

The Basic Health Program in Utah

Using the American Community Survey 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 Utah under the rules defined in the Patient Protection and Affordable Care Act (ACA). Important findings include these:

- 55,000 Utahns would qualify for BHP; between 31,000 and 41,000 would likely enroll, if BHP is structured like the state's current CHIP program.
- We were able to break results out by substate areas. For example, we estimate BHP enrollment of 9,500 in western Salt Lake County and 6,100 in eastern Salt Lake County.
- For low-wage, working Utahns, BHP could substantially reduce the cost of health coverage and care, compared to the exchange with standard federal subsidies.
- With member cost sharing based on CHIP B, federal BHP payments would exceed state BHP costs by \$300 per member per year. With the higher cost sharing of CHIP C, they would exceed costs by \$1,100 per member.
- The surplus of federal payments over costs could be used to raise provider payments or lower member cost sharing. Applied entirely to provider reimbursement, the surplus could raise payments 8 percent over Medicaid levels if members receive CHIP B-level coverage or 27 percent if members receive coverage modeled after CHIP C.
- Even with BHP, the health insurance exchange in Utah would cover about 120,000 lives in the nongroup market, down from about 160,000 without BHP.
- BHP-eligible adults are slightly healthier, on average, than others projected to receive nongroup coverage under the ACA. Removing BHP adults from the exchange would thus increase nongroup premiums by less than 2 percent. That increase could be avoided by including BHP in the same risk-sharing systems that apply to nongroup plans.
- Administering Washington State's Basic Health program took up 4 percent of total costs when it was run as a separate state program. There may be opportunities under the ACA to reduce these costs by integration with Medicaid managed care and the exchange.

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Introduction

Under the Affordable Care Act (ACA), states have the option of establishing a Basic Health Program (BHP). Under a BHP, those with incomes below 200 percent of the federal poverty level (FPL) who are eligible for subsidized coverage in the health insurance exchange would instead be covered under a program designed and administered by the state. To fund the program, the federal government would pay the state 95 percent of the subsidies that those enrolled in BHP would have received in the exchange. The state would have flexibility in setting benefits and cost sharing, so long as benefits are not more limited and consumer costs are not higher than in the exchange.¹ A state could, for example, integrate BHP with its current Medicaid managed care plans, charging premiums and out-of-pocket cost-sharing for adults above 138 percent FPL modeled on the Children's Health Insurance Program (CHIP).

In this paper, we evaluate the size, composition, and feasibility of a BHP program in Utah. This analysis combines the large, representative population of Utahns in the American Community Survey (ACS) with the Health Insurance Policy Simulation Model (HIPSM).² HIPSM has previously been used to model BHP in several contexts: nationally,³ in New York,⁴ and in Washington State.⁵

Beneficiary Costs

One of the main reasons to consider a Basic Health Program is to improve the affordability of coverage for low-income families. We modeled two different levels of cost sharing for BHP, one based on Utah's current CHIP B and another based on CHIP C.⁶ Since these plans were originally designed for children, we had to modify them modestly to fit the overwhelmingly adult BHP population. For the plan based on CHIP B, we assumed a member premium of \$120 a year per adult. We modeled cost sharing with a \$40 individual deductible and 98 percent actuarial value. For the plan based on CHIP C, we assumed a member premium of \$300 a year per adult. We also assumed out-of-pocket cost-sharing levels like those charged by subsidized plans in the exchange, which could be lower than under the CHIP C cost sharing schedule (particularly the deductibles).

¹ Depending on how the federal government interprets the relevant section of the ACA, a BHP program might be allowed to impose slightly higher out-of-pocket cost-sharing than subsidized coverage would charge in the exchange. The rule stated in the text reflects the clear Congressional intent, but this issue will not be definitively resolved under HHS issues BHP guidance. See Colloquy between Senators Bingaman and Cantwell, U.S. Senate, Committee on Finance, Transcript, Executive Committee Meeting to Consider Health Care Reform, October 1, 2009. <http://finance.senate.gov/library/transcripts/download/?id=00243c7b-fd31-40c6-ad10-fa3d6c2285a5>

² For a description of the model and a bibliography of research using it, see The Urban Institute's Health Microsimulation Capabilities, <http://www.urban.org/uploadedpdf/412154-Health-Microsimulation-Capabilities.pdf>

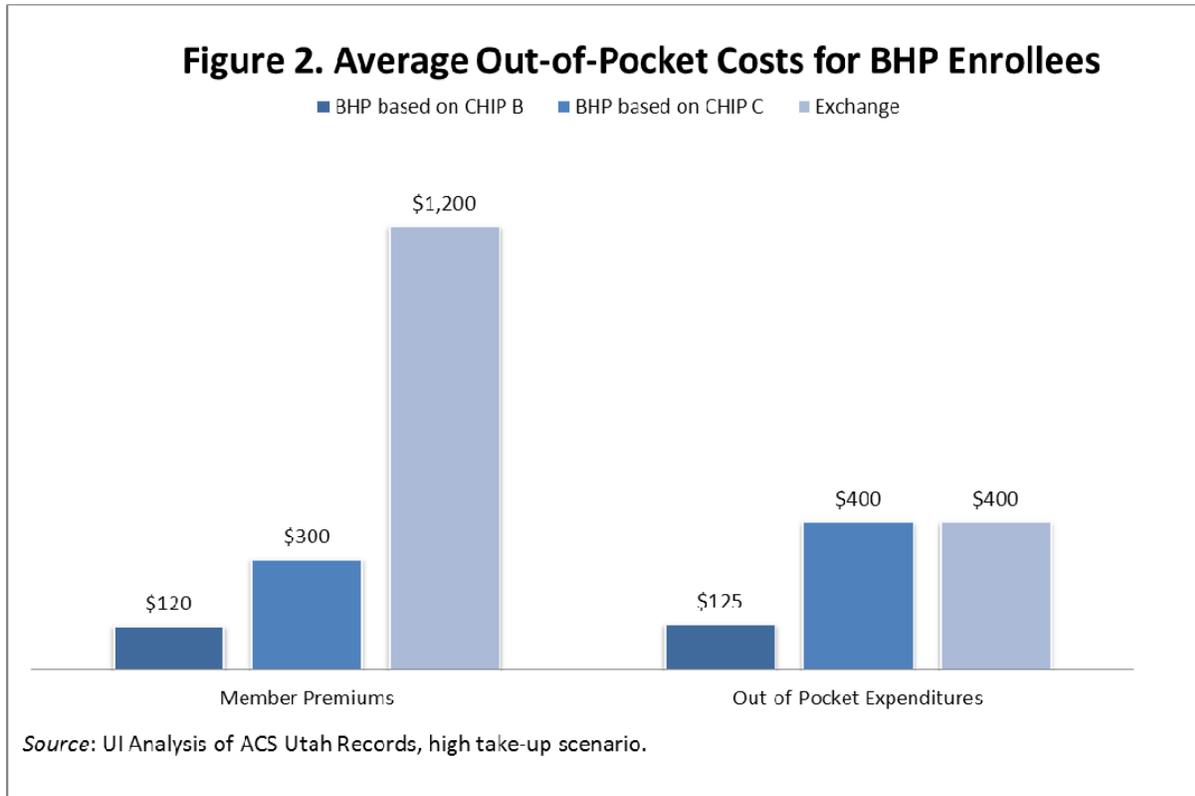
³ Stan Dorn, Matthew Buettgens, and Caitlin Carroll, "Using the Basic Health Program to Make Coverage More Affordable to Low-Income Households: A Promising Approach for Many States," Washington, DC: Urban Institute, 2011. http://www.urban.org/health_policy/url.cfm?ID=412412

⁴ Fredric Blavin, Linda J. Blumberg, Matthew Buettgens, Jeremy Roth, "The Coverage and Cost Effects of Implementation of the Affordable Care Act in New York State," Washington, DC: Urban Institute, 2012. http://www.urban.org/health_policy/url.cfm?ID=412534

⁵ Matthew Buettgens and Caitlin Carroll, "The ACA Basic Health Program in Washington," Washington, DC: Urban Institute, 2012. http://www.urban.org/health_policy/url.cfm?ID=412572

⁶ Pp. 21-26. CHIP Member Guide. <http://health.utah.gov/chip/Adobe%20PDF%20Files/CHIPmemberGuideEng.pdf>

The resulting costs to the beneficiary are summarized in figure 1. Under subsidized exchange coverage as defined in the ACA, Utahns with incomes at or below 200 percent FPL would be charged an average of \$1,200 in premiums and \$400 in out-of-pocket health care costs. This is much lower than the cost of unsubsidized coverage in the nongroup market, but it is still a significant amount for low-wage families. Both BHP plans offer coverage at far lower premiums than would have been available in the exchange. The package based on CHIP B would also notably reduce out-of-pocket health care expenditures.



As a final affordability effect, BHP would prevent low-income Utahns from incurring tax debts to the federal government. Subsidies in the exchange include Advance Payment of Tax Credits (APTC), which are based on projected household income. If annual income turns out to exceed projected levels, then APTCs will exceed the proper tax credit amount, and the taxpayer will owe the federal government some or all of the difference. Conversely, if income is lower than projected, and the taxpayer was eligible for a higher tax credit, the difference will be refunded. BHP enrollees are not subject to these potential consequences, since they do not receive APTCs. We were not able to model the effect this would have on exchange enrollment.

Eligibility and Enrollment

Statewide Eligibility

We estimate that almost 55,000 Utahns would be eligible for a Basic Health Program under the ACA (table 1). The vast majority would be citizens and lawfully present immigrants between 138 and 200 percent FPL who: (a) are ineligible for Medicaid and CHIP; and (b) are not offered affordable employer-sponsored insurance (ESI).⁷ In addition, BHP eligibility would include nearly 8,000 lawfully resident adult immigrants below 138 percent FPL who, without BHP, would have qualified for subsidies in the exchange; these adults are ineligible for Medicaid because of such factors as lawful residence for less than five years.

