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Impact of Changes to Premiums, Cost-Sharing, and Benefits on Adult Medicaid Beneficiaries: Results from an Ongoing Study of the Oregon Health Plan

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**IMPACT OF CHANGES TO PREMIUMS, COST-SHARING,
AND BENEFITS ON ADULT MEDICAID BENEFICIARIES:
RESULTS FROM AN ONGOING STUDY OF
THE OREGON HEALTH PLAN**

Bill J. Wright, Matthew J. Carlson, Jeanene Smith, and Tina Edlund

July 2005

ABSTRACT: In 2003, Oregon implemented changes to its Medicaid program to cope with budget shortfalls. In addition to reducing benefits, increasing premiums, and implementing copays for a substantial portion of enrollees, the Oregon Health Plan (OHP) also eliminated premium exemptions and instituted a six-month lockout for individuals missing premium payments. In 2004, OHP rolled back some of these policies. An ongoing study of the impact of OHP's program changes finds that, after the initial cost-sharing increases and benefit reductions, nearly two-thirds of individuals surveyed had lost their coverage, many directly resulting from increased costs. Those who left because of premiums and cost-sharing reported worse access to care, less primary care utilization, and greater financial hardships than those who remained enrolled or left OHP for other reasons. Many also reported a decline in health status. Analysis suggests that these negative impacts may be reduced considerably if coverage is restored within three to six months.

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EXECUTIVE SUMMARY

Serious budget problems have recently forced all 50 states to implement cost-containment strategies in Medicaid and other public insurance programs. In early 2003, the Oregon Health Plan (OHP) implemented cost-saving strategies of its own. OHP increased premiums, reduced benefits, and implemented copays for a substantial portion of its members. OHP also eliminated premium exemptions and instituted a six-month lockout policy for those who missed premium payments. In 2004, OHP rolled back some of these changes, eliminating copays and reintroducing some benefits.

To help understand the impact of Oregon's policy redesign on Medicaid beneficiaries, the Oregon Health Research and Evaluation Collaborative (OHREC), a unique public-private partnership of health care researchers, launched a longitudinal cohort study in March 2003. This ongoing study follows a representative sample of individuals who were enrolled in OHP when the initial wave of changes occurred. The study's objectives are to assess the short- and long-term effects of changes to premiums, cost-sharing and benefit structures in five key areas: beneficiaries' health care coverage, access to care, utilization of services, financial well-being, and overall health status.

The study findings so far suggest that even small changes to premiums, cost-sharing, or benefit structures can have a dramatic effect on enrollment. After the initial cost-sharing increases and benefit reductions, nearly two-thirds of individuals surveyed had lost their coverage, many as a direct result of the increased premiums and cost-sharing. Those who left the program because of the premium and cost-sharing policies reported worse access to care, less primary care utilization, more emergency department utilization, and greater financial hardships than those who remained enrolled or left OHP for other reasons.

Among those who left OHP and did not find other insurance, overall health status declined over the course of the study. The unemployed and those with very low incomes were hardest hit. All of these effects were evident 18 months after the initial policy changes.

Analysis of gaps in coverage for those who left OHP suggest that the most severe impacts associated with loss of coverage may be reduced considerably if coverage is restored, or new coverage can be found, within three to six months.

As other states and the federal government move to increase premiums or cost-sharing as a means of controlling Medicaid expenditures, they will need to consider the

impact those changes might have on such critical areas as health care coverage, access to care, utilization of care, and individuals' financial well-being.

Table ES-1. Percentage Who Left OHP Due to Increased Premiums and Cost-Sharing or Other Program Changes
(Includes those who left at some point during study period)

Reason for Leaving OHP Standard	Percentage Choosing Reason (multiple responses allowed)
Could not afford the premiums <i>New policy: increased premiums, no premium exemptions</i>	23%
Owed back premiums <i>New policy: six-month lockout for nonpayment of premiums</i>	22%
Could not afford the copayments <i>New policy: copayments introduced for most services</i>	20%
Loss of a benefit <i>New policy: mental health, chemical dependency, durable medical equipment, vision, dental cut</i>	7%
Percentage who chose at least one of the above reasons	53%

Source: Oregon Health Research and Evaluation Collaborative/2003 and 2004 Oregon Health Care Cohort Surveys.

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BACKGROUND

Serious budget problems have recently forced all 50 states to implement cost-containment strategies in their public insurance programs. By fiscal year 2004, 19 states had reduced benefits, including vision, dental, and mental health; 21 states had raised premiums or restricted eligibility with more stringent administrative rules; and 20 states had expanded or added new copayments.¹ In early 2003, the Oregon Health Plan implemented cost-containment strategies of its own.

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 waiver created the Oregon Health Plan (OHP), which was designed to expand coverage to families and childless adults up to 100 percent of the federal poverty level (FPL) while controlling costs with a managed care delivery system and a prioritized list of services. Enrollment began in 1994. In the first year, 120,000 new members qualified under the expanded eligibility rules.² Oregon's uninsurance rate fell from 18 percent to 10 percent between 1994 and 1998.³

Budget shortfalls prompted lawmakers to overhaul OHP in hopes of maintaining or even expanding eligibility in the face of a severe state financial crisis, and in February of 2003 Oregon launched OHP2. The new plan called for splitting OHP into two distinct benefit packages: OHP Plus and OHP Standard. OHP Plus was designed to serve the categorically eligible Medicaid population, including children, pregnant women, and parents who receive Temporary Assistance for Needy Families (TANF), as well as elderly and disabled individuals. Other than the implementation of \$3 copayments for some services, benefit reductions and cost-sharing changes were not implemented in the OHP Plus program.

Those qualifying under the "expanded eligibility" of Oregon's Section 1115 waiver were moved into the new OHP Standard program. OHP Standard covers poor adults who are not receiving TANF or general assistance and pairs a slimmer benefit package with increased premiums and cost-sharing requirements. Specifically, the changes included:

- A premium increase for couples, with the new premiums ranging from \$12 to \$40 per couple per month depending on income. Premiums for single persons remained largely unchanged.
- The elimination of premium exemptions for the homeless, those with zero income, or those who had experienced crime, domestic violence, natural disasters, or a death in the family.
- More stringent administrative rules that mandated a six-month lockout for missing a premium payment.
- The introduction of wide-ranging copayments for services and medications. Copayments under OHP2 ranged from \$5 for an outpatient physician visit to \$50 for an emergency department (ED) visit and \$250 for an inpatient hospital admission. Previously, there had been only nominal copayments, and these had applied only to a limited range of prescription drugs and services.
- Benefit reductions, including the elimination of coverage for outpatient mental health and substance abuse services, durable medical equipment, dental, and vision.

