Effects of Premiums on Eligibility for the Oregon Health Plan

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Executive Summary

The Oregon Health Plan (OHP), Oregon's Section 1115 waiver program, incorporated a broad eligibility expansion that provides Medicaid coverage to all residents living below poverty. Initially free-of-charge, OHP began charging premiums to the expansion population late in the program's second year to offset budget shortfalls. People in payment arrears at the end of their six-month eligibility period are dropped from the program. However, beneficiaries who reapply may request a waiver of unpaid premiums on several bases, including having no income. Despite these protections, there are concerns that premiums pose a barrier to enrollment in OHP. In addition, they may create adverse selection if only those beneficiaries who need services are willing to pay the premium to remain enrolled. The penalty for allowing coverage to lapse is minimal because beneficiaries can reapply and receive immediate coverage in the future if they become sick, as long as any past premium arrearage is cleared. Finally, although children are not subject to premiums and can enroll in OHP even if their parents lose coverage due to unpaid premiums, there are concerns that premiums may have unintended spillover effects if parents do not understand this policy. Parents that are not eligible themselves also may be less likely to enroll their children in OHP. Following are key findings from our report on the impacts of imposing premiums on a low-income population.

Premium Policy

- Premiums vary by income and family size, ranging from $6.00 to $28.00 per month. The average household pays $11.00.

- More than 40 percent of expansion eligibles that reapply have their premiums waived. However, beneficiaries are confused about the waiver process and are not always aware that having zero income is grounds for waiving unpaid premiums.

- Although the majority of expansion households make their premium payments, with 70 percent of billed premiums collected, they only contribute about 1 percent to the OHP budget.

Premium Impacts on Eligibility

- The odds that an expansion eligible would recertify fell by 38 percent following the introduction of premiums. The reduction in the likelihood of recertifying in the post-premium period was relatively greater for males, non-whites, and younger expansion beneficiaries, as well as those with children.

- Coverage of expansion beneficiaries has become increasingly episodic and churning has increased since the adoption of premiums. The average length of an expansion eligibility spell fell from 6.1 months in 1995, the year prior to the introduction of premiums, to 5.5 months in 1998, the third year after their introduction. The likelihood of having more than one eligibility spell during the course of the year increased by nearly 50 percent during this time period.

- Most participants in focus groups of expansion eligibles considered premiums to be low relative to the value of coverage provided, although some felt it was wrong to require people with very little income to make even modest premium payments. Most focus group members who allowed their coverage to lapse did so because they found the required paperwork burdensome.

Evidence of Adverse Selection Due to Premiums

- During the post-premium period, prior service use is a strong predictor of recertifying at the end of an eligibility spell, increasing the likelihood by 21 percent. However, it is likely that such a relationship also held before premium payments were instituted. We cannot test whether its strength changed following the introduction of premiums because we do not have adequate utilization data for earlier time periods.

- Service use has a lesser effect on the likelihood of recertifying for expansion beneficiaries that have children than for those who do not. This suggests that the enrollment decision for expansion beneficiaries with children is in part motivated by the desire to ensure continuous coverage for children, rather than their own health care needs.

- Focus group members with serious or long-term health problems were most likely to consider the premiums "a bargain," while those without an immediate need for services were more likely to view them as excessive. Among those who re-enrolled in OHP after allowing their coverage to lapse, many rejoined because of emergency medical or dental conditions.

Spillover Effects on Children

- OHP eligibility data do not indicate that there have been important spillover effects. The likelihood that a child would recertify did not change following the introduction of premiums.

Introduction

The Oregon Health Plan (OHP), Oregon's Section 1115 Medicaid waiver program, began operation in February 1994. Among the hallmarks of the program are mandatory enrollment in managed care for nearly all eligibility groups, the use of a prioritized list of medical conditions and treatments to define the benefit package, and the expansion of Medicaid eligibility to include all residents with incomes below the Federal Poverty Level (FPL) who are not otherwise categorically eligible for Medicaid. The expansion population is divided into two groups: New Families and New Adults/Couples. New Families includes adults over the age of 18 with children,[1] while New Adults/Couples includes single adults and childless couples.

The expansion program has proven extremely popular. Over the first five years of OHP operation, the eligibility expansion extended Medicaid coverage to more than 428,000 unique individuals. At its height in October 1995, over 134,000 expansion eligibles were enrolled in OHP, comprising 33 percent of the total Medicaid population. Although the number of expansion eligibles subsequently declined to approximately 82,000 by December 1998, the expansion population still accounted for a sizable share of OHP eligibles, 24 percent.

Not only has the size of the expansion population been larger than projected by Oregon, but their medical costs have also exceeded initial estimates. The higher than expected costs of serving the expansion population, along with other factors, contributed to a State budget shortfall by the second year of the program. To offset the budget deficit, the

[1] Prior to Oregon's implementation of the State Children's Health Insurance Program (SCHIP) in July 1998, which covers all children under age 19 up to 170 percent of the FPL, New Families also included children born before October 1, 1983. Poverty-level children born after this date already received Medicaid coverage under SOBRA expansions.

1995 Oregon legislature directed the Office of Medical Assistance Programs (OMAP), which administers OHP, to require premium payments from the expansion population. OMAP anticipated that these premiums would contribute approximately $14 million in revenue to the State's biennial Medicaid budget of $681 million for 1995-1997. The estimated premium revenue for the subsequent biennium (1997-1999) was $13 million.

The premium requirement, which was implemented in December 1995, has proven controversial for several reasons. First, there are concerns that the premiums may discourage people from applying for OHP coverage or reapplying at the end of an eligibility spell. Even a nominal payment may pose a significant financial hardship for people living below poverty. Second, managed care plans that participate in OHP believe that premiums have created adverse selection in the expansion population. They contend that only those expansion beneficiaries who need services will pay the premium in order to remain enrolled in OHP. The penalty for allowing OHP coverage to lapse is minimal because beneficiaries can reapply and receive immediate coverage in the future if they become sick, as long as any past premium arrearage is cleared. These incentives may create a churning in the expansion population that makes it difficult to manage care. Finally, although children are not subject to the premium requirement, premiums may have unintended spillover effects on children's eligibility for OHP. Parents may not understand that their children can remain enrolled in OHP, even though they themselves have lost eligibility due to unpaid premiums. Parents that are not eligible themselves also may be less likely to enroll their children in OHP.

This paper examines the effect of premiums in OHP. We begin with an overview of other states' experiences with premiums. Next, we describe the data sources used in our analyses. We then discuss OHP's premium policy, including the structure of premiums and

provisions for waiving premium payments. Following sections look at premium impacts on eligibility, evidence of adverse selection associated with premiums, and spillover effects of premiums on children's eligibility. The paper concludes with a discussion of the policy implications of premiums.

Use of Premiums in Other States

A number of states have adopted programs to provide subsidized insurance to low-income populations as part of initiatives to reduce the size of the uninsured population. Some programs have expanded Medicaid to include populations outside of traditional eligibility categories, while others subsidize the purchase of private insurance. Most of these programs require a premium contribution from enrollees at some income levels. SCHIP, which allows states to charge limited premiums under certain circumstances, has further heightened interest in the effect of premiums on participation in these programs by low-income populations.