Table 1. BHP Eligibility and Enrollment in Utah, by Eligibility Category

	Eligible for BHP		Enrolled in BHP			
	N	%	Low Take-Up		High Take-Up	
			N	%	N	%
Total	54,638	100.0%	30,854	100.0%	41,092	100.0%
Subsidy Eligible, 138–200% FPL Lawfully Present Immigrants Below 138% FPL	46,883	85.8%	27,582	89.4%	35,668	86.8%
	7,756	14.2%	3,272	10.6%	5,424	13.2%

Source: UI Analysis of ACS Utah Records

Statewide Enrollment

Of the 55,000 Utahns who qualify for BHP, we estimate that between 31,000 and 41,000 would actually enroll. Enrollment rates would depend on four main factors:

- *The individual mandate.* 32,000 of those eligible for BHP would be currently uninsured (table 3). This population has a high likelihood of enrollment in BHP, but there is uncertainty as to the exact rate. Nearly all of those eligible for BHP would be above the tax filing threshold and would be subject to the individual mandate. Under the high take-up scenario, we assume that the mandate will have a strong effect on behavior, comparable to what was observed in Massachusetts. The differences in premiums and out-of-pocket cost sharing between the BHP plans based on CHIP B and CHIP C would have much less of a behavioral impact than different assumptions about the mandate, so the high take-up scenario applies to both BHP variants.⁸

Under the low take-up scenario, we assume a weaker but still significant mandate effect, which results in lower take-up. Under these assumptions, BHP take-up rates are comparable to those

⁷ The ACA denies subsidy eligibility to people offered ESI for which the worker’s share of single coverage costs no more than 9.5 percent of the family’s modified adjusted gross income.

⁸ Suggesting that Massachusetts’s experience could be relevant, cost sharing in Massachusetts’ Commonwealth Care program is somewhat higher than Utah’s CHIP B plan and lower than the CHIP C plan.

observed in past Medicaid expansions. In effect, BHP premiums' deterrence of enrollment and the mandate's spur to enrollment offset each other. Take-up would be lower still if there was general non-enforcement of the mandate or if popular opposition to the ACA in Utah made the mandate much less effective than it was in Massachusetts.⁹ Those same factors would lower take-up of subsidized coverage in the exchange, as would the risk of incurring federal tax debts, describe above.

- *The “no-wrong-door” interface.* A little less than 7,000 of BHP-eligible adults report having private nongroup coverage. These people will also likely take up BHP at a high rate. Not only will the cost sharing be considerably lower for BHP than for unsubsidized coverage in the nongroup market, the ACA establishes a unified no-wrong-door interface for the health insurance exchanges, Medicaid, CHIP, and (if implemented in a particular state) BHP. People who have incomes low enough to qualify for BHP and who currently receive private insurance are likely to apply for subsidies in the exchange, at which point they will be screened and qualified for BHP.
- *ESI crowd-out.* 16,000 of those eligible for BHP report having employer-sponsored coverage. Studies on ESI crowd-out focus on the choice between employer coverage and Medicaid. However, Medicaid, unlike BHP and subsidies in the exchange, does not limit eligibility based on ESI. Those covered by ESI who are nonetheless eligible for BHP fall into two groups, both of which are small and atypical in comparison to the state's ESI recipients as a whole. The first group consists of those with an employer offer of coverage that would be deemed unaffordable under the law because the worker's contribution for single coverage would exceed 9.5 percent of family MAGI. The second group, much larger than the first, consists of survey respondents who report ESI but are not offered such coverage directly or through an immediate family member. Such people may be covered under the policy of a worker not in the surveyed household, through a retiree's policy, through a former worker's COBRA coverage, or through a different type of coverage that the survey respondent incorrectly identified as ESI, such as nongroup coverage. For our high take-up scenario, we assume that crowd-out in these special circumstances would be at the high end of the range of estimates in the literature. Our low take-up scenario, on the other hand, assumes lower crowd-out levels consistent with the bulk of the literature, such as the often-cited study by Cutler and Gruber.¹⁰ Other useful surveys showing the range of crowd-out estimates are Glied¹¹ and Gruber.¹²
- *BHP premiums and out-of-pocket cost sharing.* Lower beneficiary costs will lead to higher take-up, so enrollment will be higher if BHP is based on CHIP B than on CHIP C. The individual mandate will narrow this difference, which will nonetheless remain significant if the mandate has a modest impact on behavior. With a strong mandate effect, the difference between CHIP B and CHIP C enrollment will be negligible.

⁹ Take-up might also fall if the hardship exemption to the mandate—the conditions of which HHS has not yet specified—were to apply to a large number of those eligible for BHP. However, in Massachusetts consumers who were completely exempt from the mandate's enforcement did not understand that exemption and so were likely to receive coverage. If most consumers are unaware of the precise details of the mandate's reach, the details of the hardship exemption may not have a significant impact on enrollment.

¹⁰ David M. Cutler and Jonathan Gruber, “Does public insurance crowd out private insurance?” *The Quarterly Journal of Economics*, 111: 391-430, 1996.

¹¹ Glied, Sherry, Dahlia Remler, and Joshua Graff Zivin. “Inside the Sausage Factory: Improving Estimates of the Effects of Health Insurance Expansion Proposals.” *Milbank Quarterly*. Volume 80, Number 4: 603-636, 2002.

¹² Gruber, Jonathan, and Kosali Simon. “Crowd-out 10 years later: Have recent public insurance expansions crowded out private health insurance?” *Journal of Health Economics* 27): 201-217, 2008.

Our high and low take-up scenarios combine high and low estimates for the effects of the individual mandate, ESI crowd-out, and cost sharing. The effect of the no-wrong-door interface is held constant, since it involves an automated process. Of the three factors that vary, the mandate effect makes the greatest difference.

Local eligibility and enrollment

Our underlying data contain enough observations that we can estimate BHP eligibility and enrollment in several localities within the state (table 2). For example, Eastern Salt Lake County contains about 17 percent of all nonelderly Utahns, 20 percent of those eligible for BHP, and 23 percent of those who would likely enroll in BHP under the high take-up scenario. Utah County shows a different trend, containing 20 percent of nonelderly Utahns and 15 percent of those likely to enroll in BHP. Figure 1 maps these regions, together with estimated BHP enrollment.

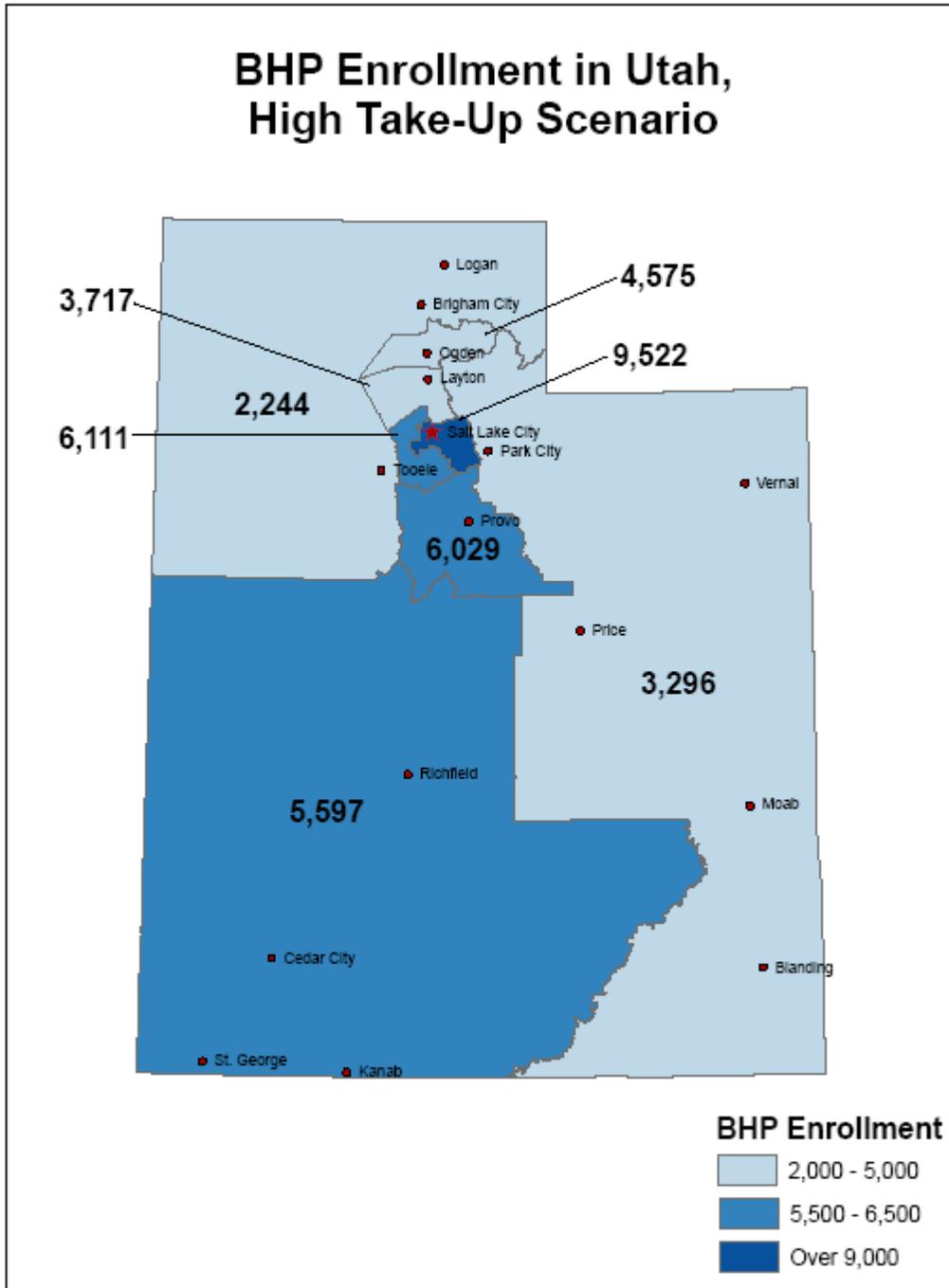
Table 2. BHP Enrollment and Eligibility by Region in Utah