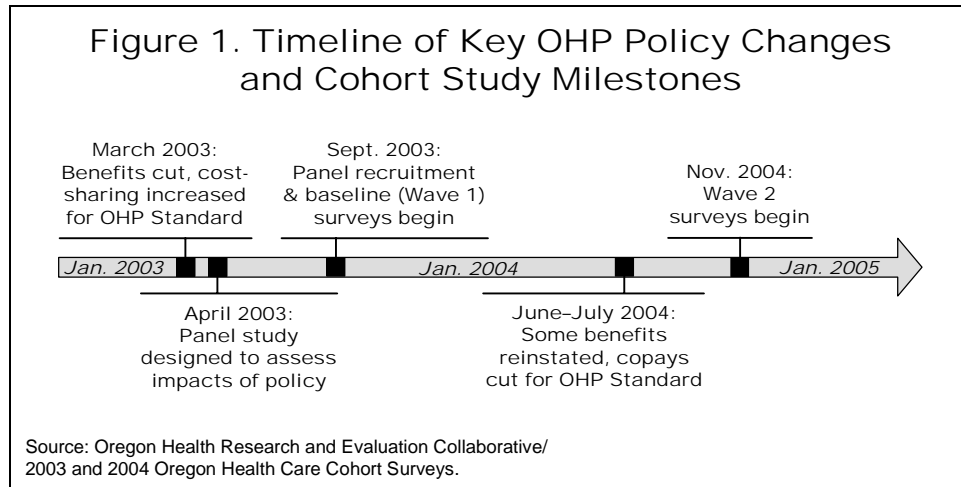
These changes remained in effect until mid-2004, when they were partially rolled back as a result of two actions. First, the Oregon Legislature, drawing upon a new funding resource from a provider tax, reinstated mental health and chemical dependency benefits. Second, following litigation, Oregon also eliminated copayments for the OHP Standard population.⁴

The OHP Cohort Study

This analysis presents results from an ongoing longitudinal cohort study launched in March 2003⁵ to assess the impact of changes to premiums, benefits, and cost-sharing arrangements in Medicaid programs. A total of 2,783 individuals from the OHP Plus and OHP Standard programs were recruited for the study. To be recruited, a person must have been enrolled in OHP for at least one month before the initial program redesign took effect in early 2003; thus, the cohort represents a population who experienced the shift to higher premiums and cost-sharing and benefit reductions.

The study design called for each cohort member to be surveyed upon recruitment (approximately six months after implementation of the new rules) and again every 12 months for the next two years. To date, two of the three planned survey waves have been completed. The first survey occurred approximately six months after the initial program changes, while the second occurred approximately five months after the second set of

program changes in June of 2004 (Figure 1). Full data (complete responses to both surveys) are available for a total of 2,004 of the original 2,783 cohort members (72%). The analyses presented here describe the experiences of those who responded to both the baseline and follow-up surveys: 991 OHP Standard cohort members and 1,012 OHP Plus cohort members. [See Appendix A on page 18](#) for a complete description of the survey methodology.

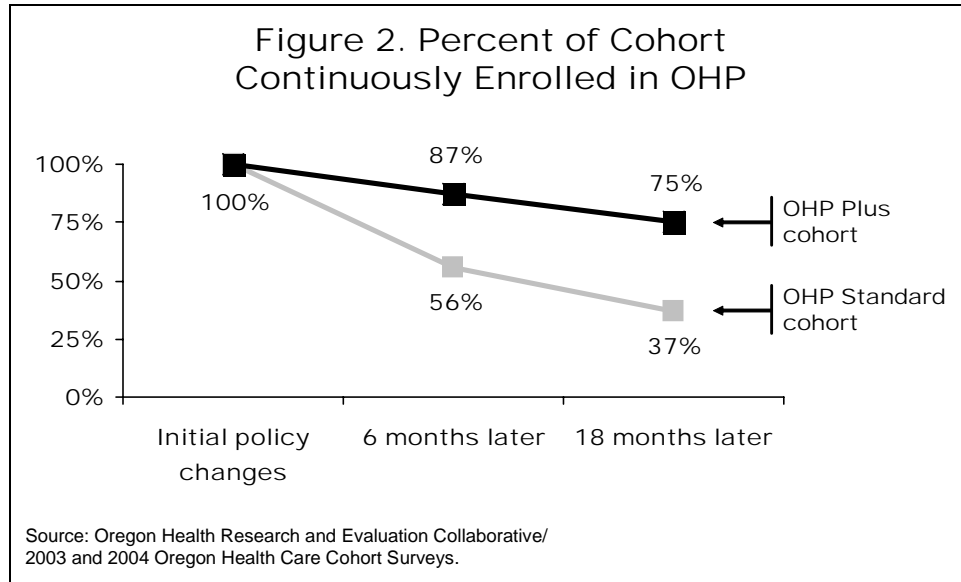


Because the study recruited a set of individuals who were enrolled at the time of the 2003 changes and followed them through the second set of program changes in 2004, it is well positioned to assess the impacts of each policy change. Although the full study includes OHP Plus and OHP Standard members, this analysis is meant primarily as a description of what happened to OHP Standard members after they experienced a Medicaid program redesign similar to those being implemented or considered in many other states. The study describes four major outcomes: health care coverage, access to care, utilization of services, and financial well-being.

