Health Insurance Policy Simulation Model

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The ACA Basic Health Program in Washington State

Using the Washington State Population Survey (WSPS) augmented with results from the Urban Institute's Health Insurance Policy Simulation Model (HIPSM), we estimated eligibility, enrollment, and costs for a Basic Health Program (BHP) for Washington State under the rules defined in the Affordable Care Act (ACA). Important findings include these:

- More than 160,000 Washington residents would be eligible for BHP.
- If BHP cost sharing were based on 98 percent actuarial value and $100 annual premiums (member contributions), between 90,000 and 111,000 of those eligible would enroll in BHP. If exchange plans are comparable to those in the current small group market, federal BHP payments would exceed costs by $550 to $600 per enrollee. This could be used to lower beneficiary cost sharing, or would allow reimbursement to providers to be raised 11 to 12 percent above Medicaid levels.
- BHP enrollment in the WSPS regions would vary from 22,400 in King County to 6,800 in the Yakima Tri-Cities region.
- If BHP cost sharing were based on 94 percent actuarial value with premiums set at 2 percent of family income, enrollment would be between 75,000 and 103,000. Federal BHP payments would exceed costs by $1,250 to $1,350 per enrollee. This surplus could be used to decrease cost sharing, increase provider reimbursement by 31 to 34 percent over Medicaid, or some combination of lowered cost sharing and increased reimbursement.
- The size of the nongroup market would be larger under the ACA than it is now, even with BHP (nearly 400,000 versus about 300,000).
- With health reform fully implemented, the exchange would cover about 250,000 lives, even with BHP.
- Moving BHP enrollees out of the nongroup market would not affect premiums notably.

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April 2012, Updated August 2012

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BHP Eligibility

We estimate that 162,000 Washington residents would be eligible for BHP (Table 1). The vast majority (142,000) would be legal residents between 138 and 200 percent of the federal poverty level (FPL) not eligible for any form of public coverage and not having an affordable offer of employer-sponsored insurance (ESI).[1] About 14,000 would be legal immigrants below 138 percent of FPL who do not have an affordable employer offer and are ineligible for public coverage because they have been resident less than five years. About 6,000 would be adults with modified adjusted gross income (MAGI) above 138 percent FPL who are currently covered under the state's Medicaid bridge waiver (Basic Health) and who do not have an affordable ESI offer. MAGI does not include income disregards currently used in eligibility determination, so some who are currently eligible would have MAGI levels that high. Beginning in 2014, the state could end Medicaid eligibility for these people and transfer them to BHP.

Table 1. BHP Eligibility and Enrollment in Washington State, by Eligibility Category

	Eligible for BHP	
	N	%
Total	161,578	100.0%
Subsidy Eligible, 138%–200% FPL	141,652	87.7%
Legal Immigrants Below 138% FPL	13,869	8.6%
MOE Adults in Waiver Programs	6,056	3.7%
		100.0%
North Sound Region	11,454	7.1%
West Balance Region	11,080	6.9%
King County	26,787	16.6%
Puget Metro Region	16,360	10.1%
Clark County	16,442	10.2%
East Balance Region	13,986	8.7%
Spokane County	11,083	6.9%
Yakima Tri-Cities Region	9,320	5.8%
Snohomish County	11,642	7.2%
Pierce County	33,423	20.7%
		100.0%

Source: UI Analysis of Augmented Washington State Database.
MOE = maintenance of eligibility.
1. BHP Package A has $100 premiums and 98 percent actuarial value.

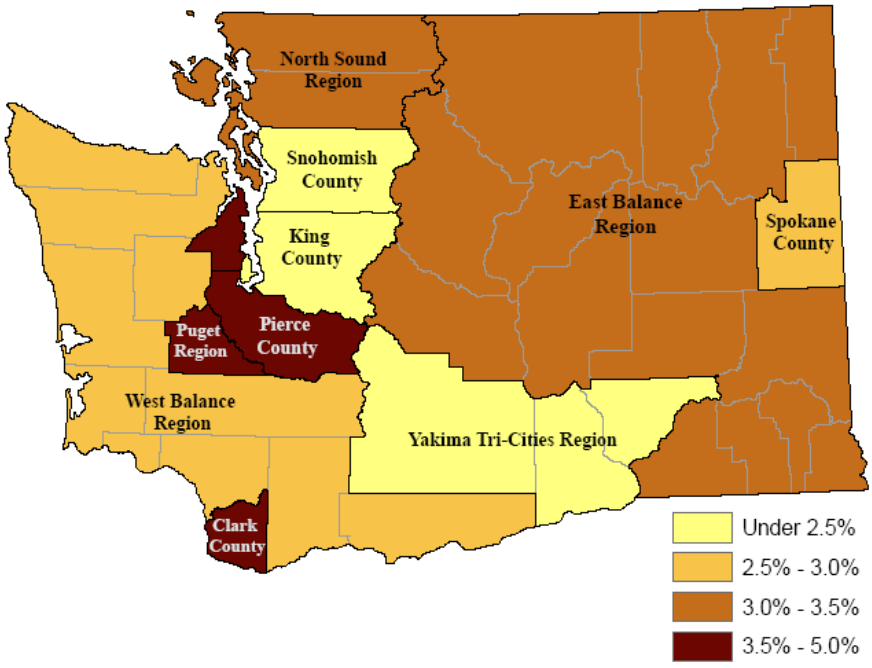
[1] As defined in the law, a family is barred from subsidized coverage if one member has an offer of coverage for which the single premium is less than 9.5 percent of family MAGI.

2. High BHP take-up indicates that 29 percent of people with baseline ESI take up BHP and 90 percent of the baseline uninsured take up BHP.

3. Low BHP take-up indicates that 22 percent of people with baseline ESI take up BHP and 71 percent of the baseline uninsured take up BHP.

More than 33,000 would be eligible for BHP in Pierce County alone. This is followed by King County, with nearly 27,000 eligibles. The Yakima Tri-Cities region would have just over 9,000, the fewest of any region. In Figure 1, we show the concentration of BHP eligibles in each region. Fewer than 2.5 percent of residents in King County, Snohomish County, and Yakima Tri-Cities would be eligible for BHP. By contrast, more than 3.5 percent of residents in Pierce County, Clark County, and the Puget Region would be eligible. Regional variation is due primarily to differences in the income distribution and the prevalence of employers that offer coverage to their workers. Note, for example, that King County has the second highest number of those eligible for BHP, but has one of the lowest concentrations of eligibles. Residents of this county are more likely have incomes above or below the BHP eligibility range than in other areas. Both very high and very low incomes are more prevalent in King County.

Figure 1: Percent of Nonelderly that are Eligible for BHP by Washington State Region



BHP with Lower Cost Sharing

We estimated take-up and costs under two different BHP packages. Package A would provide coverage at 98 percent actuarial value with annual per person premiums set at $100 a year. The premium represents approximately one percent of income for a single person at 133 percent FPL and less than one percent of income for larger families. Package B would have higher cost sharing: 94 percent

actuarial value with premiums at 2 percent of family income. These are the same actuarial value and premium levels as for subsidized coverage in the exchange below 133 percent of FPL.[2] For simplicity, we will go through our results for the lower cost sharing of Package A first, and then Package B.

The decision by eligible people to enroll in BHP is based on HIPSM. This decision takes into account out-of-pocket premiums and cost sharing, the risk of high health costs, and a family's disposable income. A given dollar amount of additional cost sharing would discourage enrollment more for a lower-income family than for a higher-income family. The decision is also heavily influenced by other factors, such as the effect of the individual mandate. See Methods section below for details.

Table 2. BHP Eligibility and Enrollment in Washington State, by Eligibility Category

	Eligible for BHP		Enrolled in BHP Package A[1]			
			High Take-Up[2]		Low Take-Up[3]	
	N	%	N	%	N	%
Total	161,578	100.0%	110,692	100.0%	90,446	100.0%
Subsidy Eligible, 138%–200% FPL	141,652	87.7%	95,129	85.9%	78,634	86.9%
Legal Immigrants Below 138% FPL	13,869	8.6%	9,507	8.6%	5,755	6.4%
MOE Adults in Waiver Programs	6,056	3.7%	6,056	5.5%	6,056	6.7%

Source: UI Analysis of Augmented Washington State Database.

1. BHP Package A has $100 premiums and 98 percent AV.

2. High BHP take-up indicates that 29 percent of people with baseline ESI take up BHP and 90 percent of the baseline uninsured take up BHP.

3. Low BHP take-up indicates that 22 percent of people with baseline ESI take up BHP and 71% of the baseline uninsured take up BHP.

We estimated take-up of BHP Package A under two scenarios. The difference between low and high take-up scenarios reflects different levels of responsiveness to the individual mandate. No person above the tax filing threshold eligible for BHP would qualify for an affordability exemption to the mandate because BHP coverage would be deemed affordable. Most of those eligible for Medicaid, on the other hand, are below the tax filing threshold, and thus exempt from the mandate. Mandate penalty amounts would generally be less than premium and out-of-pocket costs in subsidized exchange coverage, but would still be substantial for a low-income family. National estimates show that people between 138 and 200 percent FPL would spend on average $1,200 on premiums and $400 on other out-of-pocket medical expenses.[3] Tax penalties usually have an effect on behavior larger than the actual amount of the penalty would suggest. Also, tax penalties are simply money spent, while the purchase of health

[2] In the exchange, this cost sharing would apply to adult legal immigrants who are resident less than five years and thus ineligible for Medicaid.

[3] Stan Dorn, Matthew Buettgens, and Caitlin Carroll, *Using the Basic Health Program to Make Coverage More Affordable to Low-Income Households: A Promising Approach for Many States* (Washington, DC: The Urban Institute, 2011). http://www.urban.org/health_policy/url.cfm?ID=412412.

coverage provides the purchaser with a product that has value. Under the 2006 Massachusetts health reform law, the mandate had a significant effect on people in this income range. The high take-up rate assumes that the mandate will be enforced for low-income families and that their behavior will be similar to that observed in Massachusetts, adjusting for differences in cost sharing between Commonwealth Care in Massachusetts and our BHP packages.

On the other hand, the effect of the mandate could be lower for several reasons. Low-income families subject to the mandate could be granted hardship exemptions, enforcement efforts could be lower for them than for the higher-income uninsured, or there could be less of a desire to comply with the law, particularly given the cost sharing of exchange coverage. Any of these would reduce take-up. Note that we did not simulate the effect of eliminating the individual mandate.[4]

Enrollment in BHP will vary considerably depending on the type of health insurance coverage, if any, a person currently has. Nearly 80,000 of those eligible are currently uninsured (Table 6). They would take up coverage at the rate of 90 percent under the high scenario and 71 percent under the low scenario. The low scenario is comparable to the take-up rate that we used for those currently uninsured who become Medicaid eligible under the ACA. Given the low cost sharing of Package A, take-up behavior would be similar.

