt, and a shift in usage patterns away from primary care and toward the hospital ED

compared with those who left OHP for reasons unrelated to cost sharing. The social costs of such a shift in care patterns should be carefully considered, since they may well negate any potential savings associated with increasing the cost-sharing burden of Medicaid members.

The impacts observed here will play out over a longer period of time than the six months that had elapsed between the OHP policy changes and our first survey. We know that as a group, those who left OHP because of the policy changes had inferior outcomes than those who left for other reasons; however, we cannot yet track changes at a case level, observing how each person's access and usage patterns changed over time in response to their experiences. Since this is but the first wave of an ongoing cohort study, subsequent work will allow us to more fully address these important questions.

■ **Study limitations.** This study had several important limitations. First, it relied heavily on self-report, which can be subject to recall bias.¹³ To limit this bias, multiple items were used to examine issues such as access to care, all based on well-validated surveys. Additionally, a six-month recall period was used, rather than one year, to minimize recall bias.

Second, our panel recruitment rate was approximately 34 percent. Although this rate is comparable to the response rates of other studies of Medicaid populations, even those that employ telephone follow-up, nonresponse bias remains an important consideration.¹⁴ Although respondents who agreed to join the panel were demographically similar to nonrespondents, this study does face at least one additional potential source of nonresponse bias: Because panel recruitment and baseline surveying occurred six months after the initial program changes, it is possible that we disproportionately enrolled people who had experienced adverse outcomes, particularly coverage loss.

Enrollment records suggest that, in fact, the opposite occurred: Nonrespondents were more likely than respondents to have dropped off OHP. Just over half (54 percent) of those who joined our panel were still enrolled in OHP at the time of our survey according to administrative records, compared with only 40 percent of nonrespondents. There are several reasons this might happen, but one likely explanation is that those who had already left OHP did not feel as obligated to join the study or return the survey as those who were still part of the system.

This difference suggests the possibility that our panel's experience may differ from that of others who experienced the policy change. We do not believe that this difference negates the value of our findings—if anything, it is likely our panel understates the extent of the policy impact, since as a group it was insured more stably than those who failed to respond. Still, it is important to note such differences between respondents and nonrespondents and to exercise appropriate caution when generalizing results.

STATE LAWMAKERS ACROSS THE COUNTRY will increasingly look to competing approaches for restructuring their Medicaid programs.¹⁵ It is vital that decisionmakers enter this process with information about the impact of policy changes on vulnerable populations.

Early results from this prospective cohort study have already affected Oregon's decision-making process. Based on information about how cost-sharing mechanisms are affecting the lowest-income group, proposals to eliminate premiums for beneficiaries below 10 percent of poverty have been drafted for consideration during the state legislative session. Additionally, a recent lawsuit filed by OHP clients and their advocates resulted in the elimination of required copays for the OHP Standard population. However, budget difficulties forced OHP Standard to close new enrollment on 1 July 2004, and it is now estimated that by the end of 2005 there will only be funding for 24,000 people to remain in OHP Standard.

This study illustrates the sizable impacts that changes in Medicaid policy can have on individual lives. Oregon implemented higher cost sharing in an attempt to improve OHP's financial solvency. However, faced with even modest cost-sharing increases, thousands of people were no longer able to afford coverage at all. Those who left were disproportionately very poor, while those with slightly more income were more often able to absorb the increase and stay in the plan. Because of this, many who need Medicaid most cannot participate, while those with slightly more resources can find a way to participate in the system.

For a person affected by this policy change, losing health insurance could have led to their going without needed health care in an urgent situation, not filling costly prescriptions, losing access to a primary care physician's office, and facing the ED as the only option for care. But impacts travel beyond the individual level: The state's health care system quickly found itself faced with a new population of uninsured poor people, with reduced access to primary care and increased ED use. These findings call for continued vigilance in the study of interactions between Medicaid program changes, insurance status, and access to or use of health care services.

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This study was financially supported by the Robert Wood Johnson Foundation's State Coverage Initiatives in Health Care Reform, Grant no. 0403017, and the Oregon Office of Medical Assistance Programs. The Commonwealth Fund has provided funding for collection of a second wave of data. The authors also gratefully acknowledge the Oregon Health Research and Evaluation Collaborative, the Office for Oregon Health Policy and Research, and the Oregon Office for Medical Assistance Programs. This project would not have been possible without the efforts of Lisa Krois, Jessica Miller, Heidi Allen, and Janne Boone.

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