BASIC HEALTH PROGRAMS
IMPLICATIONS FOR CONCORDANT FAMILY INSURANCE COVERAGE

A Report prepared for the Amerigroup Corporation
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TABLE OF CONTENTS

EXECUTIVE SUMMARY ......................................................................................................... 3
INTRODUCTION ..................................................................................................................... 4
ANALYZING THE RISK TO STATES .................................................................................... 7
DEFINITIONS OF CONCORDANCE ..................................................................................... 13
LITERATURE REVIEW ......................................................................................................... 14
NEW CONTRIBUTIONS ......................................................................................................... 19
DATA AND METHODOLOGY .............................................................................................. 21
RESULTS ............................................................................................................................... 27
LIMITATIONS ....................................................................................................................... 32
POLICY IMPLICATIONS AND CONCLUSIONS .................................................................... 34
WORKS CITED ..................................................................................................................... 36
APPENDIX ........................................................................................................................... 38
EXECUTIVE SUMMARY

With the implementation of the Patient Protection and Affordable Care Act under way, states must soon decide whether to establish a Basic Health Program (BHP). A BHP is an alternative approach to insuring individuals earning between 133-200 percent of the Federal Poverty Level. While states may be wary of the financial risks associated with establishing another program with guaranteed benefits, a recent study by the Urban Institute should help alleviate this concern. Dorn et al. (2011) determined that the federal funds allocated to a BHP would likely exceed the cost of implementation by 23 percent. Beyond the financial ramifications, the BHP-induced coverage increases will encourage more families to have all members insured—a situation called concordant coverage. It is hypothesized that concordant coverage improves both access and utilization of health care for families. We used logistic regression analysis on data from the Medical Expenditure Panel Survey (MEPS) to test this hypothesis. Our results show that extending coverage to children and fathers is associated with statistically significant improvements in both access and utilization for mothers. We did not find statistically significant improvements to access and utilization for insured children and fathers when coverage was extended to the rest of their families, however.
INTRODUCTION

A Basic Health Program (BHP) is one of many aspects of the Patient Protection and Affordable Care Act (PPACA). Ultimately, the PPACA intends to achieve near-universal insurance coverage through two primary means: the expansion of Medicaid coverage, and the establishment of health insurance exchanges (HIE) in each state. These key ventures will extend insurance coverage to 28 million people, consequently decreasing the national uninsured rate from 18.9 percent of the nonelderly to 8.7 percent. A BHP introduces nuance to the manner in which many of these newly-insured individuals will receive care.

The expansion of Medicaid will occur by easing the program’s eligibility requirements. Currently, each state determines who qualifies for the public insurance. After 2014, uniform eligibility requirements will exist across the country, however. States will be mandated to extend coverage to a relatively large demographic; everyone under the age of 65 earning an income lower than 133 percent of the federal poverty level (FPL) will qualify.

Health insurance exchanges are marketplaces where individuals can buy federally-subsidized insurance. Everyone earning under 400 percent of the FPL qualifies for subsidized insurance through an HIE. One imagines that the poor population will be segmented into two groups after 2014: those earning less than 133 percent FPL who qualify for Medicaid, and those earning between 133 and 400 percent FPL who will purchase federally-subsidized insurance.

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2 This excludes undocumented immigrants. Also, the first five FPL percentage points are neglected in determining income, so the eligibility cutoff for Medicaid is actually 138 percent FPL.
There is a concern for individuals who earn just enough to disqualify themselves from Medicaid coverage. These individuals hovering above the 133 percent cutoff will bear the financial burden of insuring themselves as is mandated by the PPACA. Despite the availability of subsidized insurance in an HIE, the burden can still be significant. The PPACA allows states the opportunity to implement a BHP to address this concern.