	Nonelderly Population		Eligible for BHP		Enrolled in BHP ¹	
	N	%	N	%	N	%
Total	2,552,501	100.0%	54,638	100.0%	41,092	100.0%
Davis County	274,895	10.8%	4,067	7.4%	3,717	9.0%
Utah County	513,739	20.1%	7,971	14.6%	6,029	14.7%
Weber County	209,884	8.2%	5,615	10.3%	4,575	11.1%
Eastern Salt Lake County	426,375	16.7%	10,799	19.8%	9,522	23.2%
Western Salt Lake County	530,901	20.8%	9,325	17.1%	6,111	14.9%
Northwest Region (Contains Tooele/Logan)	208,751	8.2%	3,488	6.4%	2,244	5.5%
Eastern Region (Contains Park City/Moab)	157,397	6.2%	3,583	6.6%	3,296	8.0%
Southwest Region (Contains Cedar City/Richfield)	230,559	9.0%	9,790	17.9%	5,597	13.6%

Source: UI Analysis of ACS Utah Records

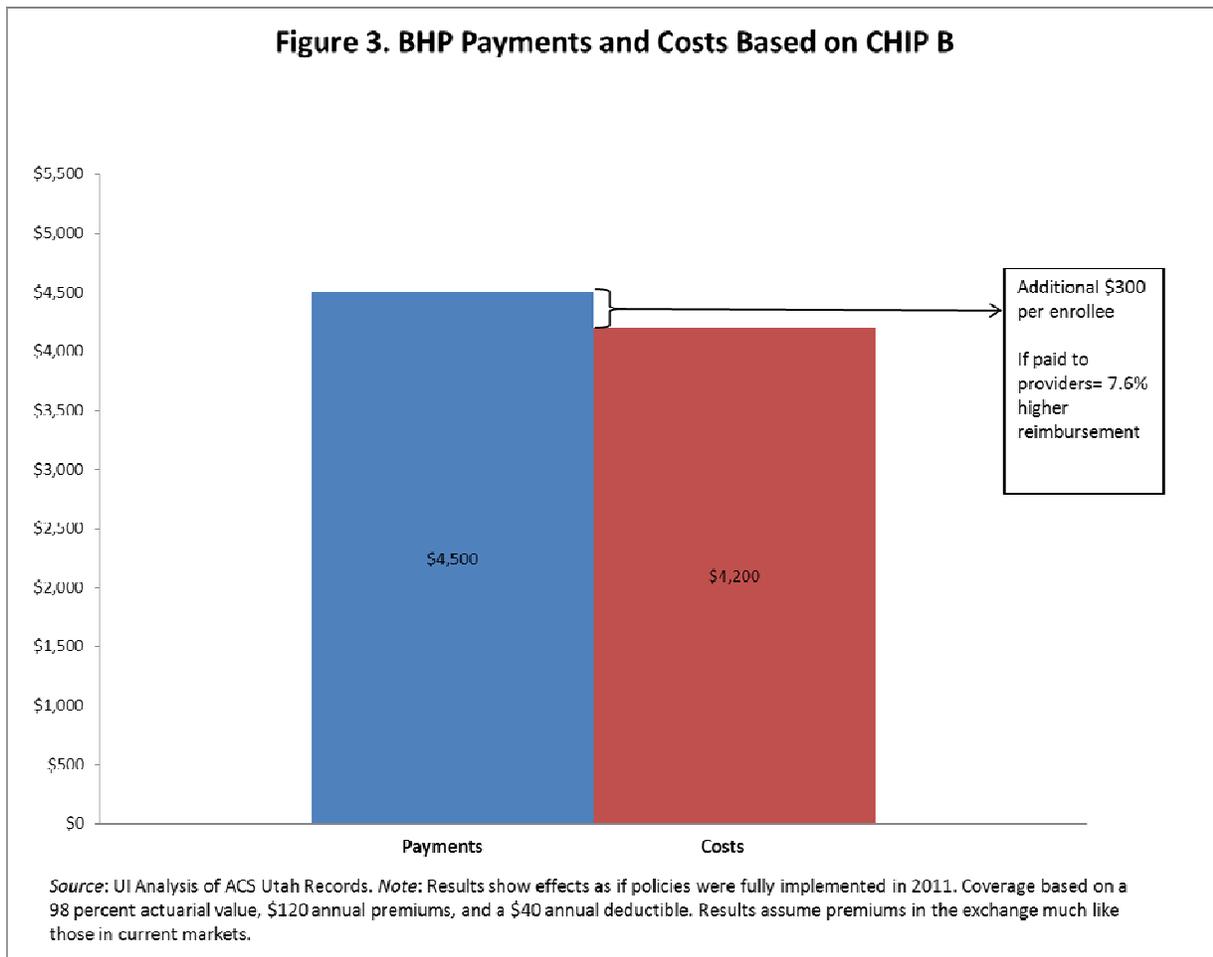
1. High take-up scenario

Figure 2



Federal Payments and State Costs

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.¹³ We estimate exchange subsidy amounts based on Utah’s current small group market, which could provide a benchmark for the state’s Essential Health Benefits package.¹⁴ We find that federal BHP payments would be \$4,500 per enrollee (figure 3). Payments for the high and low take-up scenarios are indistinguishable when rounded to the nearest \$50. If the second-lowest premium in the market were notably lower than current pricing in the small firm market,¹⁵ these federal payments would be lower, as the conclusion explains in more detail.



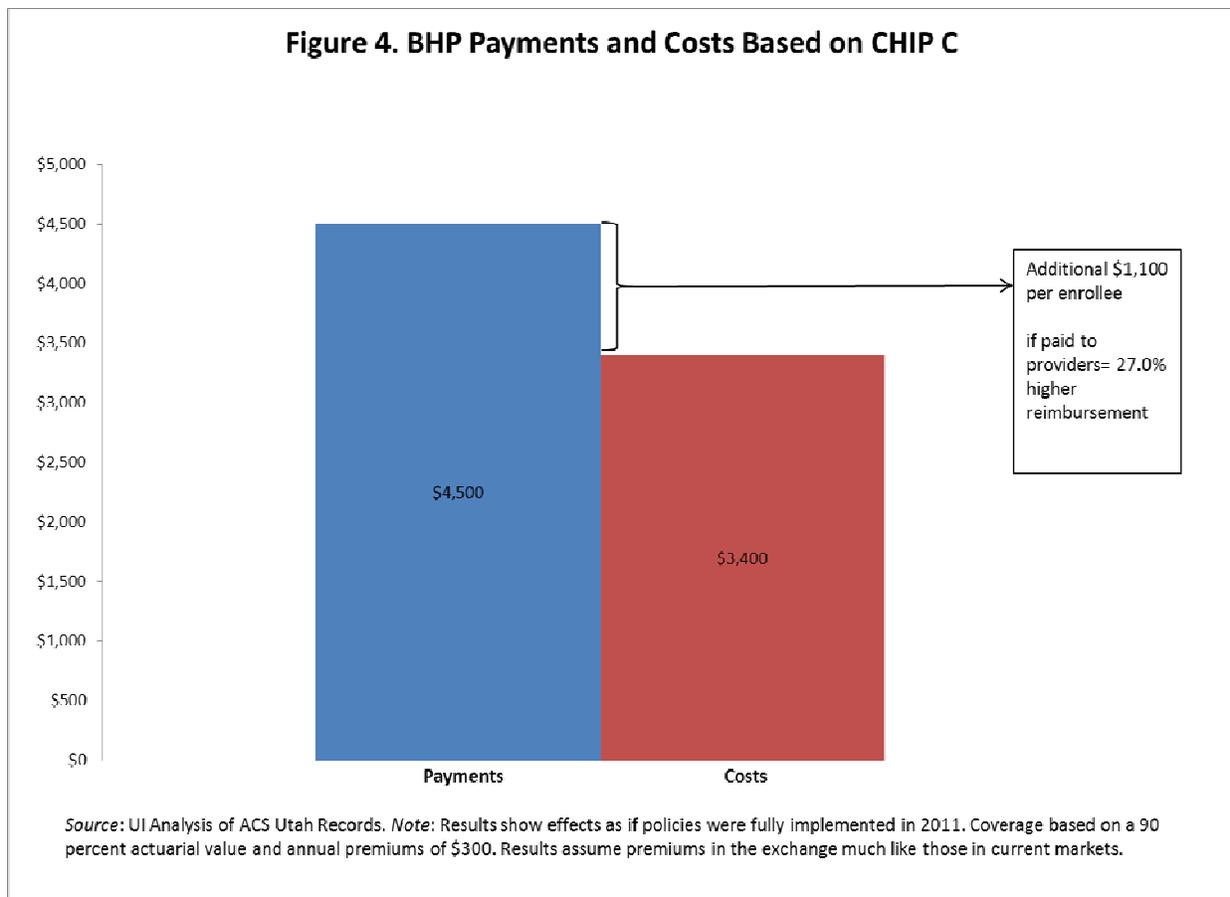
¹³ Depending on how the federal government interprets the law, payments could be slightly higher, combining 95 percent of premium subsidies and 100 percent of cost-sharing subsidies.

¹⁴ In estimating the risk pool for the exchange and the state’s overall nongroup market, we assumed the inclusion of BHP adults in the exchange’s risk pool. If instead we had excluded BHP adults, the risk level in the nongroup market would have risen by slightly less than 2 percent, as we explain later, so federal BHP payments would be slightly higher than what we show here.

¹⁵ Benchmark premiums could be lower than expected if plans offer much smaller provider networks than is typical in the current small-group market or for other reasons.

We then estimate the costs of covering people under two possible configurations of BHP—one modeled on CHIP B and the other on CHIP C. These cost estimates were set to reflect current spending on Medicaid enrollees in Utah (See Methods below). This spending was adjusted to reflect beneficiary cost sharing in the BHP plan, the demographic characteristics of BHP enrollees, and a 15 percent administrative load.¹⁶ We find that, with CHIP B-level coverage, BHP enrollees would cost about \$4,200 on average in both take-up scenarios (figure 3).

