

# Healthcare Reform and the Basic Health Program Option

Modeling Financial Feasibility



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This paper discusses the feasibility for states to offer some of their residents coverage through a Basic Health Program (BHP), as provided for in the Patient Protection and Affordable Care Act (PPACA) of 2010. We've developed a model that will help the states and other stakeholders understand the financial implications of the BHP, with the primary goal of feasibility modeling to estimate the financial risk and potential benefits for a state.

The underlying question is whether a given state would be well advised to offer a BHP for individuals and families whose incomes are relatively low, but not low enough to be eligible for Medicaid. In the absence of a BHP, such low-income people could purchase subsidized healthcare insurance through an American Health Benefit Exchange (exchange), but likely at a higher premium and with higher point-of-service cost sharing than through a BHP.

Under the PPACA, states have the option of offering or not offering a BHP. States are understandably concerned about the risk factors involved in developing a BHP. Our model, described in this paper, demonstrates how to calculate the risk and make an informed decision.

## WHAT BHP DOES

Effective January 1, 2014, states will be permitted to offer a BHP to certain uninsured individuals in lieu of those individuals' receiving federal subsidies to purchase healthcare coverage in the exchanges. To be eligible for participating in a BHP, individuals must meet the following criteria:

- They must not be eligible for Medicaid.
- They must be under 65 years old at the beginning of the plan year (and therefore not eligible for Medicare).
- Their income must fall between 133% and 200% of the federal poverty level (FPL) for U.S. citizens, or below 133% for legal aliens.

- If they have access to employer-sponsored insurance (ESI), it does not provide minimum essential coverage as determined by PPACA statute, or the plan offered is not affordable (in terms of a percentage of employee's income).

Note that 133% of FPL is the cutoff point for Medicaid.<sup>1</sup> Thus, the BHP resembles an extension of Medicaid, designed for individuals and families with relatively low incomes, but not low enough to qualify for Medicaid. In this respect, it is similar to expansion programs already existing in some states. States that already provide such an outreach or expansion of coverage may implement a BHP as a replacement for the existing programs and realize significant savings. Because the same may be true if replacing these existing programs with exchange participation, this analysis focuses on the comparison between the exchange and a BHP for these low-income people.

The PPACA specifies statutory requirements for a BHP:

- The plan must cover at least the minimum essential benefits defined in the PPACA.
- Member premiums cannot exceed the premium of the second-lowest-cost silver tier plan in the exchange (adjusted for any premium credits).
- For persons with incomes between 133% and 150% of FPL, cost sharing cannot exceed that of the platinum level (10%); for persons earning 151%–200%, cost sharing cannot exceed that of the gold level (20%).

<sup>1</sup> In practice, the cutoff point for Medicaid eligibility is 138% of FPL because of the 5% "disregard" factor; i.e., Medicaid disregards the first 5% of one's income before calculating the proportion to FPL.

### WHAT IS THE SECOND-LOWEST-COST SILVER TIER PLAN?

The PPACA provides for commercial healthcare insurers to offer plans through the state exchanges that fall into four tiers, or categories, according to the level of benefits they provide and the costs of the plans. The bronze tier pays 60% of coverage costs; the silver, 70%; the gold, 80%; and the platinum, 90%.

With multiple carriers offering plans, there will likely be various premium costs within each tier. Thus, within the silver tier, Company W might offer the lowest premium cost, Company X the second-lowest, Company Y the second-highest, and Company Z the highest. In this case, federal subsidies to the state's BHP would be tied to the cost of Company X's premiums.

### FINANCIAL IMPLICATIONS FOR STAKEHOLDERS

States, the federal government, and the potential members of a BHP (persons who might either join a BHP or receive healthcare coverage through an exchange) have differing perspectives regarding the BHP option.

#### States' financial risk perspective

Estimating a state's financial risk involves calculating the cost of a BHP and subtracting (a) funds to be received from the federal government in premium credits and cost-sharing subsidies and (b) any amounts the state intends to charge plan members through premiums and cost sharing. The net result of that is the state's cost, or financial risk.

