Oregon Basic Health Program Study

October 31, 2016

Department of Consumer & Business Services
Prepared by:

Wakely Consulting Group

Tim Courtney, FSA, MAAA
Senior Consulting Actuary

The Urban Institute

Matthew Buettgens, Ph.D.
Senior Research Analyst

Table of Contents

EXECUTIVE SUMMARY....1

Background 1

RESULTS....3

BHP Eligibility and Enrollment....3

The Number of Uninsured 3

Consumer Effects....4

Churning....4

State Fiscal Feasibility 5

Oregon's Marketplace 6

1) INTRODUCTION 7

ACA Implementation in Oregon 7

BHP Background 7

Scope of Work 11

General Approach....11

Scenarios Modeled 12

2) BHP ELIGIBILITY, ENROLLMENT AND CHURN....13

Introduction 13

Methods....13

Results....14

How would BHP Affect Health Coverage in Oregon? 27

Twelve-Month Continuous Eligibility for BHP 28

The Regional Impact of BHP 29

CHURNING IN ELIGIBILITY FOR OHP, BHP, AND QHPS WITH TAX CREDITS 32

CONCLUSION 37

3) PROJECTED BHP REVENUES AND COSTS 38

Background 38

Key Assumptions and Methodology 38

Results and Considerations 40

4) BHP ENROLLEE AFFORDABILITY 46

Background 46

Results 46

5) BHP IMPACT ON OREGON MARKETPLACE AND INDIVIDUAL MARKET 50

Background 50

Risk Pool Effects 50

Attractiveness to Carriers and Options for Consumers 55

6) MODEL UPDATES 57

Differences in Urban Estimates of BHP Eligibles and Enrollment 57

Differences in Urban Estimates of Churn 57

Differences from October 2014 Oregon Health Authority Report 57

7) IMPACT OF BHP ON STATE BUDGET 61

8) RELIANCE AND LIMITATIONS 64

DETAILED METHODOLOGY 2

Section 2: BHP eligibility, enrollment and churn 3

Additional Information on Methodology 8

Section 3: Projected BHP revenues and costs 9

APPENDIX A – METHOD AND ASSUMPTIONS

APPENDIX B-FEDERAL BHP PAYMENT METHODOLOGY

EXECUTIVE SUMMARY

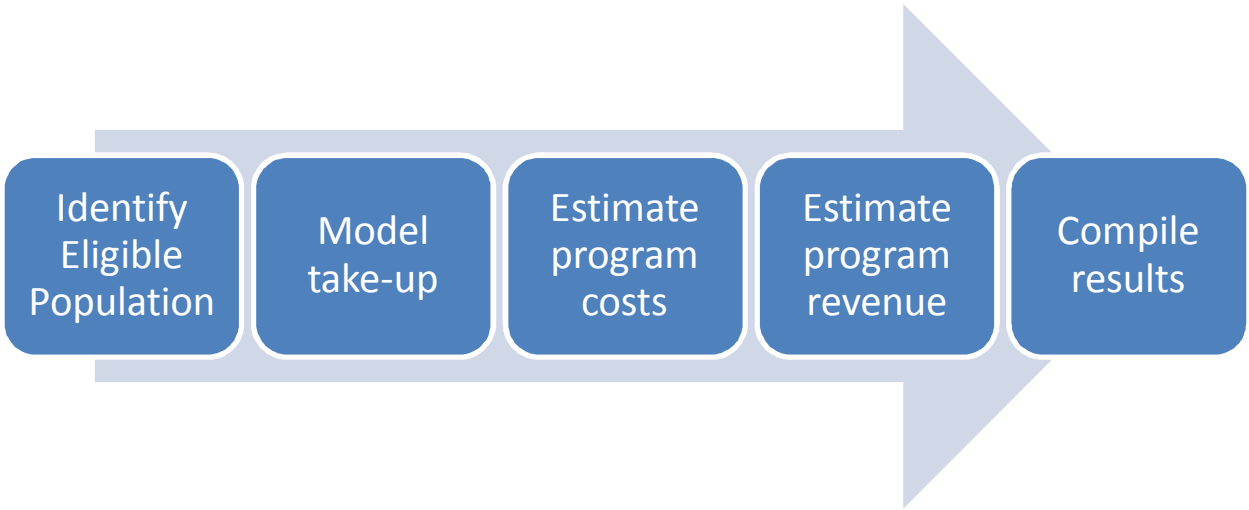
Background

This report represents an update to the October 29, 2014 "Oregon Basic Health Program Study", delivered to the Oregon Health Authority. It is a result of the Oregon Legislature directing the Oregon Department of Consumer & Business Services (DCBS) to update the Study for certain cost and operational assumptions.

DCBS contracted with Wakely Consulting Group, Inc. (Wakely) and The Urban Institute (Urban) to produce this report, which analyzes BHP's potential effects on consumers, the Oregon Marketplace, state-funded health care costs, and other topics.

Section 1331 of the Patient Protection and Affordable Care Act (ACA) gives states the option to operate a Basic Health Program (BHP) to cover consumers with incomes up to 200 percent of the federal poverty level (FPL) through state-contracting "standard health plans," rather than Qualified Health Plans (QHPs) offered through the Health Insurance Marketplace. BHP-eligible consumers include citizen and lawfully present immigrant adults between 138 and 200 percent FPL; and lawfully present immigrants under 138 percent FPL whose immigration status makes them ineligible for federally matched Medicaid (usually because of lawful residence for less than five years). BHP enrollees must receive coverage no less generous and affordable than what they would have obtained from subsidized QHPs. The federal government provides states with funding equal to 95 percent of the subsidies BHP enrollees would have received in the marketplace.

The following illustrates our general method for identifying the most important financial impacts of the BHP on the State of Oregon in 2017:



We analyzed the impact of a BHP on coverage for Oregon residents, State finances, and the Oregon individual Marketplace under several scenarios. The scenarios covered variations in three key variables:

1. Twelve months continuous enrollment (Scenarios 1 through 4) versus no twelve month continuous enrollment provision (Scenarios 5 through 8).
2. OHP Plus benefit package (Scenarios 1, 3, 5, and 7) versus OHP Plus benefits with dental coverage added (Scenarios 2, 4, 6, and 8).
3. Zero member cost sharing (Scenarios 1, 2, 5, and 6) versus half of ACA cost sharing for those with incomes from 139% of the federal poverty level (FPL) to 200% (Scenarios 3, 4, 7, and 8).

Altogether, this leads to eight scenarios as summarized in Table ES1, below.

Table ES1 - Summary of BHP Scenarios

Scenario	BHP Population Scenario (See Section 2)	Population	Benefits	Cost Sharing 139% FPL to 200% FPL
1	B	12-months continuously eligible	OHP+ no dental	0%
2	B	12-months continuously eligible	OHP+ with dental	0%
3	C	12-months continuously eligible	OHP+ no dental	50%
4	C	12-months continuously eligible	OHP+ with dental	50%
5	B	No 12-months continuously eligible	OHP+ no dental	0%
6	B	No 12-months continuously eligible	OHP+ with dental	0%
7	C	No 12-months continuously eligible	OHP+ no dental	50%
8	C	No 12-months continuously eligible	OHP+ with dental	50%

All estimates are for 2017, and assume that initial coverage transitions to the ACA marketplace are complete and stable. Please note that three population take-up assumptions are modeled in Section 2 (Options A, B, and C); however, only two of those options are used for purposes of the financial estimates presented in Sections 3 through 5.

RESULTS

BHP Eligibility and Enrollment

Based on our analysis, between 60,000 and 80,000 could enroll in a BHP in 2017, depending on how the BHP premiums, cost sharing and eligibility rules are set. A little over half of BHP enrollees would be coming from QHPs. The remainder would come roughly 50%/50% from a current status of being uninsured or having employer sponsored coverage that is deemed unaffordable by the ACA. Table ES2 shows estimated enrollment by scenario.

Table ES2
BHP Enrollees by Source of Current Coverage

Previous Coverage	Scenarios 1 and 2	Scenarios 3 and 4	Scenarios 5 and 6	Scenarios 7 and 8
Previous QHP Enrollee	49,645	49,521	48,028	48,028
Non-QHP Individual Market	355	322	-	-
Uninsured	12,228	7,230	8,625	4,242
Employer	16,846	13,680	9,585	6,977
Other Public	323	277	-	-
Total	79,397	71,030	66,238	59,247

Higher enrollment in the BHP will occur under scenarios where there is enrollee cost sharing and if eligibility is determined by granting 12 months of continuous eligibility if a resident meets income requirements for at least one month within the last 12.

The Number of Uninsured

We estimate that, by making coverage more affordable for residents under 200 percent FPL, BHP implementation will modestly reduce the number of uninsured Oregonians. If current state decisions are unchanged, we project that 270,000 Oregonians would be uninsured in 2017. Adding BHP to the rest of the ACA programs would further reduce the number of uninsured by:

- 12,200 if no cost sharing is charged and 12 months of continuous eligibility granted;
- 8,600 if no cost sharing is charged, but without 12 months of continuous eligibility;
- 7,200 if cost sharing is charged and 12 months of continuous eligibility is granted; and
- 4,200 if cost sharing is charged, but without 12 months of continuous eligibility.

There is uncertainty involved in predicting BHP enrollment. BHP enrollment rates are likely to be lower than current OHP Plus enrollment rates due to the premiums and/or cost sharing charged, but, as a

possible upper bound, if BHP enrollment rates were equal to current OHP Plus participation rates, the reduction in the uninsured compared to coverage without BHP would be 20,600 with 12 months of continuous eligibility or 16,600 without it.

Consumer Effects

Implementing a BHP that charges members half the premium they would have paid had they enrolled in a QHP and reducing cost sharing will reduce out-of-pocket expenses for consumers over $1,000 for those with QHP coverage to $2,400 to $3,500 for those previously uninsured. Out-of-pocket reductions would also occur for residents choosing employer sponsored coverage that is deemed not affordable; however, we did not have data to quantify this impact since employee contribution rates by employer are not known.

Table ES3 shows the estimated average annual out-of-pocket expenses for consumers with and without a BHP program.

Table ES3
Average Annual Out-of-pocket expense

Scenario	Previous Coverage	No BHP	With BHP	Savings
1 and 2	Uninsured	$3,858	$1,426	($2,432)
	Marketplace	$1,886	$801	($1,085)
3 and 4	Uninsured	$4,266	$991	($3,274)
	Marketplace	$1,875	$792	($1,083)
5 and 6	Uninsured	$3,720	$1,338	($2,382)
	Marketplace	$1,793	$746	($1,047)
6 and 7	Uninsured	$4,059	$592	($3,467)
	Marketplace	$1,793	$746	($1,047)

Churning

The two states that currently have a BHP, Minnesota and New York, were able to integrate many BHP functions with existing Medicaid or marketplace functions. Both states integrated BHP eligibility and enrollment with their existing state marketplace software. In addition, Minnesota does joint procurement for Medicaid and BHP. In our 2014 report, we considered the scenario in which BHP is aligned with OHP. However, it does not appear that such integration is feasible for Oregon—for

example, HealthCare.gov is not expected to support BHP enrollment—so we assume that BHP will be a separate program from OHP Plus and the marketplace.

About 120,000 people would be eligible for BHP during the course of a year. Of these, 44,000 would also be eligible for OHP Plus at some point during the year, and 39,000 would be eligible for QHPs with tax credits at some point during the year. Some of these people would be eligible for all three programs during the year. Groups that are particularly likely to churn between OHP Plus and BHP include older adults (age 55 to 64), young adults (age 19 to 24), and those with a high school education. Groups that are particularly likely to churn between BHP and QHPs with tax credits include adults aged 55 to 64, non-Hispanic blacks, and American Indian/Alaska Natives. Those least likely to churn between BHP and QHPs include adults aged 25 to 44, Asian/Pacific Islanders and those with at least some college.

We estimate that with BHP, 234,000 people would be eligible for marketplace QHPs with tax credits during the course of a year. Of these, 72,000 would be eligible for OHP Plus at some point during the year, and 39,000 would be eligible for BHP at some point.

State Fiscal Feasibility

Estimated state revenues and costs for 2017 vary by scenario, as shown by table ES4. All scenarios imply that the State will need to supplement federal funding in order to cover claim and administrative expense liabilities. It is important to note that federal BHP payments are tied to the second lowest cost silver rate available on the Marketplace which could change from year to year and may not track with true medical cost trends. This reduces the overall predictability of state fiscal impacts.

Table ES4 - Total Projected BHP Cash Flows for 2017 (thousands)

Scenario	Federal and Member BHP Revenue	Claim and Administrative Expense Liability	Surplus/ (Deficit), Excluding State Admin	State Admin Expenses	Total Surplus/ (Deficit)	Surplus/(Deficit) Net Per Enrollee Per Year
1	$406,795	$449,282	($42,487)	$20,313	($62,800)	($791)
2	$406,795	$485,663	($78,868)	$20,313	($99,181)	($1,249)
3	$363,245	$389,144	($25,899)	$18,172	($44,071)	($620)
4	$363,245	$421,691	($58,446)	$18,172	($76,618)	($1,079)
5	$358,544	$380,975	($22,431)	$16,946	($39,377)	($594)
6	$358,544	$411,326	($52,781)	$16,946	($69,728)	($1,053)
7	$321,421	$334,155	($12,734)	$15,158	($27,892)	($471)
8	$321,421	$361,302	($39,881)	$15,158	($55,039)	($929)

Although all scenarios show deficits, it is important to understand that underlying claim expenses are estimates that depend on several key assumptions. Those assumptions include:

- Provider reimbursement levels in the BHP will be 82% of average levels achieved by carriers in the commercial individual Marketplace.
- Claim costs are based on CY2017 Second Lowest Cost Silver rates with an assumed benefit cost ratio of 80% and actuarial value of 70%.

Beyond the claim cost estimates, it is also important to note that all scenarios modeled involve at least some level of additional subsidy or benefit to residents above and beyond what they would receive in the Marketplace. The projected deficits could be reduced by charging higher member premiums, increasing cost sharing (in some scenarios), and by setting carrier capitation rates that imply a lower level of provider reimbursement.

Also, the above analysis does not consider any potential state budget savings in other areas as a result from economies of scale or taking advantage of existing infrastructure and processes inherent in the Medicaid program.

Oregon's Marketplace

Implementing BHP would reduce the size of Oregon's individual market (on and off exchange) by about 21%, from 237,300 to 189,000. Enrollment in Oregon's Marketplace would decline by 37 percent, from about 135,000 to 87,000. Enrollment in the individual market outside the Marketplace would not be affected by BHP, remaining at 102,000. The decrease in Marketplace enrollment is estimated to modestly affect the overall Marketplace individual market's risk pool, increasing premiums by 1.5 percent for the 119,000 residents who are projected to pay full premiums, over 95% of whom have incomes over 400 percent of FPL.

Fewer covered lives could translate into less carrier interest, which in turn could mean fewer consumer choices and reduced competition, ultimately translating into higher premiums.

Even without enrollees under 200 percent FPL, nearly 80% of the Oregon Marketplace's enrollees would have subsidies that cannot be used elsewhere, making the Marketplace highly unlikely to become unstable.

1) INTRODUCTION

This section provides background on ACA implementation in Oregon, the Basic Health Program, the scope of work for which DCBS contracted with Wakely and Urban, and the general approach to the analysis.

ACA Implementation in Oregon

Working within the health insurance coverage framework provided by the Affordable Care Act (ACA), Oregon has a health insurance Marketplace for individual and small-group markets, and an expanded the Oregon Health Plan (OHP) Medicaid program for low-income individuals.

As of March 2016, effectuated enrollment in Oregon's individual exchange was over 130,000 individuals, with 73% of those receiving advance premium tax credits. Meanwhile, enrollment in Oregon Health Plan, the Medicaid program, is nearly 1.1 million enrollees as of March 2016.

According to healthinsurance.org, approved rate increases in the individual exchange for 2017 range from about 10% to 32%, depending on the carrier[1].

BHP Background

Section 1331 of the Affordable Care Act (ACA) establishes the Basic Health Program (BHP), which gives states the option to provide coverage to eligible individuals, including those with household incomes between 138 percent and 200 percent of the federal poverty level (FPL), through state-contracted standard health plans that meet certain requirements, rather than through the exchange Marketplace. The following provides some of the key BHP provisions based on the final federal regulation dated February 29, 2016. Note that this is not a comprehensive list of requirements.

Eligibility

BHP eligibility requirements are similar to those for subsidized coverage through state Marketplaces; however, the BHP is limited to the population with household incomes under 200% FPL. More specifically, BHP eligible individuals fall into one of the following categories:

[1] http://dfr.oregon.gov/news/Pages/2016/june302016.aspx

- Residents of the State who:
    - Have incomes between 138% and 200% FPL
    - Are U.S. citizens or lawfully present immigrants
    - Are under age 65
    - Are not eligible for coverage under the State's Medicaid program, the Children's Health Insurance Program (CHIP) or Military/CHAMPUS-TRICARE (except for pregnancy-related coverage or eligibility categories that provide less than full services)
    - Do not have access to Employer-Sponsored Insurance (ESI) or other coverage that meets ACA affordability and minimum coverage standards
    - Meet all other eligibility criteria for subsidized coverage through the Marketplace
- Lawfully present immigrants with household income up to 138% of FPL such as those who are not eligible for Medicaid as a result of the five year residency requirement and COFA people, who are permanently excluded from Medicaid eligibility.

In a state that establishes a BHP, BHP-eligible individuals are not eligible to receive federal subsidies in the form of premium tax credits and cost-sharing reductions to offset the costs of qualified health plans in the Marketplace.

Coverage Requirements

Similar to Qualified Health Plans (QHPs) offered through state Marketplaces, standard health plans are required to provide Essential Health Benefits (EHB) as defined under 45 CFR Section 156. The EHB standards define the minimum required covered benefits and similar standards apply for Medicaid Alternative Benefit Plans (ABPs) that apply to adults who became eligible for Medicaid through ACA Medicaid expansion. In 2013, states had the option of selecting among up to 10 benchmark plans to define EHBs that were then required to be covered under all non-grandfathered health plans in the individual and small group insurance markets with effective dates on or after January 1, 2014. For standard health plans under the BHP, states can use the EHBs defined for commercial coverage, or they can choose one or more additional benchmark option to apply to standard health plans. States also have the flexibility to provide additional benefits through the BHP, for example, to be comparable to the Medicaid Alternative Benefit Plans (ABPs). Benefits offered in the Marketplace are a floor, not a ceiling, for BHP.

Throughout this report, we use the term OHP Plus in defining covered services in the BHP. Based on discussions with DCBS, it was decided that differences between the OHP Plus and EHB covered services were immaterial, other than dental and non-emergency transportation (NEMT). Costs in this report described as OHP Plus (without dental and NEMT added) are derived from second lowest cost silver rates in the marketplace, and as such, will reflect EHB benefits.

Consumer Premiums Out-of-Pocket Cost Requirements

States cannot require BHP enrollees to pay more in premiums or out-of-pocket costs than they would have had they enrolled in subsidized second lowest cost silver QHP coverage (benchmark plan) through the Marketplace. States have the option to vary premiums and cost sharing for BHP coverage based on household income, so long as lower income enrollees do not pay more than higher income enrollees.

The following table summarizes the premiums and average out-of-pocket costs consumers with household incomes under 200% FPL pay for subsidized coverage through the Marketplace.

Table 1.1 - Consumer Premiums and Cost Sharing for Marketplace Benchmark Plan

Household Income	Estimated 2017 Income, 1 Person Household	Premium for Benchmark Plan as Percent of Household Income	Annual Premium Amount	Out of pocket Costs as Percent of Average Claims
< 133% FPL	<$15,968	2.03%	$324	6%
133% – 150% FPL	$15,968 - $18,009	3.05% - 4.07%	$487 - $733	6%
150% – 200% FPL	$18,009 - $24,012	4.07% - 6.41%	$733 - $1,539	13%

Contracting Requirements

The BHP regulations require that states employ a competitive contracting process for procuring standard health plans to provide BHP coverage. That process must meet standard federal requirements for state procurement as well as additional standards discussed below. States can contract with the entities that include the following to offer standard health plans:

- Licensed health maintenance organizations (HMOs)
- Licensed health insurance insurers
- Network of health care providers
- Non-licensed health maintenance organizations participating in Medicaid and/or CHIP

Note that if the state contracts with a health insurance issuer, the contract must require that the medical loss ratio (MLR) be at least 85 percent. At a high level, this means that the health insurance issuer must use at least 85 cents of each dollar for medical claims expenses or other health-related services rather than administrative or other non-benefit expenses. In applying these requirements,

assessments, taxes, and fees are treated differently from health plans' internal administrative costs; the former are subtracted from the premium before the MLR calculation is made.

Federal Funding

The federal government provides funding of roughly 95% of the expected premium tax credits and cost-sharing reduction subsidies BHP enrollees would have received had they enrolled in subsidized coverage through the Marketplace. To implement a BHP, states must establish a BHP trust fund either with an independent entity or in a segregated account within the State's fund structure. Federal funding can only be used to reduce premiums and cost-sharing for eligible individuals enrolled in BHP standard health plans or to provide additional benefits to eligible BHP enrollees. Operational costs incurred by the State to administer the BHP cannot be directly funded with federal BHP payments. However, States can impose fees on carriers participating in the BHP program to fund state operations, and use federal BHP funds to pay the resulting increase in carrier premiums. Most Marketplaces uses a similar approach to funding administrative costs by surcharging QHP premiums and using premium tax credits to cover most of the resulting increase in QHP premiums.

Federal payments are made to the BHP trust fund on a quarterly basis with prospective payments based on estimated enrollment segmented into different "federal payment cells" multiplied by the payment rate developed for each cell. Payments are then retrospectively adjusted at the end of each quarter based on actual enrollment for that quarter.

Operational Requirements

The federal regulations include the following BHP operational requirements that states must address:[2]

- Eligibility determinations and appeals
- Contracting with standard health plan offerors. States are expected to provide enrollees with a choice of at least two standard health plans unless an exception can be justified.
- Oversight and financial integrity, which includes operation of the BHP Trust Fund and required federal reporting.
- Consumer assistance, such as providing clear information to potential applicants and enrollees about their coverage options.

[2] 45 CFR Section 600.145

- Extending protections to American Indian/Alaska Natives and compliance with Civil Rights and nondiscrimination requirements.
- Data collection and reporting for efficient and effective operation of the BHP and as required to support program oversight.
- Program termination procedures, as applicable.

Though not included in the regulations, to the extent premiums are imposed on BHP enrollees, the State or standard health plans would also need premium collection functionality.

Scope of Work

The following provides a high level description of each of the components included in the scope of work for this study and indicates where the information can be found within the report. Note that all cost projections are for calendar year 2017 only and should not be assumed for future years.