Nearly 60,000 of those eligible for BHP report having ESI on the survey while not having an affordable ESI offer in the family. This is a legitimate circumstance for some. There are people with coverage through the employer plan of someone outside the household—separated couples, for example. Early retirees are also in this category. Some misreporting may be involved as well, but it is impossible to tell how much.[5] Since they already have coverage that is presumably paid for by someone else, they would take up BHP at a much lower rate. We estimate take-up at 28 percent for the high scenario and 23 percent for the low scenario. These estimates are consistent with assumptions made when we modeled Medicaid take-up.[6]

Just over 20,000 BHP eligibles currently have nongroup coverage. The “no-wrong-door interface” would screen these people automatically for BHP eligibility and could automatically enroll them. Thus take-up among this group would be very high in both scenarios.

Finally, about 6,000 of those eligible are currently enrolled under the Medicaid bridge waiver (Basic Health) and have MAGI above 138 percent FPL without affordable employer offers. The state could terminate their Medicaid eligibility and automatically enroll them in BHP. We are assuming a BHP package that would not differ markedly from their current coverage, so there would not be an affordability issue for those affected. The state would realize savings, since their BHP coverage would be entirely federally funded. However, if the state simply ended maintenance of eligibility for adults above 138 percent FPL, some of those losing Medicaid eligibility would have employer offers deemed affordable. They would be ineligible for BHP or exchange subsidies. To avoid terminating eligibility for

[4] For a national analysis, see Matthew Buettgens and Caitlin Carroll, *Eliminating the Individual Mandate: Effects on Premiums, Coverage, and Uncompensated Care* (Washington, DC: The Urban Institute, 2012), http://www.urban.org/health_policy/url.cfm?ID=412480.

[5] Many of these families report having a member formerly in the Armed Forces. A possible hypothesis is that such families are reporting TRICARE as ESI, but we did not recode the survey responses.

[6] Matthew Buettgens, Randall Bovbjerg, Caitlin Carroll, and Habib Moody, Memorandum to Washington State Office of Financial Management, *Task 2: The Medicaid Expansion and Hospital Utilization* (June 2011).

those not eligible for subsidized coverage, Washington could alter its Section 1115 waiver to continue eligibility for those with affordable offers but not for other adults above 138 percent FPL. The no-wrong-door interface would already have the means to determine the presence of an affordable offer, so it may not be difficult to administer.

Altogether, of the 162,000 eligible for BHP, we estimate that 111,000 would enroll with a higher effect of the individual mandate on behavior, and 90,000 would enroll with a lower effect (Table 2). Lower enrollment would mean modestly higher risk. A little less than 16 percent of enrollees would be in fair/poor health with high take-up, compared with just over 17 percent with lower take-up (Table 7). With higher take-up, nearly 16 percent would be 19 to 24 years old, compared with just over 11 percent with lower take-up.

As we saw earlier, Pierce County and King County have the highest number eligible for BHP (Table 3). Take-up rates in these counties would be very different. Only 13,200 of the 33,400 eligible in Pierce County would enroll, contrasting with 22,400 enrolling out of 26,800 eligible in King County. This difference is due to several factors. A much higher percentage of Pierce County BHP eligibles currently have ESI coverage than in King County.[7] Also, those eligible in Pierce County tend to have somewhat higher incomes and are more likely to have workers in the family than those in King County.

Table 3. BHP Enrollment and Eligibility by Region[1] in Washington State

	Nonelderly Population		Eligible for BHP		Enrolled in BHP Package A[2,3]	
	N	%	N	%	N	%
Total	5,911,733	100.0%	161,578	100.0%	110,692	100.0%
North Sound Region	349,506	5.9%	11,454	7.1%	8,599	7.8%
West Balance Region	377,014	6.4%	11,080	6.9%	8,910	8.0%
King County	1,727,438	29.2%	26,787	16.6%	22,368	20.2%
Puget Metro Region	446,055	7.5%	16,360	10.1%	9,699	8.8%
Clark County	391,109	6.6%	16,442	10.2%	13,477	12.2%
East Balance Region	425,472	7.2%	13,986	8.7%	11,127	10.1%
Spokane County	400,478	6.8%	11,083	6.9%	8,712	7.9%
Yakima Tri-Cities Region	429,474	7.3%	9,320	5.8%	6,807	6.1%
Snohomish County	640,694	10.8%	11,642	7.2%	7,763	7.0%
Pierce County	724,493	12.3%	33,423	20.7%	13,230	12.0%

Source: UI Analysis of Augmented Washington State Database.

1. Regions that include multiple counties are North Sound (Island, San Juan, Skagit, Whatcom), West Balance (Clallam, Cowlitz, Grays Harbor, Jefferson, Klickitat, Lewis, Mason, Pacific, Skamania, Wahkiakum), Puget Metro (Kitsap, Thurston), East Balance (Adams, Asotin, Chelan, Columbia, Douglas, Ferry, Garfield, Grant, Kittitas, Lincoln, Okanogan, Pend Oreille, Stevens, Walla Walla, Whitman), and Yakima Tri-Cities (Benton, Franklin, Yakima).
2. High take-up scenario.

[7] There may be a data reporting problem among Pierce County respondents. Most of those found to be BHP eligible but currently covered by ESI also report having a current or former active duty military person in the family. Some of these might actually have TRICARE coverage rather than employer coverage, despite their survey responses. Note that this primarily affects eligibility for rather than take-up of BHP, since take-up rates are low for this group.

3. BHP Package A has $100 premiums and 98 percent AV.

A Basic Health Program would be funded by the federal government. Payments to the state would be 95 percent of the premium and cost-sharing subsidies that BHP enrollees would have gotten had they been in the exchange.[8] Federal guidance on the exact method of computing payments was not available at the time of writing. We follow the intent of the language in the law, adding BHP enrollees to the exchange risk pool in order to obtain the premiums used to compute payments. We then take 95 percent of premium and cost-sharing subsidies. The private insurance spending levels are based on those currently in the small firm ESI market, since the state's Essential Health Benefits benchmark package will be drawn from that market. We find that BHP payments would be $5,850 per enrollee with high take-up and $5,950 with low take-up (figure 2). If the second-lowest premium in the market were notably lower than current pricing in the small firm market, these payments would be lower. See Conclusions below for more on this issue.

We then estimate the costs of covering people under BHP. We began with the Medicaid package used in our earlier work for the Washington State Office of Financial Management (OFM). Our focus was to ensure that total Medicaid spending—the net result of provider payment rates, service utilization, and moral hazard—was consistent with current spending levels in Washington. Since private spending was also important for this work, we performed an additional verification that the Medicaid spending levels relative to commercial coverage were appropriate for BHP enrollees. See Methods section below for details. For BHP Package A, we adjusted the actuarial value down to 98 percent and reduced the resulting insured cost by the amount collected in premiums ($100 per person per year). Finally, a 15 percent administrative load was added to obtain the BHP cost per enrollee.[9] We find that BHP enrollees would cost $5,300 on average with high take-up and $5,350 with low take-up (figure 2).[10]

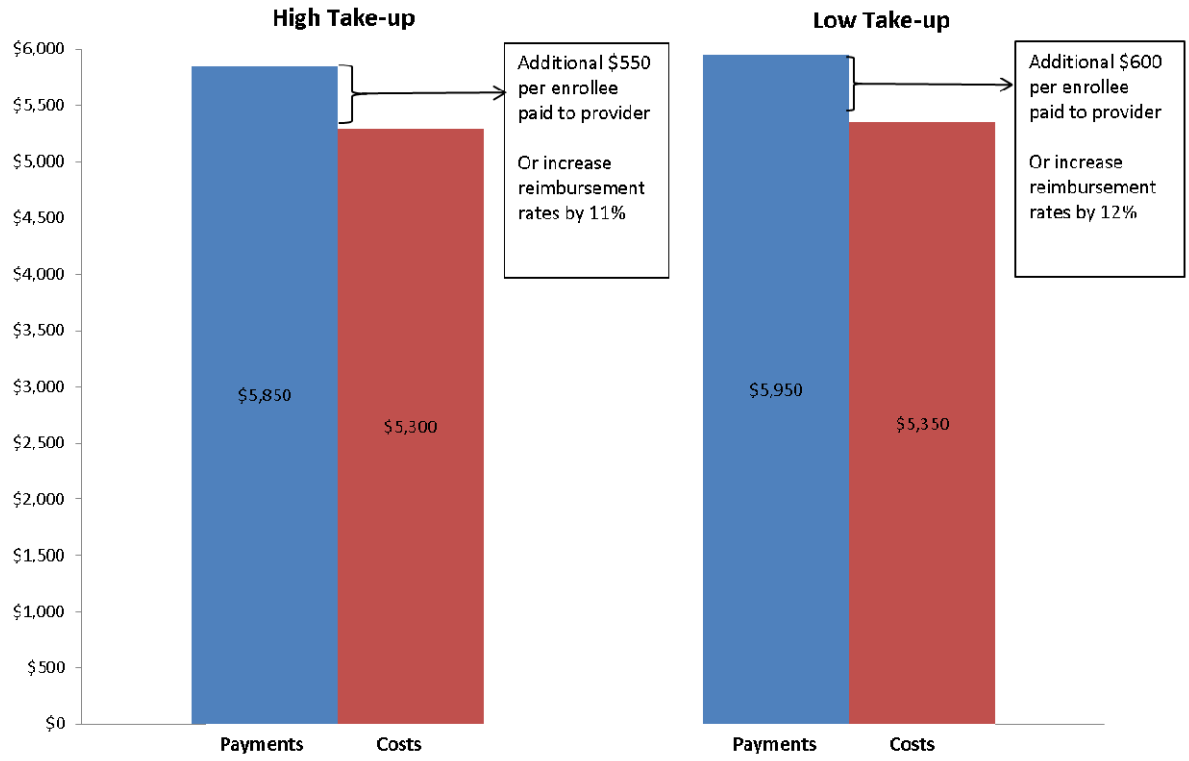
Hence, federal payments would exceed BHP costs by about $550 per enrollee with high or $600 with low take-up. By law, this surplus must be spent on beneficiary care. It could be used to lower beneficiary cost sharing and/or increase provider reimbursement. If the entire amount were devoted to provider reimbursement, it could be increased over Medicaid levels by 11 percent with high take-up or 12 percent with low take-up. When computing this, we kept the administrative load constant except for the portion used to pay premium taxes.

[8] Some have argued that the law could be interpreted to mean that payments would be 95 percent of premium subsidies and 100 percent of cost-sharing subsidies.