The risk will vary state to state, depending on numerous dynamics, some of them involving demography and other factors specific to the state's population. State officials must weigh all of the financial variables, as well as qualitative factors, in deciding whether to offer a BHP. The alternative is to assume that those low-income persons who would qualify for the BHP will instead find their healthcare solutions through the exchange.

#### Federal perspective

As incentives for states to offer a BHP, the federal government will provide for the states:

- 95% of the premium credits that would otherwise go to individuals for enrolling in the exchange
- The cost-sharing subsidy that would otherwise go to the members in the exchange

By definition, the BHP will cost the federal government less per individual than the exchange because it will pay 95% of the premium credits, as opposed to 100%. However, if participation in the two programs differs from what is anticipated (e.g., higher enrollment in the BHP than what would be expected in the exchange) the federal government might realize an aggregate cost increase rather than a savings. If that occurs, it is possible that Washington, D.C. might adjust its subsidies to the states to reflect the level of expenditures that would have been expected in an exchange.

### Member perspective

BHP members may pay a premium to be decided by the state, with a statutory maximum at the same level they would pay in the exchange. The statute sets the maximum at 3% of their income for persons earning 133%–150% of FPL, and up to 6.3% of income for those earning 151%–200% of FPL.

In addition to the up-front member premium, members may also have to pay a point-of-service cost-sharing component. For the exchanges, this amount varies between 6% and 13% of the allowed cost, again depending on a member's income.

Exactly how the BHP payment schedules will work out in practice is yet to be determined, but it seems likely that the states will set the combination of the premium and cost sharing for BHP at less than, or equal to, those of the exchange. It is also noteworthy that if a state establishes a BHP, those eligible for the program are not allowed to enroll in the exchange alternative. While this will likely result in a better value for the enrollees, it may create limitations in health plan choice compared to the exchange.

### Modeling the state's balancing act

Modeling the financial ramifications of the BHP requires balancing the sources of funds and the uses of funds. The sources of funds coming to the state include premium credits from the federal government, cost-sharing subsidies from the federal government, member premiums, and member cost sharing. The state uses these funds for:

- Service costs of BHP coverage
- A risk charge, which allows the state to add in some uncertainty or volatility and allows officials to be confident that they're going to hit their target
- Administrative costs
- (If there is a surplus) additional benefits for members and/or higher payments to providers

Stating this differently, the basic formula for analyzing the finances of a BHP for a state is:

$$\text{State surplus or deficit} = \text{federal subsidies} - \text{BHP state costs (net of member components)}$$

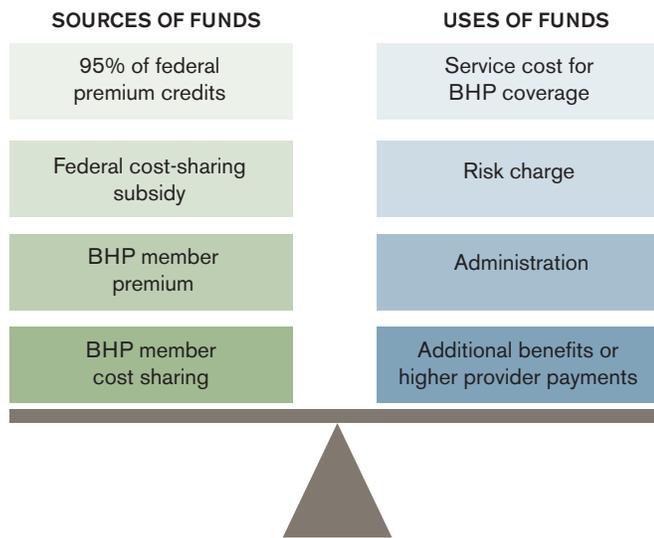
in which:

$$\text{Federal subsidies} = 95\% \text{ of exchange premium credits}^2 + \text{exchange cost-sharing subsidy}^3$$

and:

$$\text{BHP state costs} = \text{BHP allowed}^4 - \text{member premiums} - \text{member cost sharing}$$

**FIGURE 1: ILLUSTRATES THIS BALANCE.**



States will naturally want to collect enough funds from the federal government to cover the net BHP costs; if the program does not meet this target, the state has a deficit and must cover it with its own funds. If the state has a surplus (collects more funds than it pays out), it can decide what to do with the excess as long as it uses the funds within the BHP. For example, the state can raise member benefits, reduce the premiums or cost sharing that members pay, or reimburse healthcare providers at higher rates.<sup>5</sup>

Given that the PPACA sets statutory limits for members' premiums and cost sharing, our model demonstrates that there are scenarios in which a state can feasibly offer a BHP within those limits.