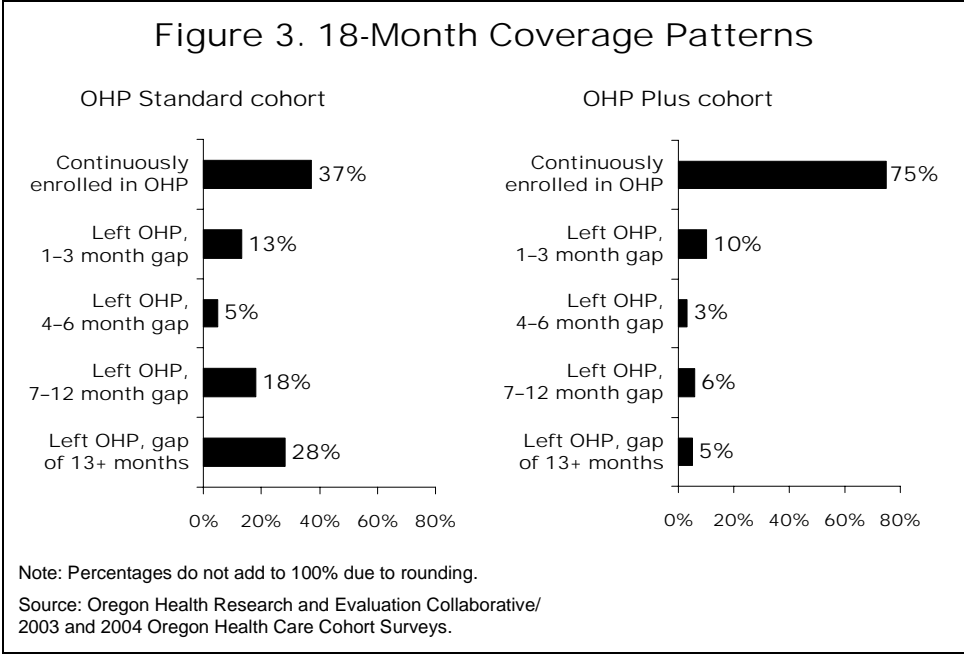
IMPACT ON HEALTH CARE COVERAGE

The months after the initial program changes were marked by a large decline in enrollment for OHP Standard. Just over half (56%) of cohort members who started out on OHP Standard remained continuously enrolled until the first survey six months later, compared with 87 percent of the OHP Plus cohort. This result is consistent with state administrative data, which show a 46 percent drop in overall OHP Standard enrollment, from 88,874 to 47,957 covered lives, between March and December of 2003. By comparison, OHP Standard enrollment fell less than 3 percent between March and December of 2002.⁶

The decline in OHP Standard enrollment continued after the first survey, though at a slower pace. In the 12 months between the first and second surveys, another 19 percent of OHP Standard cohort members left OHP, compared with another 12 percent among the OHP Plus cohort (Figure 2).



OHP Standard cohort members were not only more likely to leave OHP; they were also *less* likely to find other insurance coverage after they left. Nearly a third (28%) of OHP Standard cohort members were without health insurance coverage for more than 12 months of the 18-month study period, compared with 5 percent among OHP Plus cohort members (Figure 3). Additionally, OHP Standard cohort members were far more likely to be uninsured at the second survey (31%) than members of the OHP Plus cohort (9%).



To better understand these phenomena and the role program changes played in establishing them, all respondents who left OHP during the study were asked *why* they left. Responses were collapsed into two categories: reasons related to the program redesign, which included not being able to afford the new premiums or copays, owing back premiums, or leaving because a benefit was lost; and other reasons, including income increasing over the eligibility limit, finding other insurance, or paperwork problems.

Overall, 53 percent of those who left OHP Standard identified one or more reasons related to the program redesign when asked why they had lost coverage. Premium and cost-sharing reasons were much more important than benefit cuts as a reason for leaving OHP, suggesting that “affordability” was the key driver of coverage loss rather than the declining value of OHP’s benefit package (Table 1).

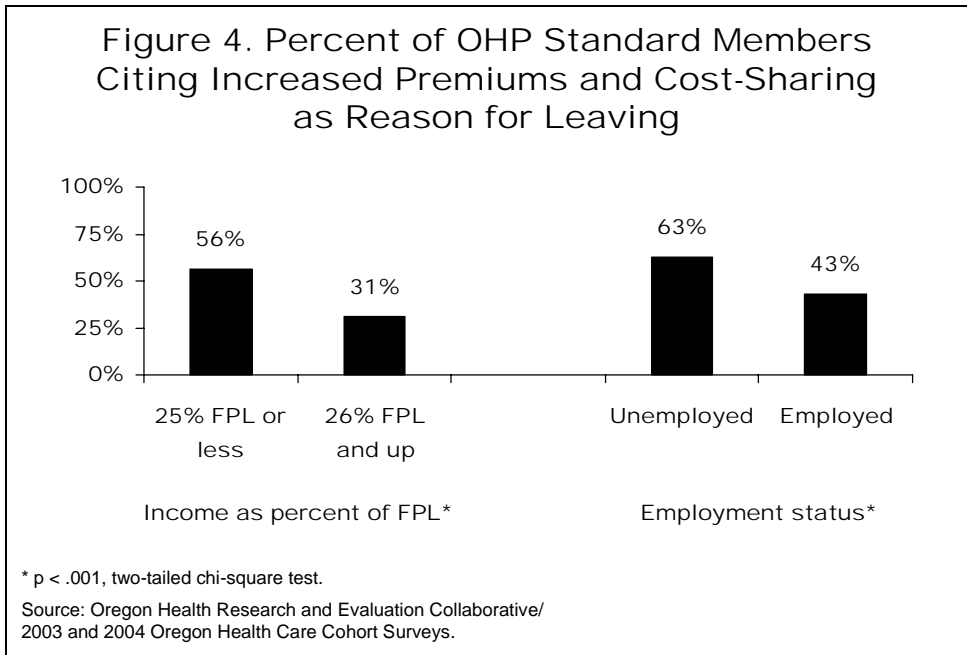
Table 1. Percentage Who Left OHP Due to Increased Premiums and Cost-Sharing or Other Program Changes
(Includes those who left at some point during study period)

Reason for Leaving OHP Standard	Percentage Choosing Reason (multiple responses allowed)
Could not afford the premiums <i>New policy: increased premiums, no premium exemptions</i>	23%
Owed back premiums <i>New policy: six-month lockout for nonpayment of premiums</i>	22%
Could not afford the copayments <i>New policy: copayments introduced for most services</i>	20%
Loss of a benefit <i>New policy: mental health, chemical dependency, durable medical equipment, vision, dental cut</i>	7%
Percentage who chose at least one of the above reasons	53%

Source: Oregon Health Research and Evaluation Collaborative/2003 and 2004 Oregon Health Care Cohort Surveys.

Results suggest that the *combination* of higher premiums and cost-sharing increases was more important than any single policy change. Although 53 percent of those who left OHP chose at least one reason related to policy changes, most selected more than one: 21 percent selected one “program redesign” reason, 15 percent selected two, 13 percent selected three, and 4 percent selected all four elements of the program redesign as the reason they left OHP.

Higher premiums and cost-sharing were particularly critical as a reason for leaving among the most economically vulnerable OHP members. Among those who left OHP, the unemployed and those with extremely low incomes were far more likely to have done so for reasons related to increased premiums and cost-sharing than their counterparts (Figure 4). This may reflect a combined effect of three specific policy changes: the increased premiums, the elimination of a zero-income exemption from premiums, and the institution of a six-month lockout for not paying premiums. Taken together, these three policy changes seem to have contributed to widespread loss of coverage among those with the fewest financial resources.