[9] We realize that many Medicaid managed care plans have administrative loads significantly lower, and that Washington State has long emphasized efficiency in delivering care through Medicaid. However, there would be greater churning in BHP than in Medicaid managed care, so we chose a higher load. Closer integration between Medicaid managed care and BHP could reduce the administrative costs of BHP.

[10] The main difference between this version and the prior one is that BHP costs are 6 percent lower for BHP plan A and 5 percent lower for BHP plan B. This change is based on updated 2012 data and forecasts of Medicaid costs obtained from the Washington State Office of Financial Management which better reflect spending patterns than the earlier data provided to us.

Figure 2. BHP Payments and Costs with Package A



Source: UI Analysis of Augmented Washington State Database. *Note*: Results show effects as if policies were fully implemented in 2011. Coverage based on a 98 percent actuarial value and $100 annual premiums. Results assume premiums in the exchange much like those in current markets.

BHP with Higher Cost Sharing

The cost sharing in BHP Package A is comparable to that in the Children's Health Insurance Program (CHIP) and some Medicaid managed care programs. Cost sharing could be increased to make the plan closer to exchange coverage, while keeping an advantage in affordability. To show this, we constructed BHP Package B with 94 percent actuarial value and premiums of 2 percent of family MAGI. These are exactly the values in the ACA for the subsidized exchange coverage available to legal immigrants below 138 percent FPL who are ineligible for Medicaid because they have lived in the country for less than five years. Subsidized coverage in the exchange for those from 138 to 150 percent FPL is at 94 percent actuarial value, but the premiums would be between 3 and 4 percent of income. For those between 150 and 200 percent FPL, the exchange would provide coverage at 87 percent actuarial value with premiums at 4 to 6.3 percent of income. Thus, Package B would provide lower premiums for all and lower cost sharing for those above 150 percent FPL.

Table 4. BHP Eligibility and Enrollment in Washington State, by Eligibility Category

	Eligible for BHP		Enrolled in BHP Package B[1]			
			High Take-Up		Low Take-Up	
	N	%	N	%	N	%
Total	161,578	100.0%	103,422	100.0%	74,250	100.0%
Subsidy Eligible, 138%–200% FPL	141,652	87.7%	91,610	88.6%	67,107	90.4%
Legal Immigrants Below 138% FPL	13,869	8.6%	5,755	5.6%	1,620	2.2%
MOE Adults in Waiver Programs	6,056	3.7%	6,056	5.9%	5,523	7.4%

Source: UI Analysis of Augmented Washington State Database.

1. BHP Package B sets premiums at 2 percent of MAGI and 94 percent AV.

The higher cost sharing of Package B leads to lower enrollment than Package A: 103,000 with high take-up and 74,000 with low take-up (Table 8). Package B enrollees are slightly older than Package A enrollees. While nearly 16 percent of Package A enrollees are between 19 and 24, just over 14 percent of Package B enrollees are in that age group (Tables 7 and 8). In general, though, the distribution of risk factors for health care cost is quite similar for both packages.

As in take-up of Package A, the largest numbers of enrollees under low take-up of BHP Package B reside in King County (13,300) and Clark County (9,600). Again, take-up rates vary greatly within regions. Snohomish County would experience the lowest BHP Package B take-up and contribute only 2,800 enrollees. Spokane County, on the other hand, has a relatively high take-up rate and would enroll almost three times as many residents into BHP as Snohomish County, despite having slightly fewer eligibles. Compared to enrollment under Package A, North Sound, Clark County, Spokane County, and the Yakima Tri-Cities Region would account for larger percentages of overall BHP enrollment, while the other regions would see a decreased relative contribution. For example, 7.8 percent of BHP Package A enrollees reside in the North Sound Region. This figure increases to 9.8 percent under BHP Package B.

Table 5. BHP Enrollment and Eligibility by Region[1] in Washington State

	Nonelderly Population		Eligible for BHP		Enrolled in BHP Package B[2,3]	
	N	%	N	%	N	%
Total	5,911,733	100.0%	161,578	100.0%	74,250	100.0%
North Sound Region	349,506	5.9%	11,454	7.1%	7,244	9.8%
West Balance Region	377,014	6.4%	11,080	6.9%	5,817	7.8%
King County	1,727,438	29.2%	26,787	16.6%	13,321	17.9%
Puget Metro Region	446,055	7.5%	16,360	10.1%	5,622	7.6%
Clark County	391,109	6.6%	16,442	10.2%	9,615	12.9%
East Balance Region	425,472	7.2%	13,986	8.7%	7,381	9.9%
Spokane County	400,478	6.8%	11,083	6.9%	7,659	10.3%
Yakima Tri-Cities Region	429,474	7.3%	9,320	5.8%	5,966	8.0%
Snohomish County	640,694	10.8%	11,642	7.2%	2,752	3.7%
Pierce County	724,493	12.3%	33,423	20.7%	8,873	11.9%

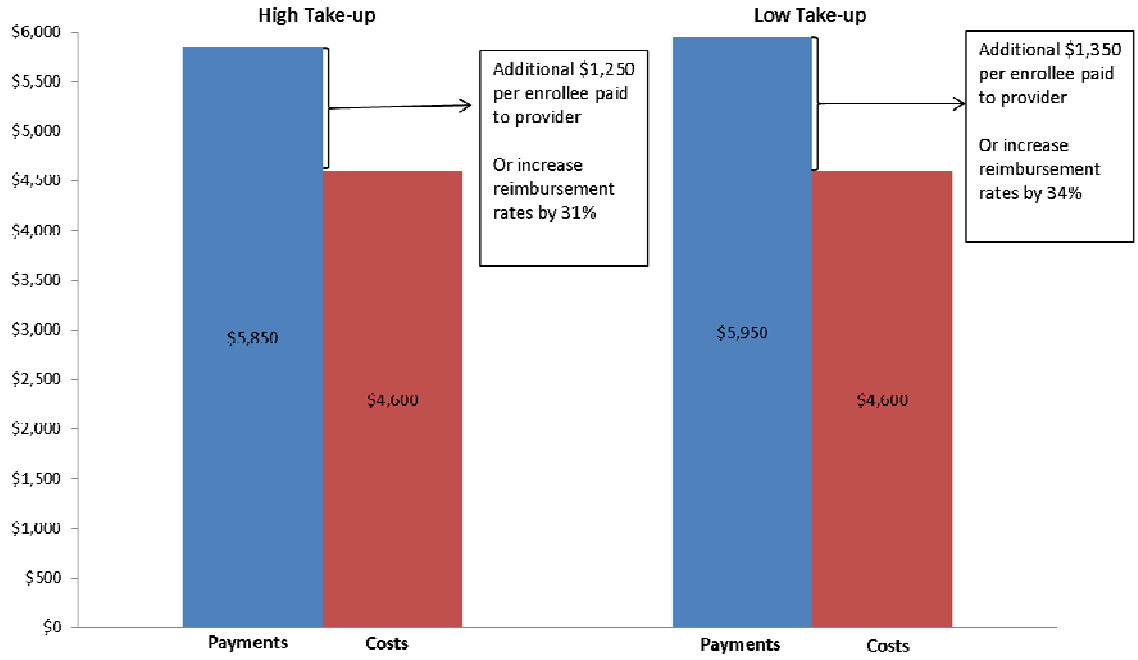
Source: UI Analysis of Augmented Washington State Database,

1. Regions that include multiple counties are North Sound (Island, San Juan, Skagit, Whatcom), West Balance (Clallam, Cowlitz, Grays Harbor, Jefferson, Klickitat, Lewis, Mason, Pacific, Skamania, Wahkiakum), Puget Metro (Kitsap, Thurston), East Balance (Adams, Asotin, Chelan, Columbia, Douglas, Ferry, Garfield, Grant, Kittitas, Lincoln, Okanogan, Pend Oreille, Stevens, Walla Walla, Whitman), and Yakima Tri-Cities (Benton, Franklin, Yakima).
2. Low take-up scenario.
3. BHP Package B has premiums at 2 percent of family MAGI and 94 percent AV.

BHP payments for Package B are computed in the same way as Package A, except, of course, that the population of enrollees is different. Due to higher enrollee cost sharing and the resulting moral hazard, BHP costs are significantly lower for Package B. We estimate that they would be $4,600 for both take-up scenarios, rounded to the nearest $50 (Figure 3).[11] Thus, payments would exceed costs by $1,250 per enrollee with high take-up and $1,350 per enrollee with low take-up. This surplus, which must be spent on the health care of BHP beneficiaries, could be used to raise provider reimbursement and to reduce cost sharing for beneficiaries. If all of it is applied to provider reimbursement, payments to providers could be increased by 31 percent with high take-up and 34 percent with low take-up. The state could choose any mixture of lower cost sharing and higher provider reimbursement in order to spend the surplus of payments over costs. For example, provider reimbursement could be raised to Medicaid plus 15 percent, while reducing cost sharing (both premiums and out-of-pocket costs) by an average of $600 per beneficiary.

[11] Based on updated Medicaid cost data. See footnote 10.

Figure 3. BHP Payments and Costs with Package B



Source: UI Analysis of Augmented Washington State Database. *Note*: Results show effects as if policies were fully implemented in 2011. Coverage based on a 94 percent actuarial value and annual premiums at 2% of MAGI. Results assume premiums in the exchange much like those in current markets.