Hence, using the CHIP B model, federal payments would exceed BHP costs by about \$300 per enrollee under either high or low take-up scenarios. By law, federal BHP dollars must be spent within the BHP program. This excess could thus be used to lower beneficiary cost sharing and/or increase provider reimbursement. If the entire amount were devoted to provider reimbursement, such payments could increase over Medicaid levels by 7.6 percent.¹⁷



¹⁶ We realize that many Medicaid managed care plans have much lower administrative loads. However, if plans must track their enrollees’ changing income levels, administrative costs would rise. If BHP and Medicaid contracted with the same plans, and the state tracked changing household circumstances, plan administrative costs could fall below the 15 percent level we assume. As a result, the excess of federal BHP funds over baseline costs would rise above the amounts we show.

¹⁷ Provider reimbursement levels should not change the administrative load, except for the portion used to pay premium taxes, which are approximately 2 percent of premiums. The 7.6 percent increase in reimbursement was computed by adding the \$300 excess of payments to BHP costs minus 13 percent.

If the BHP package is based on CHIP C, the higher beneficiary cost sharing reduces state costs to \$3,400, on average (figure 4). This raises the excess of federal payments over baseline CHIP C costs to \$1,100 per beneficiary. If this were applied entirely to provider reimbursement, it could be raised 27 percent above Medicaid levels. Alternately, part of this surplus could be used to raise provider reimbursement and part to lower beneficiary cost sharing.

BHP and the Exchange

A common concern about BHP is the effect it could have on the health insurance exchange. Without BHP adults, the exchange would shrink, and the nongroup market’s risk pool would change. Are the remaining covered lives in the exchange enough to make it viable? Would BHP raise the exchange’s risk and premium levels? Figure 5 addresses these questions.

Implementing BHP would leave Utah with an exchange that is large enough for stability. Without a BHP, we estimate that about 200,000 Utahns would receive nongroup coverage, including about 160,000 in the exchange. With BHP, adults below 200 percent FPL would no longer be in the exchange, reducing the exchange’s nongroup enrollment to about 125,000 covered lives. The approximate number of subsidy recipients in the exchange would decline by 36 percent (from 110,000 to roughly 70,000),¹⁸ with additional covered lives in the exchange coming from unsubsidized individuals and small groups.

Such an exchange would be large enough for viability, even though adults with incomes below 200 percent FPL would receive coverage elsewhere. In Massachusetts, a state with more than twice Utah’s population, just 35,000 people now receive nongroup coverage through Commonwealth Choice, the state’s unsubsidized commercial exchange.¹⁹ Because of Massachusetts’s insurance reforms, Commonwealth Choice has remained stable since its 2006 creation. Similar reforms will likewise protect the stability of Utah’s exchange under the ACA.²⁰

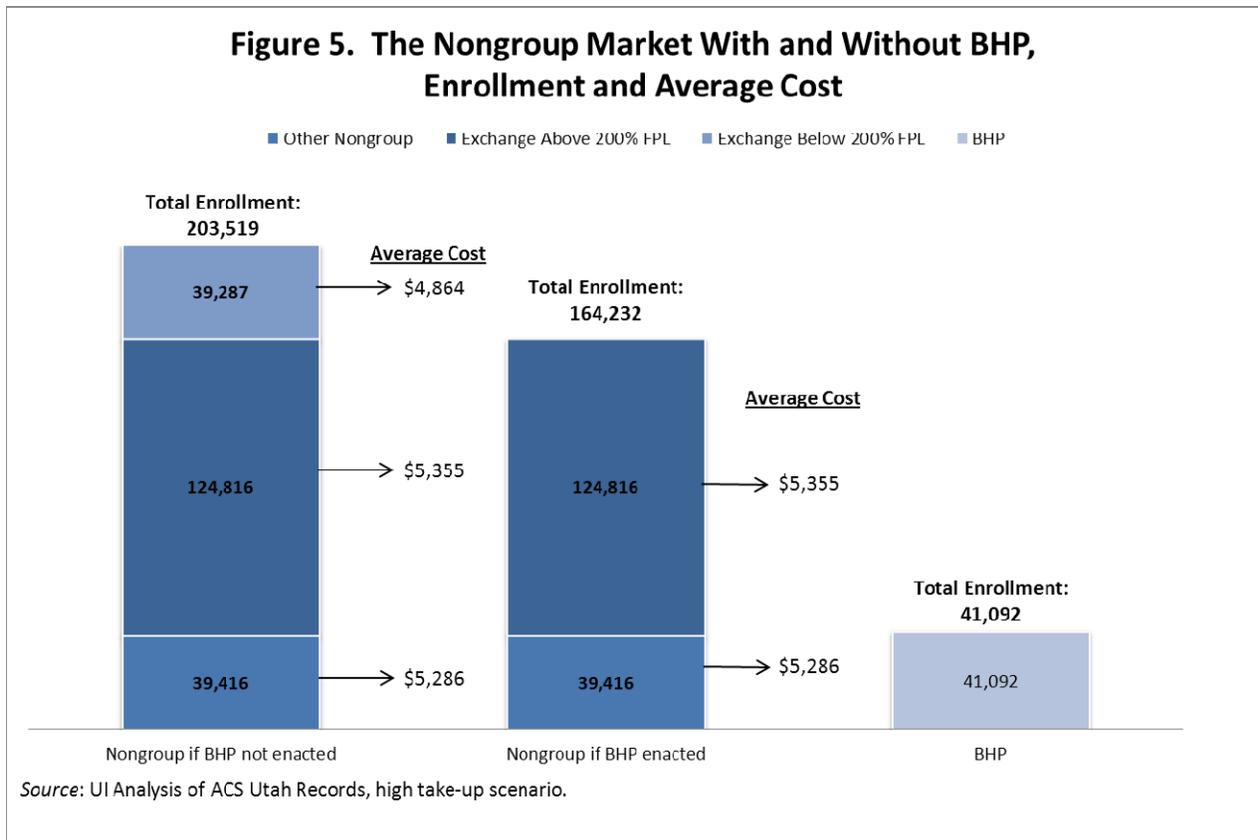
¹⁸ See table 4, below.

¹⁹ Standard, commercial insurers serve Commonwealth Choice. By contrast, Commonwealth Care, Massachusetts’s highly subsidized program for residents ineligible for Medicaid who have incomes at or below 300 percent FPL, relies almost entirely on Medicaid plans. The latter program covers an additional 90,000 people who pay no premiums and 100,000 who pay partial premiums on a sliding scale. Commonwealth Connector. Sept. 26, 2012. Monthly Health Connector Summary Report—September 2012.

<https://www.mahealthconnector.org/portal/binary/com.epicentric.contentmanagement.servlet.ContentDeliveryServlet/About%2520Us/Publications%2520and%2520Reports/2012/2012-10-11/3ConnectorSummaryReport.pdf>

²⁰ Because past exchanges were in states with market rules that varied premiums based on the risk level of a plan’s enrollees, healthy consumers abandoned the exchange for identical coverage they could buy outside the exchange for a much lower price. This left a higher cost population in the exchange, forcing higher premiums in the exchange, triggering an exodus of the healthiest remaining consumers, further raising premiums, etc. Such a death spiral is short-circuited by insurance reforms like those in Massachusetts and the ACA. These reforms seek to ensure that premiums charged by a particular plan (or set of plans offered in the exchange) reflect the average risk level of the nongroup market as a whole, not the unique cost of plan enrollees. Accordingly, exchange participants cannot find the same coverage available elsewhere for a much lower price; and if the exchange’s enrollees are less

Implementing BHP would not cause significant premium increases for the exchange’s nongroup market. As figure 5 shows, if the exchange includes adults below 200 percent FPL, their average cost (about \$4,900) would fall below that for the remaining nongroup market (about \$5,300). We consider BHP’s effects on the entire nongroup market, not just the exchange, since the ACA’s risk adjustments, reinsurance, and risk-pooling requirements seek to ensure that premiums, both inside and outside the exchange, reflect the average risk of all nongroup market enrollees. Removing from the exchange consumers below 200 percent FPL—who tend to be relatively healthy—will thus raise the average cost across the remaining nongroup market. However, this effect would be modest, increasing nongroup premiums, both within and outside the exchange, by less than 2 percent. This could be lessened or avoided if BHP enrollees are included in the same risk-sharing mechanisms that serve the nongroup market—that is, risk adjustment, reinsurance, and for licensed carriers that have BHP enrollees, pooling BHP with the carriers’ nongroup members.²¹



Administrative Costs to the State

When Washington State ran Basic Health as a separate program with no federal support—using a state agency, set of health plans, and purchasing arrangements that were completely distinct from

healthy than average for the nongroup market, risk-adjustment, reinsurance, and risk-pooling seek to lower exchange premiums to levels that reflect statewide risk.

²¹ As with many other issues, the feasibility of this approach depends on forthcoming HHS guidance.

Medicaid—administrative costs made up about 4 percent of total spending.²² Roughly eighty percent of these costs were consumed by employee salary and benefits, and most of the remainder involved information technology (IT).

Under the ACA, a Basic Health Program for Utah could incur much lower administrative costs. BHP could be closely integrated with the state’s Medicaid managed care administration, allowing joint procurement for Medicaid managed care and BHP plans. Also, the IT support needed for BHP eligibility determination would be built into the IT infrastructure—developed with more than 90 percent federal funding—for exchanges and the Medicaid expansion.²³

The funding of BHP administrative costs will depend on regulatory guidance from HHS. Some states have argued that they should be allowed to use some BHP dollars to cover reasonable administrative expenses without which BHP could not operate. With CHIP, for example, administrative costs can consume up to 10 percent of a state’s allotment.