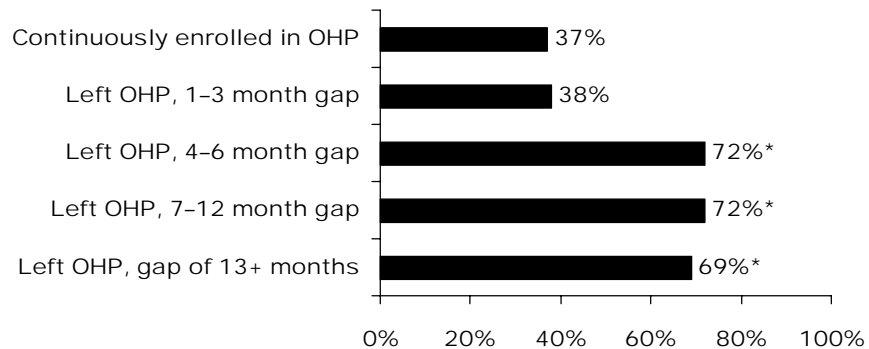


These results suggest that increasing premiums and cost-sharing and reducing benefits had a dramatic impact on the enrollment and coverage status of OHP Standard members. Those who experienced the program redesign were more likely to leave OHP, and less likely to find other coverage quickly, than those who did not. They were also significantly more likely to be uninsured at the time of the most recent survey.

IMPACT ON ACCESS TO CARE

This study used “unmet need” as its principle measure of access, defined as “needing health care but being unable to get it at some point in the past six months.” OHP Standard cohort members who left OHP experienced significantly higher unmet need than those who remained continuously enrolled, if they experienced a coverage gap of more than three months (Figure 5).

Figure 5. OHP Standard Members Reporting Unmet Need, by Coverage Pattern

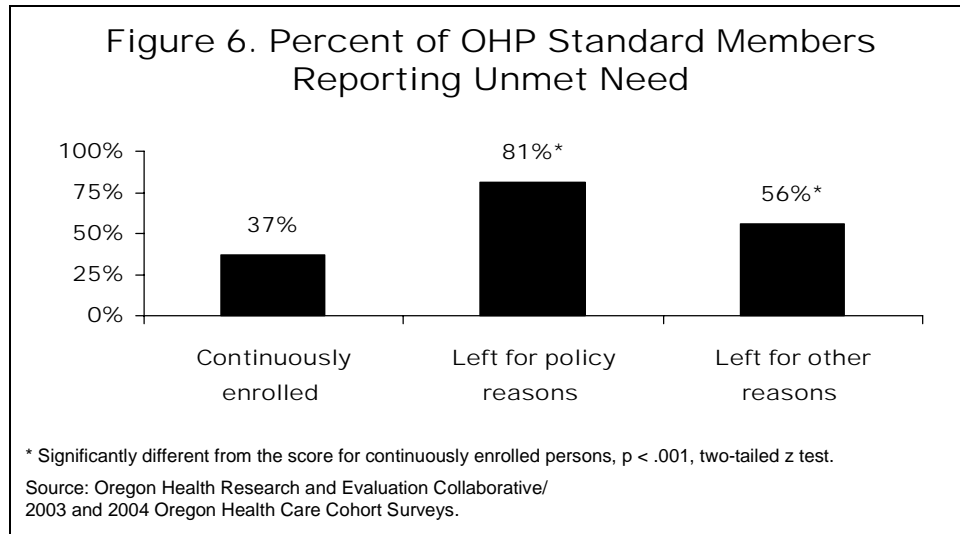


* Significantly different from the score for continuously enrolled persons, $p < .001$, two-tailed z test.

Source: Oregon Health Research and Evaluation Collaborative/
2003 and 2004 Oregon Health Care Cohort Surveys.

These results provide compelling evidence of the importance of insurance continuity in maintaining access to care. Short periods without insurance (three months or less) were not associated with increased unmet need, but coverage gaps of four months or more were. Moreover, unmet need was just as high among those who experienced a four-to-six-month coverage gap as it was for those with a much longer gap, suggesting that the negative impact of coverage loss on access to care occurs relatively early.

Nearly two-thirds (63%) of OHP Standard cohort members left OHP during the study, and nearly half (53%) of those reported that premiums, cost-sharing, or benefit loss was the reason. Among those who left because of the policy changes, access to care was significantly worse than it was for those who remained with OHP or left for reasons unrelated to the policy changes (Figure 6). This may again suggest that those who left because of the policy changes were a particularly vulnerable group of people.



To help assess the specific impact of policy changes on access to care, respondents who experienced unmet need were asked *why* they had not been able to get care. Among those who remained continuously enrolled in OHP, 65 percent of those with unmet need identified cost as the reason. Among those who left OHP, 89 percent of those with unmet need reported cost as the reason.

Eliminating Copays and Restoring Some Benefits. To assess the impact of reintroducing some benefits and eliminating copays on access to care, unmet need among those who remained continuously enrolled in OHP Standard was measured at two points in time: six months before these rollbacks (first survey) and five to six months after (second survey). Overall levels of unmet need fell between the first and second surveys, as did the percentage that identified cost as a reason for unmet need (Table 2).

Table 2. Unmet Need Among Continuously Enrolled OHP Standard Members

	First Survey (before copays eliminated)	Second Survey (after copays eliminated)
Percent who experienced unmet need	28%	19%*
Of those with unmet need, percent identifying cost as the reason	55%	32%*

* Significantly different than the wave one score, $p = .001$, two-tailed z-test of proportions.

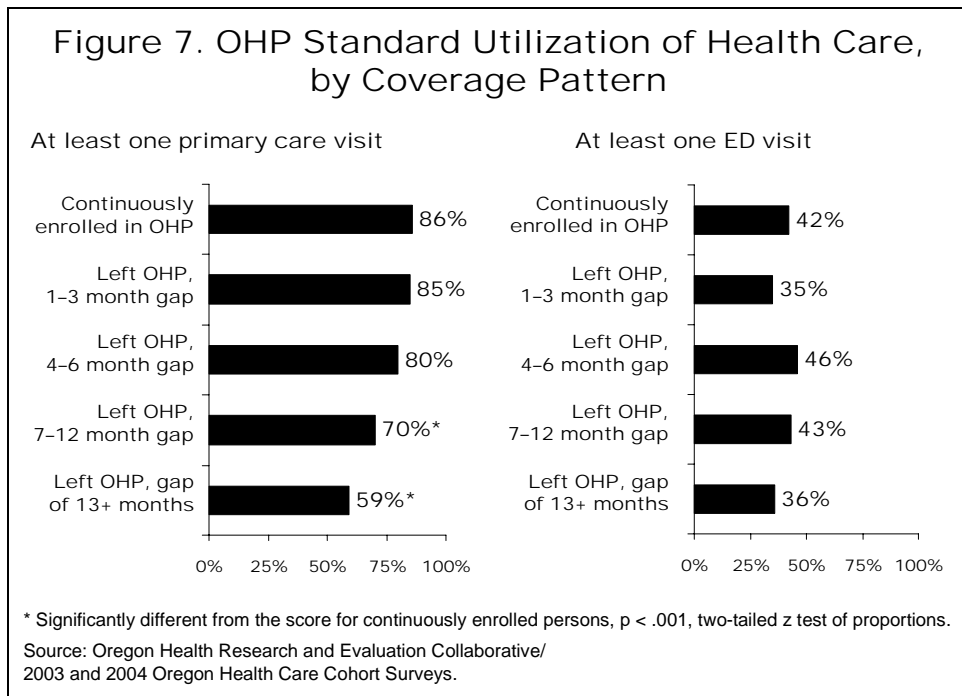
Source: Oregon Health Research and Evaluation Collaborative/2003 and 2004 Oregon Health Care Cohort Surveys.