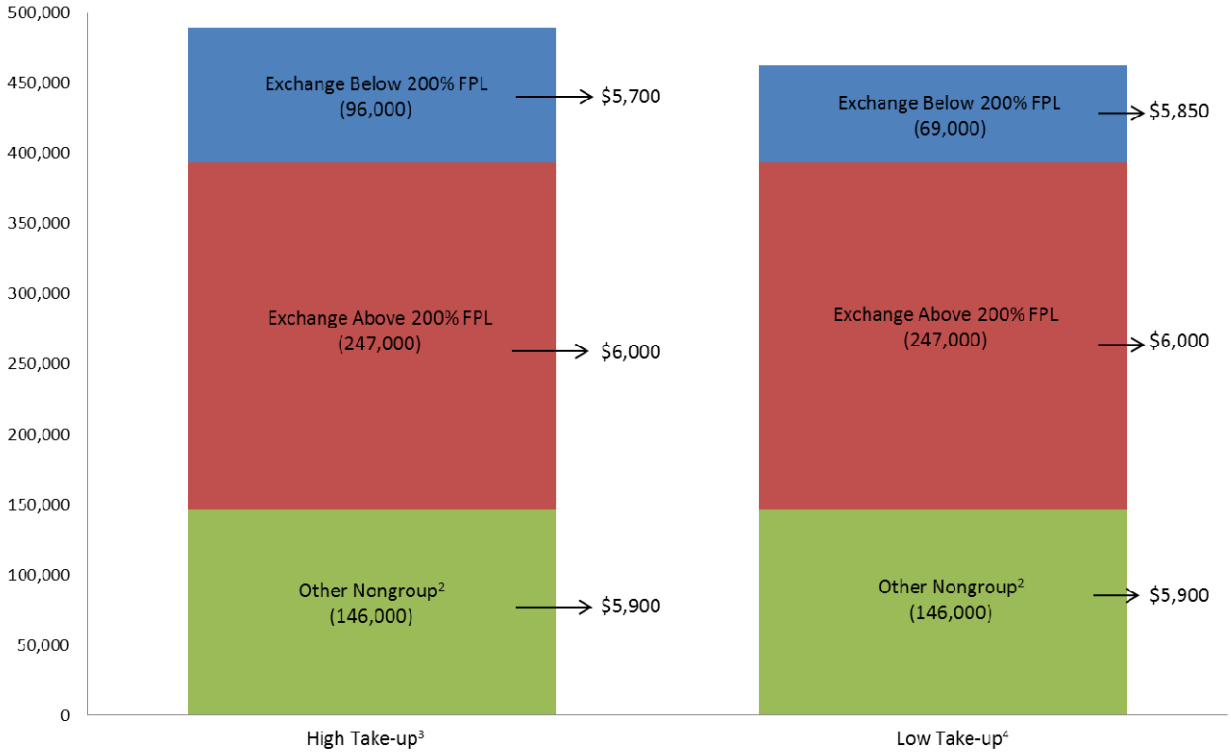
BHP and the Exchange

Next, we address some common concerns regarding BHP and the health insurance exchange. Will the exchange be too small to be viable if a BHP is established? Will the nongroup market in general be smaller and less attractive? Will premiums in the exchange be higher after BHP enrollees are taken out? To address these questions, we estimated take-up of exchange coverage for those above and below 200 percent FPL who would be eligible for subsidies using a method similar to that described above for BHP. We estimated high and low take-up scenarios for those eligible for subsidies with family income below 200 percent FPL. As with BHP, these reflect different responsiveness of low-income families to the individual mandate. Take-up for those currently uninsured ranged from 81 percent in the high scenario to 45 percent in the low scenario. We also estimated enrollment for the remainder of the exchange above 200 percent FPL.

Without BHP, there would be more than 300,000 in the exchange (Figure 4). From 69,000 to 96,000 people below 200 percent FPL would be covered, depending on responsiveness to the mandate, along with 247,000 above 200 percent FPL. This includes those eligible for subsidies as well as those ineligible for subsidies but who would still enroll. Most of those enrolling but not eligible for subsidies are already covered by a policy in the nongroup market, but the mandate would bring in some higher-income uninsured as well. Note that our results represent Washington with health reform fully phased in, not during the first year or two after the exchange and BHP are established. There would also be 146,000

who currently have nongroup coverage who would not enter the exchange or public coverage. Thus, without BHP, the nongroup market would cover between 460,000 and 490,000 lives. There are currently only about 300,000 with nongroup coverage in Washington.

Figure 4. Nongroup Market without BHP Enrollment and Total Costs[1]

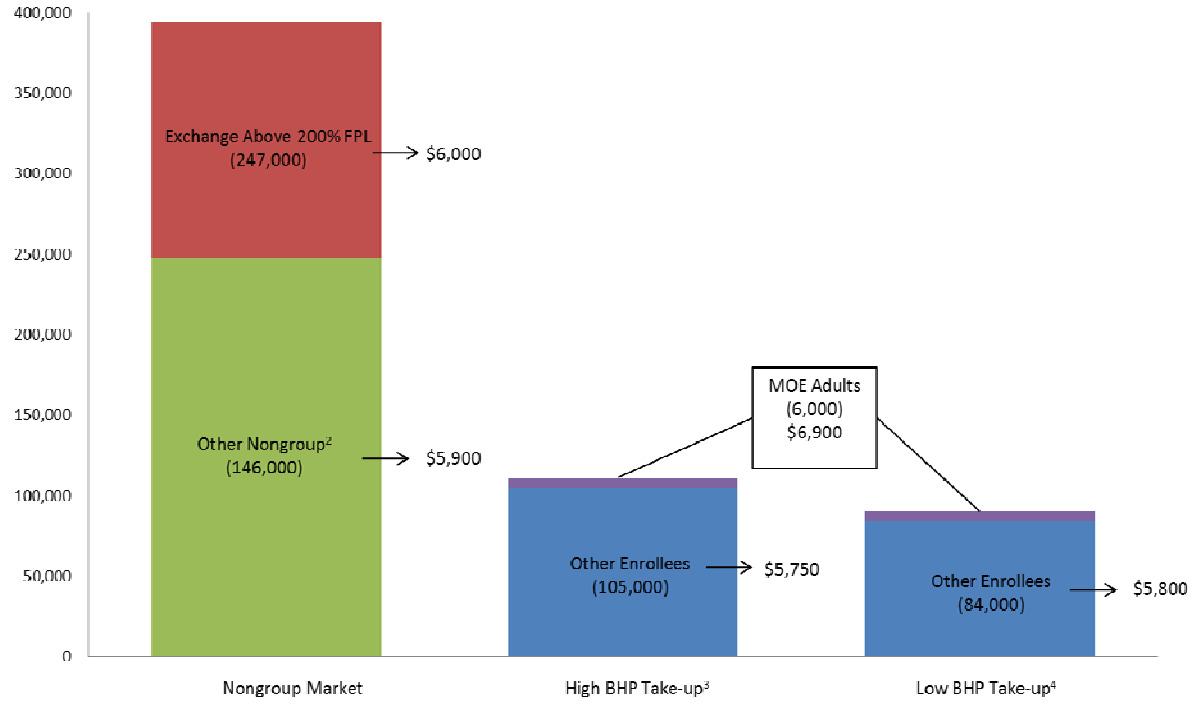


Source: UI Analysis of Augmented Washington State Database
1. Total costs indicates insured costs and out of pocket spending
2. Those with baseline NG that do not take up coverage in the Exchange, BHP or through Medicaid.
3. High Exchange take-up indicates a ~81% take-up of nongroup exchange coverage within the population of baseline uninsured subsidy eligibles between 100% and 200% of the FPL and a 21% take-up rate among baseline ESI subsidy eligibles.
4. Low Exchange take-up indicates a ~45% take-up of nongroup exchange coverage within the population of baseline uninsured subsidy eligibles between 100% and 200% of the FPL and a 16% take-up rate among baseline ESI subsidy eligibles.

The per capita annual health care spending—both insured and out-of-pocket spending—of exchange enrollees below 200 percent FPL would be $5,700 with high mandate effect and $5,850 with low mandate effect (Figure 4). This is consistent with other analysis that finds that a weakening or removal of the mandate induces adverse selection; however, the amount of adverse selection is modest.[12] Note that Figure 4 shows total spending on health care, both insured and out-of-pocket. Exchange enrollees above 200 percent FPL and other nongroup enrollees would have average total health care costs of $5,900. The overall average cost in the nongroup market without BHP would be $5,900.

[12] Buettgens and Carroll, *Eliminating the Individual Mandate*.

Figure 5. Nongroup Market with BHP Enrollment and Total Costs[1]



Source: UI Analysis of Augmented Washington State Database
1. Total costs indicates insured costs and out of pocket spending for BHP Package A
2. Those with baseline NG that do not take up coverage in the Exchange, BHP or through Medicaid.
3. High BHP take-up indicates that 29% of people with baseline ESI take-up BHP and 90% of the baseline uninsured take-up BHP.
4. Low BHP take-up indicates that 22% of people with baseline ESI take-up BHP and 71% of the baseline uninsured take-up BHP.

With BHP, the exchange would not have subsidized enrollees below 200 percent FPL. That would leave nearly 250,000 exchange enrollees and a total nongroup market size of 393,000 (Figure 5). The average health care costs of those with nongroup coverage would not differ noticeably with or without BHP, rounding to the nearest $50. Hence, BHP would still leave a substantial nongroup exchange and would not introduce noticeable adverse selection into the nongroup market.[13]

The small number of current Medicaid bridge waiver adults over 138 percent FPL who could be moved into BHP or the exchange would be much more expensive to cover, with average total costs of $6,900. Excluding these, the remaining BHP enrollees would have total health care costs of $5,750 to $5,800 on average depending on take-up, making them somewhat less expensive than those in the nongroup market.

Earlier estimates using the Washington State observations in the Current Population Survey (CPS) instead of the WSPS show a much larger difference in costs between BHP and the exchange.[14] The WSPS

[13] We assumed a 15 percent administrative load in the exchange both with and without BHP. This is consistent with the Massachusetts Connector. Note that the combined enrollment of Commonwealth Care and Commonwealth Choice in Massachusetts is less than our forecast exchange enrollment in Washington even with BHP. The presence of BHP would not by itself force an administrative load higher than 15 percent.

[14] Dorn et al., *Using the Basic Health Program to Make Coverage More Affordable to Low-Income Households*.

has a sample size roughly three times as large as two years of the CPS Washington State records merged together, so these new results would be much less subject to error due to small sample. Note that the earlier estimate of the number of Washington residents eligible for and enrolling in BHP is very close to our current numbers (163,000 eligible and 104,000 enrolled in Table 2 of that paper). The difference is thus in costs rather than population. The distribution of health care costs is well known to have a high variance and to be highly skewed, making average costs particularly susceptible to small sample error.

Overall Impact on the Number of Uninsured

Under the high take-up scenario, 105,000 people eligible for BHP would enroll in BHP Package A (excluding the 6,000 adults affected by Medicaid MOE), while only 96,000 would enroll in the exchange without BHP, a gain in coverage of 9,000. This scenario assumes a strong effect of the individual mandate on behavior. Without a strong mandate effect, take-up of both BHP and the exchange drops substantially, but the difference in enrollment, 15,000, is greater due to the greater importance given to affordability when deciding whether or not to enroll in coverage. The difference in take-up under the low scenario is dramatic for those currently uninsured—71 percent for BHP versus 45 percent for the exchange—but only half of those eligible for BHP are currently uninsured (Table 6). There would be a much smaller difference for those currently with ESI, who take up at a much lower rate anyway, and no difference for those currently in the nongroup market, who would take up at a very high rate due to the no-wrong-door interface and the fact that exchange coverage would be much more affordable than the coverage for which they are currently paying.

Thus, BHP could lead to up to 15,000 who would have been otherwise uninsured obtaining coverage, depending on mandate enforcement and compliance among low-income families. However, estimating the effect on the overall number of uninsured is more complicated. The presence of BHP could affect the take-up decisions of those not eligible in two ways. First, nongroup premiums could change when BHP enrollees are removed from the nongroup risk pool. We answered this concern by showing above that average costs, and therefore premiums, would not change significantly.