As of 1996, there were 14 programs in 12 states (including Oregon) that offered insurance for low-income populations and that charged premiums to at least some beneficiaries (Lipson and Schrodel, 1996). Wisconsin implemented a Section 1115 Medicaid waiver that incorporates premiums in 1999.[2] All of the state programs vary premium payments with family income. Fourteen of the programs cover people living below poverty and nine of these (including Oregon) charge premiums to this population. In some states, premiums are set at a fairly constant percentage of family income; in others, the percentage increases as income rises (Lipson and Schrodel, 1996; Ku and Coughlin,

2 Information on Wisconsin's Section 1115 waiver is taken from the fact sheet on the demonstration available from http://www.hcfa.gov/medicaid/wifact; Internet; accessed 01 Feb 2000.

1999/2000). While three programs offer subsidized premiums to beneficiaries with incomes as high as 400 percent of FPL, four charge full premiums to enrollees at the highest income levels (including Hawaii, which offers no subsidy above 100 percent of FPL).

There has been little research studying the effects of premiums on program enrollment for low-income populations. However, the few studies that have been conducted consistently find that premiums reduce program participation. Indeed, several states have explicitly used their premium policies as a mechanism to either encourage or discourage program enrollment (Lipson and Schrodel, 1996). For example, Washington State reduced premiums for its Basic Health Plan in response to lower than expected participation. Following these reductions, enrollment doubled over a one year period (Rajan, 1998). A study of programs in Hawaii, Minnesota, and Washington found that participation fell from 57 percent to 35 percent of the potentially eligible population as premiums increased from 1 percent to 3 percent of family income (Ku and Coughlin, 1999/2000). A premium representing 5 percent of family income further reduced participation to 18 percent. Another study found that even modest premiums have substantial enrollment impacts (Feder and Levitt, 1998). The authors estimated that 79 percent of children in families below poverty and 83 percent of those in families below 200 percent of FPL would enroll in an SCHIP program if it were free. Charging $200 per year would reduce participation to 41 percent and 59 percent, respectively. Expected participation would decline to 29 percent and 49 percent with a $600 annual premium.

Data Sources

The analyses in this paper draw on several administrative data bases maintained by the State of Oregon. Monthly Medicaid eligibility files, which identify eligible beneficiaries as of the first of the month, were used to construct eligibility spells. A spell is defined as a period of uninterrupted eligibility. Because Medicaid beneficiaries may lose eligibility briefly, for example if they do not reapply on time, we consider people with a one-month break in coverage to be continuously eligible.

End-of-month case history files maintained by Adult and Family Services (AFS), the state agency that determines eligibility for the expansion population, were used to ascertain whether expansion beneficiaries applied for recertification of Medicaid coverage at the end of a six-month eligibility period. The AFS case history files also include limited demographic information (age, gender, race, language, and income). In addition, because these files link eligibility information for all members of the same case, we used them to determine whether there are children associated with a case including adult expansion beneficiaries and the eligibility status of any children. We linked case history files to eligibility files to determine the eligibility category under which a beneficiary qualified (i.e., New Families or New Adults/Couples).

Case-level information on amounts of premiums billed, amounts of premiums collected, and whether the case is in arrears are maintained in a premium history file. The file contains premium information for every case charged a premium since the program's inception. Premium arrearage information from the premium history file was linked to data on recertification status for the expansion population derived from the AFS case history files. Because the premium history file is continuously updated, arrearage information is only

accurate at a point in time and does not contain historical information on arrearage status. We obtained a premium history file for December 1998. Premium arrearage information as of December 1998 would not necessarily accurately reflect arrearage status at the time of reapplication for a beneficiary who came up for recertification in 1997, for example. As a result, we only analyze arrearage status for cases coming up for recertification in October through December 1998.

Data from claims and encounter files for services provided during 1996 and 1997 were also linked to case history files. Under-reporting of encounter data by managed care plans has been a persistent problem in OHP, as it is in most Medicaid managed care programs. Our analyses of encounter data indicated that the quality of data reported for 1996 and 1997 was adequate for use in this study.[3] We only use claims and encounter data to compare expansion beneficiaries' utilization by whether or not they recertify. This further mitigates concerns about the completeness of encounter data reporting because we are interested only in relative utilization, rather than absolute levels of service use.

Finally, information on beneficiary perceptions about premiums were obtained from two additional data sources. The first was a series of focus groups composed of expansion eligibles that were held in February 1999. Seven focus groups, attended by a total of 57 people, were conducted in the cities of Portland and Eugene. To the extent possible, the focus groups were divided into three categories: currently enrolled, currently disenrolled,

[3] The quality of encounter data reporting improved considerably after OMAP announced that they would use encounter data to set capitation rates and risk adjust payments to plans. OMAP did not propose using data for 1994 and 1995 for these purposes. Thus, the quality of encounter data for the early years of OHP is considerably poorer than for subsequent years. Because of the lag in encounter data reporting, complete encounter data for 1998 were not available in time for inclusion in this study.

and re-enrolled.[4] Among other topics, focus group participants were asked to discuss several issues related to premiums, including beneficiary understanding of the premium requirement, perceptions of the reasonableness of premium payments, and the impact of premiums on the decision to reapply.

In addition, some questions pertaining to premiums were included in a telephone survey of a statewide, random sample of OHP adults. Respondents who were OHP expansion eligibles were asked whether premiums posed a financial hardship, whether they were up-to-date on their premium payments, and whether they had ever lost OHP eligibility for premium-related reasons. In total, 903 expansion-eligible adults responded to the survey.[5] However, survey respondents may not reflect the attitudes of the expansion population generally because the sample included only beneficiaries who were currently eligible and had been eligible for at least 10 of the past 12 months. Thus, beneficiaries who were no longer eligible because they allowed their eligibility to lapse were not included in the sample.

All analyses are restricted to adults aged 19 or older because the expansion population has been primarily adult since its inception. With the implementation of Oregon's SCHIP program, the expansion population is now exclusively adult.

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[4] Participants were recruited from OHP eligibility files based on their history as expansion eligibles between December 1997 and November 1998. Individuals were considered currently enrolled if they had been eligible during 10 of those 12 months and were eligible as of November 1998. Individuals were classified as disenrolled if they had been eligible for any part of that 12-month period, but had been ineligible for at least two months as of November 1998. Re-enrollees were defined as people eligible as of November 1998 who were ineligible for at least 3 months during the previous year and who had some earlier period of eligibility in the preceding 24 months.

[5] The survey response rate among expansion beneficiaries was 76 percent.

Premium Policy

Premiums are set using a sliding scale based on income[6] and family size. As shown in Table 1, they range from a low of $6.00 to a high of $28.00 per month. The rates have not changed since the introduction of premiums in December 1995. Data provided by OMAP indicate that the average premium per household is approximately $11.00 per month.