Table 1.2 – Summary of Scope of Work

Description	Location in Report
BHP Enrollment Estimates	Section 2
Churn Estimates	Section 2
Assessment of Available Funds	Section 3
Program Cost Estimates	Section 3
Impact of BHP on Marketplace Population and Risk	Section 5
Estimated Impact of BHP on Commercial Market Premiums	Section 5
Consumer Affordability Impacts	Section 4
Comparison of BHP Operating Costs and Revenues	Section 3

General Approach

The BHP eligibility and enrollment analysis performed by Urban provides the foundation for the other analyses in this report. The following illustrates the high level approach to identifying the financial impact of the BHP on the State of Oregon in 2017.

Urban performed the first two pieces of the analysis described above which can be found in section 2 of this report. This enrollment analysis provided the basis for estimating the BHP program costs and revenues (section 3), and identifying the impact of BHP implementation on the State's Health Insurance Marketplace (section 5), and the estimated impact to individuals who are expected to enroll in the BHP relative to the coverage (or lack thereof) they would have had in the absence of the BHP (section 4).

Scenarios Modeled

Wakely and Urban worked with DCBS staff and the Oregon BHP Study Advisory Group to identify eight scenarios to use as the basis for BHP modeling. The eight scenarios are the result of taking all combinations of three variables, each with two options. The three variables are described below:

- Twelve months of continuous eligibility. The standard Medicaid eligibility definition in Oregon grants a resident 12 months of eligibility as long as he or she is eligible for one month. We also model a scenario where this definition is not used, and eligibility is assessed on a monthly basis.
- Benefits with and without dental and non-emergency transportation coverage. We model services covered under the OHP Plus benefit package as well as OHP Plus benefits plus dental and non-emergency transportation.
- Cost sharing for BHP eligibles. The two scenarios modeled here are no cost sharing for all BHP enrollees and 50% of the cost sharing amount that would have been paid under the ACA for a Silver metal-tier plan for enrollees with incomes between 139% FPL and 200% FPL. Please see Appendix A for a definition of cost sharing.

The following table summarizes the scenarios that were modeled at the request of DCBS and the Oregon BHP Study Advisory Group.

Table 1.3 - Summary of BHP Scenarios

Scenario	12-Months Continuous Eligibility Granted?	BHP Population Scenario (See Section 2)	Additional Dental/ NEMT Benefits?	Member Premiums 139% to 200% FPL	Cost Sharing 139% to 200% FPL
1	Yes	Option B	No	50%	0%
2	Yes	Option B	Yes	50%	0%
3	Yes	Option C	No	50%	50%
4	Yes	Option C	Yes	50%	50%
5	No	Option B	No	50%	0%
6	No	Option B	Yes	50%	0%
7	No	Option C	No	50%	50%
8	No	Option C	Yes	50%	50%

Note that across the scenarios, the method for determining premiums to be paid by the BHP enrollee does not vary. In all scenarios, BHP enrollees with incomes between 138% and 200% FPL will pay 50% of the household premium that would have been paid had the individual purchased the 2017 second lowest cost silver plan in the Marketplace. BHP enrollees with incomes less than 139% of FPL will not pay any premiums.

2) BHP ELIGIBILITY, ENROLLMENT AND CHURN

Introduction

In this section, we update the eligibility and enrollment estimates from the 2014 Oregon Basic Health Program Study. Our new estimates take into account actual Medicaid, marketplace, and other private nongroup enrollment in Oregon under the ACA. Also, our model is based on more recent Census survey data for Oregon households. And we simulate the impact of 12-month continuous eligibility on BHP enrollment.

We simulate three different BHP options both with and without 12-month continuous eligibility. First, BHP is based on OHP Plus without premiums or cost sharing (Option A). This option was not included in the cost estimates, but was included for two reasons. First, it is a useful comparison because it represents the result of making BHP virtually indistinguishable from Medicaid. Second, it provides a reasonable upper bound on enrollment if BHP proves more popular than we simulated. Second, BHP based on OHP Plus with premiums up to 50 percent of current marketplace premiums with tax credits for those with incomes above 138 percent of the FPL (Option B). There would be no premiums for those with lower incomes and no cost sharing for anyone in BHP. This option is based on the recommendations of the 2015 BHP Stakeholder Workgroup. Third, premiums are the same as in the second option, but enrollees with incomes above 138 percent of the FPL would pay cost sharing at half the level of current out-of-pocket spending with marketplace cost sharing reductions (Option C).

To map these options with the 8 BHP scenarios in the cost analysis, Option B without continuous eligibility was used for scenarios 1 and 2. Option C without continuous eligibility was used for scenarios 3 and 4. Option B with continuous eligibility was used in scenarios 5 and 6. Finally, Option C with continuous eligibility was used in scenarios 7 and 8.

Methods

We began with a large representative sample of Oregonians using two years (2012 and 2013) of Oregon households from the American Community Survey (ACS), the largest Census Department household survey. The data were aged to 2017 using projections from the Urban Institute's Mapping America's Futures program. We then modeled eligibility for OHP, marketplace tax credits, and OHP based on current law and regulations. Finally, we used the Urban Institute's Health Insurance Policy Simulation Model (HIPSM) to project the take-up of all forms of health coverage in 2017 under four scenarios:

- No BHP. Current law and state decisions continue unchanged.
- BHP without premiums or cost sharing (Option A). Benefits are the same as OHP plus.

- BHP with premiums, based on BHP Stakeholder Workgroup recommendations (Option B). Benefits are the same as OHP plus. There is no premium or cost sharing for those with incomes below 138 percent of the FPL. Premiums for those eligible for BHP at higher incomes are computed at a sliding scale, with the maximum premium of 50 percent of the current premium contribution for QHP coverage with premium tax credits at 200 percent of the FPL.

- BHP with premiums and cost sharing (Option C). Same as Option B, except that cost sharing for those with incomes above 138 percent of the FPL is half that of health costs not covered by ACA Marketplace coverage with cost sharing subsidies.

Our methodology was similar to that used in the BHP report that we prepared for the state in 2014, but there are several important enhancements that were not possible then. First, our estimates for 2017 health coverage without BHP were based on 2016 enrollment data for Medicaid and private nongroup coverage in Oregon. The increase in Medicaid enrollment under the ACA was derived from CMS coverage reports, while detailed data on marketplace and other nongroup covered lives was provided by the state. Second, we were able to compute 2016 Medicaid take-up rates for Oregonian adults who gained Medicaid eligibility due to the ACA. We expect that take-up rates among the uninsured gaining access to BHP without premiums (Option A) would be similar, so we were able to use Oregon Medicaid enrollment data to reduce the uncertainty surrounding BHP take-up. Third, our model is based on more recent ACS data than the model used in 2014.

We also simulated enrollment in all three BHP options under 12-month continuous eligibility. To do this, we used the latest waves of the 2008 SIPP panel, which were collected in 2012 and 2013. We simulated eligibility for Medicaid, BHP, and Marketplace tax credits for each wave over the last year of SIPP data, allowing us to identify those who were not eligible for BHP in the last wave of the survey, but who would have been eligible in the previous year. To better reflect the population of Oregon, we used the SIPP data to predict the probability that each person on our ACS-based Oregon dataset was eligible for BHP in the previous year. Take-up among those currently eligible for BHP is the same as without continuous eligibility, but there is additional BHP enrollment among those who were previously eligible. We applied take-up rates for each BHP option to the population that could have enrolled in BHP last year, but is not currently eligible to get the additional enrollment under 12-month continuous eligibility.

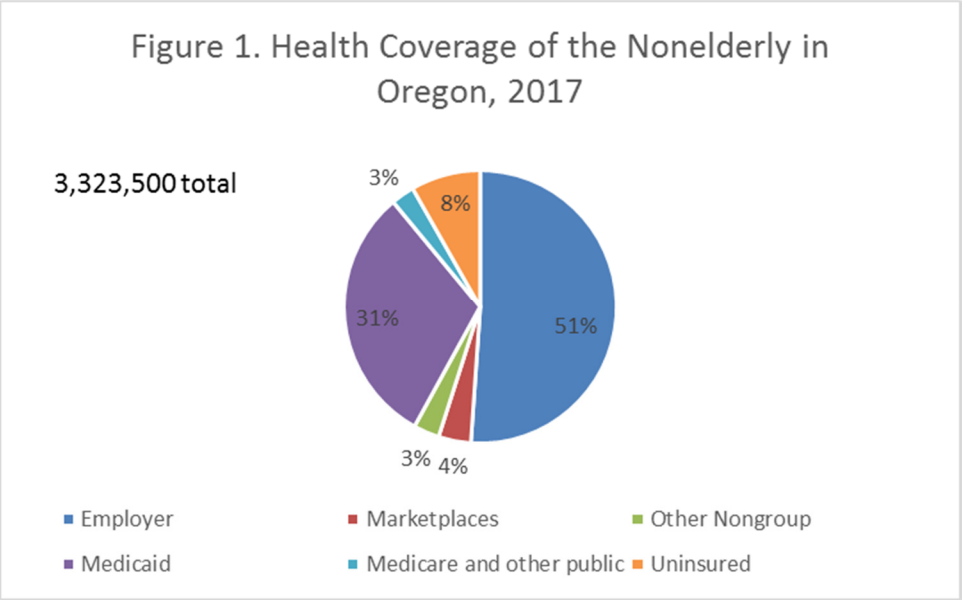
More details about our methodology are available in the Appendix A.

Results

We begin by estimating 2017 health coverage in Oregon under current law. We then examine those who would be eligible for BHP. We then estimate BHP enrollment under three different options, along with changes to marketplace enrollment and the nongroup risk pool. We estimate how BHP would change the distribution of health coverage, particularly how it would affect the number of uninsured, and estimate the impact of 12-month continuous eligibility.

Health Coverage in 2017 Without BHP

Based on 2016 marketplace and Medicaid enrollment data for Oregon, we estimate that the uninsured rate among nonelderly Oregonians in 2017 will be 8 percent, or 275,000 people (Figure 1). This is based on American Community Survey data, and is consistent with the National Health Insurance Survey. [3] Estimates based on other surveys with different methodologies can give different rates.[4] Just over half of all nonelderly Oregonians will be covered by an employer's health plan, and 31 percent would be covered by Medicaid or CHIP. About 7 percent would have nongroup coverage; 4 percent would be covered by the marketplace and 3 percent by plans outside the marketplace. The remaining 3 percent of the nonelderly would have Medicare or some other form of coverage.



All estimates in this report take into account undocumented immigrants, who are ineligible for OHP, BHP, and marketplace health coverage, and legal immigrants who are ineligible for Medicaid because

[3] https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201605.pdf

[4] For example, the Oregon Health Insurance Survey. http://www.oregon.gov/oha/analytics/Pages/Insurance-Data.aspx

they have been resident less than five years or are Compact of Free Association (COFA) migrants, but are eligible for marketplace tax credits or BHP.[5]

Comparing 2016 marketplace enrollment with our projections of eligibility for marketplace tax credits, we find that a substantial number of eligible people have not enrolled. In particular, 27 percent of Oregonians with incomes below 200 percent of the FPL who are eligible for marketplace tax credits would be uninsured in 2017, nearly 25,000 people (Figure 2). Of the remaining 73 percent, 53 percent, or 48,000, are enrolled in marketplace and 20 percent have employer coverage.

Under current regulations, if any family member is offered single coverage costing up to 9.66 percent of family income, then the entire family is barred from marketplace tax credits.[6] This is often called the "family glitch." We have seen that one fifth of tax credit eligibles with incomes below 200 percent of the FPL have employer coverage (Figure 2). In order to be eligible, these families are paying at least 10 percent of their income for single coverage and generally more to cover their families, a much higher share of their income than they would pay for marketplace coverage. They may have decided to stay with employer coverage due to factors such as the benefits and cost sharing of their employer's plan versus marketplace plans or the tax advantage of financing coverage through an employer. Other families are barred from tax credits because of an affordable offer of single coverage. However, most of these would have to pay a much larger share of their income for premiums to cover their families than they would for marketplace coverage.[7] It is important to note that BHP would not make more people eligible for assistance. Unless Congress addresses the "family glitch", families ineligible for marketplace tax credits due to affordable offers of single coverage will likewise be ineligible for BHP coverage.

Several studies have shown that the large majority of those who search for marketplace coverage but do not enroll say that the coverage was unaffordable.[8] Some of these people may not have actually been

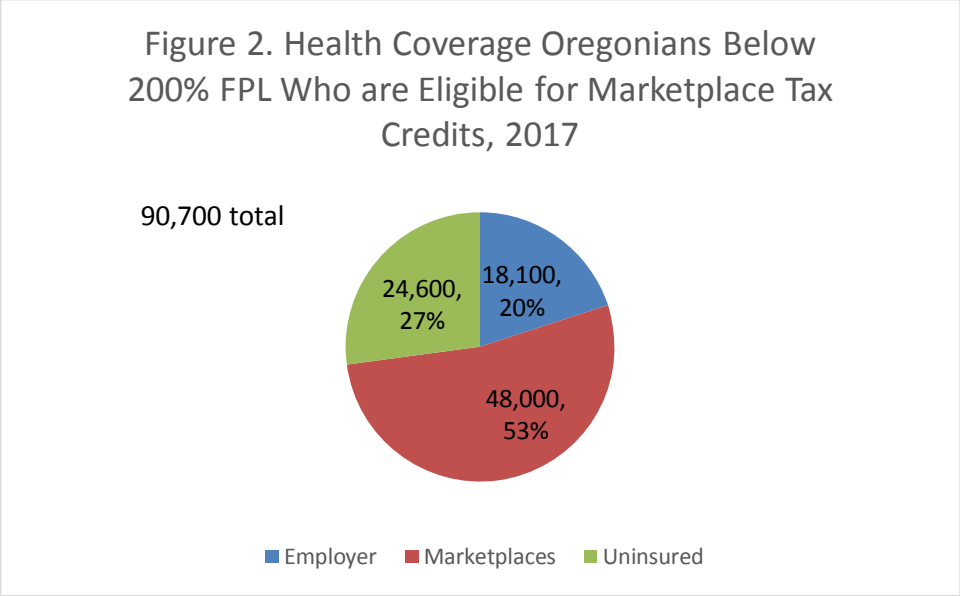
[5] We impute documentation status for immigrants in our underlying survey data. See the technical appendix for details. Legal immigrants eligible for tax credits or BHP are included to the extent that they can be identified based on survey data.

[6] 9.66 is the applicable percent for 2016. It will be slightly higher in 2017.

[7] For an analysis of changing the "family glitch," see Matthew Buettgens, Lisa Dubay, and Genevieve M. Kenney. Marketplace Subsidies: Changing The 'Family Glitch' Reduces Family Health Spending But Increases Government Costs. Health Aff July 2016 vol. 35 no. 7 1167-1175. http://content.healthaffairs.org/content/35/7/1167.full

[8] Shartzer A, Kenney GM, Long SK, and Odu Y. A Look at Remaining Uninsured Adults as of March 2015. Washington: Urban Institute, 2015. http://hrms.urban.org/briefs/A-Look-at-Remaining-Uninsured-Adults-as-of-March-2015.html; Holahan H, Blumberg LJ, Wengle E, Hill I, Peters R, and Solleveld P. Factors that Contributed to

eligible for tax credits, but there is some evidence that others found the applicable percent of income to be unaffordable. BHP would replace marketplace coverage for those with incomes under 200 percent of the FPL who currently qualify for tax credits. Under the BHP Stakeholder Workgroup's recommendations, BHP would be available at lower premiums and cost sharing than marketplace coverage, so it should result in increased enrollment among the nearly 25,000 currently uninsured people who would become eligible for BHP. Our enrollment projections are discussed below.



Who Would Be Eligible for BHP?

Almost all people eligible for BHP in Oregon are adults (89,500 out of 90,700) because Medicaid and CHIP eligibility thresholds for children are relatively high, and those eligible for any form of public

Low Marketplace Enrollment Rates in Five States in 2015. Washington: Urban Institute, 2015. http://www.urban.org/sites/default/files/

alfresco/publication-pdfs/2000488-Factors-That-Contributed-To-Low-Marketplace-Enrollment-In-Five-States-In-2015.pdf.

coverage are ineligible for BHP. Adult BHP eligibles are younger than nonelderly adults in Oregon generally. For example, 19.0 percent of BHP eligibles are age 19 to 24, compared with only 12.7 percent of all nonelderly adults (Table 2.1).

Asians and Pacific islanders are more common among BHP eligibles (6.2 percent versus 4.5 percent), and non-Hispanic whites are somewhat less common among BHP eligibles (74.5 percent versus 76.5 percent). Similarly, Asian languages, particularly Chinese, Korean, and Vietnamese, are more common among BHP eligibles.

Males are much more common among BHP eligibles, 56 percent of BHP eligibles versus 49.7 percent of all nonelderly adults.

A notably larger share of BHP eligibles is employed: 76.8 percent are employed, 8.4 percent are unemployed, and the remainder are not in the labor force. Among all nonelderly adults in Oregon, 69.0 percent are employed, 7.5 percent are unemployed, and the remainder are not in the labor force.

Table 2.1. Estimated Adult BHP Eligibles in Oregon, 2017

	Total		*All Nonelderly Adults (For Comparison)*	
	N	%	*N*	*%*
Total BHP Eligibles	89,500	100.0%	2,375,000	*100.0%*
Age				
19 - 24 years	17,000	19.0%	302,500	*12.7%*
25 - 34 years	23,400	26.2%	525,500	*22.1%*
35 - 44 years	17,300	19.4%	526,900	*22.2%*
45 - 54 years	16,300	18.2%	506,500	*21.3%*
55 - 64 years	12,900	14.4%	513,600	*21.6%*
Race/Ethnicity				
White, Non-Hispanic	66,700	74.5%	1,816,400	*76.5%*
Black, Non-Hispanic	1,800	2.0%	49,800	*2.1%*
Hispanic	11,400	12.7%	304,500	*12.8%*
Asian/Pacific Islander	5,500	6.2%	107,600	*4.5%*
American Indian/Alaska Native	2,100	2.4%	67,200	*2.8%*
Other	2,000	2.2%	29,600	*1.2%*
Gender				
Male	50,100	55.9%	1,179,300	*49.7%*
Female	39,500	44.1%	1,195,700	*50.3%*
Education				
Less than High School	6,500	7.3%	204,800	*8.6%*
High School	37,300	41.7%	812,600	*34.2%*
Some College	28,000	31.3%	691,100	*29.1%*
College Graduate	17,700	19.8%	666,600	*28.1%*
Health Status				
Better than Fair	76,400	85.3%	2,005,300	*84.4%*
Fair or Poor	13,100	14.7%	369,800	*15.6%*
Function Limitation[1]				
No	44,000	49.1%	1,135,900	*47.8%*
Yes	1,900	2.1%	47,700	*2.0%*
Language				
English	73,400	81.9%	1,979,700	*83.4%*
Spanish	8,100	9.0%	245,800	*10.4%*
Chinese	1,200	1.4%	15,300	*0.6%*
Korean	600	0.7%	8,200	*0.3%*
Vietnamese	1,000	1.1%	15,600	*0.7%*
French	400	0.5%	7,200	*0.3%*
Other	4,900	5.4%	103,200	*4.3%*
Citizenship				
Born U.S. Citizen	77,000	86.0%	2,044,400	*86.1%*
Naturalized U.S. Citizen	4,500	5.1%	118,000	*5.0%*
Not a U.S. Citizen	7,800	8.7%	211,700	*8.9%*
Employment Status				
Employed	68,800	76.8%	1,639,500	*69.0%*
Unemployed	7,500	8.4%	177,600	*7.5%*

SOURCE: The Urban Institute. HIPSM 2016

1: Includes cognitive, ambulatory, independent living, self-care, vision, or hearing difficultly.

By How Much Would BHP Increase Enrollment?

Based on 2016 marketplace enrollment data, about 52 percent of those with incomes below 200 percent of the FPL who were uninsured before the ACA and are now eligible for tax credits will enroll in marketplace coverage in 2017 (Table 2.2). We assume that virtually all of those previously enrolled in nongroup who became eligible for tax credits would be in the marketplace by 2017. About 33 percent of those enrolled in employer coverage with unaffordable offers would enroll. Fewer than 4,000 legal immigrants with incomes less than 138% FPL would be eligible for tax credits; about 60 percent of them will enroll.

Those now eligible for tax credits with incomes below 200 percent of the FPL would become eligible for BHP. If BHP were offered without premiums or cost sharing (Option A), 77,500 would enroll, 85.5 percent of those eligible. Among those who were uninsured prior to 2014, 84 percent would enroll in BHP. This rate is equal to the participation rate in 2016 among uninsured adults in Oregon who gained Medicaid eligibility under the ACA, based on actual Medicaid enrollment and our estimate of the number eligible. Thus, replacing marketplace tax credits with BHP option A would double the participation rate for this group. A similar share of those with unaffordable employer offers would switch. Three quarters of BHP-eligible immigrants with incomes below 138 percent of the FPL would enroll. We assume that people who enrolled in the marketplace with current tax credits would all enroll in BHP.

BHP enrollment in Tables 2.2, 2.4, and 2.5 assumes that beneficiaries would have to report changes in income during the year, as they currently do in the Marketplace and for most OHP coverage. We estimate enrollment if BHP had 12-month continuous eligibility below (Table 2.6).

With premiums up to 50 percent of current Marketplace coverage with tax credits for those with incomes over 138 percent of the FPL, but no cost sharing (Option B, used in Scenarios 5 and 6), 66,200 would enroll in BHP, 73 percent of those eligible. Just over two thirds of previously uninsured would enroll, as well as 71.1 percent of those with unaffordable employer offers. The rate for those with employer coverage is higher because those with unaffordable employer offers tend to be lower-income than BHP eligibles in general. Thus, they face lower BHP premiums on average. BHP-eligible legal immigrants with incomes below 138 percent of the FPL are unchanged from Option 1 because they would not face premiums under Option B either.

BHP Option A was designed to show the impact of eliminating BHP premiums, but such high enrollment rates could also happen if enrollment in BHP with premiums exceeds projections. There is real uncertainty about the price responsiveness of this very specific population. Response to BHP in New York appears to have exceeded our 2016 projections (490,000 enrolled, versus 470,000 projected), so it is possible that enrollment could exceed 66,200 even with the premiums recommended by the BHP Stakeholder Workgroup (option B).

BHP Option C (used in Scenarios 7 and 8) is like Option B, except that beneficiaries with incomes above 138 percent of the FPL face cost sharing equal to half of the health care spending not covered by the ACA's cost sharing subsidies. With this additional cost sharing, 59,200 people would enroll in BHP in 2017. The overall take-up rate would be 65.3 percent.