These results suggest that the second wave of policy changes (eliminating copays and reintroducing some benefits) may have helped improve access to care. Of course, this

was only true for those who were still members of OHP when the copays were eliminated and benefits reintroduced.

IMPACT ON UTILIZATION OF HEALTH CARE SERVICES

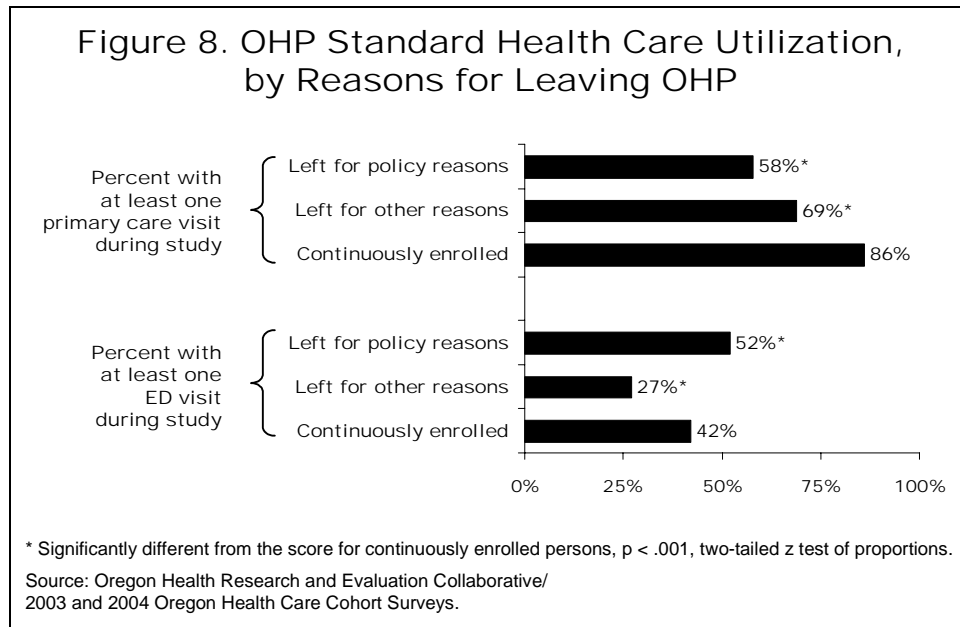
The analysis of health care utilization took into account primary care visits and emergency department (ED) visits. Over the 18-month study period, 86 percent of the OHP Standard cohort members who were continuously enrolled had at least one primary care visit, but primary care utilization began to erode with coverage gaps of seven or more months. Hospital ED utilization, on the other hand, did not vary by coverage pattern (Figure 7).



Results again speak to the importance of insurance continuity and the length of coverage gaps, at least for primary care. Gaps of less than six months were not associated with reduced primary care utilization, but gaps of over six months were. Because the surveys asked about primary care visits “in the last six months,” those experiencing coverage gaps of six months or less may have been insured for part of the referent time period, and it is possible this explains why there is such a clear drop-off after gaps of six months or more.

While loss of coverage itself was not associated with higher ED utilization, *policy-related* loss of coverage was. When the reason an individual left OHP is taken into

consideration, it becomes clear that those who left due to the policy changes were significantly more likely to have used the hospital ED at least once during the study than those who left for other reasons (Figure 8). This again may suggest that those who left due to the policy changes represented a particularly vulnerable group of OHP members whose circumstances make ED use more likely.

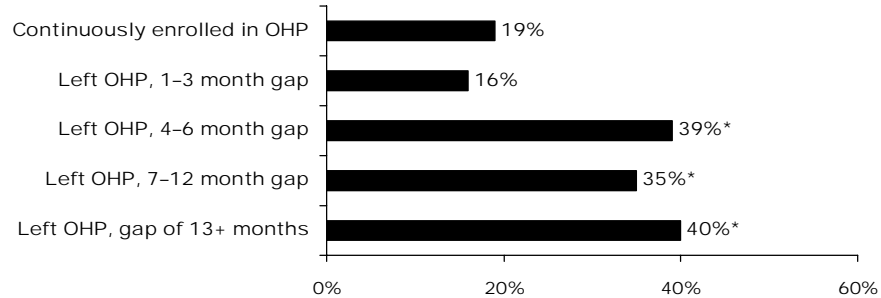


Eliminating Copays and Restoring Some Benefits. To assess the impact of the second wave of policy changes on utilization of care, primary care and ED utilization among those who remained continuously enrolled in OHP Standard were measured six months before elimination of copays and the reintroduction of some benefits (first survey) and six months after (second survey). Primary care utilization did not significantly change between the surveys (83 percent reported at least one visit on the second survey, 84 percent on the first). Nor were there statistically significant changes in ED utilization between the first and second surveys. Overall, there is no clear evidence to support the idea that rolling back copays and adding back benefits had an immediate impact on utilization of either ambulatory or acute care.

IMPACT ON PERSONAL FINANCES

By the time of the second survey, 18 months after the initial policy changes, many of those who left OHP Standard had accumulated significant medical debt. OHP Standard cohort members who remained continuously enrolled in OHP fared better than those who left: they were significantly less likely to owe \$500 or more in medical bills to a doctor or creditor (Figure 9).

Figure 9. Percent of OHP Standard Members Owing \$500 or More in Medical Bills, by Coverage Pattern



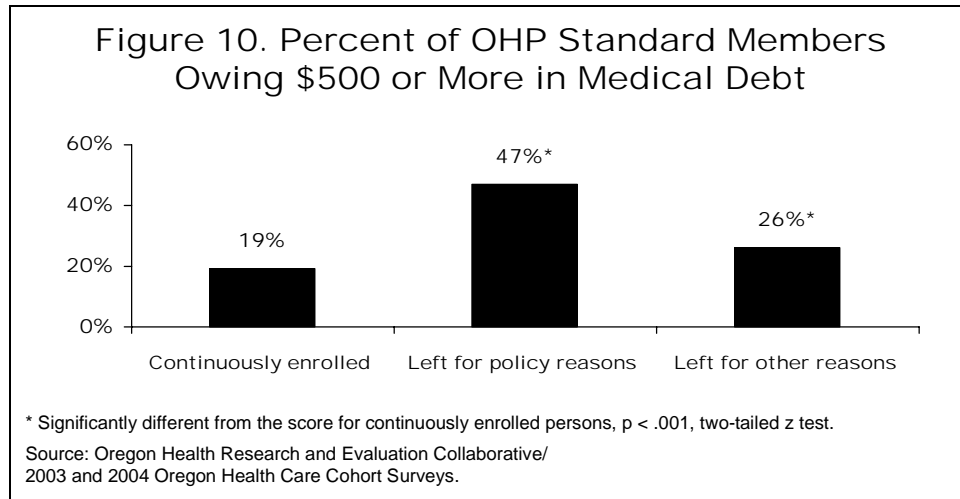
* Significantly different from the score for continuously enrolled persons, $p < .001$, two-tailed z test of proportions.