Second, the greater affordability of BHP will cause some low-income workers who currently have ESI to value BHP more highly than their current coverage. Since worker preferences are an important factor in employers' decisions whether to offer coverage, this may lead some employers with significant numbers of BHP-eligible workers to stop offering coverage.[15] This loss of ESI would cause some workers not eligible for BHP to become uninsured. We did not have access to the sophisticated modeling of the employer offer decision used in HIPSM on the WSPS data, but experience in modeling BHP has shown that the number of employers who would drop would be small. However, there would likely be enough to offset much of the small difference (9,000) in take-up under the high scenario. There would likely be fewer uninsured in Washington State with a BHP, particularly with lower enforcement or compliance with the mandate, but the difference would be modest.

[15] Linda Blumberg, Matthew Buettgens, Judy Feder, and John Holahan, *Why Employers Will Continue to Provide Health Insurance: The Impact of the Affordable Care Act* (Washington, DC: The Urban Institute, 2011), http://www.urban.org/health_policy/url.cfm?ID=412428.

Detailed Characteristics of Those Eligible and Enrolling

Several times above, we have used differences in age and health status to explain differences in coverage and costs. In this section, we include detailed characteristics of the populations relevant to BHP and subsidized exchange coverage. We show considerable detail in these characteristics; many estimates are based on relatively small numbers of survey observations. Rather than suppress them, we mark the relevant numbers. Estimates based on a small sample are italicized, and those with very small sample are grayed as well. These should be considered less reliable than other estimates.

Table 6 gives detailed characteristics of those eligible for BHP and exchange subsidies. The first six columns summarize those eligible for subsidized coverage in the exchanges. Those eligible for subsidies below 200 percent FPL would be eligible for BHP (first two columns). The next two columns show those between 200 and 400 percent FPL who would be eligible for subsidies, and the final columns in the block show all eligible for subsidies. For comparison, we then give the distribution of those currently with nongroup coverage and those currently uninsured. For example, just over 16 percent of BHP eligibles would be in fair or poor health, compared with 11 percent of those above 200 percent FPL eligible for subsidies and 20.5 percent of those currently uninsured. Almost 16 percent of BHP eligibles would be between 19 and 24 years old, compared with just over 22 percent of other subsidy eligibles with higher income.

Table 7 deals with enrollment in BHP Package A and in the exchange. The first four columns show enrollment in the BHP under the high and low scenarios. The share of BHP enrollees in fair or poor health would be 17.1 percent with low take-up and 15.9 percent with high take-up. As we saw in Table 6, 16 percent of eligibles are in fair or poor health, so those with better health status would be somewhat less likely to enroll with the lower effect of the individual mandate. Likewise, enrollees tend to be somewhat older with low take-up than with high take-up. We next show the small population of adults currently in Medicaid who could be moved into BHP. The next four columns show nongroup exchange enrollment of those below 200 percent FPL under high and low scenarios. Finally, we show our estimated enrollment in the exchange for those above 200 percent FPL. Note that exchange enrollment includes some not eligible for subsidies.

Table 8 shows the characteristics of those who would enroll in BHP Package B under high and low scenarios. Differences in the distribution of age and health status between packages A and B are small.

Table 6. Characteristics of Nonelderly Washington State Residents by Eligibility and Coverage Type

	Eligibility Type						Coverage Type			
	BHP Eligible		Not Eligible for BHP		All Subsidy Eligibles		Nongroup		Uninsured	
	N	%	N	%	N	%	N	%	N	%
Total Nonelderly	161,578	100.0%	383,715	100.0%	545,293	100.0%	293,164	100.0%	786,404	100.0%
Current Coverage										
Medicaid	6,056	3.7%	10,413	2.7%	16,469	3.0%	---	---	---	---
Medicare	0	0.0%	0	0.0%	0	0.0%	---	---	---	---
ESI	56,568	35.0%	161,490	42.1%	218,058	40.0%	---	---	---	---
NG	21,503	13.3%	58,626	15.3%	80,128	14.7%	---	---	---	---
Uninsured	77,451	47.9%	153,187	39.9%	230,637	42.3%	---	---	---	---
Health Status										
Excellent	40,780	25.2%	102,002	26.6%	142,781	26.2%	108,376	37.0%	161,626	20.6%
Very Good	29,361	18.2%	104,230	27.2%	133,591	24.5%	80,248	27.4%	162,302	20.6%
Good	65,323	40.4%	135,298	35.3%	200,620	36.8%	78,119	26.6%	301,426	38.3%
Fair	*21,232*	*13.1%*	*28,340*	*7.4%*	*49,572*	*9.1%*	21,687	7.4%	120,286	15.3%
Poor	*4,883*	*3.0%*	*13,846*	*3.6%*	*18,729*	*3.4%*	4,734	1.6%	40,764	5.2%
MAGI										
Under 138% FPL	*13,869*	*8.6%*	*0*	*0.0%*	*13,869*	*2.5%*	35,057	12.0%	353,263	44.9%
138% - 200% FPL	147,708	91.4%	0	0.0%	147,708	27.1%	24,703	8.4%	117,370	14.9%
200% - 300% FPL	0	0.0%	201,603	52.5%	201,603	37.0%	30,472	10.4%	140,803	17.9%
300% - 400% FPL	0	0.0%	182,112	47.5%	182,112	33.4%	54,273	18.5%	86,570	11.0%
400%+ FPL	0	0.0%	0	0.0%	0	0.0%	148,658	50.7%	88,398	11.2%
Age										
0 - 18	*12,021*	*7.4%*	*28,352*	*7.4%*	*40,373*	*7.4%*	49,557	16.9%	56,900	7.2%
19 - 24 years	25,613	15.9%	85,440	22.3%	111,053	20.4%	19,958	6.8%	166,041	21.1%
25 - 44 years	76,535	47.4%	126,433	32.9%	202,968	37.2%	98,835	33.7%	360,940	45.9%
45 - 64 years	47,408	29.3%	143,491	37.4%	190,900	35.0%	124,813	42.6%	202,523	25.8%
Race/Ethnicity										
White, Non-Hispanic	115,885	71.7%	295,846	77.1%	411,732	75.5%	241,872	82.5%	523,969	66.6%
Black, Non-Hispanic	*6,806*	*4.2%*	*17,091*	*4.5%*	*23,897*	*4.4%*	7,787	2.7%	27,813	3.5%
Hispanic	*23,848*	*14.8%*	*26,277*	*6.8%*	*50,125*	*9.2%*	10,711	3.7%	153,502	19.5%
Other[1]	*15,038*	*9.3%*	*44,501*	*11.6%*	*59,540*	*10.9%*	32,794	11.2%	81,119	10.3%
HIU Type[2]										
Single, No Dependents	72,693	45.0%	193,523	50.4%	266,216	48.8%	84,098	28.7%	395,261	50.3%
Single, With Dependents	*11,403*	*7.1%*	*20,648*	*5.4%*	*32,051*	*5.9%*	20,873	7.1%	86,599	11.0%
Married, No Dependents	19,767	12.2%	80,631	21.0%	100,398	18.4%	72,794	24.8%	90,716	11.5%
Married, With Dependents	57,528	35.6%	88,248	23.0%	145,776	26.7%	115,057	39.2%	208,579	26.5%
Kid Only	*187*	*0.1%*	*665*	*0.2%*	*852*	*0.2%*	342	0.1%	5,250	0.7%
Adult Nonelderly Population	149,557	100.0%	355,363	100.0%	504,920	100.0%	243,606	100.0%	729,504	100.0%
Employment Status[3]										
Unemployed/Not in Labor Force	89,278	59.7%	220,384	62.0%	309,662	61.3%	89,462	36.7%	350,966	48.1%
Employed - Unidentifiable Firm Size	28,244	18.9%	58,465	16.5%	86,709	17.2%	97,282	39.9%	143,251	19.6%
Small Firm (< 50 Employees)	22,451	15.0%	53,039	14.9%	75,491	15.0%	37,916	15.6%	139,696	19.1%
Medium Firm (50-500 Employees)	*5,920*	*4.0%*	*10,459*	*2.9%*	*16,380*	*3.2%*	6,858	2.8%	37,358	5.1%
Large Firm (500+ Employees)	*3,663*	*2.4%*	*13,016*	*3.7%*	*16,679*	*3.3%*	12,088	5.0%	58,233	8.0%
Tobacco Use										
Yes	39,197	26.2%	88,208	24.8%	127,405	25.2%	59,524	24.4%	182,978	25.1%
No	110,360	73.8%	267,155	75.2%	377,515	74.8%	184,083	75.6%	546,525	74.9%
Chronic Condition Prevalences[4]										
Angina	*1,978*	*1.3%*	*9,145*	*2.6%*	*11,123*	*2.2%*	7,148	2.9%	7,396	1.0%
Arthritis	*14,972*	*10.0%*	*49,232*	*13.9%*	*64,204*	*12.7%*	42,296	17.4%	81,621	11.2%
Asthma	*11,616*	*7.8%*	*27,220*	*7.7%*	*38,836*	*7.7%*	23,679	9.7%	69,000	9.5%
Coronary Heart Disease	*2,286*	*1.5%*	*10,907*	*3.1%*	*13,194*	*2.6%*	7,839	3.2%	10,831	1.5%
Diabetes	*4,693*	*3.1%*	*18,474*	*5.2%*	*23,167*	*4.6%*	17,812	7.3%	30,615	4.2%
Emphysema	*588*	*0.4%*	*3,741*	*1.1%*	*4,329*	*0.9%*	2,238	0.9%	6,276	0.9%
Heart Attack	*3,105*	*2.1%*	*9,417*	*2.7%*	*12,522*	*2.5%*	4,093	1.7%	14,693	2.0%
High Blood Pressure	21,846	14.6%	71,110	20.0%	92,956	18.4%	61,231	25.1%	109,075	15.0%
Other Heart Disease	*9,289*	*6.2%*	*25,764*	*7.2%*	*35,053*	*6.9%*	16,150	6.6%	42,586	5.8%
Stroke	*972*	*0.6%*	*4,743*	*1.3%*	*5,715*	*1.1%*	2,444	1.0%	7,806	1.1%

Source: UI Analysis of Augmented Washington State Database

1. Other includes, among the non-Hispanic population, American Indian/Alaskan Native, Native Hawaiian/ Other Pacific Islander, and Multiracial

2. "Married" includes health insurance units with a married individual even if the spouse is not within the unit

3. Employment subcategories include part-time workers. Self-employed workers are included in "Employed - Unidentifiable Firm Size"

4. Except for asthma, all prevalences reflect any diagnosis of the disease in question, regardless how long ago the diagnosis occurred. The asthma prevalence reflects a current asthma diagnosis.