**MODELING EXAMPLE**

Let's turn to some numbers we have calculated to see how one might model BHP feasibility for a state.

**Running the numbers**

Our model first estimated income levels for 2014, the year in which the BHP becomes active; for this, we used projections of changes in CPI and compared them to estimates calculated by the Congressional Budget Office. Then, the model projected the costs of the BHP; we assumed that the costs will be in some relation to Medicaid costs, and to derive those figures we used data from the Massachusetts Commonwealth Care and Commonwealth Choice programs.<sup>6</sup>

To project the subsidies, we projected what the second-lowest-cost silver tier plan will cost. Then we determined a level of member premium. For this exercise, we decided *not* to include member cost sharing in order to show a BHP that is particularly beneficial for the members—their only out-of-pocket cost would be the premium. (In other modeling exercises, we would include a cost-sharing amount.<sup>7</sup>) Finally, we assumed an administrative component of 15%.

Tables 1–3 illustrate the financials of a hypothetical Basic Health Program as we have calculated them.

Table 1 shows how we calculated federal subsidies for the BHP. The second and third columns represent the low end (133% FPL) and high end (200% FPL) of the income levels for eligible BHP members. (FPL is assumed to be \$11,275.) The fourth column simply assumes an average (mean) of the highest and lowest income levels.

In a real modeling situation, we would also factor in data about the distribution of a state's population. We have omitted this factor in the present example because it will vary significantly from state to state. Instead, we are showing the financial outcome per person at the lowest, highest, and average income levels.

**TABLE 1**

LINE	CALCULATION OF FEDERAL SUBSIDIES	133% FPL	200% FPL	AVERAGE
1	MEMBER INCOME IN 2014	\$15,000	\$23,000	\$19,000
2	MAXIMUM MEMBER PREMIUM (% OF INCOME)	3.0%	6.3%	5.0%
3	MAXIMUM MEMBER PREMIUM (LINE 1 TIMES LINE 2)	\$450	\$1,450	\$950
4	2ND-LOWEST-COST SILVER PREMIUM IN 2014 (PER MEMBER PER YEAR)	\$6,500	\$6,500	\$6,500
5	FEDERAL EXCHANGE PREMIUM CREDITS (LINE 4 MINUS LINE 3)	\$6,050	\$5,050	\$5,550
6	95% OF FEDERAL EXCHANGE PREMIUM CREDITS (LINE 5 TIMES 95%)	\$5,750	\$4,800	\$5,275
7	ADMINISTRATIVE EXPENSE COMPONENT	15.0%	15.0%	15.0%
8	PERCENTAGE PLAN IS RESPONSIBLE FOR	94.0%	87.0%	90.6%
9	COST-SHARING REDUCTION [(LINE 4) * (1-LINE7) * (LINE 8 / 70% -1)]	\$1,900	\$1,350	\$1,625
10	TOTAL FEDERAL SUBSIDIES (LINE 6 PLUS LINE 9)	\$7,650	\$6,150	\$6,900

2 Exchange premium credits = second-lowest-cost silver tier premium – maximum premium based on % of income.  
 3 Exchange cost-sharing subsidy = second-lowest-cost silver tier premium × (1-X) × (Y/70%-1), where X is the administrative expense component and Y is 94% for income levels of 133%–150% of FPL and 87% for 151–200% of FPL.  
 4 BHP allowed is the total covered benefit cost, including claims and administrative costs.  
 5 Paying higher reimbursements to providers is obviously something the latter would welcome, since the assumption is that states will generally pay fees that are lower than the providers' commercial fees.  
 6 Under the existing Massachusetts healthcare program, Commonwealth Choice is our proxy of a commercial exchange as mandated by the PPACA, and Commonwealth Care is our proxy of a BHP. Because there is no existing American Health Benefit Exchange or BHP, we used the Massachusetts equivalents as a proxy for estimating costs.  
 7 When we do factor in member cost sharing, we limit the amount to the maximum allowable amounts, which are 10% of the platinum tier levels for incomes between 133% and 150% of FPL, and 20% of the gold tier levels for incomes of 151%–200%.