Table 1

Premium Charges for OHP's Expansion Population

Income as Percent of FPL	Family Size 1	2	3	4+
Less than 49%	$6.00	$6.50	$7.00	$7.50
50-65%	15.00	18.00	20.00	22.00
66-85%	18.00	21.00	24.00	26.00
86-100%	20.00	23.00	26.00	28.00

Although premiums are billed monthly, expansion beneficiaries are guaranteed six months of eligibility. Thus, in contrast to most commercial insurance billing and collection policies, expansion eligibles can carry a premium arrearage during their six-month eligibility period without experiencing any lapse in OHP coverage. However, they must be current in their premium payments or receive a waiver of premiums in order to be recertified at the end of this six-month period. Similarly, individuals who reapply for OHP after a lapse in eligibility must pay all back premiums in order to re-enroll.[7] If a premium waiver is granted,

[6] Income is calculated based on the average for the three-month period prior to eligibility determination.

[7] Beneficiaries are eligible to re-enroll without paying their premium arrearage after three years.

the arrearage is wiped out and a beneficiary would not be required to pay the waived premiums if she reapplied in the future.

The premium requirement applies only to adult members of the expansion population. Although children are no longer included in the expansion population since the adoption of Oregon's SCHIP program in July 1998, prior to this time children could be covered by OHP as part of the expansion population. However, during the time period that they were included under the expansion, children could have their eligibility recertified at the end of a six-month coverage period even if their families had not cleared any arrearages in premium payments. In addition, Native Americans are exempted from the premium requirement.

OMAP has specified six circumstances under which they will waive unpaid premiums and allow beneficiaries carrying a premium arrearage to be recertified. As shown in Table 2, the vast majority of waivers (82 percent) are granted because the beneficiary has no income. Of those adult expansion eligibles that had their eligibility recertified during the six-month period from January through June 1998, 45 percent received a waiver of premiums. This increased somewhat compared to the period from January through June 1997, when 41 percent received a premium waiver.

The re-application package that is mailed to beneficiaries prior to the end of their six-month certification period includes a form that allows them to request a waiver of past premiums. Initially, the form listed each of the conditions under which a person could waive past due premiums except for the zero income provision because OMAP preferred to grant the zero income waiver automatically based on income information gathered during the recertification process. However, because it was not listed on the form, beneficiaries who

were not aware that having no income was grounds for waiving premiums may not have bothered to reapply. The waiver request form was subsequently revised to list zero income as a condition for waiving premiums.

Table 2

Number and Type of Premium Waivers, January – June 1998

Reason for Waiver	Number of Cases with Premium Waived
Zero Income	13,945
Homeless	2,232
Domestic Violence	523
Crime Victim	112
Natural Disaster	76
Death in Family	73
TOTAL WAIVERS	16,961

SOURCE: Office of Medical Assistance Programs

Nonetheless, based on our focus groups, there appears to be substantial confusion about the waiver process. While some participants reported that they were able to have unpaid back premiums waived at recertification, others carrying a premium arrearage were not aware of the waiver provisions and did not re-apply because they assumed they would be denied. Even those aware of the waiver process did not always know that having zero income was grounds for a waiver. The retroactive nature of the waiver process has also created confusion. First-time beneficiaries will not be aware of the waiver provisions until they re-apply and may pay their premiums even though this poses a financial hardship. Several focus group participants indicated that they were paying premiums even though they were currently unemployed. Furthermore, even if past unpaid premiums were waived at recertification, beneficiaries will continue to be billed for premiums during their current six-

month eligibility period. Although beneficiaries that remained unemployed could again waive their premium arrearage at their next recertification, OMAP's policy of continuing to send them premium bills was a source of frustration and confusion for some focus group participants.

Between December 1995 and October 1998, Oregon succeeded in collecting nearly $20 million in premiums (Table 3). This represents nearly 70 percent of billed premiums. After accounting for waived or adjusted[8] premiums, 23 percent remains outstanding. The percentage collected has increased over time, from 63 percent through the end of 1996 (the first thirteen months that premiums were in effect) to 76 percent in 1998.[9] Correspondingly, the percentage outstanding was cut in half over this time period, from 32 percent to 16 percent, although waiver amounts have increased.[10]

Table 3

Total Premium Amounts Billed and Collected and Percentages Collected, Waived, Adjusted, and Outstanding

	Amount of Premiums Billed	Amount of Premiums Collected	Percentage Collected	Percentage Waived	Percentage Adjusted	Percentage Outstanding
12/95-12/96	$10,298,204	$6,500,789	63.1%	4.2%	0.5%	32.1%
1/97-12/97	10,029,534	7,187,050	71.7	7.5	0.5	20.4
1/98-10/98	7,851,600	5,935,389	75.6	8.3	0.6	15.5
TOTAL	$28,179,338	$19,623,228	69.6%	6.5%	0.5%	23.3%

SOURCE: Office of Medical Assistance Programs

[8] Premiums are adjusted when OMAP determines that the case worker entered incorrect information that resulted in a miscalculation of the premium amount. An adjustment is only made if it benefits the beneficiary.

[9] Collections are reported for the time period in which payment was received and do not necessarily correspond to the time period in which the premium was billed. Similarly, waivers and adjustments are based on the month they were granted, rather than the month the premium was billed. Nonetheless, particularly over fairly long time periods such as a year, these numbers should reasonably represent trends.

[10] Premium waivers for the period December 1995 through December 1996 appear artificially low because no premiums were waived from December 1995 through March 1996.

Billing and processing premium payments is handled by a third-party administrator (TPA). We estimate that the TPA received $3.4 million[11] for its services during the 35 months of premium billing through October 1998, or 12 percent of the premiums billed and 17 percent of the premiums collected. Because 50 percent of the administrative costs of collecting premiums is reimbursed by Federal Medicaid matching funds, the cost to the state of Oregon was $1.7 million. After taking into account the Federal match, premiums contributed approximately $17.9 million to the OHP budget net of the costs of administering the program.[12]

Premium Impacts on Eligibility

As shown in Figure 1, the size of the expansion population declined beginning in the latter part of the 1995, corresponding to the introduction of premiums. The reduction is particularly large for New Families from July 1997 through July 1998. Some of this is explained by the movement of approximately 12,000 children out of the New Families eligibility category with the implementation of SCHIP in July 1998.[13] At roughly the same time that the number of expansion eligibles contracted, the uninsured rate among the population in Oregon living below poverty increased from 17 percent in 1996 to 23 percent in 1998 (OHPPR, 1999b). It has also been estimated that Oregon's Medicaid participation