Source: Oregon Health Research and Evaluation Collaborative/ 2003 and 2004 Oregon Health Care Cohort Surveys.

Results suggest that short periods without insurance (three months or less) are not associated with greater levels of medical debt, while coverage gaps of over three months are. As with access to care, the negative impact of coverage loss on medical debt levels seems to occur relatively early after the coverage is lost.

To better assess the role insurance coverage plays in mitigating medical debt, respondents were asked whether they were insured at the time they received the care that caused their debt. Overall, 67 percent of those who owed \$500 or more in medical bills were uninsured when they received some or all of the care that created their medical debt, while 33 percent accumulated that level of debt for care they received while insured. Predictably, members with longer gaps were far more likely to have been uninsured at the time they received the care that created their debt.

Those who left OHP because of the policy changes had significantly more medical debt by the second survey than those who remained enrolled or left for other reasons (Figure 10).



Eliminating Copays and Restoring Some Benefits. To assess the impact of the second wave of policy changes on cohort members’ finances, a variety of financial impact measures were collected, both before and after the second round of changes that eliminated copays and reintroduced some benefits. While overall levels of medical debt did not change between the first and second surveys among those who remained in OHP, there is evidence that the changes made in June 2004 may have alleviated some of the other difficult financial choices faced by cohort members (Table 3). Of course, these changes only benefited those who were still members of OHP when they took effect.

Table 3. Financial Impacts Among Continuously Enrolled OHP Standard Members

	First Survey Period	Second Survey Period
Had to borrow money from family or friends to pay medical costs in past six months	30%	23%*
Had to cut back on food to pay for medical costs in last six months	35%	26%*
Had to underpay or miss payments on other bills due to medical costs in past six months	34%	27%*
Had to pay more than \$100 in out-of-pocket medical expenses in past six months	43%	34%*

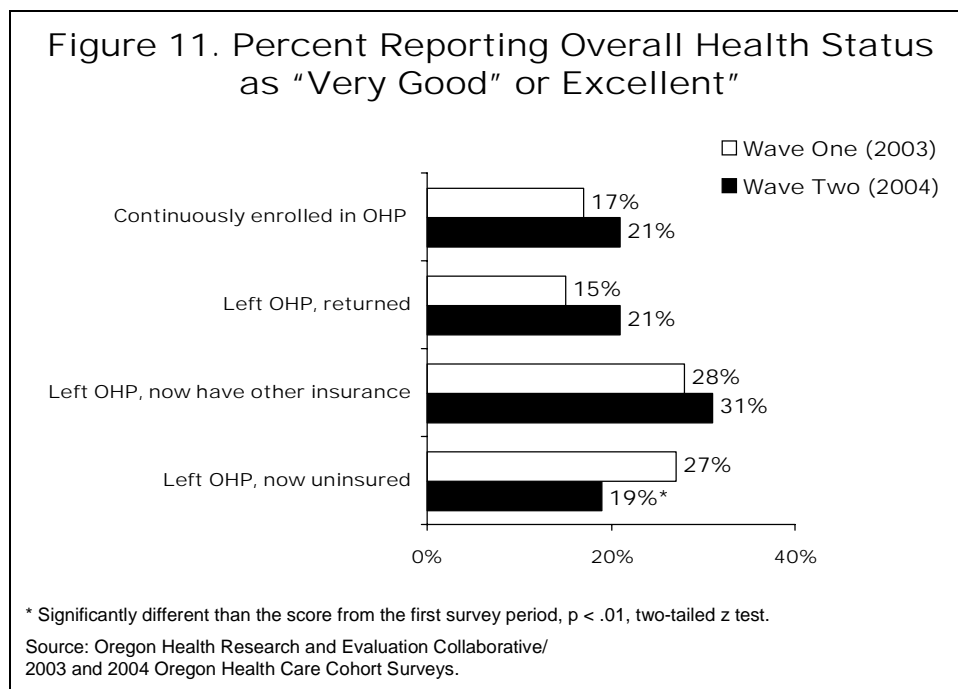
* Significantly different than score from first survey period, $p < .01$, two-tailed z-test.

Source: Oregon Health Research and Evaluation Collaborative/2003 and 2004 Oregon Health Care Cohort Surveys.

IMPACT ON HEALTH

Cohort members were asked to rate their overall health on a five-point scale ranging from “excellent” to “poor” on each survey. Insurance status was a key factor in overall health: members who were not insured at the time of the second survey experienced a

considerable decline in their overall health status across the 18 study months, while those who remained with OHP, or left but found other insurance, saw no decline (Figure 11).



Over two-thirds (68%) of those who were uninsured at the time of the second survey had experienced coverage gaps of more than 12 months during the 18-month study, suggesting that "time uninsured" may play a critical role in driving overall health declines. Indeed, among those who were uninsured at the time of the second survey, declines in overall health were statistically significant only if they had experienced coverage gaps in excess of six months during the 18-month study period (Table 4).

Table 4. Percent Reporting Overall Health Status as "Very Good" or "Excellent"
 (includes all those who were uninsured at time of second survey)

	First Survey: Percent "Very Good" or "Excellent"	Second Survey: Percent "Very Good" or "Excellent"
Total coverage gap of less than 7 months	23%	17%
Total coverage gap of 7–12 months	37%	20%*
Total coverage gap of 13–18 months	27%	18%*

* Significantly different than score from first survey period, $p < .01$, two-tailed z-test.

Source: Oregon Health Research and Evaluation Collaborative/2003 and 2004 Oregon Health Care Cohort Surveys.

DISCUSSION

Cutting benefits and increasing premiums and cost-sharing dramatically affected enrollment in the OHP Standard program. By the end of the 18-month study period, nearly two-thirds of OHP Standard cohort members had lost their OHP coverage, with more than half identifying one of the policy changes as the main reason. Nearly three-quarters of those who left were subsequently uninsured for more than six months out of the 18 months covered by the study, and nearly a third of all OHP Standard cohort members were uninsured at the time of the most recent survey.

These effects on insurance coverage cascaded into other areas, including access, utilization, medical debt levels, and health status. Those who left OHP Standard reported greater unmet need, less primary care utilization, and more significant financial hardships than those who remained enrolled continuously. ED utilization was also significantly higher among those who left OHP because of the program changes. Among those who were still uninsured at the time of the second survey, overall health status declined between the first and second surveys.