Table 2.2.Overall BHP And Marketplace Take-Up Rates and Numbers of Enrollees, No Continuous Eligibility, 2017

	BHP Option A: No premiums or cost sharing		BHP Option B: (Scenarios 5 and 6) Premiums, no cost sharing		BHP Option C: (Scenarios 7 and 8) Premiums and cost sharing		QHPs < 200% FPL Without BHP[2]	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Legal immigrants < 138% FPL	2,900	75.4%	2,900	75.4%	2,900	75.4%	2,200	58.1%
Pre-ACA uninsured[1]	42,400	84.0%	34,100	67.6%	29,600	58.6%	26,000	51.5%
Pre-ACA nongroup[1]	11,700	100.0%	11,700	100.0%	11,700	100.0%	11,700	100.0%
Pre-ACA employer[1]	20,500	83.3%	17,500	71.1%	15,000	61.1%	8,100	32.8%
Total	**77,500**	**85.5%**	**66,200**	**73.1%**	**59,200**	**65.3%**	**48,000**	**53.0%**

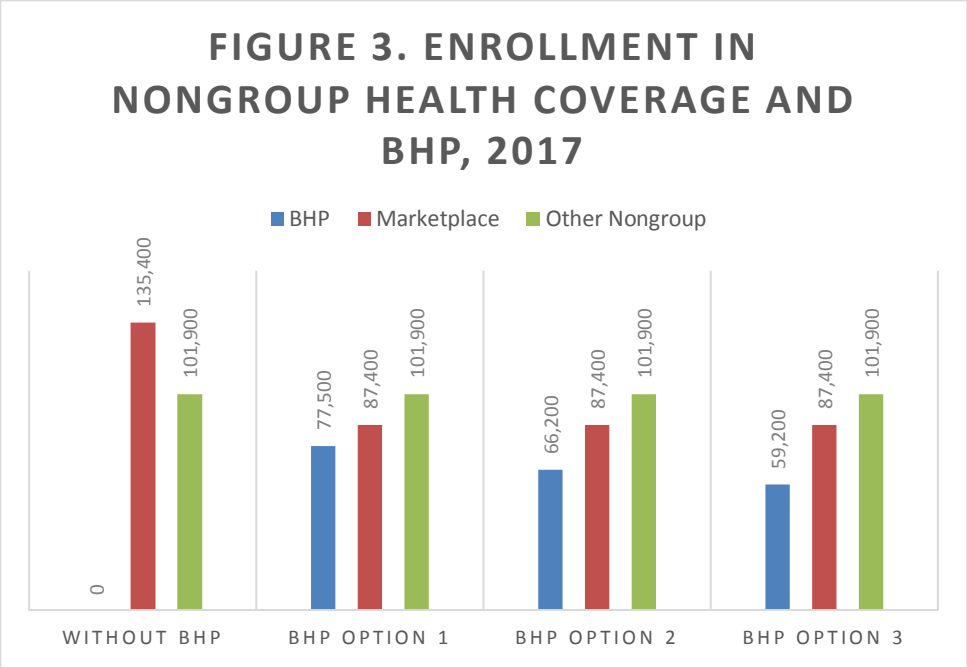
SOURCE: The Urban Institute. HIPSM 2016

1: Excluding legal immigrants < 138% FPL.

2: Less than 200% FPL and eligible for premium tax credits

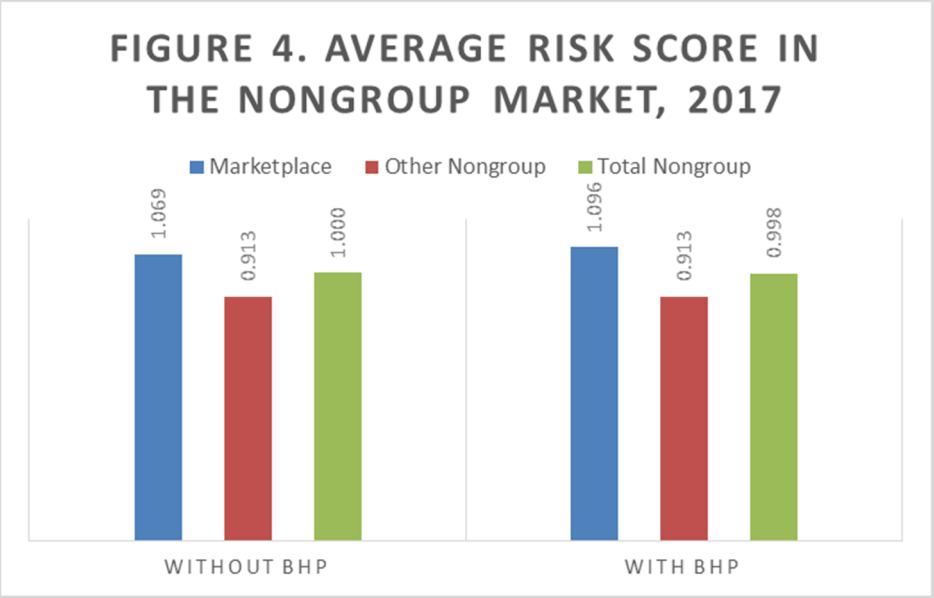
How Would BHP Affect Marketplace Enrollment and the Nongroup Risk Pool?

Without BHP, we estimate that there would be 237,300 covered lives in the Oregon nongroup market in June 2017. Of these, 135,400 would be enrolled in the marketplace, and 101,900 would be enrolled in plans outside the marketplace (Figure 3). With BHP, those eligible for marketplace tax credits with incomes below 200 percent of the FPL would be removed from the nongroup market. Thus, nongroup market enrollment would be the same under all BHP options. There would be 189,300 nongroup covered lives in Oregon, a decline of 21 percent. Marketplace enrollment would be 87,400, a decline of 37 percent. Nongroup enrollment outside the marketplace would be unchanged.



Based on the reported number and characteristics of 2016 covered lives in the marketplace and other nongroup coverage, we project that 2017 marketplace enrollees will on average have higher health risk than other nongroup enrollees. Specifically, if we normalize the average risk in the whole nongroup market to 1, the average risk score of marketplace enrollees would be 1.069 (Figure 4). This means that marketplace enrollees would be 6.9 percent more expensive, on average. By contrast, the average risk score of nongroup enrollees outside the marketplace would be 0.913.

BHP would change the average risk of nongroup enrollees only very slightly, 0.998 versus 1.000. On the one hand, there are fewer marketplace enrollees. On the other hand, the remaining marketplace enrollees have higher risk on average than without BHP, 1.096 versus 1.069. BHP does not affect nongroup enrollment or risk outside the marketplace because most are ineligible for BHP.



Who Would Enroll in BHP?

In Table 2.3, we compare the characteristics of projected 2017 adult marketplace and other nongroup enrollees with all nonelderly adults in Oregon, assuming that BHP is not implemented. The most marked differences—which are present in actual 2016 enrollment data—are that marketplace enrollees are disproportionately female and disproportionately older than the general adult population. In the marketplace, 56 percent of enrollees are female. In contrast, other nongroup enrollees and the general population are split about evenly between the genders.

Marketplace enrollees with incomes at least 200 percent of the FPL are much older than the general adult population. For example, 5.4 percent are age 19 to 24, compared with 12.7 percent of all adults, and 38.7 percent are age 55 to 64, compared with 21.6 percent of all adults. Marketplace enrollees with incomes below 200 percent of the FPL are more likely to be aged 55 to 64 than the general adult population, but other age groups are closer to the general adult population than higher-income marketplace enrollees.

The distributions of race/ethnicity and educational attainment are correlated with income. Marketplace enrollees with incomes at least 200 percent of the FPL are more likely to be non-Hispanic whites than the general adult population, while the race/ethnicity of marketplace enrollees with incomes below 200 percent of the FPL is similar to that of the general adult population. Similarly, marketplace enrollees with incomes at least 200 percent of the FPL have notably higher educational attainment than lower income marketplace enrollees or the adult population in general.

Table 2.3. Adult Nongroup Enrollees in Oregon Without BHP, 2017

	Nongroup						*All Nonelderly Adults (For Comparison)*	
	Marketplace, < 200% FPL[3]		Marketplace, >= 200% FPL		Other			
	N	%	N	%	N	%	*N*	*%*
Total Enrollees	48,000	100.0%	74,100	100.0%	85,900	100.0%	*2,375,000*	*100.0%*
Age								
19 - 24 years	4,600	9.6%	4,000	5.4%	17,300	20.1%	*302,500*	*12.7%*
25 - 34 years	11,200	23.4%	9,900	13.3%	12,300	14.3%	*525,500*	*22.1%*
35 - 44 years	9,900	20.6%	12,800	17.2%	14,500	16.9%	*526,900*	*22.2%*
45 - 54 years	9,000	18.8%	18,800	25.3%	18,400	21.4%	*506,500*	*21.3%*
55 - 64 years	13,300	27.7%	28,700	38.7%	23,400	27.3%	*513,600*	*21.6%*
Race/Ethnicity								
White, Non-Hispanic	31,100	64.7%	65,700	88.7%	84,100	97.9%	*1,816,400*	*76.5%*
Black, Non-Hispanic	500	1.0%	600	0.8%	800	0.9%	*49,800*	*2.1%*
Hispanic	4,900	10.1%	4,800	6.5%	6,900	8.1%	*304,500*	*12.8%*
Asian/Pacific Islander	2,700	5.7%	3,300	4.5%	6,100	7.1%	*107,600*	*4.5%*
American Indian/Alaska Native	700	1.5%	1,400	1.8%	1,700	2.0%	*67,200*	*2.8%*
Other	500	1.0%	1,000	1.3%	2,200	2.6%	*29,600*	*1.2%*
Gender								
Male	21,800	45.3%	32,600	44.1%	42,900	50.0%	*1,179,300*	*49.7%*
Female	26,300	54.7%	41,400	55.9%	43,000	50.0%	*1,195,700*	*50.3%*
Education								
Less than High School	3,500	7.2%	2,600	3.5%	3,200	3.8%	*204,800*	*8.6%*
High School	18,700	39.0%	22,200	29.9%	22,600	26.3%	*812,600*	*34.2%*
Some College	15,400	32.1%	22,500	30.3%	30,300	35.3%	*691,100*	*29.1%*
College Graduate	10,400	21.7%	26,800	36.2%	29,700	34.6%	*666,600*	*28.1%*
Health Status								
Better than Fair	39,800	82.8%	63,400	85.6%	75,700	88.1%	*2,005,300*	*84.4%*
Fair or Poor	8,300	17.2%	10,700	14.4%	10,200	11.9%	*369,800*	*15.6%*
Function Limitation[1]								
No	23,500	48.9%	33,500	45.2%	42,100	49.0%	*1,135,900*	*47.8%*
Yes	1,000	2.1%	1,600	2.1%	1,900	2.3%	*47,700*	*2.0%*
Language								
English	39,500	82.2%	64,300	86.8%	73,100	85.1%	*1,979,700*	*83.4%*
Spanish	3,500	7.3%	3,900	5.3%	4,200	4.8%	*245,800*	*10.4%*
Chinese	600	1.3%	1,000	1.4%	1,500	1.7%	*15,300*	*0.6%*
Korean	500	1.0%	300	0.4%	1,000	1.1%	*8,200*	*0.3%*
Vietnamese	600	1.2%	800	1.1%	600	0.7%	*15,600*	*0.7%*
French	300	0.7%	200	0.3%	500	0.6%	*7,200*	*0.3%*
Other	3,000	6.3%	3,500	4.7%	5,100	6.0%	*103,200*	*4.3%*
Citizenship								
Born U.S. Citizen	40,400	84.1%	64,700	87.4%	74,200	86.4%	*2,044,400*	*86.1%*
Naturalized U.S. Citizen	2,600	5.5%	5,200	7.0%	5,100	6.0%	*118,000*	*5.0%*
Not a U.S. Citizen	4,800	10.1%	4,200	5.7%	6,500	7.6%	*211,700*	*8.9%*
Employment Status								
Employed	34,400	71.7%	49,700	67.1%	51,600	60.0%	*1,639,500*	*69.0%*
Not Employed	4,300	9.0%	4,900	6.6%	8,600	10.0%	*177,600*	*7.5%*

SOURCE: The Urban Institute. HIPSM 2016

1: Includes cognitive, ambulatory, independent living, self-care, vision, or hearing difficultly.

In Table 2.4, we show the projected characteristics of 2017 enrollees in BHP. BHP eligibility ends at 200 percent of the FPL, so the number of marketplace enrollees under BHP is the same as marketplace enrollment of 200 percent of the FPL or more in Table 2.3. Also, other nongroup coverage is unaffected by the introduction of BHP, so the number of other nongroup enrollees is the same as in Table 2.3. The impact of BHP is to take 48,000 adults with incomes below 200 percent of the FPL out of the marketplace and enroll between 59,200 and 77,500 people in BHP, depending on premiums and cost sharing (Table 2.2 and Table 2.4). These estimates are for BHP without continuous eligibility. See below for enrollment with continuous eligibility.

The biggest difference in the characteristics of BHP enrollees versus marketplace enrollees with incomes below 200 percent of the FPL is in the gender distribution. About 56 percent of those eligible for tax credits in this income group are male (Table 2.1). However, current marketplace enrollment data suggests that 56 percent of marketplace enrollees with incomes below 200 percent of the FPL are female (Table 2.3). BHP results in higher enrollment among those eligible, and those eligible but not enrolled in the marketplace are disproportionately male. As a result, the share of male enrollees increases with higher BHP enrollment. Under BHP Option 3, 54 percent of enrollees would be female, under BHP Option B, enrollees would be about evenly split, and under BHP Option 1, 53 percent of enrollees would be male.

Higher enrollment under BHP also leads to a younger age distribution among enrollees. We have already noted that, without BHP, 31.1 percent of marketplace enrollees below 200 percent of the FPL would be aged 55 to 64 (Table 2.3). With BHP, that share declines to 23.8 percent under Option 3, 21.4 percent under Option B and 18.6 percent under Option A (Table 2.4).

About three quarters of BHP enrollees would be employed in every BHP scenario. In contrast, without BHP, 69.5 percent of marketplace enrollees with incomes below 200 percent of the FPL are employed, almost the same share as among all adults in Oregon (Table 2.3).

Table 2.4. Adult BHP Enrollees in Oregon, No Continuous Eligibility, 2017

	BHP					
	Option A		Option B (Scenarios 5 and 6)		Option C (Scenarios 7 and 8)	
	N	%	N	%	N	%
Total Enrollees	77,500	100.0%	66,200	100.0%	59,200	100.0%
Age						
19 - 24 years	9,900	12.7%	6,600	9.9%	5,600	9.5%
25 - 34 years	21,800	28.2%	18,300	27.7%	14,500	24.4%
35 - 44 years	17,000	21.9%	13,800	20.9%	12,900	21.8%
45 - 54 years	14,300	18.5%	13,300	20.2%	12,200	20.6%
55 - 64 years	14,400	18.6%	14,200	21.4%	14,100	23.8%
Race/Ethnicity						
White, Non-Hispanic	57,900	74.8%	49,500	74.7%	43,600	73.6%
Black, Non-Hispanic	1,600	2.1%	1,400	2.1%	1,100	1.8%
Hispanic	10,000	12.9%	8,700	13.1%	8,100	13.7%
Asian/Pacific Islander	4,600	5.9%	4,200	6.3%	4,100	7.0%
American Indian/Alaskan Native	1,900	2.4%	1,500	2.3%	1,300	2.3%
Other	1,400	1.9%	1,100	1.7%	1,000	1.6%
Gender						
Male	41,400	53.4%	32,900	49.7%	27,300	46.1%
Female	36,100	46.6%	33,300	50.3%	31,900	53.9%
Education						
Less than High School	5,700	7.4%	4,800	7.3%	4,400	7.4%
High School	31,600	40.7%	25,600	38.6%	22,800	38.5%
Some College	24,000	31.0%	21,400	32.3%	19,200	32.5%
College Graduate	16,200	20.9%	14,500	21.8%	12,800	21.6%
Health Status						
Better than Fair	65,600	84.6%	55,000	83.0%	49,200	83.0%
Fair or Poor	11,900	15.4%	11,300	17.0%	10,100	17.0%
Function Limitation[1]						
No	38,100	49.2%	32,900	49.7%	29,300	49.5%
Yes	1,700	2.2%	1,300	2.0%	1,300	2.1%
Language						
English	64,100	82.7%	54,600	82.4%	48,100	81.2%
Spanish	6,800	8.8%	5,300	8.1%	5,000	8.5%
Chinese	900	1.2%	900	1.4%	900	1.6%
Korean	500	0.7%	500	0.8%	500	0.9%
Vietnamese	700	0.9%	600	0.9%	600	1.0%
French	400	0.5%	400	0.6%	300	0.5%
Other	4,100	5.3%	3,900	5.8%	3,700	6.2%
Citizenship						
Born U.S. Citizen	66,700	86.1%	56,300	85.0%	49,500	83.6%
Naturalized U.S. Citizen	4,100	5.3%	3,900	5.9%	3,800	6.4%
Not a U.S. Citizen	6,500	8.4%	5,900	8.8%	5,800	9.7%
Employment Status						
Employed	59,200	76.4%	49,800	75.2%	43,800	73.9%
Not Employed	6,400	8.3%	5,300	7.9%	4,800	8.1%

SOURCE: The Urban Institute. HIPSM 2016

1: Includes cognitive, ambulatory, independent living, self-care, vision, or hearing difficultly.

2: For non-English speaking adults only.

How would BHP Affect Health Coverage in Oregon?

Based on 2016 Medicaid and marketplace enrollment, we project that 269,800 Oregonians would be uninsured in 2017 without BHP, 8.1 percent of the total nonelderly population of 3.3 million (Table 2.5). Just over half the population, 1.7 million, would be covered through an employer's health plan, and just over one million would be covered by Medicaid. Marketplace plans would cover 135,400 people, and an additional 101,900 would be covered by private nongroup plans outside the marketplace. The remaining 92,000 nonelderly people would have Medicare or other health coverage.

If we focus on the 1.4 million Oregonians with incomes up to 200 percent of the FPL, the maximum income for BHP eligibility, we project that 100,900 would be uninsured, 7.2 percent of the total. Interestingly, this is lower than the uninsured rate for all nonelderly Oregonians. This is a consequence of high reported enrollment from Medicaid expansion, lower marketplace take-up rates, and little change in the coverage of higher-income uninsured people not eligible for tax credits. Only 19.4 percent of people with incomes below 200 percent of the FPL would have employer-sponsored coverage, while 62.8 percent would be covered by Medicaid.

Among the 90,700 people who would be eligible for BHP, 27 percent would be uninsured, 53 percent would be enrolled in the marketplace with tax credits, and 20 percent would be enrolled in employer coverage, even though that coverage qualifies as unaffordable under the ACA. These results were also shown in Figure 2.

BHP without premiums (Option A) would decrease the number of uninsured by 16,600 in 2017. BHP with stakeholder-recommended premiums (Option B) would decrease the number of uninsured by 8,600, and BHP with both premiums and cost sharing (Option C) would decrease the number of uninsured by 4,200. The uninsured rate would decrease from 8.3 percent to 7.6 percent, 7.9 percent, or 8.0 percent under BHP, depending on beneficiary premiums and cost sharing. The number of Oregonians with employer coverage would decrease by 12,900, 9,600 or 7,000 people, depending on BHP option, as more people with unaffordable offers of coverage decide to switch.

Among those eligible for BHP, the uninsured rate would fall from 32.6 percent without BHP to 8.9 percent under BHP with no premiums (or higher than expected enrollment), 17.6 percent under BHP with recommended premiums, or 22.4 percent under BHP with premiums and cost sharing. The share of BHP eligible covered by ESI—who by definition have unaffordable offers of coverage—would decline from 22.8 percent to 5.7 percent, 9.3 percent, or 12.2 percent under BHP, depending on the BHP option.