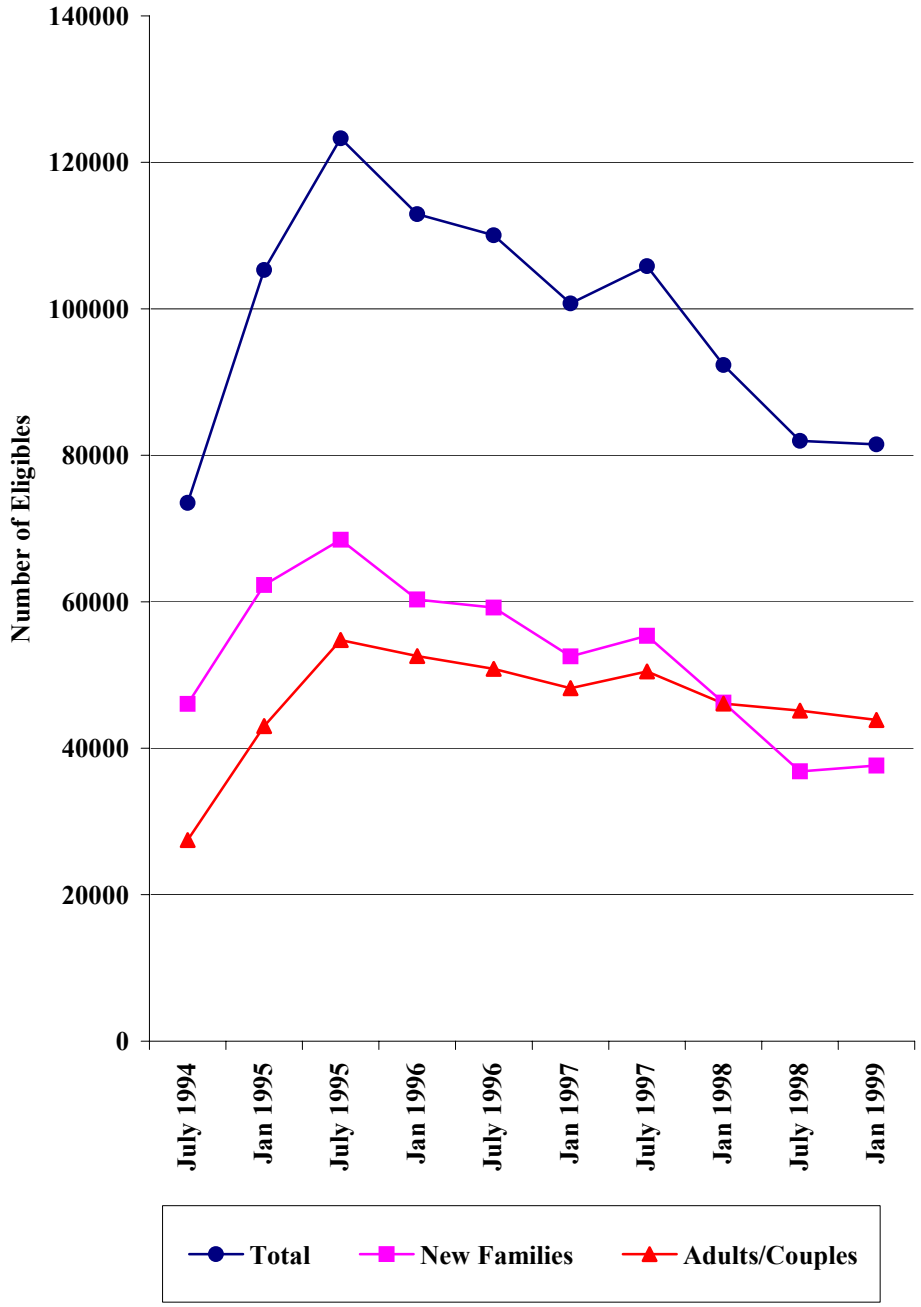
[11] The TPA received a flat-fee of $14,000 to cover start-up costs and receives an additional $1.26 per household per month.

[12] Premium collections do not reduce the Federal funds available to Oregon as revenues normally would under Medicaid law, because they are not deducted from the totals submitted by the State for Federal matching.

[13] However, as discussed later, we do find evidence that premiums have had a greater impact on New Families than on New Adults/Couples.

Figure 1

Trends in Number of Expansion Eligibles



SOURCE: Office of Medical Assistance Programs.

rate fell from 94 percent in July 1995 to 87 percent in July 1997 (OHPPR, 1999a). These facts have led some to conclude that premiums have deterred eligible low-income Oregonians from enrolling in OHP. However, alternative interpretations of these phenomenons have been advanced. The declining size of the expansion population might be explained by: the strong economy; a change in the basis for calculating income eligibility from using the previous month's income only to the average of the most recent three months; the imposition of a $5,000 asset limit; and the elimination of expansion eligibility for full-time college students.[14] The increasing uninsured rate and falling Medicaid participation may be attributed to the erosion of employer-based insurance and declining participation in Medicaid among the TANF population following welfare reform.

Responses to premium-related questions in our survey of OHP beneficiaries suggest that beneficiaries do not view premiums as a major barrier. Of the expansion beneficiaries surveyed, 78 percent reported that they were up-to-date on their premium payments and 71 percent said that premiums posed a small or no hardship. Among those who reported that they lost OHP coverage in the past because they did not reapply, only 14 percent attributed this to premium-related factors. However, the survey sample includes only beneficiaries who had been eligible for 10 of 12 months in the past year and, therefore, may not reflect attitudes towards premiums in the overall expansion population.

The majority of focus group participants considered premiums to be low relative to the value of the coverage provided. Those with serious or long-term health problems were most likely to consider the premiums "a bargain" in terms of the access to care they receive. On the other hand, some felt that it was wrong to require people with very little income to

[14] All three eligibility changes were instituted on October 1, 1995. Coverage of college students was reinstated on January 1, 1999.

have to pay for OHP coverage. Several participants, who did not have an immediate need for services, considered the premiums to be excessive and viewed them as diverting their limited resources from necessities to something they were not using. As one disenrolled focus group member said, "[the premium is] one more thing to scrape together each month. Keeps me from having good back tires on the car." These participants were aware that they could re-enroll in the future if they needed medical care.

Most focus group members who allowed their coverage to lapse chose not to initiate the recertification process, generally because they did not want to complete the required paperwork. A number of participants viewed the reapplication process to be especially burdensome if they did not need to use services at the time. Other people in the focus groups allowed their coverage to lapse because they had gotten insurance through a new job or knew they were over the income limits. Only a few reported not re-applying because they owed back premiums. Some of those were not aware of the waiver process, while others felt they were not eligible for a waiver.

Among those focus group members who re-enrolled in OHP after allowing their coverage to lapse, many rejoined because of emergency medical or dental conditions, including the need for substance abuse treatment, or having children who were ill. Others lost coverage due to temporary or seasonal employment and rejoined when they were no longer working. In general, it appeared that those who allowed their coverage to lapse because they were not using medical services tended to re-enroll when prompted by new health care needs. Those who lost their coverage because of a change in income were more likely to re-enroll as soon as they became eligible again, whether or not they had immediate needs for care.