TABLE 2

LINE	CALCULATION OF BHP STATE COST	133% FPL	200% FPL	AVERAGE
1	BHP COST IN 2014 (PER MEMBER PER YEAR)	\$6,500	\$6,500	\$6,500
2	MEMBER INCOME IN 2014	\$15,000	\$23,000	\$19,000
3	MAXIMUM MEMBER PREMIUM (% OF INCOME)	3.0%	6.3%	5.0%
4	MAXIMUM MEMBER PREMIUM (LINE 2 TIMES LINE 3)	\$450	\$1,450	\$950
5	MEMBER COST-SHARING AMOUNT	\$0	\$0	\$0
6	TOTAL BHP STATE COST (LINE 1 MINUS LINE 4 MINUS LINE 5)	\$6,050	\$5,050	\$5,550

Table 2 calculates the cost of the BHP to the state. We have used Commonwealth Care data to estimate the BHP costs, premiums, and net cost. The maximum premium figures correspond to members' income levels (3.0% for 133%–150% of FPL and 6.3% for 151%–200%). It should be noted that while the administrative cost component of the exchange plans is assumed to be 15%, historical experience for the Commonwealth Care plan and other similar programs such as the Washington State Basic Health Program operate at much lower levels of health plan administration. These administrative cost savings are typical when comparing Medicaid managed care programs to Commercial products.

TABLE 3

CALCULATION OF BASIC HEALTH PLAN SURPLUS OR DEFICIT			
	133% FPL	200% FPL	AVERAGE
FEDERAL SUBSIDIES	\$7,650	\$6,150	\$6,900
BHP STATE COST	\$6,050	\$5,050	\$5,550
TOTAL SURPLUS	\$1,600	\$1,100	\$1,350

Table 3 calculates the total surplus or deficit by comparing the total federal subsidies with the total state cost. In this case, based on real data from the Massachusetts experience, the result is a surplus for the hypothetical state of this model. Actual feasibility depends on how a particular state defines it, but the present example demonstrates a strong case for the feasibility of a BHP.

**Finding the break-even point**

State officials will naturally want to know the approximate point at which incoming funds will equal the costs of a Basic Health Program. Figure 2 charts the range of our best estimates, given the assumptions and data we have been using.

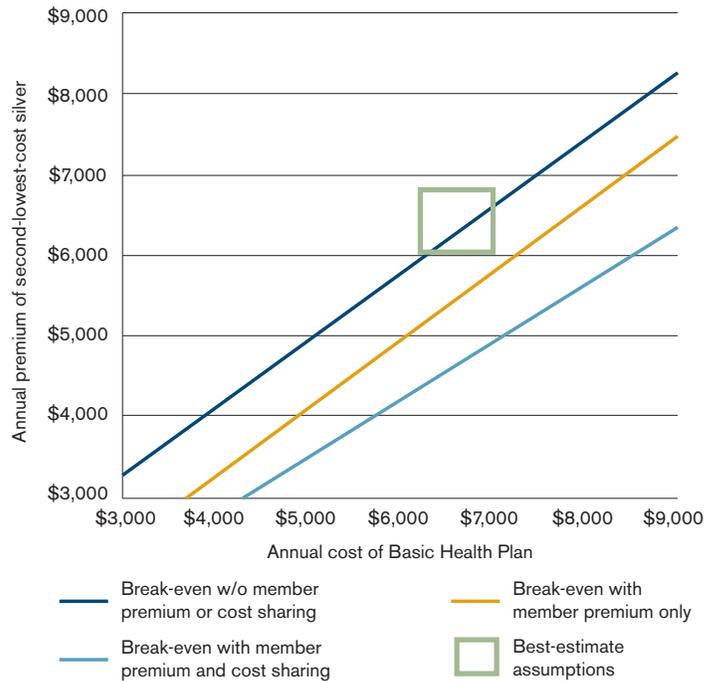
The vertical axis represents the cost of premiums in the exchange (second-lowest-cost silver tier), which determines how much the federal government will pay in premium credits and cost-sharing subsidies. The horizontal axis represents the cost of the BHP. The three diagonal lines reflect the break-even points at different levels of members' out-of-pocket costs: with a premium and cost sharing (bottom line), with only a premium (middle line), and with neither a premium nor cost sharing (upper line). These lines reflect the fact that each state has the option to charge, or not charge, premiums and cost sharing to the member. In each case, the area above the line represents a surplus for the state, and the area below the line represents a deficit.