Note: Italicized font indicates a weighted sample of the entire subsidy population under 70,000

Note: Italicized and grayed font indicates a weighted sample of the entire subsidy population under 30,000

Table 7. Characteristics of Nonelderly, Nongroup Exchange and BHP Enrollees in Washington State

	BHP Package A[1] without MOE Adults				MOE Adults Below 200% FPL		Nongroup Exchange Below 200% FPL				Other Nongroup Exchange (Above 200% FPL)	
	High Take-Up[2]		Low Take-Up[3]				High Take-Up[4]		Low Take-Up[5]			
	N	%	N	%	N	%	N	%	N	%	N	%
Total Nonelderly	104,636	100.0%	84,390	100.0%	6,056	100.0%	95,976	100.0%	68,981	100.0%	247,302	100.0%
Current Coverage												
Medicaid	0	0.0%	0	0.0%	6,056	100.0%	0	0.0%	0	0.0%	0	0.0%
Medicare	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
ESI	16,010	15.3%	11,945	14.2%	0	0.0%	11,717	12.2%	8,651	12.5%	50,254	20.3%
NG	20,571	19.7%	20,571	24.4%	0	0.0%	25,567	26.6%	25,567	37.1%	109,030	44.1%
Uninsured	68,056	65.0%	51,874	61.5%	0	0.0%	58,692	61.2%	34,764	50.4%	88,018	35.6%
Health Status												
Excellent	23,284	22.3%	16,522	19.6%	883	14.6%	21,595	22.5%	15,850	23.0%	78,161	31.6%
Very Good	19,914	19.0%	16,357	19.4%	1,325	21.9%	18,976	19.8%	14,660	21.3%	59,671	24.1%
Good	44,727	42.7%	37,041	43.9%	2,711	44.8%	42,599	44.4%	28,748	41.7%	82,237	33.3%
Fair	*14,053*	*13.4%*	*12,247*	*14.5%*	*533*	*8.8%*	*11,085*	*11.5%*	*8,603*	*12.5%*	*19,991*	*8.1%*
Poor	*2,658*	*2.5%*	*2,224*	*2.6%*	*604*	*10.0%*	*1,721*	*1.8%*	*1,119*	*1.6%*	*7,242*	*2.9%*
MAGI												
Under 138% FPL	*9,507*	*9.1%*	*5,755*	*6.8%*	*0*	*0.0%*	*9,691*	*10.1%*	*9,691*	*14.0%*	*0*	*0.0%*
138% - 200% FPL	95,129	90.9%	78,634	93.2%	6,056	100.0%	86,284	89.9%	59,290	86.0%	0	0.0%
200% - 300% FPL	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	103,607	41.9%
300% - 400% FPL	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	48,480	19.6%
400%+ FPL	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	95,214	38.5%
Age												
0 - 18	*0*	*0.0%*	*0*	*0.0%*	*0*	*0.0%*	*1,243*	*1.3%*	*1,243*	*1.8%*	*26,361*	*10.7%*
19 - 24 years	16,592	15.9%	9,481	11.2%	608	10.0%	11,960	12.5%	4,925	7.1%	29,374	11.9%
25 - 44 years	49,428	47.2%	42,336	50.2%	3,247	53.6%	49,664	51.7%	37,672	54.6%	85,723	34.7%
45 - 64 years	38,616	36.9%	32,573	38.6%	2,202	36.4%	33,109	34.5%	25,141	36.4%	105,844	42.8%
Race/Ethnicity												
White, Non-Hispanic	75,002	71.7%	61,844	73.3%	4,341	71.7%	70,292	73.2%	48,133	69.8%	202,676	82.0%
Black, Non-Hispanic	*5,756*	*5.5%*	*4,405*	*5.2%*	*0*	*0.0%*	*6,895*	*7.2%*	*5,544*	*8.0%*	*3,769*	*1.5%*
Hispanic	*12,354*	*11.8%*	*10,109*	*12.0%*	*1,111*	*18.3%*	*8,792*	*9.2%*	*6,384*	*9.3%*	*13,049*	*5.3%*
Other[6]	*11,524*	*11.0%*	*8,032*	*9.5%*	*604*	*10.0%*	*9,997*	*10.4%*	*8,920*	*12.9%*	*27,807*	*11.2%*
HIU Type[7]												
Single, No Dependents	55,697	53.2%	40,574	48.1%	2,227	36.8%	41,194	42.9%	18,208	26.4%	81,579	33.0%
Single, With Dependents	*6,293*	*6.0%*	*5,178*	*6.1%*	*943*	*15.6%*	*6,619*	*6.9%*	*6,619*	*9.6%*	*15,655*	*6.3%*
Married, No Dependents	17,763	17.0%	13,965	16.5%	1,038	17.1%	19,190	20.0%	15,392	22.3%	67,897	27.5%
Married, With Dependents	24,883	23.8%	24,672	29.2%	1,848	30.5%	28,973	30.2%	28,761	41.7%	82,171	33.2%
Kid Only	*0*	*0.0%*	*0*	*0.0%*	*0*	*0.0%*	*0*	*0.0%*	*0*	*0.0%*	*0*	*0.0%*
Adult Nonelderly Population	104,636	100.0%	84,390	100.0%	6,056	100.0%	94,733	100.0%	67,738	100.0%	220,941	100.0%
Employment Status[8]												
Unemployed/Not in Labor Force	55,205	52.8%	43,137	51.1%	2,035	33.6%	45,370	47.9%	31,367	46.3%	94,572	42.8%
Employed - Unidentifiable Firm Size	24,827	23.7%	24,191	28.7%	1,537	25.4%	22,951	24.2%	16,978	25.1%	64,091	29.0%
Small Firm (< 50 Employees)	18,316	17.5%	12,609	14.9%	608	10.0%	18,579	19.6%	13,732	20.3%	42,678	19.3%
Medium Firm (50-500 Employees)	*3,407*	*3.3%*	*2,056*	*2.4%*	*1,492*	*24.6%*	*3,726*	*3.9%*	*2,038*	*3.0%*	*12,135*	*5.5%*
Large Firm (500+ Employees)	*2,882*	*2.8%*	*2,397*	*2.8%*	*383*	*6.3%*	*4,107*	*4.3%*	*3,622*	*5.3%*	*7,466*	*3.4%*
Tobacco Use												
Yes	31,576	30.2%	24,840	29.4%	3,052	50.4%	27,321	28.8%	17,849	26.3%	53,084	24.0%
No	73,060	69.8%	59,549	70.6%	3,005	49.6%	67,412	71.2%	49,889	73.7%	167,857	76.0%
Chronic Condition Prevalences[9]												
Angina	*1,445*	*1.4%*	*1,274*	*1.5%*	*533*	*8.8%*	*1,445*	*1.5%*	*1,274*	*1.9%*	*6,832*	*3.1%*
Arthritis	*14,207*	*13.6%*	*12,823*	*15.2%*	*604*	*10.0%*	*14,358*	*15.2%*	*10,115*	*14.9%*	*42,206*	*19.1%*
Asthma	*8,439*	*8.1%*	*8,059*	*9.5%*	*697*	*11.5%*	*8,885*	*9.4%*	*6,168*	*9.1%*	*26,219*	*11.9%*
Coronary Heart Disease	*1,910*	*1.8%*	*1,740*	*2.1%*	*0*	*0.0%*	*1,339*	*1.4%*	*1,168*	*1.7%*	*5,717*	*2.6%*
Diabetes	*4,172*	*4.0%*	*3,070*	*3.6%*	*521*	*8.6%*	*4,172*	*4.4%*	*3,070*	*4.5%*	*18,910*	*8.6%*
Emphysema	*588*	*0.6%*	*588*	*0.7%*	*0*	*0.0%*	*588*	*0.6%*	*588*	*0.9%*	*3,372*	*1.5%*
Heart Attack	*2,196*	*2.1%*	*2,025*	*2.4%*	*533*	*8.8%*	*1,625*	*1.7%*	*815*	*1.2%*	*4,971*	*2.2%*
High Blood Pressure	17,703	16.9%	15,773	18.7%	1,054	17.4%	17,553	18.5%	13,332	19.7%	60,060	27.2%
Other Heart Disease	*6,583*	*6.3%*	*5,267*	*6.2%*	*1,476*	*24.4%*	*5,477*	*5.8%*	*3,995*	*5.9%*	*18,521*	*8.4%*
Stroke	*972*	*0.9%*	*972*	*1.2%*	*0*	*0.0%*	*468*	*0.5%*	*468*	*0.7%*	*3,027*	*1.4%*

Source: UI Analysis of Augmented Washington State Database

1. BHP Package A has $100 premiums and 98% AV.

2. High BHP take-up indicates that 29% of people with baseline ESI take-up BHP and 90% of the baseline uninsured take-up BHP.

3. Low BHP take-up indicates that 22% of people with baseline ESI take-up BHP and 71% of the baseline uninsured take-

4. High Exchange take-up indicates a ~81% take-up of nongroup exchange coverage within the population of baseline uninsured subsidy eligibles between 100% and 200% of the FPL and a 21% take-up rate among baseline ESI subsidy eligibles.

5. Low Exchange take-up indicates a ~45% take-up of nongroup exchange coverage within the population of baseline uninsured subsidy eligibles between 100% and 200% of the FPL and a 16% take-up rate among baseline ESI subsidy eligibles.

6. Other includes, among the non-Hispanic population, American Indian/Alaskan Native, Native Hawaiian/ Other Pacific Islander, and Multiracial

7. "Married" includes health insurance units with a married individual even if the spouse is not within the unit

8. Employment subcategories include part-time workers. Self-employed workers are included in "Employed - Unidentifiable Firm Size"

9. Except for asthma, all prevalences reflect any diagnosis of the disease in question, regardless how long ago the diagnosis occurred. The asthma prevalence reflects a current asthma diagnosis.