Policy changes related to increased premiums and cost-sharing were considerably more important than benefit reductions as a driver of coverage loss. The combination of increased premiums and cost-sharing, the elimination of zero-income exemptions, and the six-month lockout for nonpayment of premiums was particularly felt among the most needy OHP members: those currently unemployed, and those with incomes of 0 to 25 percent of the federal poverty level. The majority of those who were unemployed or had very low incomes at the time they left OHP reported at least one of the policy changes as the principle reason for losing coverage. The end result of increased premiums and cost-sharing paired with these stringent administrative rules may have been to reverse one of the policy goals of an expanded Medicaid program: instead of the least needy members being transitioned into private insurance, the most needy were more likely to leave the system.

These data suggest several things about Medicaid premium and cost-sharing policies. First, even modest increases in premiums and cost-sharing may cause many to leave public coverage, especially those with the fewest financial resources. Because the most economically vulnerable individuals will disproportionately be the ones who leave, increasing premiums and cost-sharing risks creating a highly unstable, newly uninsured population with significant dependence on safety net providers and charity care in hospital EDs. Indeed, those who left because of higher premiums and cost-sharing in Oregon were

significantly more likely to have used a hospital emergency room than those who remained with OHP or left for reasons unrelated to the policy changes.

Second, for those who do leave, *how long* they remain uninsured is critical: negative access, utilization, and financial outcomes are minimal with very short coverage gaps, but all begin to appear with coverage gaps of 3–6 months. Results suggest that access to care begins to erode, and medical debt levels to rise, after three months of uninsurance, while utilization of primary care starts to decline after six months without insurance. Coverage gaps of more than six months were also associated with declines in overall health for those who did not find other insurance. Given how quickly these impacts begin to take shape after coverage loss, there may be a need to reexamine the use of a six-month lockout period like the one Oregon uses. If lockout periods are to be used, a much shorter lockout period may help to encourage payment of premiums without creating unmet need for care and damaging the financial situation of beneficiaries.

These findings carry clear implications for other states and the federal government to consider as they look toward increasing cost-sharing as a means of controlling Medicaid costs. The original Oregon Health Plan expanded coverage beyond traditional Medicaid eligibility, and it was hoped that savings from raising premiums cost-sharing and restructuring benefits in OHP2 could be used to secure the financial solvency of the system and even expand coverage further. Severe budget cuts thwarted this goal, however, and the program redesign ultimately led to a dramatic, though unintended, set of consequences for enrolled individuals. The elimination of copays and reintroduction of some benefits a little over a year later did help moderate some impacts of the initial redesign, but only for people who were enrolled in OHP when the rollbacks occurred.

Attempts to redesign Medicaid systems must take into account the likely effects of redesign on individuals and systems. For many individuals enrolled in Oregon's Medicaid program, the 2003 policy changes resulted in lost coverage, going without needed health care, and the accumulation of medical debt. But individual effects cascade into larger systems. As a state, Oregon quickly found itself facing a population of newly uninsured poor people with reduced access to primary care, higher rates of ED use, declining health, and greater levels of medical debt. As policymakers nationwide consider premium and cost-sharing increases as a strategy for ensuring Medicaid solvency, Oregon's experience may hold important lessons on the potential impacts of such an approach.

NOTES

¹ Smith V, Ramesh R, Gifford K, Ellis E, Rudowitz R, O'Malley M, "The Continuing Medicaid Budget Challenge: State Medicaid Spending Growth and Cost Containment in Fiscal Years 2003 And 2004. Results from a 50-State Survey." Washington, DC: Kaiser Commission on Medicaid and the Uninsured, 2004.

² Conviser R, "A Brief History of the Oregon Health Plan and its Features," Salem, OR: Office of Oregon Health Policy and Research, 1995.

³ Oregon Office of Health Policy and Research, "HRSA State Planning Grant Final Report." Salem, OR: Office for Oregon Health Policy and Research, 2001.

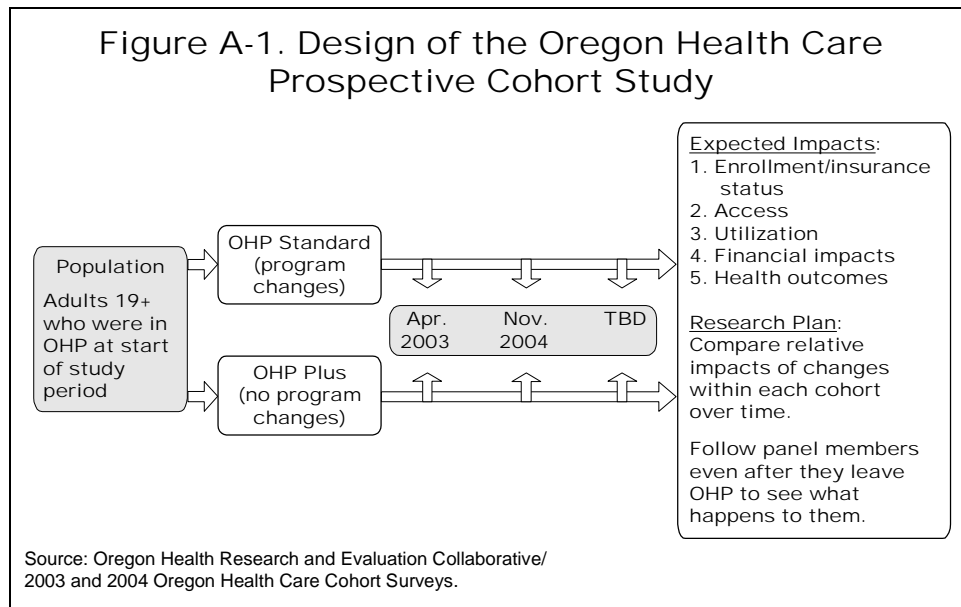
⁴ In early 2003, the Oregon Law Center legally challenged the OHP Standard premium and copayment policies authorized by the Centers for Medicare and Medicaid Services (CMS). The litigation (*Spry v. Thompson*) found that OHP Standard copayments violated federal law and therefore they were eliminated, effective June 19, 2004, according to court order. While the decision did not affect premium policies, copayments could no longer be used as a cost-sharing mechanism in OHP Standard.

⁵ The planning and initial wave of surveys for this study were supported by the Robert Wood Johnson State Coverage Initiative, through the Office of Oregon Health Policy Research.