It is difficult to directly determine the impact of premiums on eligibility for OHP. Only a small number of individuals that recertify are terminated because they have unpaid premiums. For example, OMAP reports that during the six-month period from January through June 1998 fewer than 2,800 cases, or 7 percent of the expansion cases that had their eligibility recertified**,** were denied eligibility due to a premium arrearage. Although very few households that apply for recertification are terminated because they owe past premiums and do not qualify for a waiver, we do not know how many OHP members fail to re-apply for the program because of the premium requirement. However, among expansion eligibles whose cases came up for recertification from October through December 1998, 71 percent of those who did not recertify had a premium arrearage, as compared to 45 percent of those whose eligibility was recertified. Although this is suggestive of premiums having a deterrent effect on recertification, the direction of causality in the relationship is not clear. We cannot determine whether beneficiaries did not reapply because they could not pay their premium arrearage or whether they did not bother to make their premium payments because they had decided for other reasons not to reapply.

Over the first five years that OHP was in operation, only about half (54 percent) of expansion eligibles had their eligibility recertified at the end of a six month eligibility period (Table 4). The likelihood that an expansion beneficiary would recertify fell following the introduction of premiums, from 57 percent to 52 percent. The probability of recertifying declined, regardless of race, gender, language spoken, or whether the case included children. However, the reduction was greater for some groups than others. While the probability of recertifying fell by an average of 8 percent, it fell by 12 percent for non-whites and by 11 percent for beneficiaries with children. The age gap between beneficiaries who recertify and

than those who do not widened following the introduction of premiums. On the other hand, the income gap between these groups narrowed in the post-premium period.[15]

Table 4 shows that there are significant differences in the likelihood of recertifying based on beneficiary characteristics in both the pre- and post-premium periods. Females, non-English speakers, non-whites, and childless beneficiaries are all more likely to be recertified. Beneficiaries who recertify are significantly older than those who do not and have higher incomes. If the characteristics of the expansion population have changed over time, this might explain some of the change in the likelihood of recertifying following the introduction of premiums.

We used multivariate analyses to isolate the impact of the change from the pre- to post-premium period on the probability that a beneficiary would recertify, holding constant the effect of beneficiary characteristics. Because the explanatory variable in our model is binary, we used logistic regression. Regressions were estimated for all expansion beneficiaries and separately for New Families and New Adults/Couples. Explanatory variables included dummy variables for a series of demographic characteristics: age (26-34, 35-44, 45-54, or 55 and over, with 19-25 constituting the omitted category); being female; being white; being English-speaking; and having a child on the case.[16] In addition, we controlled for the number of months a person had been continuously eligible because we

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15 Income is reported at the case level and is based on countable income at the time of application used to determine OHP eligibility. As a result, it might not reflect income at the time of reapplication six months later.

16 We did not include a separate variable for whether the beneficiary is eligible as a New Family or a New Adult/Couple because this is very highly correlated with having a child on the case. Similarly, the variable for having a child on the case was not included when we ran the regressions separately by eligibility group.

Table 4

Selected Characteristics of Expansion Beneficiaries by Recertification Status and Whether Premiums Were in Effect

	Percent Recertifying			
Characteristic	All Years	Pre-Premium	Post-Premium	Percentage Change
ALL EXPANSION ELIGIBLES	54.4%	57.2%	52.4%	-8.4%
White	54.8	57.3	52.9	-7.7
Non-white	52.8***	56.6***	49.8***	-12.0
Female	57.2	59.7	55.3	-7.4
Male	51.3***	54.3***	48.9***	-9.9
English-speaking	54.2	56.8	52.1	-8.3
Non-English-speaking	58.8***	61.4***	56.6***	-7.8
Children on case	54.6	58.2	51.8	-11.0
No children on case	54.3**	56.2***	52.8***	-6.0
Mean Age				
Recertified	35.1	33.7	36.4	8.0
Did not recertify	32.1***	31.5***	32.6***	3.5
Mean Income				
Recertified	$451	$353	$482	36.5
Did not recertify	397***	208***	452***	117.3

*Significant at p<.10.
**Significant at p<.05.
***Significant at p<.01.

SOURCE: HER analysis of case history files maintained by Adult and Family Services.

assumed that beneficiaries who had been eligible for longer periods of time were more likely to recertify. Finally, we included a dummy variable for whether recertification occurred during the post-premium period. We omitted income from our regression model because this variable is missing for more than one-quarter of our observations. The impact of premiums is substantially larger when we exclude income from our model and, thus, do not lose

observations where this variable is missing.[17] Means of the variables included in the regressions are presented in Table 5.

Odds ratios from the three logistic regressions are shown in Table 6. Nearly every variable included in the regressions is highly significant and the magnitude of the effect is generally large. After controlling for beneficiary characteristics, multivariate analyses show an even greater reduction in the likelihood that an expansion beneficiary would recertify following the imposition of premiums than do descriptive analyses. For all expansion beneficiaries, the likelihood of recertifying is 38 percent lower in the post-premium period. The negative effect of premiums is somewhat greater for New Families (odds ratio=.61) than for New Adults/Couples (odds ratio=.66). Although the magnitude of the change in the likelihood of recertifying following the introduction of premiums is striking, we cannot definitively attribute this effect to premiums because we cannot control for other secular changes that might have contributed to this reduction.

Regression results confirm descriptive findings for the impact of age, gender, race, and language on the probability of recertifying. The likelihood of recertifying increases with age. For all expansion beneficiaries, those aged 55 and over are more than twice as likely to recertify than those aged 19 to 25. The effect of age is greater for New Adults/Couples than for New Families. Overall, females are 24 percent more likely than males to recertify. The effect of gender is particularly strong among New Adults/Couples where the differential

17 It appears that this is explained by systematic differences associated with reporting of income, and not omitted variable bias. In analyses that are limited to cases where income is reported, the impact of premiums only changed slightly when income was omitted as compared to when it was included in the model. Results for other variables are largely unchanged by limiting the analysis to cases where income is reported.

Table 5

Means of Variables in Logistic Regressions for Probability of Recertifying

	All Expansion Beneficiaries	New Families	New Adults/Couples
Dependent Variable			
Recertified	.545	.551	.541
Independent Variables			
Post-premium	.545	.518	.576
Age:			
26-34	.238	.283	.183
35-44	.240	.244	.236
45-54	.141	.072	.225
≥55	.077	.014	.153
Female	.544	.585	.494
White	.852	.830	.879
English-speaking	.928	.898	.964
Children on case	.451	---	---
Months continuously eligible	13.2	13.0	13.4
N[a]	899,978	482,556	407,200

SOURCE: HER analysis of case history files maintained by Adult and Family Services.

[a] The number of observations in the regression for All Expansion Beneficiaries is greater than the sum of the observations in the New Families and New Adults/Couples regressions because it includes observations for which the eligibility code was missing or invalid.

Table 6

Odds Ratios from Logistic Regressions for Probability of Recertifying

	All Expansion Beneficiaries	New Families	New Adults/Couples
Post-premium	0.62***	0.61***	0.66***
Age:			
26-34	1.00	0.98***	1.20***
35-44	1.28***	1.17***	1.60***
45-54	1.70***	1.37***	2.12***
≥55	2.14***	1.55***	2.63***
Female	1.24***	1.12***	1.40***
White	1.16***	1.14***	1.15***
English-speaking	0.80***	0.76***	0.99
Children on case	1.17***	---	---
Months continuously eligible	1.04***	1.04***	1.05***

*Significant at p<.10.
**Significant at p<.05.
***Significant at p<.01.