Note: Italicized font indicates a weighted sample of the entire subsidy population under 70,000

Note: Italicized and grayed font indicates a weighted sample of the entire subsidy population under 30,000

Table 8. Characteristics of Nonelderly, BHP Enrollees in Washington State

	BHP Package B[1] without MOE Adults			
	High Take-up		Low Take-up	
	N	%	N	%
Total Nonelderly	97,365	100.0%	68,727	100.0%
Current Coverage				
Medicaid	0	0.0%	0	0.0%
Medicare	0	0.0%	0	0.0%
ESI	14,230	14.6%	10,640	15.5%
NG	20,571	21.1%	20,571	29.9%
Uninsured	62,565	64.3%	37,517	54.6%
Health Status				
Excellent	20,303	20.9%	13,527	19.7%
Very Good	18,814	19.3%	14,267	20.8%
Good	42,830	44.0%	30,152	43.9%
Fair	*13,194*	*13.6%*	*9,158*	*13.3%*
Poor	*2,224*	*2.3%*	*1,622*	*2.4%*
MAGI				
Under 138% FPL	*5,755*	*5.9%*	*1,620*	*2.4%*
138% - 200% FPL	91,610	94.1%	67,107	97.6%
200% - 300% FPL	0	0.0%	0	0.0%
300% - 400% FPL	0	0.0%	0	0.0%
400%+ FPL	0	0.0%	0	0.0%
Age				
0 - 18	*0*	*0.0%*	*0*	*0.0%*
19 - 24 years	13,955	14.3%	6,223	9.1%
25 - 44 years	47,648	48.9%	34,088	49.6%
45 - 64 years	35,763	36.7%	28,417	41.3%
Race/Ethnicity				
White, Non-Hispanic	71,911	73.9%	50,211	73.1%
Black, Non-Hispanic	*5,756*	*5.9%*	*4,405*	*6.4%*
Hispanic	*11,495*	*11.8%*	*6,986*	*10.2%*
Other[2]	*8,203*	*8.4%*	*7,125*	*10.4%*
HIU Type[3]				
Single, No Dependents	49,540	50.9%	29,041	42.3%
Single, With Dependents	*5,178*	*5.3%*	*4,739*	*6.9%*
Married, No Dependents	17,763	18.2%	12,631	18.4%
Married, With Dependents	24,883	25.6%	22,316	32.5%
Kid Only	*0*	*0.0%*	*0*	*0.0%*
Adult Nonelderly Population	97,365	100.0%	68,727	100.0%
Employment Status				
Unemployed	49,144	50.5%	32,684	47.6%
Employed - Unidentifiable Firm Size	24,476	25.1%	21,234	30.9%
Small Firm (< 50 Employees)	17,457	17.9%	10,692	15.6%
Medium Firm (50-500 Employees)	*3,407*	*3.5%*	*1,719*	*2.5%*
Large Firm (500+ Employees)	*2,882*	*3.0%*	*2,397*	*3.5%*
Tobacco Use				
Yes	30,499	31.3%	18,765	27.3%
No	66,866	68.7%	49,962	72.7%
Chronic Condition Prevalences[4]				
Angina	*1,445*	*1.5%*	*1,274*	*1.9%*
Arthritis	*13,989*	*14.4%*	*11,194*	*16.3%*
Asthma	*8,439*	*8.7%*	*7,374*	*10.7%*
Coronary Heart Disease	*1,910*	*2.0%*	*1,085*	*1.6%*
Diabetes	*4,172*	*4.3%*	*2,987*	*4.3%*
Emphysema	*588*	*0.6%*	*588*	*0.9%*
Heart Attack	*2,196*	*2.3%*	*1,454*	*2.1%*
High Blood Pressure	17,703	18.2%	14,487	21.1%
Other Heart Disease	*5,724*	*5.9%*	*4,159*	*6.1%*
Stroke	*972*	*1.0%*	*972*	*1.4%*

Source: UI Analysis of Augmented Washington State Database

1. BHP Package B sets premiums at 2% of MAGI and 94% AV.

2. Other includes, among the non-Hispanic population, American Indian/Alaskan Native, Native Hawaiian/ Other Pacific Islander, and Multiracia

3. "Married" includes health insurance units with a married individual even if the spouse is not within the unit

4. Except for asthma, all prevalences reflect any diagnosis of the disease in question, regardless how long ago the diagnosis occurred. The asthma prevalence reflects a current asthma diagnosis.

Note: Italicized font indicates a weighted sample of the entire subsidy population under 70,000

Note: Italicized and grayed font indicates a weighted sample of the entire subsidy population under 30,000

Methods

Our ability to generate expedient estimates of BHP eligibility depended largely on previous research done in conjunction with OFM to enhance WSPS with data elements from the CPS and the Medical Expenditure Panel Survey (MEPS). Our work with OFM included the imputation of several key variables necessary to the determination of BHP eligibility, specifically Medicaid/CHIP eligibility types, MAGI, and immigration status. The methodology for imputing the preceding variables can be found in memos provided to OFM.[16] Building on this previous work, we determined the presence and affordability of an ESI offer as well as the length of U.S. residency for legal residents in order to estimate BHP eligibility.

Additionally, we took advantage of data from previous research with HIPSM. The core microdata file that defines HIPSM's population base is a pooled data set of the March 2008 and 2009 CPS Annual Social and Economic Supplement. The CPS lacks health care expenditure data, so health care expenditures are statistically matched to CPS interviewee records from the detailed cost information available in the MEPS household component. The resulting data sets from HIPSM contain the requisite demographic variables to determine affordability as well as premium information. HIPSM estimates ACA-level premiums faced by every employee, including both single and family packages where applicable. Our baseline national ESI premium estimates are calibrated to be compatible with premiums in the most recent MEPS-Insurance Component and Kaiser/Health Research and Educational Trust surveys. Average premiums by firm size are calibrated by adjusting the actuarial value of ESI plans. Premiums are calculated based on a blend between the weighted averages of actual and expected insured costs. Full documentation of HIPSM is publicly available.[17]

Given that previous research provided us with many of the determinants of BHP and subsidy eligibility, finalization these eligibility statuses depended on further imputation of only two variables: presence of affordable ESI offer and the length of U.S. residency of legal immigrants. The imputation methodology, used successfully in previous work to augment the WSPS, is described in more detail below.

ESI Offer Determination

We based our ESI offer estimates on a WSPS question that asks survey respondents whether a health plan is available through work. However, there were several limitations to the variable, in that the question is only posed to respondents who are working and have not already indicated that they have ESI.[18] We adjusted the variable such that all working adults who are policy holders of an ESI plan also have an ESI offer. After this correction, the distribution of ESI offer by firm size approximated that of the Washington observations in the CPS.

After constructing an accurate indicator of ESI offer, we determined the affordability of those offers. Given that the WSPS does not contain the necessary premium information to calculate affordability, we

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[16] Matthew Buettgens, Randall Bovbjerg, and Caitlin Carroll, Memorandum to Washington State Office of Financial Management, *Construction of the Augmented Washington State Health Survey* (June 2011); Buettgens et al., Memorandum to Washington State Office of Financial Management, *Task .2*

[17] For more about HIPSM and a list of recent research using it, see http://www.urban.org/uploadedpdf/412154-Health-Microsimulation-Capabilities.pdf. In addition, detailed technical documentation is available: *HIPSM Methodology, 2011 National Version* (Washington, DC: The Urban Institute, 2011), http://www.urban.org/health_policy/url.cfm?ID=412471.

[18] http://www.ofm.wa.gov/sps/2010/dictionary2010v1.pdf

used a regression-based imputation to predict ESI offer affordability onto the WSPS from previously constructed HIPSM data. Conditioning on the presence on an ESI offer, we used a probit regression to predict affordability of those offers; dependent variables included industry, firm size, insurance unit type, MAGI as a percentage of FPL, and the logarithm of wages. We calibrated overall affordability levels to our full HIPSM results such that approximately 2 percent of all people with ESI offers have unaffordable offers and 16 percent of all people under 200 percent of FPL with ESI offers have unaffordable offers.

Length of Residence in the United States of Legal Residents

We again took advantage of previous work to impute the length of time that legally resident immigrants had been in the United States, specifically whether those with incomes below 138 percent FPL had met the five-year threshold necessary to qualify for Medicaid. Fortunately, our baseline data for HIPSM contains just such an indicator based on CPS variables. We performed a cell-based, "hotdeck" match between the WSPS and the HIPSM baseline file. As in the regression-based imputation, we analyzed both data sets and reconciled their variables for the characteristics to be used in the match. We then optimized the matching cells and performed the match, which allows data from the HIPSM baseline to be attached to the WSPS. Matching cells included age, insurance unit type, race, work status, education status, and income.

Imputation of Exchange and BHP Take-up

The decisions to take up BHP or exchange coverage made by families on the WSPS are based on the behavior of similar individuals and families in HIPSM. That behavior is based on an expected utility model that takes into account many characteristics of the individual or family involved. The value of each health coverage option (including being uninsured) takes into account factors such as the out-of-pocket premium costs, other out-of-pocket health care costs, the risk of high health care costs, and disposable income. All decisions are based on constant relative risk aversion, which means, among other things, that a given amount of money means more to a family with less disposable income than to one with more. Also, we take into account a family's reported preferences and choices on the original survey. For example, a person eligible for Medicaid but who is not enrolled has indicated a preference against Medicaid, and will be less likely to enroll than a similar person who has just gained eligibility. These individual and family utility functions are calibrated so that the overall price responsiveness matches targets drawn from the literature. For details, see the HIPSM Methodology Documentation.[19]

In order to predict take-up of nongroup exchange coverage, we again used a regression-based imputation to predict ACA level enrollment onto the WSPS from previously constructed HIPSM data. The models were restricted to nonelderly individuals who do not take up Medicaid and are not undocumented immigrants. We predicted nongroup exchange take-up separately for those who would be eligible for exchange subsidies and those who would not. Thus, we specified two probit models, both with the same covariates: family structure, age group, quintile of health expenditure, health status, work status, the logarithm of wages, presence of an ESI offer, MAGI as a percentage of FPL, and education status. In order to get sufficient variation in take-up due to current insurance status, we interacted all covariates with baseline insurance status, effectively running separate models for each

[19] Matthew Buettgens, *HIPSM Methodology Documentation, 2011 National Version* (Washington, DC: The Urban Institute, 2011), http://www.urban.org/UploadedPDF/412471-Health-Insurance-Policy-Simulation-Model-Methodology-Documentation.pdf.

baseline coverage type. We calibrated overall nongroup take-up levels by income, baseline coverage, and exchange subsidy eligibility to approximate our full HIPSM results. Our range of possible enrollment scenarios is driven by varying take-up of the subsidy eligible under 200 percent FPL. Within this population, low exchange enrollment is driven by a 16 percent take-up rate for those with baseline ESI and a 45 percent take-up rate among the baseline uninsured. In the high exchange scenario, there is a 21 percent take-up rate among those with baseline ESI and a 81 percent take-up rate for the baseline uninsured. The take-up rate of those with baseline nongroup coverage is 96 percent in both scenarios; take-up among Medicaid-ineligible legal immigrants below 138 percent FPL is also constant across take-up scenarios at 53 percent.