Some states have discussed covering BHP administrative expenses by surcharging BHP-participating plans. These surcharges would comprise plan administrative expenses that, like other taxes and fees, could be paid by federal BHP dollars. Since these charges would need to cover only administrative expenses that are not already funded by Medicaid or the exchange, they could presumably be quite modest.

The Effect on Overall Insurance Coverage

Under the high take-up scenario, the Basic Health Program would have only a small effect on overall coverage levels, even though it could make coverage substantially more affordable for eligible families. This scenario’s assumption of a mandate effect comparable to what was observed in Massachusetts means that participation levels are very similar with BHP and exchange subsidies. As a result, BHP would increase the number of people with coverage by only a few thousand (figure 5). This difference would be larger, as suggested above, if the mandate’s effects are less than what was observed in Massachusetts. BHP’s impact on overall coverage levels could further increase above the levels we project because BHP avoids the risk of incurring federal tax debts, a factor that our model does not take into account.

This gain in coverage from the increased affordability of BHP will be partially offset by employer choices. BHP will be more attractive to eligible workers than subsidized exchange coverage, and if a firm has enough BHP-eligible workers, their decision to offer coverage could change. Simulation using our national model has confirmed that this effect exists, though only a very small share of employers would stop offering coverage due to BHP. It would, however, be enough to offset much of the small increase in coverage due to BHP if the individual mandate has a strong effect on behavior.

²² Data provided by Washington State Health Care Authority.

²³ Medicaid eligibility IT investments qualify for 90 percent federal match. Exchange IT investments are funded entirely by the federal government.

In summary, BHP would result in substantial gains in affordability. The extent to which it affects the overall number of uninsured Utahns will depend on the impact of the mandate on Utah residents and consumers' response to being spared the risk of incurring federal tax debts. However, regardless of how these latter factors play out, other provisions of the ACA would have a much larger impact than BHP on the number of uninsured.

BHP and State Medicaid Expansion Options

On June 28, 2012, the Supreme Court upheld the Affordable Care Act.²⁴ In doing so, however, the court ruled that states could choose not to expand Medicaid eligibility as stipulated under the ACA without losing federal funding for the populations traditionally covered.²⁵ Utah can thus opt out of the Medicaid expansion, limiting eligibility to current levels. Several states have expressed an interest in expanding Medicaid to 100 percent FPL, the minimum level for subsidized exchange coverage, rather than to the full 138 percent FPL threshold specified in the ACA. It is not yet clear, however, whether HHS will allow that lower income eligibility threshold and still permit states to claim the highly enhanced federal funding that the ACA makes available for newly eligible adults.

Under the ACA, BHP may not cover anyone below 138 percent FPL (except for legal immigrants who are ineligible for Medicaid because of such factors as residence for less than five years). In a BHP state with less than full Medicaid expansion, residents between 100 and 138 percent FPL would receive subsidies in the exchange; those between 138 percent and 200 percent FPL would qualify for BHP; and exchange subsidies would again become available for people between 200 and 400 percent FPL. Churning between various programs would be more complicated, and small changes in income could lead to very large changes in out-of-pocket health care expenditures for low-income families. Unless HHS goes beyond the statutory language to permit BHP to cover adults between 100 and 138 percent FPL, the ACA's Medicaid expansion seems like an essential precondition to reasonable BHP implementation.

Detailed Characteristics of Those Eligible and Enrolling

In the following tables, we present detailed characteristics of those we estimate would be eligible for and would likely enroll in BHP. Table 3 compares the populations eligible for BHP and exchange subsidies. Without BHP, the population below 200 percent of poverty would be eligible for subsidized coverage in the exchanges. Even though Utah's CHIP threshold is 200 percent FPL and eligibility would be based on MAGI under the ACA, a few children would fall into this group because current insurance coverage would disqualify them from CHIP. BHP enrollment among these children is negligible. Table 4 gives the characteristics of those who would actually enroll in BHP, under the high- and low take-up scenarios, or the exchange, under the high take-up scenario. Tables 5 and 6 show the joint distributions of age/gender, and age/health status for the BHP populations under the high and low take-up scenarios, respectively.

²⁴ *NFIB v. Sebelius*, 567 U.S. ____ (2012); No. 11–393. Argued March 26, 27, 28, 2012—Decided June 28, 2012, <http://www.supremecourt.gov/opinions/11pdf/11-393c3a2.pdf>.

²⁵ Ricardo Alonso-Zaldivar, Supreme Court Upholds Affordable Care Act—Health Care Law: 5-4 decision finds insurance overhaul, mandate mostly legal, *The News Tribune / Tacoma, WA*, June 29, 2012, <http://www.thenewstribune.com/2012/06/29/v-printerfriendly/2198749/ruling-constitutional-supreme.html>

Table 3. Characteristics of Subsidy-Eligible Utah Residents by Potential Qualification for BHP

	Potential Qualification for BHP					
	BHP Eligible		Not Eligible for BHP		All Subsidy Eligibles	
	N	%	N	%	N	%
Total Nonelderly	54,638	100.0%	139,581	100.0%	194,219	100.0%
Current Coverage						
<i>Medicaid</i>	0	0.0%	0	0.0%	0	0.0%
<i>Medicare</i>	0	0.0%	0	0.0%	0	0.0%
ESI	16,061	29.4%	43,786	31.4%	59,847	30.8%
NG	6,745	12.3%	30,686	22.0%	37,431	19.3%
Uninsured	31,832	58.3%	65,108	46.6%	96,941	49.9%
Health Status						
Excellent	22,186	40.6%	49,670	35.6%	71,856	37.0%
Very Good	16,058	29.4%	39,752	28.5%	55,811	28.7%
Good	10,977	20.1%	38,054	27.3%	49,031	25.2%
Fair	3,945	7.2%	9,859	7.1%	13,803	7.1%
Poor	1,472	2.7%	2,246	1.6%	3,718	1.9%
MAGI						
<i>Under 138% FPL</i>	7,756	14.2%	0	0.0%	7,756	4.0%
138% - 200% FPL	46,883	85.8%	0	0.0%	46,883	24.1%
200% - 300% FPL	0	0.0%	90,208	64.6%	90,208	46.4%
300% - 400% FPL	0	0.0%	49,373	35.4%	49,373	25.4%
400%+ FPL	0	0.0%	0	0.0%	0	0.0%
Age						
0 - 18	2,870	5.3%	42,509	30.5%	45,379	23.4%
19 - 24 years	12,712	23.3%	16,646	11.9%	29,358	15.1%
25 - 44 years	25,705	47.0%	42,803	30.7%	68,509	35.3%
45 - 64 years	13,351	24.4%	37,622	27.0%	50,973	26.2%
Race/Ethnicity						
White, Non-Hispanic	39,360	72.0%	121,570	87.1%	160,930	82.9%
Black, Non-Hispanic	475	0.9%	661	0.5%	1,136	0.6%
Hispanic	6,760	12.4%	12,441	8.9%	19,201	9.9%
Other ¹	8,043	14.7%	4,909	3.5%	12,952	6.7%
HIU Type²						
Single, No Dependent Children	20,392	37.3%	27,920	20.0%	48,312	24.9%
Single, With Dependent Children	2,299	4.2%	12,297	8.8%	14,596	7.5%
Married, No Dependent Children	8,419	15.4%	23,524	16.9%	31,942	16.4%
Married, With Dependent Children	22,061	40.4%	75,783	54.3%	97,844	50.4%
Kid Only	1,468	2.7%	56	0.0%	1,524	0.8%
Adult Nonelderly Population	51,768	100.0%	97,072	100.0%	148,840	100.0%
Employment Status³						
Unemployed/Not in Labor Force	17,864	34.5%	37,934	39.1%	55,798	37.5%
Employed - Unidentifiable Firm Size	7,614	14.7%	19,479	20.1%	27,093	18.2%
Small Firm (< 50 Employees)	13,587	26.2%	17,204	17.7%	30,791	20.7%
Medium Firm (50-500 Employees)	3,391	6.6%	6,585	6.8%	9,976	6.7%
Large Firm (500+ Employees)	9,312	18.0%	15,870	16.3%	25,182	16.9%
Chronic Condition Prevalences						
Angina	595	1.2%	724	0.7%	1,319	0.9%
Arthritis	4,506	8.7%	7,315	7.5%	11,821	7.9%
Asthma	3,784	7.3%	7,287	7.5%	11,071	7.4%
Coronary Heart Disease	852	1.6%	1,379	1.4%	2,231	1.5%
Diabetes	2,247	4.3%	1,863	1.9%	4,110	2.8%
Emphysema	219	0.4%	1,210	1.2%	1,429	1.0%
Heart Attack	636	1.2%	817	0.8%	1,453	1.0%
High Blood Pressure	5,972	11.5%	11,081	11.4%	17,053	11.5%
Other Heart Disease	1,882	3.6%	2,948	3.0%	4,830	3.2%
Stroke	807	1.6%	498	0.5%	1,305	0.9%

Source: UI Analysis of ACS Utah Records

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"

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

Note: Italicized and grayed font indicates a weighted sample of the entire subsidy population under 10,000