SOURCE: HER analysis of case history files maintained by Adult and Family Services.

is 40 percent. Among all expansion beneficiaries, whites are 16 percent more likely than non-whites to recertify. The effect of speaking English remains negative, although separate regressions by eligibility category indicate that this is confined to the New Families population. While English-speaking beneficiaries might have been expected to be more likely to recertify because they are better able to negotiate the administrative process, non-English speakers may be more likely to receive care from safety net providers. These providers may make greater efforts to ensure that eligible patients are enrolled in OHP.

Unlike descriptive findings, after holding other factors constant, the odds of recertifying is 17 percent greater for expansion beneficiaries that have children on their case

as compared to those without children. Beneficiaries may have greater concern about ensuring continuity of coverage for children. If they are already going through the process of recertifying their children, they may be more likely to do so for themselves also. Finally, the longer a beneficiary has been continuously eligible for OHP, the more likely they are to again recertify. Each additional month of eligibility increases the odds of recertifying by 4 percent. Beneficiaries who have recertified in the past may perceive the benefit of continuity in coverage or may find the recertification process less daunting because they have successfully completed it before.

To test whether premiums have a differential impact on subgroups of beneficiaries, we re-estimated our model including terms interacting the post-premium period dummy variable with variables for beneficiary characteristics. These analyses (results not shown) generally confirm descriptive findings presented in Table 4. The gap between the youngest and oldest expansion beneficiaries in the likelihood of recertifying widened following the introduction of premiums. The reduction in the likelihood of recertifying in the post-premium period was also relatively greater for males, non-whites, and expansion beneficiaries with children. The latter finding confirms the greater impact of premiums on New Families as compared to New Adults/Couples.

Trends in the length of eligibility spells for the expansion population (Table 7) provide additional evidence that is consistent with premiums discouraging beneficiaries from recertifying at the end of an six-month eligibility period. Data for 1995,[18] preceding the implementation of premiums, are compared with later years. Annual data, which report the

[18] Data are not reported for 1994 because OHP was not in operation for a full year. As a result, eligibility statistics are not comparable to later years.

duration of eligibility spells during the calendar year, are truncated at January and December and do not reflect the full length of eligibility spells that extend across years. Despite this truncation of annual data, comparisons of eligibility spell duration by year should not be biased if there is no change over time in the distribution of the month when a spell begins.

Table 7

Trends in Expansion Eligibility by Eligibility Category, 1995-1998

	1995	1996	1997	1998
Average Months of Expansion Eligibility Per Spell				
All Expansion	6.1	5.7	5.7	5.5
New Adults/Couples	6.2	5.8	5.9	5.6
New Families	6.1	5.5	5.4	5.3
Average Months of Expansion Eligibility Per Year				
All Expansion	6.5	6.1	6.1	6.0
New Adults/Couples	6.6	6.2	6.3	6.2
New Families	6.5	6.0	5.9	5.8
% with Full Year of Expansion Eligibility				
All Expansion	15.4	14.3	14.9	14.0
New Adults/Couples	15.9	16.2	17.3	15.9
New Families	14.8	12.4	12.3	11.9
% with 6 or Fewer Months of Expansion Eligibility				
All Expansion	57.8	61.8	62.9	62.5
New Adults/Couples	58.3	61.2	61.0	61.0
New Families	57.3	62.5	64.9	64.2
% with More than One Expansion Spell				
All Expansion	6.4	7.8	8.0	9.4
New Adults/Couples	6.1	7.6	7.5	8.9
New Families	6.7	8.0	8.4	9.9

NOTE: Annual data , which report the duration of eligibility spells during the calendar year, are truncated at January and December and do not reflect the full length of eligibility spells that extend across years. Data are not reported for 1994 because OHP was not in operation for a full year and statistics are not comparable to later years.

SOURCE: HER analysis of eligibility files maintained by Office of Medical Assistance Programs.

The average length of an expansion eligibility spell fell from 6.1 months in 1995 to 5.5 months in 1998.[19] Counting across multiple eligibility spells during the course of a year, the average months of expansion eligibility fell from 6.5 in 1995 to 6.0 in 1998. The higher average months of expansion eligibility compared to average months in a spell of eligibility reflects the fact that some beneficiaries have more than one spell during the course of a year. Consistent with the declining duration of expansion, the proportion of the population with a full year of expansion coverage fell slightly between 1995 and 1998, from 15 percent to 14 percent. There was a corresponding increase in the percent of expansion eligibles with six or fewer months of expansion coverage during the year, from 58 percent in 1995 to 63 percent in 1998.

Managed care plans have also asserted that premiums increased churning in the expansion population by creating incentives for beneficiaries to drop their coverage when they are not using services and re-enroll at a later point if they again need services. The plans contend that this disadvantages them in two ways. First, expansion beneficiaries will be sicker on average because they are only enrolled during periods of service use. Second, episodic enrollment makes it more difficult to manage care and control utilization. Our analysis of eligibility data supports these claims of greater churning. The likelihood of having more than one eligibility spell during the course of the year increased by nearly 50 percent between 1995 and 1998, from 6.4 percent to 9.4 percent.

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[19] During the course of a year, approximately 15 percent of expansion eligibles have some period of coverage in a non-expansion category (most commonly TANF). For the purposes of calculating the average length of an expansion eligibility spell, we can counted any spell that included at least one month in an expansion eligibility category as an expansion spell. When the calculation of the average length of an expansion spell is limited to beneficiaries that are only eligible in an expansion category, the average expansion spell length is somewhat higher. However, the same trend toward declining spell length is observed, falling from 6.5 months in 1995 to 5.7 in 1998.

The pattern of declining length of eligibility and increased churning holds for both New Adults/Couples and New Families (Table 7). In all years, New Families tend to be eligible for shorter periods than New Adults/Couples. However, the difference between the two groups widened from 1995 to 1998, suggesting that premiums may have had a greater impact on New Families than New Adults/Couples. It is striking that the percent of New Adults/Couples with a full year of eligibility actually increased in the first two years following the introduction of premiums, although in 1998 it returned to the pre-premium levels of 1995. The likelihood of having multiple eligibility spells during the course of a year also increased for both eligibility groups.

While eligibility data suggest that premiums have had a greater effect on New Families, our survey produced mixed evidence on the relative burden of premiums for New Families versus New Adults/Couples. Of those survey respondents who reported that they had lost OHP coverage in the past because they failed to reapply, New Families were twice as likely as New Adults/Couples to cite premiums as the reason for their loss of eligibility (18.9 percent versus 9.4 percent).[20] However, in the total sample, New Families were significantly less likely than New Adults/Couples to consider premiums a big or moderate hardship (24 percent versus 32 percent, $p<.01$). On the other hand, there was no significant difference in the likelihood that they reported being up-to-date on premiums (82 percent versus 78 percent).