The methodology for predicting BHP take-up was very similar to that of the nongroup exchange. We again constructed a regression-based model to determine the coverage status of BHP eligibles who did not take up coverage in the nongroup exchange, assuming all BHP eligibles who took up coverage in the exchange would also take up BHP. Note that the high/low BHP take-up scenarios correspond to the high/low exchange take-up scenarios, and as such we assumed that anyone opting into exchange coverage in the high/low take-up scenario would choose BHP in its corresponding high/low take-up scenario. We used a probit model, restricting to BHP eligibles. We included the same covariates as in the nongroup exchange take-up model, but due to sample size limitations did not interact the independent variables with baseline coverage. We calibrated the results of the model to HIPSM estimates by baseline coverage. In both the high and low take-up scenarios, approximately 95 percent of those with baseline nongroup coverage take up BHP. Take-up of BHP among those with baseline ESI ranges from 22 percent to 29 percent in the low and high take-up scenarios, respectively, while take-up within the baseline uninsured population moves from 71 percent to 90 percent. Take-up within the population of Medicaid-ineligible legal immigrants below 138 percent FPL is about 42 percent with low take-up and 69 percent with high take-up (table 9).

Table 9. Take-up Rates for Each Health Coverage Option and Scenario

Insurance Product	Mandate effect	Take-up rate		
		Current Uninsured	Current nongroup	Current ESI
BHP Package A	High	29%	96%	90%
	Low	22%	96%	71%
BHP Package B	High	26%	96%	87%
	Low	19%	96%	55%
Exchange <200%	High	21%	96%	81%
	Low	16%	96%	45%

Source: UI Analysis of Augmented Washington State Database.
Note: Excludes undocumented immigrants below 138 percent FPL.

We imputed health care spending under typical ESI and nongroup plans to all WSPS observations from HIPSM data using the same methodology as in our earlier work for OFM.[20] We then adjusted the resulting levels of spending to be consistent with Washington State ESI premiums from the MEPS-IC. Our HIPSM spending estimates were not state-specific, so this additional adjustment reflects differences in pricing and service utilizations in Washington. We focused on ESI not only because the MEPS-IC provides a reliable, representative history of ESI premiums, but, more important, because the Essential Health Benefits package in Washington will be based on a benchmark plan currently in the small group market. We computed ESI premiums from the WSPS and compared them to the MEPS-IC. To compute large firm premiums, we constructed a plan with a typical large firm actuarial value, computed the average costs of those reported in the WSPS to be covered by large firm ESI, and added an appropriate administrative load for large firm coverage. Spending levels were adjusted to match the MEPS-IC targets.

We then were able to compute total spending, insured costs, and out-of-pocket costs for a silver plan in the exchange by altering the actuarial value of the adjusted package to 70 percent. For those who would be eligible for cost-sharing subsidies in the exchange, we computed costs under the higher actuarial value to which they would be entitled and the amount of cost-sharing subsidies paid on their behalf.

The average silver premium in the exchange can then be computed by taking the average cost over all covered lives and adding a 15 percent administrative load. Since health care costs have a high variance and skewed distribution, we standardized them by age, gender, health status, and income in order to avoid distortions of average cost caused by small numbers of outlier observations. We computed premiums for several different populations of covered lives:

1. BHP enrollees (Package A or Package B, high take-up or low take-up) + exchange enrollees above 200 percent FPL + other nongroup. Used to compute BHP payments.
2. Exchange enrollees < 200 percent FPL (high take-up or low take-up) + exchange enrollees above 200 percent FPL + other nongroup. The nongroup market without BHP.
3. Exchange enrollees above 200 percent FPL + other nongroup. The nongroup market with BHP.

We then computed the premium and cost-sharing subsidies that BHP enrollees would have received had they been in the exchange for each combination of the two packages and two take-up scenarios. BHP payments are computed as 95 percent of these subsidies.

Estimating BHP Costs

BHP costs are based on observed Medicaid spending. In earlier research for OFM we estimated Medicaid costs for each individual on the WSPS using spending from the MEPS with enhancements from HIPSM and from Washington State administrative data.[21]

[20] Matthew Buettgens, Randall Bovbjerg, and Caitlin Carroll, Memorandum to Washington State Office of Financial Management, *Construction of the Augmented Washington State Population Survey (WSPS) Data Base* (June 2011).
[21] Buettgens et al., Memorandum to Washington State Office of Financial Management, *Construction of the Augmented Washington State Population Survey (WSPS) Data Base.*

Since the relative difference of Medicaid versus commercial spending is so important to estimating the cost-effectiveness of BHP, we performed an additional check. We again note that the difference in spending reflects more factors than payment rates. Total spending is the net of payment rates, utilization, and moral hazard. Holahan and Hadley estimated that, nationally, Medicaid expenditure is a little over 80 percent of comprehensive ESI expenditure.[22] However, the difference in payment rates between Washington and the nation as a whole should raise that percentage. The increase should not be the full difference in payment rates, due to utilization constraints and the efforts the state has made in pursuing managed care cost savings. We found that our previous estimates of Medicaid spending for BHP eligibles were about 90 percent of what would be spent on them in comprehensive ESI. We determined that no adjustment was necessary.

We constructed two different BHP cost-sharing scenarios. For Package A, we assigned 2 percent of cost sharing to the BHP enrollee and premiums at a constant $100. Package B has 6 percent cost sharing and premiums are set at 2 percent of MAGI. Note that in both scenarios, we took moral hazard into effect, recognizing that health care spending will decrease as out-of-pocket costs increase. These expenditure levels, inflated by 15 percent to account for the administrative load, equate to BHP costs. As noted earlier, this load may be a somewhat high estimate, since many Medicaid managed care plans operate at a lower load. However, BHP would have to deal with more churning in eligibility.

Conclusions

We find that a Basic Health Program would likely be feasible in Washington State, though a final determination must take into account federal regulations that had not been issued at the time of writing. A BHP under the ACA would cover about 100,000 lives, somewhat more with lower cost sharing and higher responsiveness to the individual mandate and somewhat fewer with higher cost sharing and lower responsiveness to the mandate. Were BHP to provide coverage at 98 percent actuarial value for a member premium of $100 per year, the resulting federal payments would exceed costs by $550 to $600 per beneficiary. This surplus could be used to reduce beneficiary cost sharing and/or raise reimbursement to providers. If the entire surplus were allocated to providers, reimbursement could be raised 11 to 12 percent above Medicaid rates and still cover costs. If, instead, BHP were provided at 94 percent actuarial value with premiums at 2 percent of family income—which would still be more affordable than subsidized exchange coverage—federal payments would exceed BHP costs by about $1,250 to $1,350 per beneficiary. Payments to providers could be raised up to 31 to 34 percent higher than Medicaid. Alternately, provider reimbursement could be raised to Medicaid plus 15 percent, while reducing cost sharing by an average of $600 per beneficiary. Exact projections for provider rates must wait for federal regulations on the exact computation of BHP payments, but our range of estimates shows that Washington should be able to adjust cost sharing in BHP so that provider rates are substantially higher than Medicaid.

[22] Jack Hadley and John Holahan, "Is Health Care Spending Higher under Medicaid or Private Insurance?" *Inquiry* 40(4): 323–42, Winter 2003/2004.

The nongroup market would be larger than it currently is under the ACA, even with a Basic Health Program. In particular, there would be nearly 250,000 covered lives in the exchange. That includes a significant number of those not eligible for subsidies who seek coverage in the nongroup market. Most of them are already in the nongroup market. A successful exchange would be a true marketplace for private insurance, not just a vehicle for delivering subsidized coverage. In addition, there would be a significant amount of coverage in the nongroup market outside the exchange.

A Basic Health Program would not cause noticeable adverse selection in the nongroup market. This contrasts with our nationwide estimates.[23] The difference is in the characteristics of those eligible for subsidies in the exchange and the share of those below 200 percent of poverty, as captured by the Washington State Population Survey. This survey has a substantially larger sample than the multi-year pooled Current Population Survey data used in the nationwide estimates, and should better represent the eligible population in Washington. In other states, a larger share of those eligible for BHP would be young and have relatively low health care costs relative to those remaining in the exchange. In Washington State, the difference is much less. For example, the uninsured between 138 and 200 percent FPL are older on average in Washington than nationally.

In addition to the forthcoming regulatory guidance, there are other sources of uncertainty in these estimates. Premium subsidies are based on the second-lowest plan offered at the 70 percent actuarial value level in the exchange. This plan could have a narrower network of providers than plans typically offer in the small business market, leading to somewhat lower premiums. If the second-lowest premiums were 5 to 10 percent lower than what we estimate, that would mean federal BHP payments would be 4 to 8 percent lower.[24] That would be enough to cancel out much of the potential increase in provider reimbursement with low BHP cost sharing, but with higher cost sharing, there would still be a significant surplus of payments over costs that could be used to increase provider reimbursement and lower cost sharing for consumers.

Another source of uncertainty is churning, people gaining or losing eligibility for BHP over time. The magnitude of such churning is significant.[25] Transitions in eligibility will likely affect enrollment and could change average costs, both for BHP and the exchange. It is difficult to find enough longitudinal data on Washington residents to accurately estimate the characteristics of those most likely to gain or lose BHP eligibility over the course of a year. Also, we cannot accurately model how churning would affect enrollment without more federal regulatory guidance. Such an analysis is outside the scope of this paper.

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[23] Dorn et al., *Using the Basic Health Program to Make Coverage More Affordable to Low-Income Households*.

[24] The payment difference is lower because BHP payments consist of cost sharing subsidies as well as premium subsidies. To achieve a much larger difference in premiums, a plan would have to reimburse providers at a substantially lower rate than other commercial insurers, assuming that risk adjustment in the individual market is effective. It would be much more difficult to negotiate such rates with providers than to limit plan networks.

[25] For a national analysis that takes into account the presence of affordable offers of employer-sponsored coverage, see Matthew Buettgens, Austin Nichols, and Stan Dorn, *Churning under the ACA and State Options for Mitigation*, (Washington, DC; The Urban Institute, forthcoming)

About the Authors

Matthew Buettgens, Ph.D., is a mathematician leading the development of the Urban Institute's Health Insurance Policy Simulation (HIPSM) model. The model is currently being used to provide technical assistance for health reform implementation in Massachusetts, Missouri, New York, Virginia, and Washington as well as to the federal government. His recent work includes a number of papers analyzing various aspects of national health insurance reform, both nationally and state-by-state. Topics have included the costs and savings of health reform for both federal and state governments, state-by-state analysis of changes in health insurance coverage and the remaining uninsured, the effect of reform on employers, the role of the individual mandate, the affordability of coverage under health insurance exchanges, and the implications of age rating for the affordability of coverage. Dr. Buettgens was previously a major developer of the HIRSM model—the predecessor to HIPSM—used in the design of the 2006 roadmap to universal health insurance coverage in the state of Massachusetts.

Caitlin Carroll is a research assistant on the HIPSM team. Her research concerns domestic health care and insurance. Her current research includes the Medicaid expansion, exchange costs, and the uninsured population, and she was involved in health reform implementation technical assistance for Washington, Massachusetts, and New York. Carroll received a bachelor's degree from Tufts University.