Table 2.5. Health Insurance Coverage in Oregon, No Continuous Eligibility for BHP, 2017

All Nonelderly

	Without BHP		BHP Option A			BHP Option B (Scenarios 5 and 6)			BHP Option C (Scenarios 7 and 8)		
					Δ			Δ			Δ
Insured	**3,053,700**	**91.9%**	**3,070,300**	**92.4%**	**16,600**	**3,062,300**	**92.1%**	**8,600**	**3,058,000**	**92.0%**	**4,200**
Employer	1,696,000	51.0%	1,683,100	50.6%	-12,900	1,686,400	50.7%	-9,600	1,689,000	50.8%	-7,000
Nongroup	237,300	7.1%	189,300	5.7%	-48,000	189,300	5.7%	-48,000	189,300	5.7%	-48,000
Marketplaces	135,400	4.1%	87,400	2.6%	-48,000	87,400	2.6%	-48,000	87,400	2.6%	-48,000
Other Nongroup	101,900	3.1%	101,900	3.1%	0	101,900	3.1%	0	101,900	3.1%	0
BHP	0	0.0%	77,500	2.3%	77,500	66,200	2.0%	66,200	59,200	1.8%	59,200
Medicaid	1,028,400	30.9%	1,028,400	30.9%	0	1,028,400	30.9%	0	1,028,400	30.9%	0
Other public	92,000	2.8%	92,000	2.8%	0	92,000	2.8%	0	92,000	2.8%	0
Uninsured	**269,800**	**8.1%**	**253,200**	**7.6%**	**-16,600**	**261,100**	**7.9%**	**-8,600**	**265,500**	**8.0%**	**-4,200**
Total	***3,323,500***	***100.0%***	***3,323,500***	***100.0%***	***0***	***3,323,500***	***100.0%***	***0***	***3,323,500***	***100.0%***	***0***

Nonelderly Below 200 percent of the FPL

	Without BHP		BHP Option A			BHP Option B (Scenarios 5 and 6)			BHP Option C (Scenarios 7and 8)		
					Δ			Δ			Δ
Insured	**1,293,000**	**92.8%**	**1,309,600**	**93.9%**	**16,600**	**1,301,700**	**93.4%**	**8,600**	**1,297,300**	**93.1%**	**4,200**
Employer	270,400	**19.4%**	257,400	**18.5%**	-12,900	260,800	**18.7%**	-9,600	263,400	**18.9%**	-7,000
Nongroup	95,200	**6.8%**	47,200	**3.4%**	-48,000	47,200	**3.4%**	-48,000	47,200	**3.4%**	-48,000
Marketplaces	57,800	**4.1%**	9,800	**0.7%**	-48,000	9,800	**0.7%**	-48,000	9,800	**0.7%**	-48,000
Other Nongroup	37,400	**2.7%**	37,400	**2.7%**	0	37,400	**2.7%**	0	37,400	**2.7%**	0
BHP	0	**0.0%**	77,500	**5.6%**	77,500	66,200	**4.8%**	66,200	59,200	**4.3%**	59,200
Medicaid	874,700	**62.8%**	874,700	**62.8%**	0	874,700	**62.8%**	0	874,700	**62.8%**	0
Other public	52,700	**3.8%**	52,700	**3.8%**	0	52,700	**3.8%**	0	52,700	**3.8%**	0
Uninsured	**100,900**	**7.2%**	**84,400**	**6.1%**	**-16,600**	**92,300**	**6.6%**	**-8,600**	**96,700**	**6.9%**	**-4,200**
Total	***1,393,900***	**100.0%**	***1,393,900***	**100.0%**	***0***	***1,393,900***	**100.0%**	***0***	***1,393,900***	**100.0%**	***0***

Nonelderly Eligible for BHP

	Without BHP		BHP Option A			BHP Option B (Scenarios 5 and 6)			BHP Option C (Scenarios 7and 8)		
					Δ			Δ			Δ
Insured	**66,100**	**72.9%**	**82,600**	**91.1%**	**16,600**	**74,700**	**82.4%**	**8,600**	**70,300**	**77.6%**	**4,200**
Employer	18,100	**19.9%**	5,100	**5.7%**	-12,900	8,500	**9.3%**	-9,600	11,100	**12.2%**	-7,000
Nongroup	48,000	**53.0%**	0	**0.0%**	-48,000	0	**0.0%**	-48,000	0	**0.0%**	-48,000
Marketplaces	48,000	**53.0%**	0	**0.0%**	-48,000	0	**0.0%**	-48,000	0	**0.0%**	-48,000
Other Nongroup	0	**0.0%**	0	**0.0%**	0	0	**0.0%**	0	0	**0.0%**	0
BHP	0	**0.0%**	77,500	**85.5%**	77,500	66,200	**73.1%**	66,200	59,200	**65.3%**	59,200
Medicaid	0	**0.0%**	0	**0.0%**	0	0	**0.0%**	0	0	**0.0%**	0
Other public	0	**0.0%**	0	**0.0%**	0	0	**0.0%**	0	0	**0.0%**	0
Uninsured	**24,600**	**27.1%**	**8,000**	**8.9%**	**-16,600**	**16,000**	**17.6%**	**-8,600**	**20,300**	**22.4%**	**-4,200**
Total	***90,700***	**100.0%**	***90,700***	**100.0%**	***0***	***90,700***	**100.0%**	***0***	***90,700***	**100.0%**	***0***

SOURCE: The Urban Institute. HIPSM 2016

Twelve-Month Continuous Eligibility for BHP

Currently, enrollees in the marketplace and most OHP enrollees must report changes in income that could affect their eligibility. The results above assume that BHP would work in the same way. However,

some have suggested that BHP should have 12-month continuous eligibility. In other words, a new BHP enrollee is guaranteed coverage for the next 12 months, regardless of income or employment changes. We estimate that this would increase BHP enrollment by 15,400 people under Option A in 2017, leading to a total enrollment of 92,900 (Table 2.6, compared with Table 2.5). This includes some people who enrolled in BHP sometime between 2016 and 2017 and then had income or employment changes which would make them ineligible for BHP had they applied in June 2017. That is why enrollment exceeds the number of adults eligible for BHP in June 2017 given in Table 2.1. We discuss the number of people who were ever eligible for BHP between 2016 and 2017 in the section on churning below. With 12 month continuous eligibility, there would be 4,000 fewer uninsured people, 2,000 fewer in the marketplace, 400 fewer people with other nongroup coverage, and 9,000 fewer people with employer coverage.

If premiums are charged to BHP beneficiaries with incomes above 138 percent of the FPL (Option B), 12-month continuous eligibility would increase BHP enrollment from 66,200 to 79,400 (Table 2.6). There would be 3,600 fewer uninsured people and 1,600 fewer marketplace enrollees than under BHP option B without continuous eligibility (Table 2.5).

If both premiums and cost sharing are charged to BHP beneficiaries with incomes above 138 percent of the FPL (Option C), 12-month continuous eligibility would increase BHP enrollment from 59,200 to 71,000. There would be 3,000 fewer uninsured people and 1,400 fewer marketplace enrollees than under BHP option C without continuous eligibility.

Table 2.6. Health Coverage of the Nonelderly in Oregon, BHP With 12-Month Continuous Eligibility, 2017

All Nonelderly

			BHP With Continuous Eligibility								
	Without BHP		BHP Option A			BHP Option B (Scenarios 1 and 2)			BHP Option C (Scenarios 3 and 4)		
					Δ			Δ			Δ
Insured	**3,053,700**	**91.9%**	**3,074,300**	**92.5%**	**20,600**	**3,066,000**	**92.3%**	**12,200**	**3,061,000**	**92.1%**	**7,200**
Employer	1,696,000	51.0%	1,674,500	50.4%	-21,500	1,679,200	50.5%	-16,800	1,682,300	50.6%	-13,700
Nongroup	237,300	7.1%	186,900	5.6%	-50,400	187,300	5.6%	-50,300	187,500	5.6%	-49,800
Marketplaces	135,400	4.1%	85,400	2.6%	-50,000	85,800	2.6%	-49,600	85,900	2.6%	-49,500
Other Nongroup	101,900	3.1%	101,500	3.1%	-400	101,500	3.1%	-400	101,600	3.1%	-300
BHP	0	0.0%	92,900	2.8%	92,900	79,400	2.4%	79,400	71,000	2.1%	71,000
Medicaid	1,028,400	30.9%	1,028,400	30.9%	0	1,028,400	30.9%	0	1,028,400	30.9%	0
Other public	92,000	2.8%	91,600	2.8%	-400	91,700	2.8%	-300	91,700	2.8%	-300
Uninsured	**269,800**	**8.1%**	**249,100**	**7.5%**	**-20,600**	**257,500**	**7.7%**	**-12,200**	**262,500**	**7.9%**	**-7,200**
Total	***3,323,500***	***100.0%***	***3,323,500***	***100.0%***	***0***	***3,323,500***	***100.0%***	***0***	***3,323,500***	***100.0%***	***0***

SOURCE: The Urban Institute. HIPSM 2016

The Regional Impact of BHP

We show the geographic distribution of those eligible for BHP in 2017 (Figure 5) , those projected to enroll under BHP option B (Figure 6), and those projected to enroll under BHP with continuous eligibility

option B (Figure 7). Results are also shown in Table 2.7. These areas are the best approximation that we can get to Oregon's premium rating regions using ACS data. The smallest geographic units for which the ACS is representative are the Public Use Microdata Areas (PUMAs) defined by the U. S. Census Bureau. Some of these units cross county boundaries, so we could not perfectly match rating regions. See the Appendix B for a table of counties and rating areas corresponding to these regions.

Figure 5. 2017 BHP Eligibles

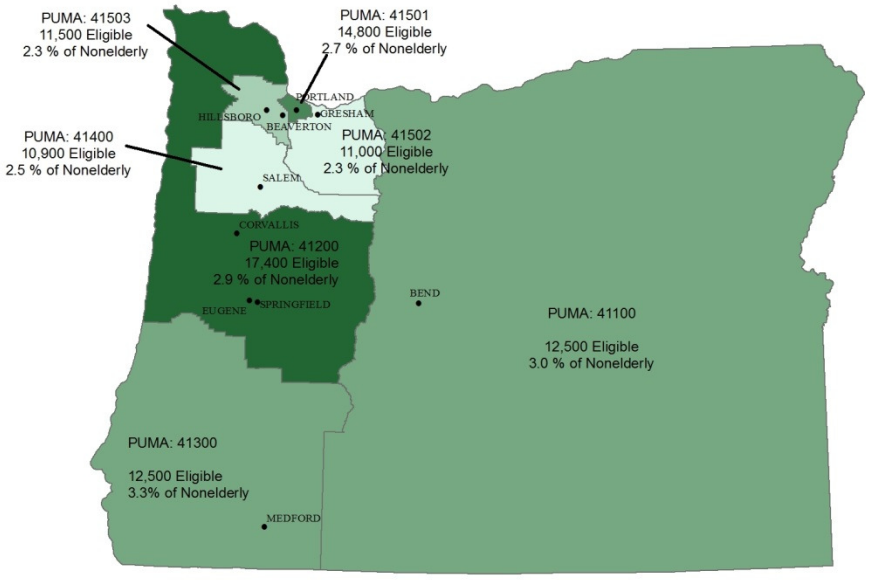


Figure 6. 2017 BHP Enrollees- Option B (Scenarios 1, 2, 5, and 6)

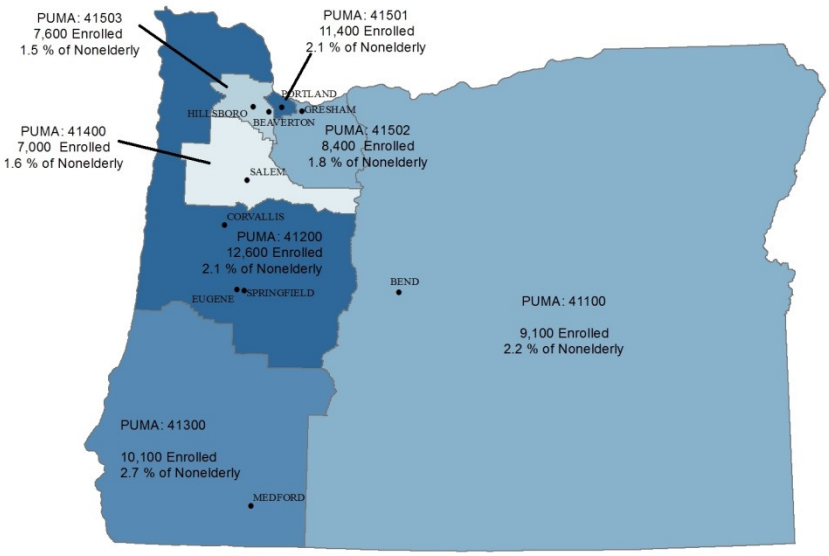


Figure 7. 2017 BHP Enrollees With Continuous Eligibility – Option B (Scenarios 1, 2, 5, and 6)

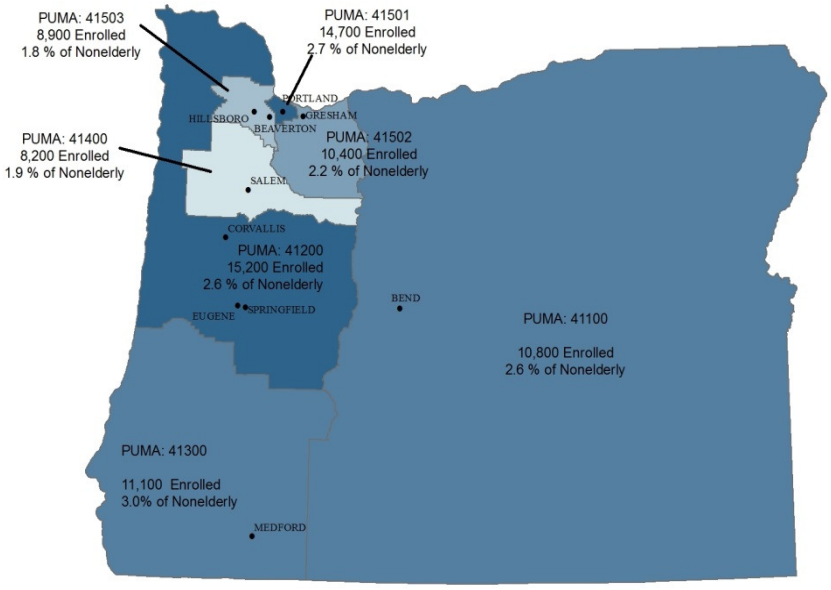


Table 2.7 BHP Eligibility and Enrollment by Region

Region	Total Nonelderly	BHP Eligibles		BHP Enrollees, Option B	
		N	% of Total Nonelderly	N	% of Total Nonelderly
41100	420,500	12,500	3.0%	9,100	2.2%
41200	591,500	17,400	2.9%	12,600	2.1%
41300	376,600	12,500	3.3%	10,100	2.7%
41400	431,200	10,900	2.5%	7,000	1.6%
41501	229,300	14,800	2.7%	11,400	2.1%
41502	541,000	11,00	2.3%	8,400	1.8%
41503	733,300	11,500	2.3%	7,600	1.5%

CHURNING IN ELIGIBILITY FOR OHP, BHP, AND QHPS WITH TAX CREDITS

We estimate that just over one million Oregonians would be enrolled in OHP Plus at a point in time in the middle of 2017 (Table 2.8), and 1.8 million would have been eligible at some point in the previous year (including those currently eligible).

Of the 1.8 million people ever eligible for Medicaid, 44,000 (2.4 percent of the total) would also have been eligible for BHP at some point during the year, and 72,000 (4.0 percent of the total) would also have been eligible for QHP coverage with tax credits at some point during the year. These two numbers are not mutually exclusive; some people are eligible for all three programs at various times throughout the year.

Children, adults with less than a high school education, non-Hispanic blacks, and Hispanics are all notably less likely to churn between OHP Plus and BHP. Groups that are more likely to churn between OHP Plus and BHP include older adults (age 55 to 64), young adults (age 19 to 24), and those with a high school education. Not surprisingly, those who were eligible for OHP Plus at some time during the year, but ended the year with incomes between 138 and 200 percent of the FPL were much more likely to also have been eligible for BHP at some point during the year.

The groups least likely to churn between OHP Plus and BHP are also the groups least likely to churn between OHP Plus and QHPs with tax credits: children, adults with less than a high school education, non-Hispanic blacks, and Hispanics. Older adults (age 55 to 64) and those with at least some college are the most likely to churn between OHP Plus and QHPs with tax credits.

As we saw earlier, in 2017, we estimate that 66,200 people would enroll in BHP option B out of a total of 90,700 eligible (Table 2.9). A total of 119,700 people would be eligible for BHP at some point during the year. Churn would affect a large share of those ever eligible for BHP. About 37 percent would also be eligible for OHP at some point during the year, and 33 percent would also be eligible for QHPs with tax credits at some point during the year. As we noted earlier, these two numbers are not mutually exclusive.

Adults aged 25 to 44, Asian/Pacific Islanders, and those with at least some college were least likely to churn between BHP and QHPs with tax credits. However, in each of those groups, at least 30 percent of those ever eligible for BHP would also be eligible for QHPs with tax credits at some point. Groups experiencing the highest rates of churn include older adults (aged 55 to 64), non-Hispanic blacks, and American Indian/Alaska Natives.

We estimate that 55,000 people would be enrolled in QHPs with tax credits at a point in the middle of 2017, out of 177,900 people eligible (Table 2.10). A total of 234,000 people would be eligible for QHPs with tax credits at some point during the previous year. About 31 percent of those ever eligible for QHP with tax credits would also be eligible for BHP at some point during the year, and 17 percent would also be eligible for OHP at some point during the year. We analyzed OHP Plus to QHP and BHP to QHP churn earlier in this section.

Table 2.8. Medicaid Eligibility and Churning, BHP Option B (Scenarios 1, 2, 5, and 6), 2017

	Point in time (Scenarios 5 and 6)		Past year (Scenarios 1 and 2)			% of Ever Eligible[1]	
	Enrolled	Eligible	Ever eligible	Medicaid-BHP churn	Medicaid-QHP tax credit churn	Medicaid-BHP churn	Medicaid-QHP tax credit churn
Total	1,028,396	1,535,451	1,810,474	44,028	71,944	2.4%	4.0%
Age							
0 - 18 years	515,515	658,533	721,019	525	11,738	0.1%	1.6%
19 - 24 years	93,122	171,768	199,445	8,707	6,196	4.4%	3.1%
25 - 34 years	142,380	202,397	247,856	9,581	12,982	3.9%	5.2%
35 - 44 years	110,502	164,350	204,544	6,758	10,233	3.3%	5.0%
45 - 54 years	94,918	162,329	204,298	7,488	10,881	3.7%	5.3%
55 - 64 years	71,960	176,073	233,312	10,969	19,915	4.7%	8.5%
Race/Ethnicity							
White, Non-Hispanic	666,133	1,054,814	1,277,165	33,490	59,964	2.6%	4.7%
Black, Non-Hispanic	37,969	50,067	54,420	974	1,531	1.8%	2.8%
Hispanic	220,995	277,887	304,226	4,887	5,667	1.6%	1.9%
Asian/Pacific Islander	32,790	54,968	64,106	2,012	1,711	3.1%	2.7%
American Indian/Alaska Native	47,937	65,477	72,851	1,683	1,978	2.3%	2.7%
Other	22,571	32,238	37,706	982	1,093	2.6%	2.9%
Gender							
Male	499,494	718,378	865,668	24,169	36,765	2.8%	4.2%
Female	528,902	817,073	944,806	19,859	35,178	2.1%	3.7%
Education							
Less than High School	576,185	736,822	806,796	4,060	15,132	0.5%	1.9%
High School	248,476	397,123	474,131	20,394	22,550	4.3%	4.8%
Some College	145,550	264,290	334,052	12,016	19,447	3.6%	5.8%
College Graduate	58,185	137,215	195,495	7,557	14,815	3.9%	7.6%
MAGI							
<138% FPL	743,479	997,294	999,336	9,989	8,454	1.0%	0.8%
138 - 200% FPL	131,709	199,844	262,232	30,075	8,321	11.5%	3.2%
200 - 300% FPL	115,303	212,755	275,030	1,752	27,830	0.6%	10.1%
300 - 400% FPL	*	*	126,661	1,814	25,521	1.4%	20.1%
400 % + FPL	*	*	147,215	397	1,818	0.3%	1.2%

SOURCE: The Urban Institute. HIPSM 2016

1. Note that these two columns are not mutually exclusive.

Table 2.9. BHP Eligibility and Churning, BHP Option B (Scenarios 1, 2, 5, and 6), 2017

	Point in time (Scenarios 5 and 6)		Past year (Scenarios 1 and 2)			% of Ever Eligible[1]	
	Enrolled	Eligible	Ever eligible	Medicaid-BHP churn	BHP-QHP tax credit churn	Medicaid-BHP churn	BHP-QHP tax credit churn
Total	66,238	90,666	119,706	44,028	39,274	36.8%	32.8%
Age							
0 - 18 years	0	1,146	1,167	525	44	45.0%	3.8%
19 - 24 years	6,555	16,827	21,393	8,707	4,749	40.7%	22.2%
25 - 34 years	18,347	23,807	30,864	9,581	11,509	31.0%	37.3%
35 - 44 years	13,829	17,895	20,817	6,758	5,201	32.5%	25.0%
45 - 54 years	13,348	15,031	20,678	7,488	5,419	36.2%	26.2%
55 - 64 years	14,158	15,959	24,787	10,969	12,352	44.3%	49.8%
Race/Ethnicity							
White, Non-Hispanic	49,466	67,585	91,573	33,490	32,194	36.6%	35.2%
Black, Non-Hispanic	1,359	1,781	2,079	974	789	46.9%	37.9%
Hispanic	8,670	11,590	13,949	4,887	3,427	35.0%	24.6%
Asian/Pacific Islander	4,150	5,518	6,491	2,012	1,573	31.0%	24.2%
American Indian/Alaska Native	1,492	2,216	2,988	1,683	790	56.3%	26.4%
Other	1,101	1,975	2,626	982	500	37.4%	19.1%
Gender							
Male	32,924	51,000	66,614	24,169	21,453	36.3%	32.2%
Female	33,313	39,665	53,092	19,859	17,821	37.4%	33.6%
Education							
Less than High School	4,843	7,527	9,726	4,060	2,273	41.7%	23.4%
High School	25,572	37,450	48,710	20,394	15,028	41.9%	30.9%
Some College	21,362	27,987	36,005	12,016	10,960	33.4%	30.4%
College Graduate	14,461	17,701	25,265	7,557	11,014	29.9%	43.6%
MAGI							
<138% FPL	3,253	5,179	13,797	9,989	5,784	72.4%	41.9%
138 - 200% FPL	62,985	85,487	92,298	30,075	20,419	32.6%	22.1%
200 - 300% FPL	0	0	6,475	1,752	6,180	27.1%	95.4%
300 - 400% FPL	0	0	4,948	1,814	4,918	36.7%	99.4%
400 % + FPL	0	0	2,189	397	1,973	18.2%	90.1%

SOURCE: The Urban Institute. HIPSM 2016

1. Note that these two columns are not mutually exclusive.

Table 2.10. QHP with Tax Credits Eligibility and Churning, BHP Option B (Scenarios 1, 2, 5, and 6), 2017

	Point in time (Scenarios 5 and 6)		Past year (Scenarios 1 and 2)			% of Ever Eligible[1]	
	Enrolled	Eligible	Ever eligible	Medicaid-QHP tax credit churn	BHP-QHP tax credit churn	Medicaid-QHP tax credit churn	BHP-QHP tax credit churn
Total	54,997	177,922	234,046	71,944	39,274	30.7%	16.8%
Age							
0 - 18 years	7,775	19,652	25,057	11,738	44	46.8%	0.2%
19 - 24 years	2,116	11,217	16,947	6,196	4,749	36.6%	28.0%
25 - 34 years	5,976	37,229	51,502	12,982	11,509	25.2%	22.3%
35 - 44 years	7,430	32,447	40,221	10,233	5,201	25.4%	12.9%
45 - 54 years	11,930	34,228	39,780	10,881	5,419	27.4%	13.6%
55 - 64 years	19,770	43,149	60,540	19,915	12,352	32.9%	20.4%
Race/Ethnicity							
White, Non-Hispanic	46,961	147,385	193,018	59,964	32,194	31.1%	16.7%
Black, Non-Hispanic	558	3,478	4,631	1,531	789	33.1%	17.0%
Hispanic	3,902	15,280	20,309	5,667	3,427	27.9%	16.9%
Asian/Pacific Islander	1,997	5,136	7,285	1,711	1,573	23.5%	21.6%
American Indian/Alaska Native	991	4,603	5,812	1,978	790	34.0%	13.6%
Other	587	2,040	2,992	1,093	500	36.5%	16.7%
Gender							
Male	28,640	97,428	125,898	36,765	21,453	29.2%	17.0%
Female	26,357	80,494	108,149	35,178	17,821	32.5%	16.5%
Education							
Less than High School	9,236	26,089	33,648	15,132	2,273	45.0%	6.8%
High School	16,217	54,991	73,520	22,550	15,028	30.7%	20.4%
Some College	14,456	52,846	67,886	19,447	10,960	28.6%	16.1%
College Graduate	15,088	43,996	58,993	14,815	11,014	25.1%	18.7%
MAGI							
<138% FPL	0	0	9,224	8,454	5,784	91.6%	62.7%
138 - 200% FPL	0	0	22,250	8,321	20,419	37.4%	91.8%
200 - 300% FPL	23,265	95,235	103,072	27,830	6,180	27.0%	6.0%
300 - 400% FPL	31,732	82,687	89,616	25,521	4,918	28.5%	5.5%
400 % + FPL	0	0	9,883	1,818	1,973	18.4%	20.0%

SOURCE: The Urban Institute. HIPSM 2016

1. Note that these two columns are not mutually exclusive.

CONCLUSION

We find that BHP would improve affordability and increase enrollment among those eligible. Without BHP, nearly 25,000 people with incomes below 200 percent of the FPL are eligible for tax credits, but are uninsured. We estimate that between 3,600 and 16,400 of them would enroll in BHP, depending on the premiums, cost sharing, and success in enrollment outreach. Also, between 6,900 and 12,400 people enrolled in employer coverage that is considered unaffordable under the ACA would switch to BHP.