⁶ Oregon Department of Human Services, "OHP Eligibility Report, Month ending December 2002." Salem, OR: Department of Human Services, 2003; Carlson MJ, Wright B. "The Impact of Program Changes on Enrollment, Access, and Utilization in the Oregon Health Plan Standard Population." Prepared for Oregon Office of Health Policy and Research, Salem, OR. 2005. Available at: <http://egov.oregon.gov/DAS/OHPPR/RSCH/docs/OHREC.cohortflwup.03.05.rpt.pdf> (accessed 3/17/05).

APPENDIX A. STUDY METHODOLOGY

The Oregon Health Care Prospective Cohort Study is following a cohort of adults, ages 19 and older, who were enrolled in OHP for at least 30 days prior to and on the date of February 15, 2003, when the initial wave of program changes was implemented. The study design calls for collection of survey data from each cohort member annually across three years' time. To date, two of the three planned surveys have been completed.



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. A total of 8,260 were ultimately eligible for panel recruitment. The remainder were either deceased, had cognitive impairments, had moved out of state, had no current address, or spoke a language other than English or Spanish. Sampled members were mailed an explanation of the cohort study, a consent form, and a baseline survey in October of 2003; the materials asked members if they were willing to participate as a panel member over three years' time. Members who returned the consent form and baseline survey were enrolled in the panel. 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.

In October 2004, 12 months after the baseline survey, a follow-up survey was fielded by mail and telephone. Nearly three-quarters (72%) of those who filled out the

original baseline survey also filled out the second survey, leaving a total of 2,004 cohort members for whom complete data from both surveys are available. Respondents are demographically similar to nonrespondents, although whites, women, and English-speaking respondents were slightly more likely to remain in the study across the 18 months.

A unique survey instrument was designed to assess Medicaid enrollment, health care access, utilization, and financial and health outcomes. The instrument was created using widely accepted data collection tools, including the Consumer Assessment of Health Plans (CAHPS) survey, the Community Tracking Study, and The Access Project.* To ensure validity, cognitive testing of the survey instrument 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. In order to minimize recall bias, the survey asked respondents about their experiences in “the last six months.”

* “CAHPS 2.0 Survey and Reporting Kit.” Silver Spring, MD: Agency for Healthcare Research and Quality, 2002; “Community Tracking Survey, Household Survey Instrument 2000–2001, Round Three,” Technical publication #54. Washington, DC: Center for Studying Health System Change, 2004; “The Consequences of Medical Debt: Evidence from Three Communities.” Boston, MA: The Access Project, February 2003, http://www.accessproject.org/downloads/med_consequences.pdf (accessed 1/18/05).

APPENDIX B. DATA TABLES

Table B-1. Study Outcomes BY 18-Month Coverage Path
Base: All OHP Standard Respondents

	Coverage Path Across 18-Month Study Period					
	All OHP Standard Respondents	Continuously Enrolled in OHP	Left OHP, 1-3 Month Gap	Left OHP, 4-6 Month Gap	Left OHP, 7-12 Month Gap	Left OHP, 13+ Month Gap
Total n (OHP Standard)	991	353	104	44	170	254
Percent Distribution	100%	38%	11%	5%	18%	28%
Insurance Status						
On OHP at End of Study	54	100	40	39	40	8
On Other Insurance at End of Study	16	0	35	34	25	17
Uninsured at End of Study	30	0	15	27	35	75
Access to Care						
Reported Unmet Need During Study	54	37	38	72	72	69
Survey 1: Unmet Need in Last Six Months	42	28	30	56	54	57
Survey 2: Unmet Need in Last Six Months	35	19	21	50	44	55
Utilization of Care						
At Least One Primary Care Visit During Study	75	86	85	80	70	59
At Least One ED Visit During Study	40	42	35	46	43	36
Survey 1: Primary Care Visit in Last Six Months	70	84	81	73	64	52
Survey 2: Primary Care Visit in Last Six Months	74	83	83	86	76	54
Survey 1: ED Visit in Last Six Months	28	30	28	32	25	28
Survey 2: ED Visit in Last Six Months	24	24	22	34	25	23
Financial Outcomes						
Owe \$500+ in Medical Debt at End of Study	28	19	16	39	35	40
Survey 1: Borrowed Money to Pay Med Costs	30	35	25	25	28	28
Survey 1: Cut Back on Food to Pay Med Costs	35	33	33	36	40	35
Survey 1: Missed Other Bills to Pay Med Costs	34	33	36	39	36	34
Survey 2: Borrowed Money to Pay Med Costs	23	18	20	34	28	27
Survey 2: Cut Back on Food to Pay Med Costs	26	18	22	21	33	35
Survey 2: Missed Other Bills to Pay Med Costs	27	18	37	32	37	36
Health Outcomes						
Survey 1: Very Good/Excellent Health	22	17	26	30	24	25
Survey 2: Very Good/Excellent Health	23	21	26	42	19	23

Source: Oregon Health Research and Evaluation Collaborative/2003 and 2004 Oregon Health Care Cohort Surveys.

Table B-2. Study Outcomes by Reason for Leaving OHP
 Base: All Who Left OHP at Some Point During Study

	Reason for Leaving*		
	All Who Left and Gave Reason*	Left for Policy Reasons	Left for Other Reasons
Total n (OHP Standard)	447	235	212
Percent Distribution	100%	53%	47%
Insurance Status			
On OHP at End of Study	28	30	25
On Other Insurance at End of Study	26	17	36
Uninsured at End of Study	46	53	39
Access to Care			
Reported Unmet Need During Study	69	81	56
Survey 1: Unmet Need in Last Six Months	47	55	38
Survey 2: Unmet Need in Last Six Months	59	69	47
Utilization of Care			
At Least One Primary Care Visit During Study	64	58	69
At Least One ED Visit During Study	40	52	27
Survey 1: Primary Care Visit in Last Six Months	56	52	62
Survey 2: Primary Care Visit in Last Six Months	68	64	73
Survey 1: ED Visit in Last Six Months	29	39	18
Survey 2: ED Visit in Last Six Months	26	36	14
Financial Outcomes			
Owe \$500+ in Medical Debt at End of Study	37	47	26
Survey 1: Borrowed Money to Pay Med Costs	28	31	24
Survey 1: Cut Back on Food to Pay Med Costs	39	41	37
Survey 1: Missed Other Bills to Pay Med Costs	36	38	33
Survey 2: Borrowed Money to Pay Med Costs	27	32	23
Survey 2: Cut Back on Food to Pay Med Costs	32	35	29
Survey 2: Missed Other Bills to Pay Med Costs	35	39	30
Health Outcomes			
Survey 1: Very Good/Excellent Health	23	17	30
Survey 2: Very Good/Excellent Health	23	17	30

* Those who left without giving a reason are excluded (n=191).

Source: Oregon Health Research and Evaluation Collaborative/2003 and 2004 Oregon Health Care Cohort Surveys.

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Publications listed below can be found on The Commonwealth Fund's Web site at www.cmwf.org.

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