Table 4. Characteristics of Nonelderly, Nongroup Exchange Enrollees and BHP Enrollees in Utah								
	BHP				Nongroup Exchange		Other Nongroup	
	High Take-Up ¹		Low Take-Up ²		Below 200% FPL ³		Exchange ⁴	
	N	%	N	%	N	%	N	%
Total Nonelderly	41,092	100.0%	30,854	100.0%	39,287	100.0%	124,816	100.0%
Current Coverage								
Medicaid	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Medicare	0	0.0%	0	0.0%	0	0.0%	0	0.0%
ESI	6,128	14.9%	2,165	7.0%	3,949	10.1%	19,612	15.7%
NG	6,390	15.5%	6,390	20.7%	10,120	25.8%	69,902	56.0%
Uninsured	28,574	69.5%	22,300	72.3%	25,218	64.2%	35,302	28.3%
Health Status								
Excellent	18,858	45.9%	14,460	46.9%	19,366	49.3%	50,501	40.5%
Very Good	10,614	25.8%	7,788	25.2%	9,567	24.4%	35,704	28.6%
Good	7,814	19.0%	5,758	18.7%	6,889	17.5%	29,249	23.4%
Fair	2,892	7.0%	2,137	6.9%	2,539	6.5%	8,548	6.8%
Poor	914	2.2%	712	2.3%	927	2.4%	814	0.7%
MAGI								
Under 138% FPL	5,424	13.2%	3,272	10.6%	2,547	6.5%	0	0.0%
138% - 200% FPL	35,668	86.8%	27,582	89.4%	36,740	93.5%	0	0.0%
200% - 300% FPL	0	0.0%	0	0.0%	0	0.0%	49,092	39.3%
300% - 400% FPL	0	0.0%	0	0.0%	0	0.0%	21,745	17.4%
400%+ FPL	0	0.0%	0	0.0%	0	0.0%	53,980	43.2%
Age								
0 - 18	149	0.4%	70	0.2%	1,246	3.2%	37,970	30.4%
19 - 24 years	9,597	23.4%	5,514	17.9%	8,464	21.5%	15,290	12.2%
25 - 44 years	21,505	52.3%	17,177	55.7%	20,572	52.4%	35,982	28.8%
45 - 64 years	9,840	23.9%	8,094	26.2%	9,005	22.9%	35,574	28.5%
Race/Ethnicity								
White, Non-Hispanic	29,285	71.3%	21,914	71.0%	30,508	77.7%	113,648	91.1%
Black, Non-Hispanic	475	1.2%	270	0.9%	270	0.7%	1,370	1.1%
Hispanic	5,632	13.7%	5,041	16.3%	5,091	13.0%	4,914	3.9%
Other ⁴	5,700	13.9%	3,629	11.8%	3,419	8.7%	4,884	3.9%
HIU Type⁵								
Single, No Dependent Children	17,739	43.2%	12,668	41.1%	14,704	37.4%	16,712	13.4%
Single, With Dependent Children	1,987	4.8%	1,507	4.9%	1,622	4.1%	8,506	6.8%
Married, No Dependent Children	5,718	13.9%	4,701	15.2%	5,002	12.7%	21,772	17.4%
Married, With Dependent Children	15,647	38.1%	11,978	38.8%	17,050	43.4%	77,826	62.4%
Kid Only	0	0.0%	0	0.0%	909	2.3%	0	0.0%
Adult Nonelderly Population	40,943	100.0%	30,785	100.0%	38,041	100.0%	86,846	100.0%
Employment Status⁶								
Unemployed/Not in Labor Force	12,759	31.2%	10,906	35.4%	12,708	33.4%	26,372	30.4%
Employed - Unidentifiable Firm Size	6,244	15.2%	4,760	15.5%	5,680	14.9%	24,389	28.1%
Small Firm (< 50 Employees)	11,822	28.9%	9,047	29.4%	10,938	28.8%	15,931	18.3%
Medium Firm (50-500 Employees)	3,014	7.4%	1,653	5.4%	2,496	6.6%	6,839	7.9%
Large Firm (500+ Employees)	7,104	17.4%	4,418	14.4%	6,218	16.3%	13,314	15.3%
Chronic Condition Prevalences								
Angina	462	1.1%	354	1.2%	462	1.2%	402	0.5%
Arthritis	3,938	9.6%	3,380	11.0%	3,885	10.2%	8,181	9.4%
Asthma	3,542	8.7%	2,504	8.1%	3,040	8.0%	7,915	9.1%
Coronary Heart Disease	636	1.6%	529	1.7%	586	1.5%	1,152	1.3%
Diabetes	1,918	4.7%	1,473	4.8%	1,567	4.1%	2,871	3.3%
Emphysema	85	0.2%	85	0.3%	85	0.2%	938	1.1%
Heart Attack	420	1.0%	420	1.4%	482	1.3%	1,107	1.3%
High Blood Pressure	4,647	11.4%	3,084	10.0%	3,793	10.0%	11,344	13.1%
Other Heart Disease	1,615	3.9%	1,523	4.9%	1,013	2.7%	3,456	4.0%
Stroke	744	1.8%	340	1.1%	290	0.8%	651	0.7%

Source: UI Analysis of ACS Utah Records

1. High BHP take-up indicates that 30% of people with baseline ESI take-up BHP and 91% of the baseline uninsured take-up BHP.

2. Low BHP take-up indicates that 14% of people with baseline ESI take-up BHP and 70% of the baseline uninsured take-up BHP.

3. Estimates for nongroup exchange show high take-up scenario.

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

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

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

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

Note: Italicized and grayed font indicates a weighted sample of the entire subsidy population under 10,000

Table 5. Distribution of Nonelderly BHP Enrollees in Utah, High Take-Up Scenario

	Enrollment	%
Ages 19-24	9,597	100%
Gender		
Male	6,040	62.9%
Female	3,557	37.1%
Health Status		
Excellent/Very Good/Good Health	9,217	96.0%
Fair/Poor Health	380	4.0%
Ages 25-34	13,522	100%
Gender		
Male	9,113	67.4%
Female	4,409	32.6%
Health Status		
Excellent/Very Good/Good Health	12,630	93.4%
Fair/Poor Health	891	6.6%
Ages 35-44	7,984	100%
Gender		
Male	4,454	55.8%
Female	3,530	44.2%
Health Status		
Excellent/Very Good/Good Health	6,977	87.4%
Fair/Poor Health	1,007	12.6%
Ages 45-54	6,782	100%
Gender		
Male	3,488	51.4%
Female	3,294	48.6%
Health Status		
Excellent/Very Good/Good Health	5,822	85.8%
Fair/Poor Health	960	14.2%
Ages 55-64	3,058	100%
Gender		
Male	1,502	49.1%
Female	1,556	50.9%
Health Status		
Excellent/Very Good/Good Health	2,490	81.4%
Fair/Poor Health	568	18.6%

Source: UI Analysis of ACS Utah Records

Table 6. Distribution of Nonelderly BHP Enrollees in Utah, Low Take-Up Scenario

	Enrollment	%
Ages 19-24	5,514	100%
Gender		
Male	3,177	57.6%
Female	2,336	42.4%
Health Status		
Excellent/Very Good/Good Health	5,133	93.1%
Fair/Poor Health	380	6.9%
Ages 25-34	11,045	100%
Gender		
Male	7,176	65.0%
Female	3,869	35.0%
Health Status		
Excellent/Very Good/Good Health	10,248	92.8%
Fair/Poor Health	797	7.2%
Ages 35-44	6,132	100%
Gender		
Male	3,609	58.9%
Female	2,523	41.1%
Health Status		
Excellent/Very Good/Good Health	5,621	91.7%
Fair/Poor Health	511	8.3%
Ages 45-54	5,651	100%
Gender		
Male	2,789	49.4%
Female	2,862	50.6%
Health Status		
Excellent/Very Good/Good Health	5,059	89.5%
Fair/Poor Health	592	10.5%
Ages 55-64	2,443	100%
Gender		
Male	1,385	56.7%
Female	1,058	43.3%
Health Status		
Excellent/Very Good/Good Health	1,874	76.7%
Fair/Poor Health	568	23.3%

Source: UI Analysis of ACS Utah Records

Methods

Modeling a Basic Health Program is more complicated than modeling many other aspects of the ACA. First, it is necessary to start with a large enough sample so that detailed distributions remain reliable, even for the relatively narrow BHP eligibility range. Additionally, modeling BHP requires estimating cost information for both Medicaid and private coverage. It is especially important that these costs are correlated in a realistic way, given that federal BHP payments will be based on subsidized private coverage in the exchange, while costs will be based on current Medicaid spending levels. Eligibility for BHP requires knowledge of Medicaid and CHIP eligibility, and whether or not there are offers of coverage from an employer in a family. Then, the decision of whether or not an eligible person would actually enroll in BHP must be simulated. The rest of this section describes this process in detail.

Demographics and Eligibility for BHP, Medicaid, and Subsidized Exchange Coverage

Our basic demographics and health care coverage data are from the American Community Survey (ACS). The large sample size of the survey allows us to examine the Utah population in the relatively narrow income eligibility range for BHP. In addition, we have augmented the survey by imputing unavailable characteristics such as Medicaid eligibility, employer offers of coverage, and immigration status which are critical to predicting insurance choices under the ACA. The American Community Survey is an annual survey fielded by the United States Census Bureau. We use an augmented version of the ACS prepared by the University of Minnesota Population Center, known as the Integrated Public Use Microdata Sample (IPUMS), which uses the public use sample of the ACS and contains edits for family relationships and other variables.²⁶ The 2009 ACS has a reported household response rate of 98.0 percent (U.S. Census Bureau 2009). The survey uses an area frame that includes households with and without telephones (landline or cellular). It is a mixed-mode survey that starts with a mail-back questionnaire—52.7 percent of the civilian non-institutionalized sample was completed by mail—and is followed by telephone interviews for initial non-responders, and further followed by in-person interviews for a sub-sample of remaining non-responders. The estimates presented here are derived from the data collected about civilian non-institutionalized Utahns.²⁷

In order to determine Basic Health Program eligibility, we must also determine eligibility for Medicaid and exchange subsidies under the ACA. We simulate eligibility for Medicaid/CHIP and subsidies using the 2009 ACS, available information on the regulations for implementing the ACA, and available information on the 2010 Medicaid/CHIP eligibility guidelines.²⁸ Broadly, our model initially simulates being newly Medicaid eligible or for those with disabilities, being eligible under the pre-ACA rules used

²⁶ Ruggles S., T.J. Alexander, K. Genadek, R. Goeken, M. Schroeder, and M. Sobek.. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis, MN: University of Minnesota. 2010

²⁷ This includes nonelderly people living in private residences as well as students in dorms and a small number of other people living in group quarters, such as outpatient treatment facilities.

²⁸ Kaiser survey 2010

in 2010. For those not initially found eligible for Medicaid our model then simulates CHIP eligibility, maintenance of effort (MOE) eligibility, and then subsidy eligibility.