If BHP had 12-month continuous eligibility, BHP enrollment would increase by between 11,800 and 15,400 people. The number of uninsured would decline by between 3,000 and 4,000 more people than without continuous eligibility.

With BHP, the number of covered lives in the private nongroup market would decline by 21 percent, and the number of covered lives in the marketplace would decline by 37 percent. BHP would have little impact on the average health risk of nongroup covered lives.

We estimate that about 44,000 people would be eligible for both OHP and BHP during the course of a year. Older adults, young adults, and those with a high school education are more likely to churn between OHP Plus and BHP; children, Hispanics, and non-Hispanic blacks are less likely to do so. We estimate that about 39,000 people would be eligible for both BHP and QHPs with tax credits during the course of a year. Adults aged 55 to 64, non-Hispanic blacks, and American Indians/Alaska Natives are more likely to churn between BHP and QHPs; adults aged 25 to 44, Asians/Pacific Islanders, and those with at least some college are least likely to do so.

3) PROJECTED BHP REVENUES AND COSTS

Background

This section summarizes the estimated federal BHP payments to the state, BHP program costs and the projected surplus or deficit to the state if a BHP is implemented. As noted in the introduction, states that implement the BHP receive a federal payment equal to approximately 95 percent of the amount of premium and cost sharing reduction subsidies BHP enrollees would have received had they been enrolled in QHPs through the Oregon marketplace.

States have flexibility to define program parameters, such as delivery system, managed care approaches and provider reimbursement levels. States can also define covered benefits (so long as they meet minimum standards for Essential Health Benefits), enrollee premiums (so long as they are no more than what the individual would have paid for the second lowest cost silver plan in the Marketplace), and enrollee cost sharing at the point of service (so long as it is no more than what the enrollee would have paid had they been enrolled in subsidized Marketplace coverage). Based on discussions with DCBS staff and guidance from the 2015 BHP Stakeholder Group recommendations, eight scenarios were defined to use in modeling BHP impacts. These scenarios are defined in Table 1.3.

Key Assumptions and Methodology

The analysis in this section is based on a detailed Wakely model that incorporates demographic, claim cost, and premium data at the household level. The primary data sources for this model are:

- Demographic information and relative health risk scores by household based on the analysis performed by Urban and summarized in Section 2 of this report.
- QHP rate filings for CY2017 with rates by age and region in Oregon were used as the basis for estimating projected claim costs for the individual market and BHP populations.
- Tentative second lowest cost Silver rates for 2017 (final rates have not yet been approved) to be offered through the Oregon Marketplace as provided by the State.
- Assumptions mutually agreed to by DCBS and Wakely which are described later in this section.

In general, the financial impacts of the BHP were modeled within the following framework:

- All cash flows and demographic assumptions are projected to 2017. This projection inherently involves several factors including:
    - Take-up of enrollment into the BHP, which is based on the Urban analysis described in Section 2 of this report.
    - Impact of induced (patient initiated) utilization on claim costs due to a change in the

relative richness of coverage (or versus no coverage at all). Induced utilization is the expected increase in utilization of medical services as a result of reduced cost-sharing, thus decreasing financial barriers for individuals seeking care.

- To simplify the analysis, all enrollees in ACA-compliant plans in the individual market (both on and off the Marketplace) are assumed to choose the second lowest cost silver plan available through the Oregon Marketplace.

- Federal BHP payment estimates are based on the formulas and factors defined in 45 CFR Part 600 - Basic Health Program; Federal Funding Methodology for Program Years 2017 and 2018, as published in the Federal Register on February 29, 2016. Details regarding these calculations are provided in Appendix B.

- The standard health plans that offer BHP coverage are assumed to pay providers at a level in between average commercial levels and Medicare fee-for-service reimbursement. For purposes of this analysis, the BHP fee levels are assumed to be 82% of commercial levels underlying QHP rates. It is important to note that the claims expense estimates for all Scenarios are highly sensitive to this assumption. Also, this ratio was applied to all types of service uniformly. It is possible, for example, that prescription drug costs could not easily be negotiated much below commercial levels in a BHP.

- Estimated 2017 2nd lowest cost Silver (SLCS) rates and lowest cost Bronze (LCB) rates for purposes of calculating BHP payments are based on filed and reviewed 2017 rates provided by the State. These rates had not been officially approved by the State at the time the analysis was performed for this report; however, our understanding was that they were very close (within 1% to 2%) to the final rates that were approved. Note that the BHP regulation allows states to elect to receive payments based on 2016 SLCS and LCB rates with prescribed trends to 2017. The state believes the actual 2017 rates will be higher than the trended 2016 rates, so all modeling in this report uses actual 2017 rates.

- Claim cost estimates by household are derived using the 2017 SLCS rates by rating region in Oregon as the starting point. This approach is somewhat conservative and actual costs may be slightly lower. BHP enrollees of childbearing ages may have a lower percentage of pregnancies than is inherent in the SLCS rates because pregnant women with incomes between 138% and 185% of FPL are eligible for Medicaid, which automatically excludes them from BHP enrollment. We are not able to identify pregnancies in survey data, so it is not possible to accurately estimate the extent of conservatism in our cost estimates. More details on this issue are provided in Appendix A.

- We assumed the following BHP administrative costs per discussions with DCBS staff and as described in section 3 of this report:

    - Standard health plan administrative costs equal to 11.5% of program costs. Note that the BHP regulations require that health insurance issuers offering a standard health plan use at least 85 cents for each dollar collected for medical and quality improvement expenses.

    - State administrative expenses equal to $20.82 PMPM, which is the average of $19.32 and $22.32, which were the two scenarios used in our October 29, 2014 report.

- The BHP payments use a different cost sharing subsidy calculation for American Indians/Alaska Natives enrolling in the BHP. These provisions are reflected in the modeling in this report.

Additional details on the methodology and assumptions used can be found in Appendix A.

Results and Considerations

The following outlines the results of the 2016 projections used to develop the projected net surplus/deficit to the state of the BHP. Key considerations are also explored in each section.

Projected Federal BHP Payments

Our analysis shows that federal BHP payments available to the State of Oregon, based on Urban's enrollment estimates, are projected to be between $293 and $347 million for 2017. When member premiums are included, total revenue is projected to be $321 to $407 million. The revenue is significantly higher than the October 2014 study for two main reasons. First, there are more residents who are estimated by Urban to take up BHP coverage. Second, the second lowest cost silver and lowest cost bronze rates, which drive federal BHP payments, have increased significantly.

Table 3.1 below summarizes the estimated federal payments under each scenario.

Table 3.1 - Projected 2017 Federal BHP Payments

Scenario Description	Scenarios 1 and 2 12 Months Continuous Eligibility with No Cost Sharing	Scenarios 3 and 4 12 Months Continuous Eligibility with Cost Sharing	Scenarios 5 and 6 Non Continuous Eligibility with No Cost Sharing	Scenarios 7 and 8 Non Continuous Eligibility with Cost Sharing
BHP Covered Lives	79,397	71,030	66,238	59,247
Amounts in ($000s)				
95% of Premium Tax Credits	$260,500	$239,810	$236,427	$218,178
95% of Cost Sharing Reductions	$86,353	$79,523	$80,978	$74,683
Total Federal Payments	**$346,853**	**$319,333**	**$317,405**	**$292,861**
Premiums from BHP Enrollees	**$59,942**	**$43,912**	**$41,139**	**$28,560**
Total	**$406,795**	**$363,245**	**$358,544**	**$321,421**
Per Enrollee Per Year Amounts				
95% of Premium Tax Credits	$3,281	$3,376	$3,569	$3,683
95% of Cost Sharing Reductions	$1,088	$1,120	$1,223	$1,261
Premiums from BHP Enrollees	$755	$618	$621	$482
Total	**$5,124**	**$5,114**	**$5,413**	**$5,425**

Total federal BHP payments and member premiums vary by scenario because a different number of residents are expected to take up BHP enrollment (due to eligibility rules related to the granting of 12 months of continuous enrollment, and whether cost sharing will be charged to enrollees).

It is important to emphasize the importance of the assumed 2017 SLCS and LCB rates in our analysis. Because these rates may change from year to year, and because competitive dynamics in the state may change over time, there is potentially high volatility in the rates from year to year. Such year-to-year changes in QHP benchmark premiums may not track with changes in health care costs that drive BHP program expenses. The 2017 results demonstrate this volatility in a positive way from the State perspective – projected revenues are significantly higher than the assumed 2015 rates in our October 2014 study due to increased Marketplace rates. Below is a summary of the assumed 2017 SLCS compared with the 2015 rates used in the October 2014 report by rating area.

Rating Area	2017 2nd Lowest Cost Silver Plan Carrier(s)	2015 Assumed 2nd Lowest Cost Silver Rate	2017 Assumed 2nd Lowest Cost Silver Rate	Annualized % Change
BEND	Bridgespan, Atrio and PacificSource	$167.00	$332.00	25.7%
COAST	Providence, Kaiser, Moda	$178.00	$287.00	17.3%
EUGENE	Bridgespan and Kaiser	$173.00	$271.00	16.1%
MEDFORD	Atrio and Bridgespan	$184.00	$289.00	16.2%
PENDLETON-HERMISTON	Bridgespan, PacificSource, Moda, Kaiser, and Providence	$182.00	$327.00	21.6%
PORTLAND	Bridgespan and Providence	$182.00	$241.00	9.8%
SALEM	Kaiser and Providence	$178.00	$248.00	11.7%

*Note that because all rates must be based on a standard age curve, the percent change column above will be consistent across all ages.

While premiums are typically expected to increase from year to year due to increases in the cost of medical services, the SLCS and LCB premium changes from year to year may not follow expected trends for a number of reasons, including:

- The carrier with the SLCS or LCB rates for any given region may change.
- Carriers may implement narrower provider networks, drug formulary, or other utilization management approaches that might result in lower expected increases.
- Change in the competitive environment or a particular carrier's business strategy may impact changes in the second lowest cost premiums.

As noted above, the 2017 and 2018 federal BHP payment rules allow states to either utilize the actual SLCS and LCB rates in effect for the given year, or they can utilize the previous year's rates projected to 2017 or 2018 at prescribed trend rates. States can also propose to HHS a methodology for developing a health risk factor to adjust the federal payment to account for differences between the health risk of the BHP population and that underlying the SLCS rates.

For States electing to use 2016 rates trended to 2017, the prescribed trend rate in the 2017 and 2018 BHP payment regulation is 8.6%. Although not final, the 2017 filed rates in Oregon are clearly higher than 2016 rates increased by 8.6%; therefore, actual 2017 SLCS and LCB rates are used in this report since it will generate higher federal revenue for the program.

Should Oregon proceed with the BHP, an analysis should be performed each year to determine whether it is more beneficial to use actual rates or trended previous-year rates.

Projected BHP Claims Expense

Wakely projected the claim costs of the estimated 2017 BHP population based on the assumed benefits, reimbursement levels, and cost sharing amounts for each scenario. Claim costs include the expected liability to the standard health plan offerors, and do not include consumer out-of-pocket expenses (e.g., copayments, deductibles and coinsurance). Overall, we estimate the BHP claim expense liability to be between $296 and $430 million for 2017. Table 3.3 summarizes the estimates for each scenario.

Table 3.3 - Summary of Expected BHP Claims Expense for Each Scenario

Scenario	Enrollees	Benefits	Continuous Enrollment	Cost Sharing [1]	Projected 2017 Claims Expense ($000s)	Projected 2017 Claims Expense Per Enrollee Per Year
1	79,397	OHP+	12 months	None	$397,615	$5,008
2	79,397	OHP+, w/ Add'l	12 months	None	$429,812	$5,413
3	71,030	OHP+	12 months	50% for 138%-200%	$344,393	$4,849
4	71,030	OHP+, w/ Add'l	12 months	50% for 138%-200%	$373,196	$5,254
5	66,238	OHP+	None	None	$337,163	$5,090
6	66,238	OHP+, w/ Add'l	None	None	$364,023	$5,496
7	59,247	OHP+	None	50% for 138%-200%	$295,727	$4,991
8	59,247	OHP+, w/ Add'l	None	50% for 138%-200%	$319,753	$5,397

[1] In all scenarios, BHP enrollees with incomes 138%-200% FPL will be charged 50% of the premium they would have paid in the Marketplace

The main cause of variation in per enrollee per year (PEPY) claims is whether the scenario includes additional coverage for dental and non-emergency transportation. Costs PEPY will also vary slightly because the relative morbidity of BHP enrollees will be slightly different in each scenario because the take-up rates are not the same, which changes the mix of BHP enrollees.

The claims expenses were estimated based on the following general process:

- Allowed claim costs derived from the 2017 individual marketplace SLCS rates were used as the starting point. The term "allowed claims" means total costs before member cost sharing is subtracted, but after discounts from provider reimbursement arrangements are applied. See Appendix A for information on how these were derived.
- Estimated 2017 Costs were developed as follows:
  - Apply an assumed loss ratio of 80% to SLCS rates to derive expected claim costs.
  - Divide by an assumed actuarial value (AV) of 0.70 to derive allowed costs. The 0.70 AV is the prescribed value for Silver metal tier plans (note that benefit designs are considered compliance if the actuarial value is between 0.68 and 0.72).
  - Apply a discount for assumed provider reimbursement levels of 82% of the Marketplace average. This adjustment is estimated to be roughly half way between average commercial (i.e. QHP/Marketplace) reimbursement levels and Medicare FFS.
  - Member cost sharing levels as defined for each scenario.
  - Induced utilization to reflect benefit richness.

- The relative morbidity factor for the expected BHP enrollees compared to individual market enrollees supplied by the Urban Institute.
- For scenarios 2, 4, 6, and 8, we added costs for dental and non-emergency transportation benefits that are not covered by the OHP Plus plan. These were estimated to be about $33 PMPM, or $408 PMPY prior to any member cost sharing.

Projected BHP Cost to the State of Oregon

This section summarizes the total estimated cash flows associated with a BHP for calendar year 2017 from the perspective of the State. This helps the state identify BHP costs that may not be covered by federal BHP payments. As discussed throughout this section, these results are highly sensitive to changes in the SLCS and LCB rates from year to year, because they drive federal BHP payments. Because BHP revenues are somewhat disconnected from claim expenses, any conservatism or aggressiveness on the part of QHP issuers in setting QHP rates could produce unexpected positive or negative cash flows for the State.

Table 3.4 - Total Projected BHP Cash Flows for 2017 (thousands, except PEPY)

Scenario	Federal BHP Payment	Member Premium	Claim Expense and Liability	Standard Health Admin Plan Expenses [1]	Surplus/ (Deficit), Excluding State Admin	State Admin Expenses [2]	Total Surplus/ (Deficit)	Surplus/(Deficit) Net Per Enrollee Per Year (PEPY)
1	$346,853	$59,942	$397,615	$51,667	($42,487)	$20,313	($62,800)	($791)
2	$346,853	$59,942	$429,812	$55,851	($78,868)	$20,313	($99,181)	($1,249)
3	$319,333	$43,912	$344,393	$44,752	($25,899)	$18,172	($44,071)	($620)
4	$319,333	$43,912	$373,196	$48,494	($58,446)	$18,172	($76,618)	($1,079)
5	$317,405	$41,139	$337,163	$43,812	($22,431)	$16,946	($39,377)	($594)
6	$317,405	$41,139	$364,023	$47,302	($52,781)	$16,946	($69,728)	($1,053)
7	$292,861	$28,560	$295,727	$38,428	($12,734)	$15,158	($27,892)	($471)
8	$292,861	$28,560	$319,753	$41,550	($39,881)	$15,158	($55,039)	($929)

[1] Standard Health Plan Expenses are based on assumed loss ratio of 88.5%
[2] State administrative expenses are assumed to be $21.32 PMPM. Note that federal BHP payments cannot be used to directly offset state administrative expenses; however, the State can charge a fee to the standard health plan issuers that can be built into plan rates and thus offset by federal BHP payments.

Key takeaways include:

- All scenarios will result in a net cost to the state.
- The scenarios produce results showing a deficit ranging from $28 to $99 million, including

assumed administrative expenses incurred by the state. The fee levels carriers are able to achieve will have a significant impact on the projected State surplus or deficit under a BHP. If BHP is implemented through using the Coordinated Care Organizations that currently serve OHP Plus beneficiaries, it may be easier to maintain provider payment levels at or near Medicaid levels.

- Adding dental and non-emergency transportation benefits adds about $27-$36 million in costs, depending on the scenario.
- The scenarios modeled represent a range of possible results; however, the State could adjust consumer premium and cost sharing subsidies or provider payment levels in order to reduce expenses. The State could also modify program details to encourage the disproportionate enrollment of the lowest-income BHP consumers, who will qualify for the highest federal BHP payments, potentially improving the overall balance of federal dollars relative to state BHP costs. For example, if no premiums are charged below 150 percent FPL, more consumers below that threshold will enroll, bringing with them higher federal payments.
- Based on the scenarios above, state incurred costs beyond federal BHP funding per enrollee per year range from $471 to $1,249.

It is important to understand that the standard health plan administrative expenses in these scenarios are high level estimates. Administrative expenses for standard health plan offerors are assumed to be 11.5% of calculated BHP capitation payments (excluding member premium). These expenses include consideration for ACA issuer taxes and reinsurance assessments. We believe these assumptions are reasonable and are consistent with what we have observed in other States and other BHP studies but it will be important to refine these estimates with more detailed studies in order to improve the predicted State surplus and deficit.

In addition to the sensitivity of results across the scenarios, there will also be variation in results from year to year as standard health plan offerors negotiate different provider reimbursement levels and BHP payments change according to the level of the SLCS and LCB rates in the Marketplace.

4) BHP ENROLLEE AFFORDABILITY

Background

This section illustrates the estimated financial impact of the program for potential BHP enrollees. This analysis is based on the estimated BHP enrollment developed by Urban and summarized in Section 2 of this report. Premium and out-of-pocket expenses for expected BHP enrollees are estimated under each BHP scenario and compared to that estimated based on the previous insurance status.

Results

Table 4.1 provides estimates of the previous insurance coverage status of projected BHP enrollees based on the Urban modeling and indicates that about 63%-81% would previously have been insured through QHPs in the Marketplace, 12%-21% would have previously received coverage through employers, and 7%-15% would previously have been uninsured, and the remainder would have been enrolled in other coverage.

Table 4.1 - Previous Coverage Status of BHP Enrollees

Previous Coverage	Scenarios 1 and 2	Scenarios 3 and 4	Scenarios 5 and 6	Scenarios 7 and 8
Total enrollees				
Previous QHP Enrollee	49,645	49,521	48,028	48,028
Previous Other Individual Market (non-QHP)	355	322	-	-
Previous Uninsured	12,228	7,230	8,625	4,242
Employer	16,846	13,680	9,585	6,977
Other Public	323	277	-	-
Total	79,397	71,030	66,238	59,247
Percent Distribution				
Previous QHP Enrollee	62.5%	69.7%	72.5%	81.1%
Previous Other Individual Market (non-QHP)	0.4%	0.5%	0.0%	0.0%
Previous Uninsured	15.4%	10.2%	13.0%	7.2%
Employer	21.2%	19.3%	14.5%	11.8%
Other Public	0.4%	0.4%	0.0%	0.0%
Total	100.0%	100.0%	100.0%	100.0%

This distribution of prior coverage is significantly different from the October 2014 analysis, where a much larger proportion of BHP enrollees were estimated to come from the Marketplace. The updated analysis shows a substantially higher number of BHP enrollees as coming from employer group coverage. This is primarily due to employers providing coverage that is deemed “not affordable” by the

ACA and the greater subsidy available through BHP encouraging more of those employees to enroll in a BHP than currently enroll in QHPs.

Table 4.2 illustrates the premiums that apply for subsidized coverage for the SLCS plan available in the Marketplace compared to the premiums that would apply in the BHP program. Note that all scenarios assume that BHP enrollees with incomes between 138% and 200% of FPL will be charged 50% of the amount they would have been charged in the Marketplace.

Table 4.2 - Monthly Premiums for All BHP Scenarios Compared to Marketplace 2ds Lowest Cost Silver Plan for a Sampling of Households

FPL	Premium as % of Income Marketplace	BHP	Premium for Single Household Marketplace	BHP	Premium for 4-Person Household Marketplace	BHP
100%	2.03%	0.0%	$20	$0	$42	$0
138%	3.35%	1.7%	$46	$23	$95	$47
150%	4.07%	2.0%	$61	$31	$125	$62
175%	5.24%	2.6%	$92	$46	$188	$94
200%	6.41%	3.2%	$128	$64	$262	$131

Out-of-pocket costs (i.e. cost sharing amounts) were calculated by applying the relative health risk factor to the average expected allowed claims cost for each individual in the Urban database and then multiplying by the average member cost sharing percentage applicable under each scenario as outlined in Table 4.3. Those assumed to be uninsured were assumed to pay 100% of their average claim costs with no adjustments made for expected lower utilization or higher provider rates that are generally associated with uninsurance.