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[20] A chi-square test did not find a significant difference between New Adults/Couples and New Families in the distribution of reasons for failure to reapply. This is likely due to the fact that only a small number of survey respondents reported they had lost OHP coverage in the past, although the proportion was higher for New Families (17.9 percent) than for New Adults/Couple (13.0 percent). As noted previously, the survey only sampled beneficiaries who had been continuously eligible for at least 10 of the last 12 months and, thus, understates the likelihood that a beneficiary will lose coverage because they failed to reapply.

Evidence of Adverse Selection Due to Premiums

Managed care plans that contract with OHP have claimed that they have been subject to adverse selection since premiums were instituted. They contend that premiums discourage healthy people from enrolling in the program and that only beneficiaries with ongoing needs for service use will pay their premiums and re-enroll at the end of a six-month eligibility period. These incentives are exacerbated by the policy of allowing beneficiaries to pay past-due premiums and re-enroll at any time in the future should they need coverage. Comments by focus group members cited in the preceding section lend credence to plans' claims of adverse selection.

For the post-premium period, we compare service use during a six-month eligibility period to ascertain whether beneficiaries who are high service users are more likely to recertify.[21] We are not able to make this comparison during the pre-premium period because we do not have usable encounter data prior to 1996. There is a strong relationship between service use and the likelihood that a beneficiary will recertify (Table 8). While this is consistent with the contention of managed care plans that sicker, more expensive beneficiaries are more likely to re-enroll, it is likely that a similar pattern held before premium payments were instituted for expansion beneficiaries. In the absence of utilization data for earlier time periods, we cannot determine whether utilization differences by recertification status increased following the introduction of premiums.[22]

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[21] We analyzed service use for beneficiaries who came up for recertification between June 1996 and December 1997 because we only had usable utilization data for January 1996 through December 1997. In order to have utilization data corresponding to the full six months of an eligibility period, June 1996 was the first recertification month that could be included in the analysis.

[22] Our findings are further limited by variation across plans in the completeness of encounter data reporting. If beneficiaries who recertify are more likely to be enrolled in plans with higher reporting rates, this would bias our analysis in favor of finding a correlation between service use and recertification.

Table 8

Percent of Expansion Beneficiaries with Selected Measures of Service Use During Six-Month Eligibility Period by Recertification Status, June 1996 - December 1997

	All Expansion Beneficiaries		New Families		New Adults/Couples	
	Recertified	Did Not Recertify	Recertified	Did Not Recertify	Recertified	Did Not Recertify
Any Service Use	80.1%	70.5***	76.1	69.6***	84.9	72.3***
Any Inpatient Admissions	4.4	3.7***	3.8	4.1**	4.9	3.2***
Any Emergency Room Use	9.2	9.4*	7.6	8.0***	11.0	11.1
Any Evaluation and Management Visits	57.5	45.5***	52.8	45.3***	63.3	46.2***
Any Mental Health/Substance Abuse Visits	8.6	7.0***	5.7	4.8***	11.8	9.4***
Any Dental Visits	31.7	25.8***	31.0	25.3***	32.7	26.8***

*Significantly different from recertified at p<.10.
**Significantly different from recertified at p<.05.
***Significantly different from recertified at p<.01.

SOURCE: HER analysis of case history files maintained by Adult and Family Services and claims and encounter data maintained by Office of Medical Assistance Programs.

As shown in Table 8, beneficiaries who recertify are significantly more likely to use services than those who do not. Eighty percent of beneficiaries who recertified received at least one service during their six-month eligibility period, as compared to 71 percent of those who did not recertify. The greater likelihood of service use among those who recertified held within each category of service use examined, with the exception of emergency room use. For example, 58 percent of beneficiaries who recertified had an evaluation and management visit as compared to 46 percent of those who did not. We also

found striking differences in the probability of using dental services, 32 percent versus 26 percent. Although beneficiaries who recertified were slightly less likely to have had an emergency room visit during their six-month eligibility period, they were significantly more likely to have had one during the three months immediately prior to recertification. For all other services, the pattern of higher service use among those who recertified held both when we included services during the full six-month period and when we only included services during the three months before recertification.

The same pattern of higher service use among those who recertify holds when New Families and New Adults/Couples are analyzed separately (Table 8). The only exception is inpatient use for New Families. This is explained by the greater likelihood among beneficiaries who do not recertify of having an admission for maternity-related services (2.1 percent versus 2.8 percent, $p<.01$); however, they are less likely to have a non-maternity-related admission (1.3 percent versus 1.8 percent, $p<.01$).

With the exception of mental health and substance abuse services, differences in the number of services for those with service use are insignificant or small (data not shown). Among those with some mental health or substance abuse service use, those who recertified had an average of 19 visits during their six-month eligibility period as compared to 11 for those who did not recertify ($p<.01$).

Patterns observed in descriptive analyses were borne out in multivariate analyses. We estimated a logistic regression for the probability that a beneficiary would recertify, including the same variables described in our earlier model. Because we are limited to the years for which we have usable encounter data, the dummy variable for the post-premium

period is omitted. In addition, we included a series of dummy variables for whether the individual had service use during the six-month eligibility period.[23]

Results for non-service use variables are similar to those from regressions reported earlier. Table 9 presents the odds ratios for service use variables only. As expected, service use is strongly associated with the probability of recertifying. For all expansion beneficiaries, using any services during the course of a six-month eligibility period increases the odds of recertifying by 21 percent. The positive effect of past utilization holds for all service categories other than emergency room use. With the exception of dental, the positive effect of service use is uniformly greater for New Adults/Couples than for New Families. Being eligible in the New Family category is highly correlated with having a child on the case. The somewhat lesser effect of utilization for New Families supports the hypothesis that, for those with children, the decision to recertify is in part motivated by the desire to ensure continuous coverage for children. Nonetheless, prior service use is a strong determinant for New Families.

Spillover Effects of Premiums on Children

OHP's premium policy was designed to minimize adverse effects on the eligibility of children. Indeed, premiums should not have a direct effect on children because they are exempted from the premium requirement. Since the implementation of SCHIP, children are no longer part of the expansion population. During the time period that some children

[23] Comparable regressions were estimated substituting service use during the three months prior to recertification. Parameter estimates for non-utilization variables were unaffected by the time period over which utilization was measured. The effects of having any service, having an inpatient admission, and using mental health or substance abuse services were higher when measured over a three-month period, while the effects of having an evaluation and management visit or using dental services were slightly lower. However, the effects of all utilization variables were large and significant regardless of the time period over which service use was measured.

Table 9

Odds Ratios for Service Use Variables from Logistic Regressions for Probability of Recertifying

	All Expansion Beneficiaries	New Families	New Adults/Couples
Any use	1.22***	1.14***	1.40***
Any inpatient admissions	1.16***	1.04	1.30***
Any emergency room visits	0.95***	0.92***	0.98
Any evaluation and management visits	1.32***	1.21***	1.43***
Any mental health/substance abuse visits	1.25***	1.12***	1.34***
Any dental visits	1.21***	1.22***	1.20***

*Significant at p<.10.
**Significant at p<.05.
***Significant at p<.01.