New Medicaid eligibility depends on having family income less than 138 percent of the federal poverty level (FPL) and subsidy eligibility depends on having family income between 138 percent and 400 percent FPL. Under the ACA, income eligibility is based on the IRS tax definition of modified adjusted gross income (MAGI), which includes the following types of income for everyone who is not a tax-dependent child: wages, business income, retirement income, investment income, alimony, unemployment compensation, and financial and educational assistance. The ACS only indirectly asks about unemployment compensation, alimony, financial assistance and educational assistance when it asks about other income and because unemployment compensation appears to affect our results and other income includes any other sources of income, we model it, using demographic characteristics and educational attainment. MAGI also includes the income of any dependent children²⁹ required to file taxes, which for 2009 is wage income greater than \$5,700 and investment income greater than \$950. To compute family income as a ratio of the poverty level³⁰, we sum the person-level MAGI across the tax unit. For ACA eligibility, the tax unit includes parents and their dependent children and married people regardless of whether they file separately. Because the ACS interviews college students away at school during the school year, we put some sample college student in families.³¹ The ACA also stipulates that Medicaid eligibility be determined using current rules for those with disabilities and those who are Medicaid eligible under current law but not under the new rules, and for current income eligibility we use state rules for 2010. State rules include income thresholds for the appropriate family³² size, asset tests, parent/family status, and the amount and extent of disregards³³ for Utah, in place as of the middle of 2010.

Subsidy and Medicaid eligibility, under current and new rules, also depend on immigration status. Current and new rules require that enrollees be citizens or legal immigrants. However because the ACS does not contain sufficient information to determine whether an individual is an authorized immigrant, we impute documentation status for non-citizens based on a model used in the CPS-ASEC. Documentation status is imputed to immigrant adults in two stages using individual and family characteristics, based on an imputation methodology that was originally developed by Passel.³⁴ The

²⁹ We use the IRS definition of dependent child except that the ACS does not allow us to identify children residing in other households: people living with their parents if they are unmarried and less than age 19, or less than age 23 and in school.

³⁰ Poverty ratio defined using Health and Human Services guidelines.

³¹ College students living apart from parents and remaining after we attempt to put them back with families are restricted from being eligible unless they also have Medicaid/CHIP reported.

³² Family-level characteristics used in determining eligibility, such as income, are based on the family groupings that states define during the eligibility determination process or that would apply for private coverage together, known as the health insurance unit (HIU). Indicators of family characteristics in this paper refer to this unit.

³³ The model takes into account disregards for childcare expenses, work expenses, and earnings in determining eligibility, but does not take into account child support disregards because data on such amounts was not available.

³⁴ Passel, J. and D. Cohen. *A Portrait of Unauthorized Immigrants in the United States*. Washington, DC: Pew Hispanic Center. 2009.

approach is designed to produce imputations that match, in the aggregate, published summary estimates of the U.S. undocumented population, nationally and in California, Florida, New York, New Jersey, Illinois, and Texas. In some states, immigrant eligibility under current rules also depends on how long an immigrant has been in the country so we also determine immigration eligibility using state rules and ACS information about citizenship and date of immigration.

Subsidy eligibility depends on whether the family was offered affordable health insurance benefits so we impute it because the ACS does not ask about insurance offer or the value of the contribution towards the cost of the insurance premium among those with ESI. We impute offer status using the same methodology as the standard HIPSM model.³⁵

To get values for the cost of employees' contributions to their insurance premium, we use the results from simulating the impact of the ACA in the CPS to do a statistical match based on industry group and wage level. We impute a value for individual coverage to everyone with an offer because the cost of the individual contribution is what is used to determine affordable offer, even for families.

Once we have all the components required for eligibility simulation, we simulate eligibility for adults and children for the eligibility pathways listed below which correspond roughly to the order in which caseworkers or state eligibility-determination software currently check for eligibility.³⁶

Those eligible for the Basic Health Program are legally-resident persons not eligible for any form of public coverage with family (tax unit) MAGI below 200 percent FPL who do not have an affordable offer of coverage from an employer in their family, as defined in the ACA. The large majority of these have incomes above the ACA Medicaid eligibility threshold of 138 percent FPL, but legal immigrant adults resident less than five years below this threshold would also be eligible (if they do not have affordable employer offers), since they are not eligible for Medicaid.

Health Care Costs, Particularly for the Newly Insured

Cost data are based on three years of the Medical Expenditure Panel Survey-Household Component (MEPS-HC). The MEPS-HC is a survey of individuals and families, employers, and medical providers across the United States that provides information about health care expenditures and health insurance coverage. There are two major components of MEPS. The Household Component collects data from individuals, families, and their health care providers, while the Insurance Component collects information on employer-based insurance from employers. To ensure an adequate sample size, we use three years of the MEPS-HC pooled together.

We reconcile MEPS-HC expenditures to be consistent with the National Health Accounts (NHA) Personal Healthcare Expenditures data, which are maintained by federal actuaries. According to Sing et al.,

³⁵ 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>.

³⁶ The model assigns eligibility type hierarchically, and cases are classified by the first pathway for which they are eligible. For instance, if an SSI recipient gets classified as eligible through the SSI pathway, they would be classified as eligible through disability-related coverage even if they also meet the qualifications for Section 1931 coverage.

compared to the NHA, MEPS routinely underestimates the aggregate insured costs associated with Medicaid and privately insured individuals.³⁷ In adjusting expenditures, we follow the methodology developed in the cited research.

To adjust for any MEPS underreporting of the high-cost tail of the health expenditure distribution, we looked to the Society of Actuaries (SOA) High-Cost Claims Database. This comprehensive survey examined seven insurers and all of their claimants. It is designed to be representative of the national distribution of all claims to private insurers. We found that the 97th to 99th percentiles of private expenditures among the nonelderly in the MEPS data fell below the same percentiles in the SOA. The discrepancy ranged from less than 1 percent (97th percentile) to 13 percent (99th percentile). We used these discrepancies as adjustment factors for all privately insured individuals with private expenditures above the 97th percentile. In order to keep total health expenditures consistent with the NHA totals following the SOA adjustment of the tail of the distribution, we decreased the private expenditures of the privately insured individuals in the lower portion of the distribution by a fixed percentage.

The same individual will incur different levels of health expenditures when insured differently (e.g., employer coverage versus Medicaid, or Medicaid versus uninsured). This is because out-of-pocket costs and costs covered by insurance will vary depending upon plan cost-sharing requirements (e.g., deductibles, copayments, out-of-pocket maximums) and benefits covered, effectively altering the price an individual will face when consuming medical care. The higher the out-of-pocket price faced, the less the individual is apt to consume. Thus, in order to understand the value of care an individual will obtain under various coverage options pre-and post-ACA, we compute health care spending for each observation under several alternate statuses of health coverage: uninsured, insured by Medicaid/CHIP, insured under a typical comprehensive ESI package, and insured under a typical nongroup (individual) package. For the uninsured, we divide total spending into out-of-pocket and uncompensated care. For the other statuses, we divide spending into insured expenses and out-of-pocket costs.

Each of our CPS observations is either insured or uninsured in the baseline. For the uninsured, expenditures in their uninsured state are obtained from the MEPS-HC, as was described above, but we need to estimate what they would spend if insured (an alternate status that may occur under reform). Conversely, we need to know what the insured would spend if they were uninsured. To simulate spending under insurance (and, conversely, under no insurance), we estimated two-part models using MEPS-HC data. For example, consider an uninsured person:

³⁷ M. Sing, J. S. Banthin, T. M. Selden, C. A. Cowan, and S. P. Keehan, "Reconciling Medical Expenditure Estimates from the MEPS and NHEA, 2002," *Health Care Financing Review* 28 (Fall 2006): 25–40. Also, T. M. Selden and M. Sing, "Aligning the Medical Expenditure Panel Survey to Aggregate U.S. Benchmarks," Agency for Healthcare Research and Quality, Working Paper No. 08006, July 2008, http://gold.ahrq.gov/projectsearch/staff_summary.jsp?project=IM05209, accessed June 28, 2010.

- Step 1: Estimating the probability of having any health expenditures.
 - *Probability of having any expenditures if privately insured* is computed using a sample of the privately insured and controlling for an array of socio-demographic characteristics, health status, and chronic health conditions.
 - *Probability of having any expenditures if enrolled in Medicaid* is estimated similarly, but using a sample of those reporting Medicaid coverage.
 - *Uninsured individuals are deemed to have expenditures or not in the case of being privately insured or enrolled in Medicaid* by comparing the probabilities computed to a random number from a uniform distribution.
- Step 2: For those deemed to have expenditures if insured in step 1, the change in total expenditures after gaining coverage is estimated.
 - *Expenditures if gaining private coverage* are computed using a sample of the privately insured incurring health care expenses and controlling for an array of socio-demographic characteristics, health status, and chronic health conditions.
 - *Expenditures if gaining Medicaid coverage* are computed similarly, but using a sample of those with Medicaid coverage.