Table 4.3 - Average Percent of Total Claim Costs Paid by Member by Scenario

	No BHP		BHP	
FPL	Uninsured	Marketplace	Scenarios 1, 2, 5, and 6	Scenarios 3, 4, 7, 8
<138%	100%	6%	0%	0%
138% - 150%	100%	6%	0%	3%
150% - 200%	100%	13%	0%	6.5%
Alaskan Native/American Indian	N/A	0%	0%	0%

Table 4.4 illustrates the average expected savings to BHP enrollees compared to what they would have paid in premiums and out-of-pocket costs (member cost sharing) in the absence of the BHP. In all scenarios, the BHP is estimated to reduce the out-of-pocket expenses for BHP enrollees. These savings are a result of BHP premium and cost sharing subsidies above and beyond what is available for coverage

provided through the Marketplace. The extent of estimated consumer out-of-pocket savings under a BHP varies depending on the coverage (or lack thereof) in the absence of the BHP offering. Out-of-pocket savings are most dramatic for those who have remained uninsured in 2016 despite the availability of subsidized coverage through the Marketplace. For residents who would have enrolled in individual market coverage in the absence of the BHP, we estimate that annual out-of-pocket savings in the BHP would be about $1,050 - $1,090 per person. The savings are higher for those who were previously uninsured. For this population, we estimate an annual savings of about $2,400-$3,500 per person. Note that we also show BHP enrollees who were not uninsured but were not enrolled in the marketplace. This can include those with employer group or other coverage. The savings for these members is high, but it is very likely overstated because the enrollees are assumed to be responsible for the entire premium, when in fact the employer will typically pay a significant portion of the premium.

Table 4.4 - Comparison of Average Annual Out-of-Pocket Expense for Each Scenario

		No BHP			BHP			
Scenario	Previous Coverage	Member Premium	Cost Sharing	Total	Member Premium	Cost Sharing	Total	Consumer Savings in BHP
1 and 2	Uninsured	$0	$3,858	$3,858	$1,194	$232	$1,426	$2,432
	Marketplace	$1,146	$740	$1,886	$505	$296	$801	$1,085
	All Other	$4,997	$2,032	$7,029	$1,157	$429	$1,586	$5,444
3 and 4	Uninsured	$0	$4,266	$4,266	$718	$273	$991	$3,274
	Marketplace	$1,137	$738	$1,875	$497	$295	$792	$1,083
	All Other	$5,163	$2,074	$7,237	$987	$451	$1,438	$5,799
5 and 6	Uninsured	$0	$3,720	$3,720	$1,172	$165	$1,338	$2,382
	Marketplace	$1,089	$704	$1,793	$465	$281	$746	$1,047
	All Other	$4,589	$2,199	$6,787	$907	$326	$1,233	$5,555
7 and 8	Uninsured	$0	$4,059	$4,059	$423	$170	$592	$3,467
	Marketplace	$1,089	$704	$1,793	$465	$281	$746	$1,047
	All Other	$4,918	$2,348	$7,266	$635	$345	$980	$6,286

When interpreting the results in Table 4.4, it is important to note that the population in each scenario is different. Some results appear counterintuitive, but are due to the different characteristics of the underlying population. For example, the savings for uninsured residents is higher in scenarios 3 and 4 even though the BHP cost sharing is higher. The reason for this is that the uninsured taking up BHP in scenarios 1 and 2 have a lower average age and relative morbidity than the uninsured taking up a BHP in scenarios 3 and 4.

Beyond out of pocket savings, another potential advantage of the BHP is that enrollees will not be subject to the reconciliation of tax credits as required by enrollees receiving subsidized coverage through the Oregon Marketplace. If household income increases during the year or there is a reduction

in household size, subsidized Marketplace enrollees may experience reductions in their tax refunds or increases in their tax liabilities if they don't report changes in circumstances throughout the year. This does not apply to BHP enrollees.

Despite the opportunity for consumer savings in the BHP relative to the options available through the Marketplace, there may be some actual or perceived disadvantages of BHP implementation to consumers, including:

- A different set of available plan options.
- Different provider networks, which may not include a consumer's specific provider. Provider access may be strained, especially if capitation rates are set such that carriers may not be able to negotiate sufficiently low reimbursement levels to participate in a BHP.
- Additional churn if BHP plans are distinct from both Marketplace and Medicaid plans, requiring consumers to change plans more frequently as income changes.

As a transitional effect, consumers would be moved out of QHPs into BHP standard health plans. While some consumer may be pleased at the resulting cost savings and, depending on the state's approach to BHP implementation, additional benefits, clinical relationships to QHP providers could be disrupted, and ongoing treatment could be interrupted. Moreover, unless affected consumers receive hands-on assistance, some may not successfully make the transition and could experience an interruption in coverage.

5) BHP IMPACT ON OREGON MARKETPLACE AND INDIVIDUAL MARKET

Background

As discussed in Urban's analysis summarized in Section 2, about 237,300 individuals are projected to be enrolled in the individual market (On or Off the Oregon Marketplace) in 2017 if the state does not implement BHP. With the introduction of the BHP, that number would fall by over 20%, with slight variance depending on how the BHP is structured. In this section, we analyze several potential effects of this change on both the individual market as a whole and on the Oregon Marketplace in particular.

First, we analyze how the introduction of the BHP would impact the individual health insurance market risk pool. While a little over half of this market consists of policies purchased through the Marketplace, the single risk pool requirements of the ACA mean that rates for individuals purchasing outside the Marketplace will also be affected. We accordingly estimate the impact of BHP on individual market premiums and analyze the effects of such premium changes on Oregon Marketplace enrollees as well as others in the non-group market.

Second, we explore whether a smaller number of covered lives in the Marketplace is likely to make carriers substantially less interested in participating. If so, consumers could have fewer QHP options, and reduced competition could increase premiums.

Risk Pool Effects

BHP's Estimated Impact on Individual Market Premiums

Table 5.1 below summarizes enrollment in individual market (inside and outside the Marketplace) plans before and after implementation of a BHP.

Table 5.1 - Comparison of Projected ACA- Compliant Individual Market Population with and without BHP

Population Type	Scenario 1 and 2	Scenario 3 and 4	Scenario 5 and 6	Scenario 7 and 8
Total Individual Market - Without BHP	237,300	237,300	237,300	237,300
BHP - Previous Individual Market	50,000	49,800	48,000	48,000
BHP - Previous Uninsured	12,228	7,230	8,625	4,242
BHP - All Other	17,172	13,970	9,575	6,958
Total Individual Market - With BHP	187,300	187,500	189,300	189,300
Total BHP	79,400	71,000	66,200	59,200

All individuals enrolled in individual coverage outside of the Marketplace were assumed to be in non-grandfathered policies and part of the single risk pool.

The characteristics of the people who go from the Individual ACA market to BHP are also important since their absence from the individual market risk pool will have an impact on premium levels set in the Marketplace.

Using the federal rating factors by age and relative morbidity estimates provided by the Urban Institute, we estimate that implementation of a BHP will result in an average age factor decrease of 0.0% to 2.0%, depending on the scenario. Meanwhile the change in the relative morbidity of those remaining in the Individual market along is estimated to range from a decrease of 0.6% to an increase of 1.4%. In all scenarios, the morbidity of the individual market is expected to be larger than the corresponding change in average age factor after a BHP is implemented.

Table 5.2 below shows the estimates in more detail.

Table 5.2 - Age and Morbidity Factors for Individual Market with and without BHP

Scenario	Measure	Without BHP	With BHP	Change
1 and 2	Enrollees	237,298	187,299	(50,000)
	Federal Age Factor	1.611	1.593	-1.1%
	Relative Morbidity	1.139	1.143	0.4%
3 and 4	Enrollees	237,298	187,455	(49,843)
	Federal Age Factor	1.611	1.611	0.0%
	Relative Morbidity	1.139	1.155	1.4%
5 and 6	Enrollees	237,298	189,271	(48,028)
	Federal Age Factor	1.611	1.578	-2.0%
	Relative Morbidity	1.139	1.132	-0.6%
7 and 8	Enrollees	237,298	189,271	(48,028)
	Federal Age Factor	1.611	1.596	-0.9%
	Relative Morbidity	1.139	1.144	0.4%

Based on the relative factors above, implementation of a BHP is estimated to result in about a 1.5% increase in Individual ACA market premiums. This is very similar to the result we reported in the October 2014 study. The 1.5% increase is based on the assumption that managed care organizations make the same estimates of the age and morbidity change underlying the enrollment Urban analysis in Section 2. Using that analysis, the 1.5% increase is derived from the fact that morbidity (which includes the impact of age) in the remaining Individual ACA market changes by about 1.5% higher than the change in age factor. In other words, a 1.5% increase in rates would be needed in order for insurers to cover administrative expenses and maintain target profit levels due to the expected changes in the Individual ACA population if a BHP were implemented.

As a practical matter, each managed care organization will make its own assessment of the impact of BHP implementation, so it is certainly possible that for any given plan, such as the second lowest Silver plan, the rate could change by more or less than our 1.5% estimate. In addition, there may be other factors we did not consider in our estimate that could influence Marketplace rates such as the potential that providers will demand higher reimbursement in the Marketplace in exchange for lower reimbursement on BHP members.

Impact of Changed Individual Market Premiums on Consumers

As noted earlier, BHP implementation is projected to raise the average risk level of the overall non-group market. As a result, non-group premiums would increase by approximately 1.5 percent above the

levels that would otherwise be charged. This would apply both within and outside the Oregon Marketplace. Here, we analyze the effects on consumers of this slight premium increase.

Consumers would be affected based on their subsidy eligibility and plan choice, as follows:

- **Nongroup enrollees without PTCs are subjected to the full premium increase.** This population pays full non-group premiums.
- **PTC beneficiaries enrolled in "benchmark plans" are unaffected**. Such plans are the second-lowest-cost available silver-level QHPs. These consumers make income-based premium payments that depend entirely on FPL and household size. The gross premium amount charged before application of the PTC affects only the federal government's PTC costs, not the charges to such a consumer.
- **Costs rise slightly for PTC beneficiaries enrolled in plans more costly than the benchmark**. If a PTC beneficiary selects a plan more expensive than the benchmark premium, the beneficiary pays the income-based amount described above, plus the difference between the benchmark premium and the premium charged by the beneficiary's chosen plan. For example, if the benchmark plan charges $200 a month and the beneficiary chooses a $300 plan, the consumer payment will be the income-based amount plus $100. If premiums rise by 1.5 percent for both the benchmark plan and the beneficiary's chosen plan, that $100 difference will increase by $1.50, as will the beneficiary's monthly premium costs. Put more generally, *whatever additional payments PTC beneficiaries make for selecting more costly plans will change by the same percentage and in the same direction, up or down, as the percentage change that applies to all non-group premiums*.
- **Costs fall slightly for PTC beneficiaries enrolled in plans less costly than the benchmark**. When a PTC beneficiary chooses a QHP less expensive than the second-lowest-cost silver plan, the consumer pays the applicable income-based charge, minus the difference between the benchmark plan and the consumer's chosen plan. If both the benchmark plan and the consumer's chosen plan experience a 1.5 percent premium increase, the gap between premiums rises by 1.5 percent, so the consumer's savings increase by 1.5 percent. Continuing with the earlier example, if the applicable benchmark plan charges $200 a month and a PTC beneficiary picks a $100 plan, he or she pays the applicable income-based amount, minus $100. If premiums rise by 1.5 percent, the benchmark plan and the beneficiary's chosen plan will charge $203 and $102, respectively. The beneficiary will then pay the applicable income-based charge, minus $102. *Whatever savings consumers achieve by selecting less costly plans will change by the same percentage <u>but in the opposite direction</u>, up or down, as the percentage change that applies to nongroup premiums generally*.

Behavioral effects of the projected 1.5 percent premium increase are likely to be quite modest. Most consumers exposed to the full increase have incomes over 400 percent FPL. Even below that income threshold, few otherwise uninsured are likely to enroll or even change plans due to a small, market-wide premium increase. The same is true of PTC beneficiaries, given the even more limited cost exposure they face.

Table 5.3 shows the expected distribution of Oregon residents enrolled in individual market coverage, assuming BHP implementation, in terms of the categories described above:

- Within the Oregon Marketplace—
  - 108,000 out of 135,000 enrollees (79 percent) are projected to receive PTCs, and would be unaffected by increases to rates in the Marketplace (in terms of out-of-pocket expense).
  - The remaining 27,000 enrollees will pay the full premium increase. About 60% of these (17,000) have incomes above 400 percent FPL; the rest are ineligible for PTCs because of ESI offers the ACA classifies as affordable.
- Outside the Oregon Marketplace, approximately 102,000 consumers are expected to obtain non-group coverage, all of whom will be subject to the full premium increase resulting from BHP implementation. About 95% of the off-Marketplace enrollees have incomes above 400% FPL.
- Putting together the entire nongroup market, both within and outside the Oregon Marketplace—
  - A little less than half (46 percent) of all recipients of non-group coverage are expected to use PTCs and thus to be largely unaffected by the expected premium increase.
  - Among nongroup enrollees who do not receive PTCs—119,000 out of a total non-group market of 129,000 consumers—96% have incomes above 400 percent FPL.

Table 5.3 - Projected nongroup enrollment in 2017, by income and PTC eligibility

	Number	Percentage of Oregon Marketplace Enrollees	Percentage of combined nongroup market
Oregon Marketplace			
At or below 400% FPL			
Eligible for PTCs	108,000	80%	46%
Ineligible for PTCs	10,000	7%	4%
Above 400% FPL	17,000	13%	7%
All Marketplace enrollees	***135,000***	***100%***	***57%***
Outside Oregon Marketplace			
At or below 400% FPL	5,000	n/a	2%
Above 400% FPL	97,000	n/a	41%
All Marketplace enrollees	***102,000***	***n/a***	***43%***
Combined nongroup market			
At or below 400% FPL			
Eligible for PTCs	113,000	n/a	48%
Ineligible for PTCs	10,000	n/a	4%
Above 400% FPL	114,000	n/a	48%

All Marketplace enrollees	***237,000***	***n/a***	***100%***

Note: Approximately 5,000 individuals are estimated to enroll in nongroup coverage outside the Oregon Marketplace and are therefore classified in this table as ineligible for PTCs, even though, had they enrolled in the Oregon Marketplace, they would have qualified for PTCs. Other people with incomes at or below 400 percent FPL shown as purchasing nongroup coverage outside the Oregon Marketplace would be ineligible for PTCs, regardless of where they purchased nongroup coverage, because of ESI offers the ACA characterizes as affordable. The same is true of the 9,560 individuals shown here as ineligible for PTCs and estimated to enroll in the Oregon Marketplace with income at or below 400 percent FPL. Totals may not sum because of rounding.

Methodology and Assumptions Underlying Premium Estimate

The analysis of the impact of a BHP on the Oregon Marketplace relies primarily on the demographic characteristics in the Urban analysis of 2017 BHP enrollment. As noted above, we calculated the impact to rates assuming carriers would set rates using the same pricing assumptions with respect to administrative expenses and profit levels.

All individuals enrolled in individual coverage outside of the Marketplace were assumed to be in non-grandfathered policies and part of the single risk pool.

Each carrier will make its own assessment of the impact of a portion of its population leaving to join the BHP. We have inherently assumed that all carriers will estimate this impact to be the same as presented in this report.

Attractiveness to Carriers and Options for Consumers

Since implementing BHP would reduce the number of covered lives in Oregon's marketplace, carriers would likely be less interested in participating.

There are many potential implications of reduced carrier participation on the marketplace. A full analysis is beyond the scope of this report; however, below we briefly list some of the potential effects.

- Fewer choices for consumers in terms of benefit plan variations and carriers.
- Reduced competition between insurers, potentially leading to higher premiums. The Oregon rate review process would act as a check on higher premiums in that rates that cannot be shown actuarially to be reasonable in relation to benefits or adequate are unlikely to be approved.
- Increased leverage for remaining carriers. Fewer competitors would mean that remaining carriers would have a larger share of the total market, and therefore more leverage. This could put the state in a difficult position if a carrier covering a majority of members in the Marketplace threatened to exit. It could also mean that carriers could negotiate more favorable reimbursement levels with providers.
- Risk transfer payments would be spread across fewer carriers. Overall, this would likely lead to a better ability of carriers to estimate risk score impact; although, the risk transfer payment

amounts could be magnified by any difference in diagnosis coding between the remaining carriers.

6) MODEL UPDATES

Prior to the release of this report, both Wakely and Urban had performed analyses related to the BHP in Oregon. The following summarizes differences between the assumptions, methodologies and results of those earlier reports compared to this report.

Differences in Urban Estimates of BHP Eligibles and Enrollment

The Urban Institute estimates presented here are based on the latest version of the HIPSM model. The most important differences from the methodology used in the 2014 report are:

- The model is based on more recent ACS data, 2012-2013 rather than 2009-2011.
- Marketplace enrollment is based on actual 2016 enrollment data provided by the state.
- Medicaid enrollment is based on recent Medicaid performance indicators data released by CMS, reflecting actual experience under the ACA. When estimating BHP Option A, no premiums or cost sharing, we simulated enrollment rates comparable Medicaid enrollment rates in Oregon.
- The 2014 report did not estimate the impact of 12 month continuous eligibility.

Estimates of the BHP eligible population did not change dramatically from the 2014 report. The main differences are in enrollment. Based on Oregon's actual experience with marketplace and Medicaid enrollment, we now estimate larger gains in enrollment and reductions in the uninsured with BHP than in the 2014 report, even without 12 months of continuous eligibility.

Differences in Urban Estimates of Churn

Our estimates of churn take into account the model improvements mentioned above. One important conceptual difference is that we considered the possibility of aligning BHP with OHP or with QHPs, which would reduce churn. Minnesota, for example, does joint procurement for its Medicaid and BHP programs. However, as we note in the report, such integration will be difficult for Oregon.

Differences from October 2014 Oregon Health Authority Report

Wakely and Urban performed similar analyses to that included in this report in an October 2014 study for the Oregon Health Authority. While the analysis in this report and the earlier work both rely on the same model, there are numerous differences in assumptions and calculations that are important to be aware of when comparing results of these two studies. Table 6.1 provides a high level summary of the key differences.

Table 6.1 – Summary of Key Differences in Method and Assumptions

Assumption/Calculation	October 2014	August 2016
BHP Population/Take-Up	2009-2011 ACS data	Oregon enrollment data, 2012-2013 ACS data
Silver Rates	2015 Projected based on 2014 OR Individual QHP Filings	2017 OR Individual QHP Filings as of July 2016
BHP Payment Regulation	March 2014 Final	February 2016 Final
Basis for Claim Costs	2015 OR Individual QHP Filings	2017 OR Individual QHP Filings
Commercial/Medicaid Annual Claim Cost Trends	6.0%/3.4%	n/a
Carrier Administrative Costs	8% / 15% retention	11.5% retention
State Administrative Costs	$19.32/$23.32 PMPM	$21.32 PMPM

Below we provide additional details on some of the differences identified in Table 6.1.

BHP Population and Take-Up

Both the October 2014 study and this report rely on enrollment estimates provided by Urban. Table 6.2 summarizes the age, gender, and income distribution from both studies.

Table 6.2 – BHP Demographics, October 2014 Report versus May 2014 Study

August 2016 - BHP Scenario 2/Option B - Urban Institute; 12 Months Continuous enrollment					
	<150% FPL		150%-200% FPL		
BHP Age Group	Females	Males	Females	Males	Total
0-20	630	462	816	1,164	3,072
21-34	2,779	3,126	11,263	10,552	27,720
35-44	1,131	1,283	5,613	6,523	14,550
45-54	1,532	1,414	6,458	6,681	16,085
55-64	1,490	1,151	7,764	7,565	17,970
Total	7,563	7,435	31,914	32,485	79,397
October 2014 - Urban Institute (BHP Scenario 1)					
	<150% FPL		150%-200% FPL		
Age	Females	Males	Females	Males	Total
0-20	576	389	652	1,226	2,843
21-34	3,400	4,709	6,825	11,199	26,133
35-44	1,734	1,421	4,541	4,686	12,381
45-54	997	1,351	4,276	4,231	10,855
55-64	2,003	1,421	6,740	3,963	14,128
Total	8,709	9,291	23,033	25,306	66,339

Overall, the current Urban Institute estimates of the BHP population are slightly older on average and project a lower percentage of enrollees in the 0%-150% FPL category as compared with the October 2014 study.

Silver Rates

The second lowest cost Silver rates filed for CY2017 are used as the basis for BHP payments, as allowed in the February 2016 BHP Payment regulation. The rates are not final; however, DCBS believes that final approved rates are unlikely to change much if at all. The October 2014 study was based on the 2015 second lowest cost Silver rates by rating area. Table 3.2 shows the percentage difference in second lowest cost Silver rates for 2017 versus CY2015 by rating region. The year over year change varies by region.

The CY2017 rates are much higher than CY2015 rates, as can be seen in Table 3.2. This directly leads to additional revenue for the State. It is important to note that claim costs are also affected by the updated Silver rates because we used these rates as a basis for claim cost estimates. This is addressed in the Claim Costs subsection, below.

BHP Payment Regulation

This report is based on the February 29, 2016 BHP final payment regulation; whereas, the October 29, 2014 report was based on the March 2014 final BHP Payment regulation.

There are several differences between the two iterations of the payment regulations:

- The applicable percentages used to determine the maximum household payment in the premium tax credit calculation have been increased slightly in the most recent payment regulation.
- The income reconciliation is higher in the current regulation. It is currently 1.0038 versus 0.9492 in the March 2014 regulation. This serves to directly increase BHP revenues to the State. We estimate this factor contributed about $12 to $14 million in additional revenue as compared with using the lower factor from March 2014.
- There is no longer a need for the factor to account for the transition of federal reinsurance since actual 2017 SLCS and LCB rates are used, and the reinsurance program expired at the end of 2016.

Basis for Claim Cost Estimates

Similar to the BHP payment estimates, we used 2017 second lowest cost Silver rates in this report as a basis for estimating claim costs. We used a retention assumption that averaged the two assumptions modeled in the October 2014 study.

Adjustments to Claim Cost Estimates

In the October 2014 study, we tested different assumptions regarding the percentage of commercial provider reimbursement that would be achieved by carriers participating in a BHP (or the State). We tested assumptions of 62% of commercial rates and half of that, or 81%. For the current study, as used an assumption of 82% of commercial provider reimbursement for all scenarios.

7) IMPACT OF BHP ON STATE BUDGET

Implementing a BHP in Oregon could create additional impact on state finances not explicitly addressed in the enrollment and financial analysis sections of this report. Some of these were discussed in our October 29, 2014 report and are repeated and updated below.

- *Medicaid coverage of pregnant women with incomes between 138 and 185 percent FPL*. Currently, when women in this income range receive QHP coverage and become pregnant, they can transfer to the Oregon Medicaid program. This lets them benefit from exemption from all cost-sharing and coverage of services that go beyond those available in QHPs, although such a shift may require changing providers mid-pregnancy.

  From a financial perspective, the State receives federal funding for pregnant women in this income range for delivery expenses. Based on recent experience, the federal funding covers about 60% to 65% of delivery costs. Pre-natal expenses are nearly 100% state responsibility.