SOURCE: HER analysis of case history files maintained by Adult and Family Services and claims and encounter data maintained by Office of Medical Assistance Programs.

received OHP coverage through the expansion program, children could be recertified even if their family was not current in their premium payments. Nonetheless, there are concerns that premiums might have unintended spillover effects on children's eligibility. These concerns were bolstered by the rising uninsured rate among children in Oregon living below poverty, from 10 percent in 1996 to 16 percent in 1998 (OHPPR, 1999b). This parallels the increase found in the poverty-level population in Oregon generally.

We asked focus group participants with children about whether their children could remain in OHP even if their own coverage lapsed. Only nine of the participants in the disenrolled or re-enrolled groups had children and not all of these were custodial parents.

Thus, information on parents' understanding of this issue is limited. Of the four parents who addressed this question, two clearly understood that children could remain covered independently of parents and one had made use of this provision. One participant was unsure whether his children could remain covered if he disenrolled, while another believed that parents' and children's eligibility were linked.

It is again difficult to directly measure the impact of premiums on children's eligibility. However, recertification data do not indicate important spillover effects. The likelihood that a child would recertify was unchanged following the introduction of premiums (63 percent pre-premiums and 64 percent post). Although children are unlikely to recertify if their parents do not and the likelihood of adults recertifying fell following the introduction of premiums, the probability of children recertifying when their parents do not increased in the post-premium period (from 15 percent to 24 percent). As a result, there was no net change in the probability of a child recertifying. On the other hand, children whose parents were not in arrears at the time the case came up for recertification were significantly more likely to remain eligible than were children whose parents were in arrears (76 percent versus 54 percent, $p<.001$).

Conclusions

The Oregon Health Plan adopted premiums for the expansion population in response to budget shortfalls that were partly attributed to higher than expected costs of covering these beneficiaries. The majority of expansion households appear willing and able to make the premium payments, with 70 percent of billed premiums collected. The collection rate has increased over time, exceeding 75 percent in 1998. However, the contribution of premiums

to the OHP budget is small, only about 1 percent. Nonetheless, facing serious budget shortfalls, legislators may feel impelled to impose user fees in discretionary programs like Oregon's Medicaid eligibility expansion.

Several features of OHP's premium policy are designed to minimize adverse impacts on beneficiaries. Premiums have been set fairly low, with the average expansion case paying only $11 per month. Premium waiver provisions provide an important safety valve for beneficiaries with no income. Our analysis of case history files suggest that a fairly high percentage of cases avail themselves of the opportunity to waive some or all of their premiums. In addition, expansion beneficiaries are guaranteed a full six months of coverage even if they are in arrears in their premium payments.

Despite its political appeal and the incorporation of certain provisions designed to protect beneficiaries, the adoption of premiums is not without potential costs. Although it is difficult to directly assess the impact of premiums, there is evidence that premiums may have had an adverse effect on eligibility in the expansion population. The likelihood that a beneficiary would recertify at the end of a six-month eligibility period fell by almost 40 percent after premiums were introduced. In addition, coverage of expansion beneficiaries has become increasingly episodic and churning in this population has grown since the adoption of premiums. On the other hand, policies that were designed to protect children's eligibility appear to have had the desired effect and we did not find evidence that premiums have had spillover effects on children. Consistent with concerns voiced by managed care plans that premiums have resulted in adverse selection, we found a strong positive association between service use and the probability of applying for recertification of OHP eligibility at the end of a six-month period of guaranteed eligibility. In the absence of

utilization data for the period prior to the adoption of premiums, however, we cannot determine whether this association changed as a result of premiums.

Our findings about premium impacts on eligibility are not conclusive because we are not able to isolate the effect of imposing a premium requirement on the expansion population from other secular changes that may have affected the likelihood of recertification. For example, Oregon increased the minimum wage in January 1997. This raised the income of a two-person household with an individual working full-time at a minimum wage job to 103 percent of FPL, above the expansion eligibility limit (OHPPR, 1999a). While this undoubtedly affected the likelihood that working expansion eligibles would continue to qualify when they recertified, the reduction in recertification rates should have been greatest for those eligibles whose eligibility period spanned the time when the minimum wage increase went into effect. Instead, we found a reduction that was sustained throughout the three-year period following the introduction of premiums.

Our findings are strengthened by the sheer magnitude of the 40 percent decline in the recertification rate observed in the post-premium period. Indeed, our analyses do not capture the full impact of premiums because they do not take into account potential eligibles that are discouraged from applying at all. Our results are also consistent with other studies that find declining participation rates in eligibility expansion programs as premiums increase as a percent of income.

Nonetheless, additional research remains to be done to confirm the deterrent effect of premiums and to better understand their consequences. In the absence of a credible control group, it is difficult to address this study's inability to control for other changes over time that might affect eligibility patterns. Other studies have adopted a cross-sectional approach,

looking at how premium effects vary with the percent of income that beneficiaries are required to pay. However these findings are also limited because beneficiaries in the highest income groups, who pay the highest relative premiums, are also the most likely to lose eligibility because a small change in circumstances causes them to exceed income limits. An alternative is to directly survey disenrollees about the factors that drove their failure to re-enroll. Locating this group, which may be very mobile, is likely to be challenging.

SCHIP legislation, which applies to children, has generated a good deal of recent interest in premiums. Oregon's experience may not be directly transferable to SCHIP programs because children were specifically excluded from OHP's premium policy. Further research is needed on the effects of premiums when they are applied to children or to an entire family unit rather than just to adults. Our findings suggest a relatively greater deterrent effect for adults with children, perhaps because their enrollment decision is less driven by immediate health care needs than is the case for adults without children. Does this extend to children and families as a whole?

Other important issues that have not been addressed by previous research on premiums are the consequences of lapses in coverage. Does episodic enrollment adversely affect beneficiary health status? What are the consequences for long-term service use? Our study was also not able to fully address questions of adverse selection because we lacked adequate utilization data from the pre-premium period.

Findings on premium impacts are likely to reflect the specific features of a state's policy. Previous research has found the percent of income that premiums represent is a key factor. To what extent did Oregon's provision for waiving premiums for beneficiaries with

no income mitigate potential impacts on eligibility? What is the impact of allowing beneficiaries to carry an arrearage and remain enrolled for a full-six month eligibility period?

If the goal of Medicaid expansions that cover low-income, uninsured populations is to provide continuity of insurance coverage, then premium requirements may undermine the intent of these programs. Premiums can have effects that are especially antithetical to the concept of managed care, which is dependent on coverage continuity and the provision of primary and preventive care to control utilization in the long run. If premiums increase the likelihood that expansion beneficiaries only seek coverage during a spell of illness, either Medicaid programs will need to increase capitation rates for this population or the financial viability of managed care plans will be jeopardized. As a result, premiums could have a net budget impact that is far less than current estimates, perhaps even negative.

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