The box shows the range of our best estimates for these two primary assumptions. Our best estimate is that, in the case of no member premium or cost sharing, the state has a more or less equal probability of surplus or deficit. The likelihood of a surplus increases as the state introduces member premium and/or cost sharing.

The key assumptions behind the results in Figure 2 are:

- The Massachusetts experience suggests that BHP-allowed cost and the second-lowest-cost silver plan premium should be comparable. This means that the cost of a Medicaid-like full benefit is comparable to the premium cost of a commercial-market product.
- Member premiums and cost sharing can vary between zero and the legal maximum amounts. Within those ranges, a state can set member costs to fit its risk tolerance.

FIGURE 2: BREAK-EVEN ASSUMPTIONS FOR THE YEAR 2014



**Modeling issues**

Our model, like all models, carries some caveats. The first is that state demographics vary substantially. We cannot be certain that the Massachusetts Commonwealth Care population, on whom we base some of our assumptions, appropriately reflects the populations of other states' future Basic Health Programs.

A second caveat concerns the interpretation of certain points in the healthcare reform legislation. The BHP provision has not yet been implemented through rules, and therefore we have had to interpret some of the actionable details ourselves. To the extent that our interpretations are not accurate, the results of the model could change.

Thus, there are several significant unknowns or variables, including:

- What will be the cost of the exchange premium (second-lowest-cost silver tier)?
- What will the BHP-allowed costs be?
- Will federal subsidies be 95% of premium credits and 100% of cost sharing or 95% of both?
- Will federal subsidies be adjusted according to participation, or will they be strictly based on the enrollees in the BHP?
- What will the actual trend levels be for commercial programs and Medicaid costs?

Finally, the structure and health plan participation in the exchange will significantly impact this comparative analysis. Results from general modeling or models for another state may be inappropriate for drawing conclusions with modifications to reflect the specifics of each state's unique characteristics.

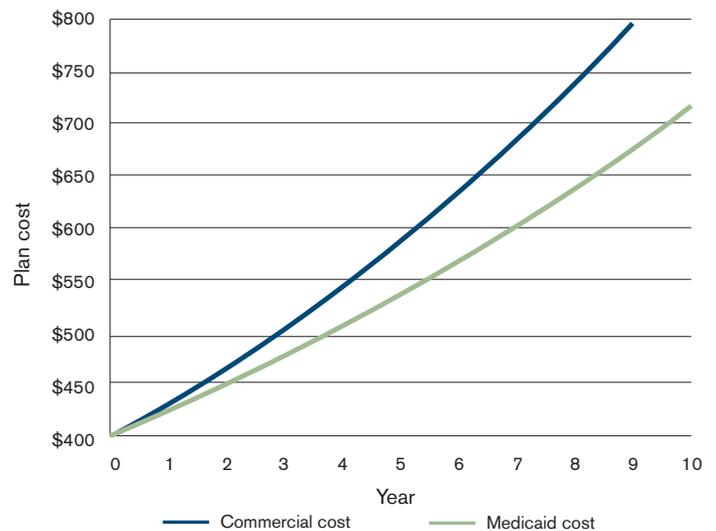
**IS IT WORTH THE RISK?**

As we have seen, states have a range of options for setting member costs that allow for achieving BHP feasibility. Another factor worth considering is the likelihood that the cost of BHPs will become more favorable over time. The reason is that the federal subsidies paid to states are based on the commercial silver-tier plan cost, whereas BHP costs are likely to parallel increases in Medicaid costs. Past experience indicates that commercial costs grow at a faster pace than Medicaid costs.