  If Oregon implemented a BHP and no longer maintained the Medicaid benefit for pregnant women with incomes 138%-185% FPL, then funding would be based on the BHP formulas. As discussed in Appendix A, BHP payments are calculated based on 95% of advance premium tax credits and cost sharing subsidies if the beneficiary had enrolled in the Marketplace. While this funding is at 95% rather than 60% to 65% under Medicaid, the percentages are applied to different starting amounts. The BHP funding is a percentage of the Second Lowest cost silver rate. This rate varies by age, but represents an expected average across males, females who are not pregnant, and females who are pregnant. The federal Medicaid funding is a percentage of expected delivery costs, which are much higher than the ACA Silver rate for the applicable ages. Therefore, the state would receive less funding under a BHP than under Medicaid.

  We analyzed projected CY2017 costs and federal revenues for pregnant women provided by DCBS and compared expected costs and revenues under a BHP. Based on our analysis, we estimate that net costs to the state (i.e. BHP revenues less medical expenses) would increase by about $118 million under a BHP. Our analysis assumes that medical expenses under a BHP would increase by 82%/62%, which is the ratio of assumed reimbursement as a percentage of commercial levels under BHP versus Medicaid. Table 7.1 shows the results of our analysis.

Table 7.1 Comparison of Revenues and Costs for Pregnant Women Medicaid versus BHP				
	CY 2017 Pregnant Women			
Item	Age <19	Ages 19-44	Ages 45-54	Total
Medicaid				
Federal Medicaid Revenue	$741,366	$99,175,544	$507,413	$100,424,323
Medicaid Cost	$1,152,168	$154,130,242	$788,579	$156,070,988
Net Cost to State	$410,802	$54,954,697	$281,166	$55,646,665
BHP				
BHP 2017 Revenue	$138,762	$31,851,577	$447,023	$32,437,362
Costs (82%/62% x M'Caid)	$1,523,835	$203,849,674	$1,042,959	$206,416,469
Net Cost to State	$1,385,073	$171,998,097	$595,936	$173,979,106
Difference in State Costs	**$974,270**	**$117,043,400**	**$314,771**	**$118,332,441**

Please note that we did not calculate separate Citizen/Alien-Waived Emergent Medical (CAWEM) revenue and costs for pregnant women. We would expect similar results as for pregnant women in that net costs to the State would be higher under a BHP.

In our October 29, 2014 report, we noted that Medicaid coverage of pregnancy-related services does not preclude eligibility for QHP subsidies, and that a Medicaid "wrap-around" type of coverage could apply. This wrap-around scenario would also preserve federal matching payments on pregnancy-related services under Medicaid. In November 2014, CMS provided guidance for determining whether certain Medicaid coverages qualify as "Minimum Essential Coverage" (MEC). Medicaid coverage that provided MEC would mean associated beneficiaries would not be eligible for a BHP. Our understanding is that Oregon's coverage for pregnant women with incomes 138%-185% FPL is considered MEC; therefore, these women would not be eligible for BHP

- *Bulk purchasing*. If BHP were integrated with Medicaid OHP Plus, BHP implementation would add covered lives to Oregon Health Authority's (OHA's) purchasing of services on behalf of the state's health programs. This may allow a small leveraging of reduced prices that benefit the Oregon Health Plan, Oregon Healthy Kids, and other OHA programs.

- *COFA Funding*. The state currently provides funding for COFA residents. If a BHP were implemented, the state could see savings from federal BHP payments as opposed to 100% state funding currently. Currently, there is insufficient information to estimate the amount of this potential savings; although our understanding is that current funding is likely to be $1 million

annually at most.

It should be noted that COFA residents were not considered separately in our study, and, although not explicitly identified, those below 200 percent of FPL are likely included in the BHP enrollment.

8) RELIANCE AND LIMITATIONS

Wakely relied on the following sources to inform this report:

- Department of Consumer and Business Services – CY2017 SLCS and LCB rates, Medicaid capitation rates for dental and non-emergency transportation, and Oregon Health Plan Plus Benefits.
- Oregon Health Authority – Medicaid capitation rates for dental and non-emergency transportation, and Oregon Health Plus benefits.
- Urban Institute – BHP Population demographic characteristics and relative morbidity
- BHP Payment calculations and assumptions in the regulations published in the February 29, 2016 Basic Health Program Final Federal Funding Methodology for 2017 and 2018.

The BHP analysis in this report depends on a number of key assumptions, some of which are highly variable, thus limiting the scope of this analysis. Readers should be aware of the following limitations.

- **Second Lowest Cost Silver Rates Can be Highly Volatile:** There is a potential for significant volatility in the rates used as a basis for determining federal BHP revenues. The increase in Marketplace rates from 2015 to 2017 was significant.
- **BHP Payment Formula:** The federal BHP payment formula for plan year 2017 was applied in developing the projected 2017 federal BHP payments. This formula is subject to change for plan year 2019 which could have an impact on the BHP payments provided in this report. For example, the final payment regulation
- **Interaction between the Marketplace and the BHP beyond 2017:** If a BHP is implemented, Silver premium levels in the Marketplace will likely be affected, which will in turn impact the BHP FPTC and cost sharing subsidy payments since they both depend on the Silver rates. Since our analysis was for 2017 only, this affect is outside the scope of our analysis.
- **Claims Expense Projections for 2017:** The analysis includes claims expense projections for calendar year 2017 based on the 2017 second lowest cost silver plan rates with adjustments for assumed retention, actuarial value, demographics, and provider reimbursement. If these are not representative of the underlying claims expense for the covered population, actual costs may vary.
- **Induced utilization:** Though additional utilization of services resulting in the reduction of enrollee cost sharing from 30% (in the standard silver plan) to 6 – 13% (for subsidized QHP coverage) was factored into the projected claims expenses, Wakely did not assume any additional use of services as a result of reducing enrollee cost sharing from the 6 – 13% of average claims for QHP coverage down to no cost sharing for scenarios 1, 2, 5, and 6.
- **Assessment of carrier participation or achievability of assumed provider reimbursement:** Our modeling assumes that the State will be able to effectively contract with willing standard health

plans. Also, we assumed that those plans would be able to negotiate provider reimbursement levels at 82% of Commercial levels. While we believe this assumption is reasonable, it is possible that actual results could vary from those assumed.

Wakely reviewed data and assumptions for reasonableness, but did not audit any data used. Any errors in the data may cause material errors in our analysis. This report is developed for the Oregon Department of Consumer and Business Service and the Oregon Legislature, for the purpose of estimating the expected impact of implementing a BHP for calendar year 2017. Other uses, including estimating costs for future years, may be inappropriate. Actual results will vary if experience differs from the assumptions made herein, or if significant changes are made to federal regulations defining federal BHP payment methodology or other program requirements. When shared, the report must be shared in its entirety. Many of the concepts in this report are actuarial in nature and should be reviewed and interpreted by individuals with the appropriate background.

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. Tim Courtney is a Fellow of the Society of Actuaries and a member of the American Academy of Actuaries. He meets the qualification standards for performing the actuarial analyses included in sections 3, 4 and 5 of this report.

Appendix A

Detailed Methodology

DETAILED METHODOLOGY

The following provides additional details on the assumptions and methodologies employed in the analyses summarized in this report.

Definition of Terms

There are several terms used throughout this document that are important to understand. Below is a list of terms used and definitions for each.

12-months Continuous Eligibility. Eligibility criterion where a beneficiary is granted 12 months of eligibility provided he or she had qualifying income in at least one of the prior 12 months.

Additional benefits. Coverage for dental and non-emergency transportation. These are above and beyond the baseline BHP benefits that cover all services from the Marketplace EHB benchmark plan.

Administrative expenses. Non-benefit expenses required to operate the BHP program. Excludes any initial start-up expenses.

Advance Premium Tax Credit. Amount of federal subsidy toward payment of an ACA-compliant metal tier plan purchased on the individual exchange. The subsidy varies according to household income level and household size.

Allowed costs. Total cost of claims before any cost sharing payments made by beneficiaries.

COFA. Individuals residing in Oregon under the Compact of Free Association agreement between the United States, Pacific Island Nations and the Commonwealth of the Northern Mariana Islands.

Cost Sharing. Portion of claim amount paid by the member or beneficiary, usually through copayments and coinsurance for services.

Cost Sharing Reduction. Amounts under the ACA where individuals with incomes between 133% and 200% FPL who purchase a Silver plan on the individual exchange receive federal subsidies that reduce the normal cost sharing associated with the Silver plan. The subsidies are paid to the health plan providing the Silver plan rather than the member.

Essential Health Benefit (EHB). Benchmark plan set by the state of Oregon for 2017. Represents the minimum standard of healthcare services that must be covered by health plans offering ACA-compliant metal tier plans.

Marketplace. Oregon individual exchange where ACA compliant metal tier plans can be purchased.

Member Premium. Prospective payment amount paid by the member or beneficiary for health insurance coverage. For plans purchased from the Marketplace, the member premium will be equal to the total premium charged by the health plan less the advance premium tax credit applicable for the individual member.

OHP Plus - Acronym for Oregon Health Plan. The Oregon Health Plan Plus is a package of services covered by the State for residents eligible for certain Medicaid programs.

PUMA – Public Use Microdata Area. Statistical geographic areas defined for the dissemination of Public Use Microdata Sample (PUMS) data. Established by the U.S. Census Bureau.

QHP – Qualified Health Plan. An insurance plan that is certified by the Health Insurance Marketplace, provides essential health benefits, follows established limits on cost-sharing (like deductibles, copayments, and out-of-pocket maximum amounts), and meets other ACA requirements.

Rating area/region - Geographic areas used for Marketplace rates. Defined by counties. Also see Appendix B.

Section 2: BHP eligibility, enrollment and churn

Eligibility for OHP, BHP, and QHPs

Sample of households in each state. To obtain a large, representative population for Oregon, we pool together the Oregon observations on the 2012 and 2013 American Community Surveys (ACS).

Non-citizens. We impute documentation status for non-citizens based on an imputation methodology that was originally developed by Passel[9]. Undocumented immigrants and lawfully present immigrant adults who have been U.S. residents for less than five years are generally ineligible for Medicaid.

Tax units and filing. To model tax units and filing behavior, we use current tax rules (including thresholds for tax filing requirements), Earned Income Tax Credit (EITC) eligibility guidelines, and poverty guidelines as defined by the U.S. Department of Health and Human Services. Baseline coverage and post-ACA eligibility are based on estimates from Urban Institute's ACS-Health Insurance Policy Simulation Model (ACS-HIPSM). A description of ACS-HIPSM is provided in Appendix C.

Tax units and filing status are determined based on the IRS guidelines set forth by the 1040 Instructions and the Earned Income Credit eligibility guidelines. The primary tax filing unit for each family is defined as the head of the family, the spouse, and any qualifying children or qualifying relatives (as defined by the IRS). In multi-generational households, nuclear subfamilies are tested for their filing status. If they are not found to file as a unit themselves, they are tested to qualify as dependents of the head of the household.

Tax filing status is determined based on characteristics of the head of the tax unit and pooled income within the tax unit. Married couples are assumed to be filing jointly to qualify for tax credits. As support within the household is not captured by the ACS, any unmarried tax unit head with dependents is considered filing as a head of household. Any other unmarried person without dependents is tested as single. To determine requirement to file, individual Adjusted Gross Income (AGI) is pooled for each person within the tax unit and compared to the 2011 minimum mandatory filing threshold.

Due to limitations of the income that is captured by the ACS, some taxable income categories could not be included in total income. Capital gains are not reported as investment income in the ACS, so it was not counted. Paid alimony was also excluded; however, internal analysis based on CPS alimony data suggests this exclusion would not affect our results. The ACS does not collect data on unemployment compensation, but because this was likely an important form of income for people at the margin of the Medicaid and subsidy eligibility thresholds, it was imputed based on reported unemployment compensation from the 2008 CPS.

[9] Passel, J. and D. Cohen. 2009. "A Portrait of Unauthorized Immigrants in the United States." Washington, DC: Pew Hispanic Center.

None of the adjustments needed to calculate AGI are reported by the ACS, so we therefore take total income as a proxy for AGI. Total income is calculated as the sum of wages, business income, farm income, rents, most forms of positive investment income, retirement income, unemployment compensation, and the taxable portion of social security income.

EITC eligibility is calculated in a slightly different way. AGI is pooled only among the head of the tax unit, the spouse (if filing as a married couple), and qualifying children. Qualifying dependents are not tested to file for EITC individually because they are either childless dependents (ineligible for EITC) or are found not to file in subfamily analysis. However, because they are claimed on the tax unit head's return, they take on the EITC eligibility status of their tax unit.

Once it was determined which tax units were required to file and which were eligible for EITC, units were assigned filing decisions. A 2005 Treasury Report estimated that about 7.4 million taxpayers who were required to file did not in Tax Year 2003.[10] That year, approximately 131 million individual tax returns were filed,[11] meaning the filing rate among those required to file was about 95 percent. A study by the IRS of Tax Year 2005 filings estimated the following EITC participation rates, by number of qualifying children: 55.6% among those without qualifying children, 73.6% among those with one qualifying child, and 85.9% among those with two or more qualifying children.[12] Based on these rates, tax units were randomly assigned their decision to file or not file.

Eligibility for Medicaid/CHIP, QHP subsidies and BHP. Medicaid and subsidy eligibility are determined using Modified Adjusted Gross Income (MAGI), which adds nontaxable social security income to AGI. Unit-level MAGI is pooled among the unit head, the spouse (if married), and any qualifying children with an individual AGI above the single tax filing threshold. The income of other qualifying children and qualifying relatives is not included. This is then used to calculate a ratio of MAGI to the applicable federal poverty level (FPL) of the unit. Special prorating of units that include undocumented parent(s) or childless spouses is used to scale the total AGI (including that of the undocumented family members) by a ratio of the FPLs including and excluding the undocumented family members.

---

[10] Treasury Inspector General for Tax Administration, "The Internal Revenue Service Needs a Coordinated National Strategy to Better Address an Estimated $30 Billion Tax Gap Due to Non-filers," November 2005, Reference Number 2006-30-006.

[11] "Internal Revenue Service Data Book 2003," Internal Revenue Service, 2003

[12] Plueger, D, "Earned Income Tax Credit Participation Rate for Tax Year 2005," Internal Revenue Service, 2009.

Medicaid eligibility for some groups, particularly the blind and disabled, does not change under the ACA. We model their eligibility using pre-ACA rules. To determine Medicaid and CHIP eligibility for other groups, tax unit-level MAGI-as-a-percentage-of-FPL is assigned to the tax unit head, the spouse (if married), and qualifying children with individual AGI above the single tax filing threshold. Excluded qualifying children and qualifying relatives are automatically eligible for Medicaid under CMS regulations. Under the ACA, the children of non-filing qualifying dependents also automatically qualify for Medicaid. The remaining parents, childless adults, and children are then tested for Medicaid eligibility based on the corresponding eligibility threshold in their state of residence. Children who are found ineligible for Medicaid are tested for CHIP eligibility.

QHP subsidy eligibility is determined slightly differently. To be eligible for subsidies, one must have a MAGI-as-a-percentage-of-FPL between 100 and 400 percent.[13] Eligibility for any public coverage precludes eligibility for subsidies, so subsidy-eligible consumers cannot be eligible for Medicaid or CHIP under the ACA, as determined above, nor can they currently be eligible for Medicare. Finally, if any family member has of single coverage that costs 9.5 percent of family MAGI or less, the entire family is barred from eligibility. For this determination, we use the ACS-HIPSM imputation of employer offers and the affordability of those offers.

The BHP population consists of those eligible for subsidies up to 200 percent of FPL. This includes lawfully present immigrants below 138 percent of FPL who are ineligible for Medicaid because they have been resident less than five years. The large sample size of the American Community Survey allows us to identify this population in Oregon.

Enrollment in BHP and Other Health Coverage

Health Insurance Policy Simulation Model (HIPSM). Once we have modeled eligibility status for Medicaid/CHIP and subsidized coverage in the Marketplaces, we use HIPSM to simulate the decisions of employers, families, and individuals to offer and enroll in health insurance coverage and then map those results to the ACS using regression modeling to assign probabilities of take-up. To calculate the impacts of reform options, HIPSM uses a micro-simulation approach based on the relative desirability of the health insurance options available to each individual and family under reform (Buettgens, 2011). The approach allows new coverage options to be assessed without simply extrapolating from historical data, by taking into account factors such as affordability (premiums and out-of-pocket health care costs for

[13] Legal immigrant adults resident less than five years may also be eligible even if their incomes are lower.

available insurance products), health care risk, whether the individual mandate would apply, and family disposable income.

Our utility model takes into account people's current choices as reported in the survey data. For example, if someone is currently eligible for Medicaid but not enrolled, they or their parents have shown a preference against Medicaid. They will be less likely to enroll in Medicaid under the ACA than a similar person who becomes newly eligible for Medicaid and thus has not had a chance to express a preference. We use such preferences to customize individual utility functions so that people's current choices score the highest among their current coverage choices, and these preferences affect their behavior under the ACA. The resulting health insurance decisions made by individuals, families, and employers are calibrated to findings in the empirical economics literature, such as price elasticities for employer-sponsored and non-group coverage.

BHP Scenarios. We simulated health insurance decisions under four different scenarios:

- *No BHP*. Federally subsidized coverage in QHPs was available to those who would have been eligible for BHP. Medicaid enrollment was based on the difference in Oregon's Medicaid enrollment under the ACA as reported by CMS.[14] Data on the number and characteristics of those covered in the Oregon marketplace and other nongroup coverage for 2016 were provided by the state. We used HIPSM to simulate which people would actually enroll in Medicaid, marketplace, or other nongroup coverage in order to achieve the reported enrollment increases.
- *BHP Option A*. In this scenario, no premiums or cost sharing were charged for BHP. BHP take-up for uninsured BHP eligibles was based on Medicaid take-up rates in Oregon under the ACA.
- *BHP Option B*. In this scenario, there were no premiums or cost sharing for BHP eligibles up to 138 percent of poverty (legal immigrants resident less than five years). For BHP eligibles with higher incomes, premiums were set based on a sliding scale of up to half of the percent of income that they would have to pay for the second lowest cost silver QHP without BHP. We used HIPSM to determine the amount by which these premiums would reduce enrollment from Option A.
- *BHP Option C*. This scenario is the same as Option B, except that beneficiary cost sharing is set to half of what it would be under current marketplace tax credits.

[14] CMS. (2015). Medicaid & CHIP: June 2015 Monthly Applications, Eligibility Determinations and Enrollment Report. Retrieved from CMS: https://www.medicaid.gov/medicaid-chip-program-information/program-information/downloads/june-2015-enrollment-report.pdf

Churning and Twelve-Month Continuous Eligibility. In order to estimate enrollment if BHP had 12-month continuous eligibility, we not only need to simulate which of the people who currently qualify for BHP would enroll, but also which people who enrolled in BHP last year, but would not be eligible if they were tested now, would stay enrolled.

The ACS data on which HIPSM is based provide annual snapshots, but do not follow the same people over time. Thus, they cannot be used directly to find out if someone was eligible for BHP in the previous year. To estimate this, we augment HIPSM with data from the Survey of Income and Program Participation (SIPP), which follows respondents over time.[15] We analyze waves 12 through 15 of the 2008 SIPP Panel. These are the latest available data, covering May 2012 through August 2013.

We age the data to fit the HIPSM-projected 2017 Oregon population. We compute each family's monthly eligibility for Medicaid, BHP and Marketplace tax credits, taking into account offers of employer coverage that preclude eligibility for QHP subsidies. We use regression analysis on the SIPP data to determine the probability that each 2017 Oregon family in our data was eligible for BHP, OHP, and/or QHPs with tax credits in the previous year. Among those eligible in the previous year, we simulate who would actually enroll in BHP for each of the three options described above. We assume that those who go from being enrolled in BHP to being eligible for OHP would switch to OHP.

Additional Information on Methodology

Buettgens, M. (2011) *HIPSM Methodology*. http://www.urban.org/UploadedPDF/412471-Health-Insurance-Policy-Simulation-Model-Methodology-Documentation.pdf

Buettgens, M., Dean Resnick, Victoria Lynch, Caitlin Carroll (2013) *Documentation on the Urban Institute's American Community Survey Health Insurance Policy Simulation Model (ACS-HIPSM).* http://www.urban.org/health_policy/url.cfm?ID=412841

Dubay, L., Matthew Buettgens, and Genevieve M. Kenney (2015). *Estimates of Coverage Changes for Children Enrolled in Separate Children's Health Insurance Programs in the Absence of Additional Federal CHIP Funding—Key Findings and Methodology: Report to the Medicaid and CHIP Payment and Access*

[15] For more detailed descriptions of our methodology, see http://www.urban.org/policy-centers/health-policy-center/publications/further-methodological-information-tax-preparers-could-help-most-uninsured-get-covered and http://www.urban.org/research/publication/documentation-urban-institutes-american-community-survey-health-insurance.

Commission. http://www.urban.org/research/publication/estimates-coverage-changes-children-enrolled-separate-childrens-health-insurance-programs-absence-additional-federal-chip-funding-key-findings-and-methodology

Section 3: Projected BHP revenues and costs

Eligible Population and Demographic Characteristics

All demographic and BHP take-up assumptions are based on the Urban Institute's analysis. A database with details at the household level was provided to Wakely by the Urban Institute.

The detail from the Urban database that was used in Wakely's analysis was as follows:

- Income as a percentage of FPL
- Age
- Previous source of coverage (Uninsured, insured in Individual private market, other non-group coverage, or employer sponsored coverage).
- Geographic region within Oregon
- Relative morbidity level (similar to a concurrent risk score model).

The relative morbidity levels provided by Urban were based on a process of imputing self-reported health status. Below is a brief description of this process.

Health status is highly correlated with medical spending and so it affects whether individuals and household take-up health insurance and the type they choose. However, because ACS does not include a health status indicator, we developed a process for imputing it. We used a hot deck imputation, with the donor data being the Medical Expenditure Panel Survey – Household Component (MEPS-HC) for combined year 2005 - 2007. The hot deck method randomly selects the value to be imputed to a recipient record (from the ACS file) from a donor record (from the MEPS-HC data) in the same cell (defined by a set of classification characteristics). We imputed health status (which consists of this ranking: 1 - Excellent, 2 - Very good, 3 - Good, 4 - Fair, 5 - Poor) separately for children and adults. For adults, cells for the hot deck procedure were formed from these ACS variables:

- Physical Limitations
- Cognitive Limitations
- Receipt of Supplemental Security Income (SSI)
- Age Category (Less than 19, 19 – 34, 35 – 49, 50 – 59, 60 and greater)

- Sex
- Current Health Insurance Coverage Type (Medicaid, Medicare, Employee Sponsored, Other Government, Non-Group, Un-Insured)
- Health Insurance Unit Income to Poverty Threshold Ratio Category (.5 or less, 0.5 – 1, 1 – 1.5, 2.5 – 4, 4 or more)
- Education Attainment (No High School Diploma, High School Diploma, Bachelor's Degree or higher)

For children, cells for the hot deck procedure were formed from these characteristics:

- Physical Limitations
- Cognitive Limitations
- Receipt of Supplemental Security Income (SSI)
- Health Insurance Unit Income to Poverty Threshold Ratio Category (.5 or less, 0.5 – 1, 1 – 1.5, 2.5 – 4, 4 or more)

The software used to perform the imputation collapsed cells when required by dearth of sample in full crossing. Note that hot decking was performed independently for each ACS survey year according to an identical methodology, including the use of the same donor file from MEPS-HC.