We impute expenditures if uninsured and if enrolled in Medicaid for those with private coverage, and we impute expenditures if uninsured and if privately insured for Medicaid enrollees. (Similar work in the past has helped UI estimate the costs of uninsurance in many states and nationally, and what savings would occur after health coverage reform.³⁸)

At this point, each individual in the file has been assigned health expenditures consistent with having private coverage. These total health expenditures, however, are reflective of the particular benefit package that the matched MEPS individual had at the time of the survey. For example, if two identical people were given two different health insurance policies, one with a high deductible and one with a low deductible, the person with the low deductible would have total health expenditures that were higher than would the one with the high deductible. Higher out-of-pocket liability lowers the expected spending (an effect referred to as moral hazard). To remove as much of the benefit package effect on total spending as possible, we standardize spending to be consistent with a typical benefit package for the large and small firm ESI markets based on data from the 2011 Kaiser Health Research and Educational Trust and MEPS-IC. We simulate the effect of the Essential Health Benefits standard on the individual market by basing current costs on those for the small group ESI market. At the time of

³⁸ The first of these path-breaking reports helped provide cost estimates for the debate that led to the Massachusetts health reform. John Holahan, Randall R. Bovbjerg, and Jack Hadley, *Caring for the Uninsured in Massachusetts: What Does it Cost, Who Pays and What Would Full Coverage Add to Medical Spending?* (Boston, MA: Blue Cross Blue Shield of Massachusetts Foundation, November 16, 2004), <http://bluecrossfoundation.org/Policy-and-Research/Initiatives/Roadmap-to-Coverage.aspx> and <http://www.urban.org/url.cfm?ID=1000981>.

writing, two states—California and Washington—had enacted EHB legislation, choosing a small firm plan as the benchmark. Each individual has his or her private health expenditures adjusted so that he or she has a calculated level of health expenditures consistent with each of the defined typical benefit packages.³⁹ Induction factors provided by actuaries are used to incorporate a behavioral response for those individuals/families who would have different levels of out-of-pocket spending under the standardized policies than they are assumed to have had at the time of the MEPS. Those with decreases in out-of-pocket expenses are presumed to respond by increasing use and total expenditures, while those with increases in out-of-pocket expenses are presumed to decrease use and total expenditures. High spenders (those observed to have high medical needs) will respond less to changes in out-of-pocket expenses than will those who are lower in the spending distribution. Once such packages are created, they are modified to achieve a given actuarial value (i.e., the average share of spending on covered benefits paid for by the insurer). This includes the precious metal tiers in the small group and individual markets, as well as the computation of cost sharing subsidies in the exchange for those eligible.

To verify the resulting costs, we compared them with information about private insurance premiums offered by firms of various sizes in the Medical Expenditure Panel Survey-Insurance Component (MEPS-IC). We also examined Medicaid data available through the Medicaid Statistical Information System (MSIS). Finally, since the relationship between private and public insured costs is very important for modeling BHP, we made sure the results were consistent with relevant research.⁴⁰

Health Status and Chronic Condition Indicators

Self-reported health status and indicator variables for chronic conditions were also statistically matched on to the ACS records for Utah from the MEPS-HC in the same way that health care costs were matched on. The resulting chronic condition indicators were compared with Behavioral Risk Factor Surveillance System data for the general population and for current Medicaid enrollees provided by the state to verify the results.

Imputation of BHP and Exchange Take-up

The decisions to take up BHP or exchange coverage made by families on the Utah ACS data are based on the behavior of similar individuals and families in the Health Insurance Policy Simulation Model (HIPSM).⁴¹ HIPSM is a microsimulation model designed to estimate consequences of health policy changes for health insurance coverage and health care costs. In HIPSM, the choice of whether or not to enroll in a plan 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

³⁹ Our computation of moral hazard throughout the model is based on analysis by Actuarial Research Corporation.

⁴⁰ Jack Hadley and John Holahan, "Is health care spending higher under Medicaid or private insurance," *Inquiry* 40: 323-342 (Winter 2003/2004).

⁴¹ For an overview of the model's capabilities and a bibliography of research using it, see "The Urban Institute's Health Microsimulation Capabilities." <http://www.urban.org/uploadedpdf/412154-Health-Microsimulation-Capabilities.pdf>

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.⁴²

In order to predict take-up of nongroup exchange coverage, we again used a regression-based imputation to predict ACA level enrollment onto the Utah data 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 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 baseline coverage type. We calibrated overall nongroup take-up levels by income, baseline coverage, and exchange subsidy eligibility to approximate our full HIPSM results. We applied a 21 percent take-up rate to those with baseline ESI and an 81 percent take-up rate for the baseline uninsured. The take-up rate of those with baseline nongroup coverage is 96 percent; take-up among Medicaid-ineligible legal immigrants below 138 percent FPL is 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. We used a probit model, restricting to BHP eligibles. We included the same covariates as in the nongroup exchange take-up model. 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 14 percent to 30 percent in the low and high take-up scenarios, respectively, while take-up within the baseline uninsured population moves from 70 percent to 91 percent. Take-up within the population of Medicaid-ineligible legal immigrants below 138 percent FPL is about 42 percent with low take-up and 70 percent with high take-up (table 9).

⁴² Buettgens, *HIPSM Methodology*.

Table 7. Take-Up Rates for Each Health Coverage Option and Scenario

Insurance Product	Mandate effect	Take-up rate		
		Current ESI	Current nongroup	Current Uninsured
BHP	High	30%	98%	91%
	Low	14%	98%	70%
Exchange <200%	High	21%	96%	81%

Estimating Health Care Costs in the Exchange and BHP Payments

We imputed health care spending under typical employer-sponsored insurance (ESI) and nongroup plans to all Utah observations as described above. We then adjusted the resulting levels of spending to be consistent with Utah ESI premiums from the MEPS-IC. We focused on ESI not only because the MEPS-IC provides a reliable, representative history of ESI premiums, but, also, because most states that have taken action on an Essential Health Benefits package have chosen a benchmark plan currently in the small group market. We computed ESI premiums from those reporting ESI coverage, 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 to be covered by large firm ESI, and added an appropriate administrative load. 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 (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 + 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.⁴³

Estimating BHP Costs

BHP costs are based on observed Medicaid spending, as noted above. We constructed two different BHP cost-sharing scenarios. The first was based on Utah’s CHIP B. Beneficiary premiums are \$120 annually. There is a \$40 deductible. We assumed an actuarial value of about 98 percent. The second was based on Utah’s CHIP C. Premiums are \$300 a year. Under the ACA, cost sharing in BHP cannot be larger than what it would have been under subsidized coverage in the health insurance exchanges. CHIP C has a \$500 deductible, in addition to copays on various services. The resulting cost sharing may be higher than under the ACA cost sharing subsidies, so we used exchange cost sharing subsidy levels instead.

Note that in both scenarios, we took moral hazard into account, recognizing that health care spending will decrease as out-of-pocket costs increase. These expenditure levels, inflated by 15 percent to account for the carrier’s 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. Also, see the discussion on administrative costs to the state above.

Conclusions

One important goal of a Basic Health Program would be, without requiring any state funding, to provide coverage to low-income Utahns that is more affordable than federally-defined subsidized coverage in the ACA’s health insurance exchanges. BHP would give the state flexibility in designing benefits and cost sharing for residents with incomes at or below 200 percent FPL, so long as the BHP covers all Essential Health Benefits and does not cost the beneficiary more than federally subsidized exchange coverage.

In addition, earlier research using national data has estimated that if the BHP used Medicaid plans to cover residents up to 200 percent FPL, the number of people forced to move each year between Medicaid plans and the exchange would decline by 16 percent.⁴⁴ And BHP would shield Utah residents under 200 percent FPL from the risk of incurring federal tax debts if their annual income turns out to exceed projected amounts.

We find that such a program appears feasible for Utah, assuming that the federal government provides guidance that facilitates an approach to BHP like that described here. Coverage would be provided to between 34,000 and 41,000 people, most of whom are currently uninsured. Federal BHP payments would allow low-income Utah residents to receive coverage based on the state’s longstanding CHIP B or

⁴³ Some have interpreted the law as basing payments on 95 percent of premium subsidies and 100 percent of cost sharing subsidies.

⁴⁴ Matthew Buettgens, Austin Nichols, and Stan Dorn, *Churning under the ACA and State Options for Mitigation*, Washington, DC: The Urban Institute, 2012.

CHIP C policies, with provider payments above Medicaid levels or lower beneficiary cost sharing. If the entire excess of federal payment over baseline BHP costs were applied to provider reimbursement, such payments could be raised 6 to 8 percent above Medicaid levels with CHIP B-type coverage or 22 to 26 percent with coverage based on CHIP C.

State administrative costs must also be considered. Based on the experience of Washington State, running a BHP program separately from both Medicaid and the exchange could consume about 4 percent of total costs. However, through jointly procuring BHP and Medicaid coverage and using the same eligibility determination mechanisms that will apply to Medicaid and subsidies in the exchange, the state could likely reduce administrative costs significantly below 4 percent. Depending on how HHS interprets the statute, viable mechanisms could fund these costs without calling upon state dollars.

Due to the demographic and economic characteristics of Utahns, we estimate that most nongroup enrollment in the exchange without BHP would take place among those above 200 percent FPL, so the introduction of BHP would reduce the total size of the nongroup exchange by about 25 percent. Even the number of subsidized enrollees would fall by just 36 percent. This is a significantly lower reduction than would occur in many other states. The nongroup exchange would still cover about 125,000 lives with BHP—large enough for stability and viability.

BHP would lead to a modest increase in risk levels in the nongroup market, raising premiums by less than 2 percent both inside and outside of the exchange. However, Utah could potentially lessen or eliminate this effect by including BHP enrollees in the same risk-sharing mechanisms that apply in the nongroup market.

There are several important sources of uncertainty about BHP. The chief one is that HHS has not issued any regulatory guidance regarding the program. Issues to be resolved through guidance include the exact method for computing federal BHP payments, the interaction between BHP and risk adjustment, funding of BHP administrative costs, and the interaction between BHP and premium subsidy reconciliation.

Another source of uncertainty involves the implementation of Utah's exchange. Premium subsidies are based on the second-lowest plan offered at the 70 percent actuarial value level in the exchange. Depending on how the exchange is administered, this plan could have different premiums than those charged by typical small group or HMO plans in today's Utah markets. For example, if several plans with significantly narrower networks than are typical of current plans enter the exchange, premiums, tax credits, and BHP payments would be lower than what we estimate here. On the other hand, if premiums in the exchange exceed the levels that typify Utah's current small group markets, federal BHP payments would be larger than what we estimate.

About the Authors

Matthew Buettgens, Ph.D., is a mathematician leading the development of the Urban Institute's Health Insurance Policy Simulation (HIPSIM) 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 HIPSIM—used in the design of the 2006 roadmap to universal health insurance coverage in the state of Massachusetts.

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