We've assumed that Medicaid costs will grow at a rate of 6% per year, based on actuarial projections made by the Centers for Medicare and Medicaid Services (CMS), and that commercial-market costs will grow at a rate of 8%, based on the Milliman Health Cost Index. Given these assumptions, as commercial cost increases outpace those of Medicaid (and thus the BHP), the growth of federal subsidies will outpace the costs of the BHP.

Figure 3 illustrates the widening gap between Medicaid and commercial healthcare costs.

**FIGURE 3: HEALTHCARE COST TRENDS, COMMERCIAL AND MEDICAID**



Thus, there are some positive financial reasons why a state might be wise to develop a Basic Health Program for its citizens whose incomes are relatively low and yet too high to qualify them for Medicaid benefits.

In addition, there are some compelling qualitative reasons for offering a BHP. In the first place, much of the adult population falling within 133%–200% of FPL have children who are covered by Medicaid or the Children's Health Insurance Plan (CHIP) at least through 2019, according to a PPACA provision for Maintenance of Eligibility. The BHP could be structured such that these families have similar health plans and benefits between the BHP and their child's Medicaid or CHIP plan.

Second, in the absence of a BHP, people whose incomes fluctuate above and below the Medicaid cutoff of 133% FPL<sup>8</sup> will have to bounce between Medicaid and the federal exchange program to maintain their healthcare coverage—a potentially complicated and awkward situation. Given the existence of a BHP, on the other hand, such people can shift between a Medicaid program and a Medicaid-like program, the BHP, and remain eligible all the way up to the 200% level. An example might be a factory or service worker whose income one year is at 132% FPL; the same worker might receive some overtime pay the following year, bringing that income up to 139%, and then fall back to the lower level in the third year. The BHP would shift the point of transition from toggling around 133% to toggling around 200%.

8 See footnote 1.

## CONCLUSIONS

The feasibility of operating a BHP depends on a state's willingness to take on a risk that it will not otherwise have; the alternative to a BHP is to leave the state's lower-income, non-Medicaid population to the exchange system, in which the state carries no risk.

Our modeling example, however, demonstrates that a state can design a Basic Health Program in ways that make it less costly than the exchange for state, federal, and individual stakeholders. A BHP can provide lower premiums and cost sharing for its members, as well as a lower subsidy level for the federal government. Moreover, a well-modeled BHP can result in a surplus for states.

In addition, there are compelling qualitative reasons why a state might develop a BHP, primarily relating to including children's healthcare within the same provider network as their parents', and seamlessly covering individuals and families whose incomes swing in and out of the Medicaid eligibility range.

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## SOURCES

Center of Medicare and Medicaid Services, Office of the Actuary, *National Health Expenditure Projections 2009 to 2019*. Retrieved March 29, 2011, from <https://www.cms.gov/NationalHealthExpendData/downloads/proj2009.pdf>

Congress of the United States, Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2010 to 2020*. Retrieved March 29, 2011, from <http://www.cbo.gov/ftpdocs/108xx/doc10871/01-26-Outlook.pdf>

Congress of the United States, The Patient Protection and Affordable Care Act of 2010, HR 3590. Retrieved March 29, 2011, from <http://democrats.senate.gov/reform/patient-protection-affordable-care-act-as-passed.pdf>

Milliman Medical Index, May 2010. Retrieved March 29, 2011, from <http://publications.milliman.com/periodicals/mmi/pdfs/milliman-medical-index-2010.pdf>

U.S. Department of Health and Human Services, *The HHS Poverty Guidelines for the Remainder of 2010*, August 2010 Retrieved March 29, 2011, from <http://aspe.hhs.gov/poverty/10poverty.shtml>

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