Federal BHP Payments to the State

Appendix B provides a detailed description of these calculations; however, we note here that all calculations were based on the following sources of data:

- Distribution of age and income based on Urban demographic data, as described above.
- Anticipated 2017 Second Lowest Cost Silver premiums by region as provided by the State.
- Formulas and factors described in the February 29, 2016 final BHP Payment regulation.

Calculation of Federal Premium Tax Credits (PTC) and Cost Sharing Reduction (CSR) Subsidies in the Individual Marketplace

Wakely calculated federal premium tax credits and cost sharing subsidies using a methodology similar to that employed by the Marketplaces based on federal regulations. When we make comparisons of out-of-pocket expenses for BHP eligible individuals under an assumption that no BHP is implemented, we calculate federal premium tax credits and cost sharing subsidies using the expected method used by CMS. Ultimately, these subsidies are calculated on an individual/household basis, so that actual premiums, incomes, and cost sharing amounts are used rather than the averages by rate cell used for

the BHP payments. This can create differences in APTC and cost sharing subsidy amounts for the same individual in the BHP versus in the Marketplace, in addition to the main difference that BHP payments apply a factor of 95%.

Projected 2017 Claims Expenses

Project 2017 claims expenses for each household in the Urban database were developed as follows:

- Begin with allowed claim costs derived from the second lowest Silver rates filed in the CY2017 Oregon individual Marketplace. The term "allowed claims" means total costs before member cost sharing is subtracted, but after discounts from provider reimbursement arrangements are applied.
- Adjust costs for assumed provider reimbursement levels (e.g. Commercial versus the average of Commercial and Medicare), member cost sharing levels, and induced utilization to reflect benefit richness.
- Adjust costs based on the relative health risk of the individual compared to the average for the individual market.
- If applicable for the given scenario, add costs for OHP *Plus* benefits that are not covered by the EHB benchmark plan.

Below we provide a more detailed description for each of the elements discussed above.

Starting CY2017 costs

We calculated starting allowed costs as follows:

- Calculate the average second lowest Silver rate for each of the standard seven geographic regions in Oregon. The demographic data from the Urban Institute database was used to calculate averages across ages.
- Multiply by an assumed medical expense ratio of 80%, consistent with the federal minimum medical loss ratio requirement for individual market business.
- Divide by the assumed Silver actuarial value of 0.70 to derive allowed costs.
- Divide by the average morbidity relativity factor individual market enrollees (without BHP) for each region using morbidity relativities from Urban.
- Multiply by the actual morbidity relativity for the given household as provided by Urban.

It is important to note that this approach to deriving cost may be somewhat conservative for BHP enrollees of childbearing ages. Because Oregon currently provides Medicaid coverage for pregnant women with incomes between 138% and 185% of FPL, it is likely that a lower percentage of deliveries

will occur among BHP enrollees than is inherent in the Silver rate that is the basis for our cost estimates. We made no adjustment for this because we are not able to identify pregnancies from survey data, and also could not determine whether a pregnant woman eligible for Medicaid in fact enrolled in Medicaid.

Adjustments applied to CY2017 Starting Costs

- Difference in provider reimbursement levels. In our modeling, we tested scenarios with different reimbursement levels. We assumed that the costs derived from the 2017 second lowest silver rates represented 100% of average commercial fees. Based on the analysis from the October 29, 2014 study, and information provided by DCBS, we used an assumption that carriers would negotiate provider reimbursement levels 18% below that in the Marketplace. We believe this represents an average between commercial/Marketplace and Medicare FFS reimbursement levels. The table below shows the factor we applied for the two reimbursement scenarios.

Scenario	Factor
Commercial Fees	1.00
Commercial/Medicare Average	0.82

- Member cost sharing. We multiplied adjusted allowed costs by the standard actuarial value established for the Silver cost sharing subsidy plans and those assumed under each BHP scenario. These actuarial values (which represent the average portion of total expected claims costs covered by the plan relative to the enrollee) vary by income level, and are summarized below.

Income as % of FPL	Marketplace Coverage	BHP Scenarios 1, 2, 5 and 6	BHP Scenarios 3, 4, 7 and 8
0%-138%	94%	100%	100%
138% - 150%	94%	100%	97%
150%-200%	87%	100%	93.5%
Alaskan Native/American Indian	100%	100%	100%

- Induced utilization. We adjusted utilization based on assumed changes in consumer behavior as benefit richness changes. We used the federal induced utilization factors as a basis. It was also necessary to estimate the inherent induced utilization (IU) built into the Silver rates filed in the Marketplace since the Silver rate applied for the standard Silver 70% plan and the cost sharing subsidy plans (73%, 87%, and 94%). For this assumption, we maintained the same factor of 1.03 used in the October 2014 analysis. This was based on a review of the Oregon individual Marketplace rate filings at the time.

The final IU factor was the ratio of the federal factor for the given benefit level being considered (as measured by actuarial value) to the 1.03 base IU assumed to be inherent in the Silver rates. Since all scenarios tested used an actuarial value of at least 0.87, the IU factor was constant at 1.12/1.03 = 1.09.

Note that no additional utilization was assumed for further reducing enrollee cost sharing from the levels in the cost-sharing reduction plans available through the Marketplace.

OHP Benefits not Covered by the EHB Benchmark Plan

In scenarios 2, 4, 6, and 8, we estimated the impact of adding certain categories of service covered not covered in the Oregon EHB Benchmark plan.

Using State Medicaid experience and capitation rates, we estimated the cost of the additional OHP benefits to be about $34.00 PMPM. The table below summarizes our estimate by benefit category. Note that we did not trend the experience since most of the benefits are subject to minimal or no inflation.

Benefit	Age Category		
Category	21-44	45-54	55-64
Adult Dental	$27.19	$27.19	$27.19
Non-Emerg. Transportation	$6.60	$6.60	$6.60
Total	$33.79	$33.79	$33.79

Member Premium

Member premiums are calculated as the difference between the household premium and the federal premium tax credit (PTC). The PTC is calculated as the difference between the premium for the second lowest cost silver plan available to the covered family members and the maximum household payment, which is a percentage of income as defined in the ACA. The table below shows this percentage for selected income levels; however, it should be noted that we linearly interpolated for all income values.

Income as % of FPL	Percentage of Income
0%-132%	2.03%
133%	3.05%
150%	4.07%
175%	5.24%
200%	6.41%
250%	8.18%
300%	9.66%
400%	9.66%
>400%	0.0%

Member premiums were assumed to be 50% of the amount the enrollee would have paid in the individual Marketplace for all scenarios. Note that this is true regardless whether the enrollee was previously enrolled in the Marketplace or not. Also, the premium was determined by assuming that the total Marketplace premium per household was divided equally among the members of the household enrolled in the BHP. For example, the Marketplace premium for the BHP enrollees of a hypothetical four-person household with income at 150% of the 2017 federal poverty level would be calculated as follows:

Person	Age	SLCS Rate	Enroll in BHP?
1	32	$285.37	Yes
2	32	$285.37	Yes
3	0-20	$153.18	No
4	0-20	$153.18	No
Total		$877.09	

A. Household income	$36,837
B. Applicable PTC percentage (4-person HH)	4.07%
C. Monthly Max Payment (AxB/12)	$124.94
D. Household size - BHP enrollees	2
E. Imputed Marketplace Premium (C/D)	**$62.47**

Member Cost Sharing

In our scenarios, we varied the portion of this maximum allowed cost sharing that would be subsidized by the State. In the scenario where the State subsidy is 50%, this means the member will be responsible for half of the expected cost sharing (as a percent of total allowed claims costs) that would have applied had the member been enrolled in the second lowest Silver plan on the Marketplace. It is important to note that in all scenarios, BHP enrollees with incomes below 138% FPL were assumed to be subject to no cost sharing requirements for all covered services.

Out-of-pocket costs for the uninsured were derived from projected 2017 average allowed costs (based on the 2017 second lowest cost silver plan) adjusted for relative health risk as provided by Urban. No assumptions were made for the relative use of services for someone who is uninsured compared to someone with insurance. Additionally, provider reimbursement levels used to derive the out-of-pocket costs for the uninsured population were assumed to be consistent with 2017 2nd lowest cost silver plan.

Program Administration Costs

The State of Oregon will incur operational costs in order to facilitate a BHP. There will be start-up costs to cover the development of processes, systems and staff to manage BHP interactions with the federal government, contracted carriers, and enrollees.

Once the BHP is set up, there will be annual ongoing costs to maintain and run the program.

For annual costs, we assumed State administrative expenses would be $21.32 PMPM for all scenarios. This assumption is based on the average of two administrative cost assumptions in our October 2014 study ($19.32 and $23.32).

Finally, the state standard health plan administrative costs were assumed to be 11.5% for all scenarios. Similar to the PMPM State administrative cost assumption, this value is based on the average of two varying assumptions from the October 2014 study (8%, to align with CCO administrative costs and 15% to align with the maximum allowable administrative costs for BHP coverage offered by insurance companies).

Appendix B

BHP Payment Methodology

Federal Basic Health Program Payment Methodology

The Basic Health Program (BHP) funding calculation methodology used in the Wakely model is based on the February 2016 Basic Health Program Final Federal Funding Methodology for 2017 and 2018. Under the section 1331 of the Patient Protection and Affordable Care Act, a federal funding payment amount will be made to the states with a Basic Health Program for low-income individuals.

The federal BHP payments include two components:

- Federal premium tax credit (PTC), and
- Federally-funded cost-sharing reductions (CSR).

The federal BHP payment is 95 percent of the PTC and CSR.

Rate Cells

The BHP funding methodology defines multiple federal BHP payment rate cells, which are combinations of five factors: Age, Income levels, geographic areas, coverage status and household size. (Note that the rule includes coverage status (individual or family coverage) as a factor, but we did not consider this in our study.)

Rather than calculating PTC and CSR on a person-by-person basis, BHP payments will be determined using averages within subcategories of the rate cell factors. Within each subcategory, a uniform average is determined in order to calculate payment. For example, for the age 21-34 rate cell, a straight average across ages is calculated.

We calculated subcategory averages for the four factors by using the analysis performed by the Urban Institute. This data provides information including age, poverty status (percentage of Federal Poverty Level FPL), Public Use Microdata Area (PUMA), Super Public Use Microdata Area (Super-PUMA), and household serial number.

Each factor within the BHP payment rate cells is developed based on the Urban Institute data at the household level, and the unique combination of all the four factors is used. Below are the detailed descriptions of each rate cell factor and how they are developed using the Urban analysis.

- *Age*: The Urban Institute data has the exact age information for each individual. We regrouped the ages to the age ranges that are defined in the March 2014 rule.
- Ages 0-20
- Ages 21-34
- Ages 35-44

- Ages 45-54
- Ages 55-64
- *Income levels*: Income levels are measured as a percentage of FPL. We calculated a straight average across FPL percentages within the following ranges defined as defined in the March 2014 rule.
- 0 to 50 percent of the FPL
- 51 to 100 percent of the FPL
- 101 to 138 percent of the FPL
- 139 to 150 percent of the FPL
- 151 to 175 percent of the FPL
- 176 to 200 percent of the FPL
- *Geographic areas*: The Urban Institute data includes PUMA and Super-PUMA area codes. The IPUMS website (https://usa.ipums.org/usa/volii/PUMA_composition_OR.shtml) provides the mapping between the combination of the two codes and each county in the state of Oregon. We then group counties by geographic rating area defined by the state and demonstrated at http://www.oregonhealthrates.org/?pg=approved_rates.html.

Oregon has defined seven rating areas by county. Below is the definition of each area according to counties included. A complete mapping between PUMA, Super-PUMA code and County and rating areas can be found at the end of this Appendix.

- **Bend**: Deschutes, Klamath, and Lake counties
- **Coast**: Clatsop, Columbia, Coos, Curry, Lincoln, and Tillamook counties
- **Eugene**: Benton, Lane, and Linn counties
- **Medford**: Douglas, Jackson, and Josephine counties
- **Pendleton-Hermiston**: Baker, Crook, Gilliam, Grant, Harney, Hood River, Jefferson, Malheur, Morrow, Sherman, Umatilla, Union, Wallowa, Wasco, and Wheeler counties
- **Portland**: Clackamas, Multnomah, Washington, and Yamhill counties
- **Salem**: Marion and Polk counties
- *Household sizes*: We calculate household size by using household serial number to identify the members in the same household. The February rule defines household sizes from 1 to 10+ members.

Premium Tax Credit Formula

The formula for calculating the federal premium tax credit portion of the federal BHP payment amount is as follows:

> Federal Premium Tax Credit = (Adjusted Reference Premium – Household Payment) * Income Reconciliation Factor

Below we further define each of these components.

Adjusted Reference Premium

Adjusted reference premium is calculated based on the CY2017 second lowest cost Silver rates by age and region. The reference premium is calculated by applying adjustments for the "population health factor"; however, this amount is 1.00 for 2017 and 2018.

Household Payment

The household payment is the maximum amount a household can pay for the second lowest Silver plan in the Marketplace. It is calculated by applying the federally defined percentages of annual household income that defines the maximum amount households would pay for the second lowest cost silver plan available through the Marketplace. The percentages range from 2.03% to 9.66%, and increase with income as a percent of FPL.

The household payment for each FPL is calculated based on the following formula:

2017 Monthly Household Payment = 2016 Federal Poverty Guideline Income*Trend factor * FPL percentage * Applicable percentage per Feb-2016 BHP regulation

The 2016 Federal Poverty Level income amount is based on the Federal Poverty Guidelines, which are summarized in the table below.

Household Size	2016 FPL Guideline (100%)
1	$11,880
2	$16,020
3	$20,160
4	$24,300
5	$28,440
6	$32,580
7	$36,730
8	$40,890
9	$45,050
10	$49,210

PTC and CSRs for 2017 will be determined based on the 2017 FPLs. The 2016 to 2017 trend factors were assumed to be 1.1% based on the average of recent changes in the poverty income level.

The applicable percentage is based on the values in the Affordable Care Act (ACA). The table below shows the values from the ACA. Though these amounts are indexed annually based on the excess of growth of medical premiums relative to household income, Wakely assumed the amounts below for purposes of this analysis.

Income Level	Initial Percentage	Final Percentage
Up to 133% FPL	2.03%	2.03%
133-150% FPL	3.05%	4.07%
150-200% FPL	4.07%	6.41%
200-250% FPL	6.41%	8.18%
250-300% FPL	8.18%	9.66%
300-400% FPL	9.66%	9.66%

We calculated applicable percentages for each FPL using a linear interpolation within each FPL range. For example, the applicable percentage for a household FPL level 140% is in the 133-150% category, with a range from 3.05% to 4.07%. The formula for calculating the percentage for 140% FPL would be:

$$3.05\% + \frac{140\%-133\%}{150\%-133\%} \times (4.07\%-3.05\%) = 3.47\%$$

Finally, we take the straight average of the monthly household payment for each household size based on the FPL rate cells defined in the February 2016 rule.

The final average monthly household payment is summarized as below:

Maximum Household Payments by Income Level and Household Size

	Income as % of FPL					
Household Size	0-50	51-100	101-138	139-150	151-175	176-200
1	$5.08	$15.33	$26.78	$54.14	$76.54	$110.25
2	$6.85	$20.68	$36.11	$73.01	$103.21	$148.67
3	$8.62	$26.02	$45.44	$91.88	$129.89	$187.09
4	$10.39	$31.37	$54.77	$110.75	$156.56	$225.51
5	$12.16	$36.71	$64.11	$129.61	$183.23	$263.93
6	$13.92	$42.05	$73.44	$148.48	$209.91	$302.35
7	$15.70	$47.41	$82.79	$167.39	$236.64	$340.86
8	$17.48	$52.78	$92.17	$186.35	$263.45	$379.47
9	$19.25	$58.15	$101.55	$205.31	$290.25	$418.08
10	$21.03	$63.52	$110.92	$224.27	$317.05	$456.68

Income Reconciliation Factor (IRF)

The income reconciliation factor is defined to be 1.0038 in the final rule. This is a 5.8% increase from the 0.9492 level in the October 2014 payment regulation.

Cost-sharing Reduction

The formula for calculating the federal cost sharing reduction amount is as follow:

Cost-sharing Reduction = Adjusted Reference Premium * Factors for Removing Admin Cost * Standard AV Factor * Tobacco Factor * IU Factor * Increase in AV

For Alaskan Natives and American Indians, the reference premium starts with the Lowest Cost Bronze rate, per the February 2016 BHP regulation. For all other BHP enrollees, the assumed adjusted reference premium is the same amount as the 2017 adjusted reference premium used for the Premium Tax Credit calculation.

Factors for Removing Admin Cost

The February 2016 rule uses a factor of 0.80 to derive claim costs by removing assumed administrative costs from the premium.

Standard AV Factor

The February 2016 rule defines the standard actuarial value (AV) factor as 1 over the standard actuarial value of either 70% for Silver plans, or 60% for Bronze plans (applies only to Alaskan Natives and American Indians).

Tobacco Factors

The general formula for the final tobacco factor is equal to the weighted average of the tobacco rating adjustment factor with the tobacco rating utilization factor for the State of Oregon. The formula is:

> Tobacco Rating Adjustment Factor for Tobacco Users * Tobacco Utilization Factor in Oregon + Tobacco Rating Adjustment Factor for Non-tobacco Users * (1 - Tobacco Utilization Factor in Oregon)

- Tobacco Rating Adjustment Factor

  The tobacco rating adjustment factor for non-tobacco users is 1.00 since there is no tobacco impact for non-tobacco users. The tobacco rating adjustment factor for tobacco users is based on the average tobacco factors from the different carriers by region who offer the second lowest cost Silver rate for 2017. We took the average of all the tobacco factors by age and further average these into the age categories defined in the February 2016 rule. The average tobacco load across all ages and all regions was about 1.14 for all age categories above age 21.

- Tobacco Rating Utilization Factors

  As prescribed in the February 2016 rule, we used the percentage of the cigarette and smokeless tobacco use in the State of Oregon from the Center for Disease Control and Prevention, Tobacco Control Interactive Maps with State Tobacco Activities Tracking and Evaluation (STATE) System. The percentage of tobacco use in Oregon was about 21.5% in year 2012.

  https://www.cdc.gov/tobacco/data_statistics/state_data/state_highlights/2012/pdfs/cover.pdf

Induced Utilization Factor

The induced utilization factor is 1.12 according to the February 2016 rule.

Increase in Actuarial Value

The increase in actuarial value varies by income range and is based on the actuarial value of the subsidized cost sharing reduction plan variations as defined in the ACA. The factor is calculated as the difference in actuarial value between the cost sharing reduction level and the standard silver plan (70%) or bronze plan (60%) for Alaskan Natives and American Indians. The table below shows the factors by FPL range.

	For General Population			For Alaska Native/American Indian Population		
FPL	AV with Cost Sharing Subsidy	Silver Plan AV	Increase in AV	AV with Cost Sharing Subsidy	Bronze Plan AV	Increase in AV
0-50	0.94	0.70	0.24	1.00	0.60	0.40
51-100	0.94	0.70	0.24	1.00	0.60	0.40
101-138	0.94	0.70	0.24	1.00	0.60	0.40
139-150	0.94	0.70	0.24	1.00	0.60	0.40
151-175	0.87	0.70	0.17	1.00	0.60	0.40
176-200	0.87	0.70	0.17	1.00	0.60	0.40

Mapping of Puma, Super-Puma, County and Rating Area

Super-PUMA	Super-PUMA & PUMA	Counties	Rating Areas
41100	41100100	Baker	PENDLETON-HERMISTON
41100	41100100	Umatilla	PENDLETON-HERMISTON
41100	41100100	Union	PENDLETON-HERMISTON
41100	41100100	Wallowa	PENDLETON-HERMISTON
41100	41100200	Crook	PENDLETON-HERMISTON
41100	41100200	Gilliam	PENDLETON-HERMISTON
41100	41100200	Grant	PENDLETON-HERMISTON
41100	41100200	Hood River	PENDLETON-HERMISTON
41100	41100200	Jefferson	PENDLETON-HERMISTON
41100	41100200	Morrow	PENDLETON-HERMISTON
41100	41100200	Sherman	PENDLETON-HERMISTON
41100	41100200	Wasco	PENDLETON-HERMISTON
41100	41100200	Wheeler	PENDLETON-HERMISTON
41100	41100300	Harney	PENDLETON-HERMISTON
41100	41100300	Klamath	BEND
41100	41100300	Lake	BEND
41100	41100300	Malheur	PENDLETON-HERMISTON
41100	41100400	Deschutes	BEND
41200	41200500	Clatsop	COAST
41200	41200500	Columbia	COAST
41200	41200500	Lincoln	COAST
41200	41200500	Tillamook	COAST
41200	41200600	Benton	EUGENE
41200	41200600	Linn	EUGENE
41200	41200703	Lane	EUGENE
41200	41200704	Lane	EUGENE
41200	41200705	Lane	EUGENE
41300	41300800	Coos	COAST
41300	41300800	Curry	COAST
41300	41300800	Josephine	MEDFORD
41300	41300901	Jackson	MEDFORD
41300	41300902	Jackson	MEDFORD
41300	413001000	Douglas	MEDFORD
41400	414001103	Marion	SALEM
41400	414001104	Marion	SALEM
41400	414001105	Marion	SALEM

41400	414001200	Polk	SALEM
41400	414001200	Yamhill	PORTLAND
41501	415011301	Multnomah	PORTLAND
41501	415011302	Multnomah	PORTLAND
41501	415011303	Multnomah	PORTLAND
41501	415011305	Multnomah	PORTLAND
41501	415011314	Multnomah	PORTLAND
41502	415021316	Multnomah	PORTLAND
41502	415021317	Clackamas	PORTLAND
41502	415021318	Clackamas	PORTLAND
41502	415021319	Clackamas	PORTLAND
41503	415031320	Washington	PORTLAND
41503	415031321	Washington	PORTLAND
41503	415031322	Washington	PORTLAND
41503	415031323	Washington	PORTLAND
41503	415031324	Washington	PORTLAND