There are several implications for states that elect to establish a BHP. Individuals who earn between 133 and 200 percent FPL will not receive their subsidies from the federal government to purchase insurance in an HIE. Instead, their subsidies will be pooled into a state trust fund. From that trust fund, their health insurance will be paid for and supplied to them; the state will cover these individuals by contracting with health plans or providers.\(^3\)

An insurance policy offered through a BHP will be a Medicaid look-alike policy. Conceivably, BHP coverage will be similar enough to Medicaid coverage that a state can integrate BHP, Medicaid, and CHIP into a single program serving all individuals earning up to 200 percent FPL.\(^4\)

Some anxieties develop as states weigh the decision to establish a BHP. Foremost is the angst over additional assumption of risk. The creation of a new, publicly-funded insurance scheme raises questions of long-run affordability that are often associated with guaranteed benefit programs. States need to be convinced that the benefits of implementing a BHP outweigh the costs. Additionally, healthcare policy experts express concern over a BHP’s impact on the viability of a state’s health insurance exchange. Both of

\(^3\) Dorn, S., The Basic Health Program Option under Federal Health Reform: Issues for Consumers and States, Urban Institute, March 2011.

\(^4\) Ibid.
these overarching, general concerns have been addressed by Dorn et al. in a September 2011 Urban Institute report. We will address the most relevant findings of the Urban Institute report.

Although Dorn et al. sufficiently speak to the overarching concerns of BHP costs and corresponding benefits, there is an overlooked research question which we address in this study. This question concerns the relatively unknown aspect of family unity within the context of insurance coverage. Analyzing the advantages of family unity offers detailed insight into the often unnoticed benefits of implementing a BHP. The PPACA will extend insurance coverage to millions of individuals, and BHPs will effectively unite everyone under the 200 percent of the FPL into a single type of insurance coverage. Logically, there will be more families with every member insured and on the same type of coverage. We hypothesize that it will lead to higher healthcare utilization and increased access to care for members of these families.

This paper is organized into several parts. Immediately following the introduction are the findings of the Urban Institute report and other relevant studies. Following that is our definition of family unity, a cursory literature review, our study’s contribution to the literature, data and methodology, results, and finally the policy implications and conclusions.
ANALYZING THE RISK TO STATES

Dorn et al. contend in their September 2011 Urban Institute publication that states should “seriously consider implementing BHP” in an effort to “substantially lower health care costs for low-income consumers while achieving state budget savings.” This broad recommendation rests on myriad assumptions and unknown variables. Nevertheless, the findings are significant and invaluable in this era where policymakers are in need of expert testimony.

In 2010, the average individual pays $3,606 a year in premiums and $924 in out-of-pocket costs. This is prohibitive for many individuals; 61 percent of respondents to a 2010 Kaiser Family Foundation survey found insurance coverage difficult to afford at these prices. After 2014, the costs of an insurance policy in a subsidized HIE are projected to be lower for low-income individuals than they are today, however. These individuals will pay an average of $1,218 a year in premiums and $434 out-of-pocket costs. If a state elects to implement a BHP, those earning between 133 and 200 percent FPL will pay even less for health insurance – only $100 in premiums and $96 in out-of-pocket costs, on average. The key point is that insurance will be more affordable after 2014 regardless of BHP implementation. If a state does have a BHP, the costs for eligible individuals will fall even further, however (Figure 1).

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7 Ibid.
8 Dorn, et al. *Using the Basic Health Program...,* p. 4.
Clearly, a BHP will be advantageous for the low-income individuals. But does this benefit come at the expense of the state that chooses to establish a BHP? After all, the premiums are cheap because the insurance is paid with federal taxpayer money. The fear is that the federal funding will not entirely cover a state’s BHP costs.\(^9\) The anxiety fosters reluctance among the states to actually create BHPs.

Dorn et al. maintain that the fear is unfounded. The cost of covering BHP-eligible adults with Medicaid-like coverage will not exceed the federal BHP funding. In fact, a state will receive federal BHP payments that exceed the program’s cost by 23 percent, on average. The cost of providing a BHP-eligible adult with insurance is projected to be $4,600, while a state will receive $5,665 to insure that same adult (Figure 2).\(^{10}\) In this scenario, a state will

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\(^9\) Aside from the actual costs of this demographics’ insurance policies, a state implementing a BHP will face new administrative costs of managing the program, along with providing the new infrastructure to do so.


\(^{10}\) Dorn, et al. *Using the Basic Health Program...*, p. 9.
receive adequate funding to avoid a deficit that would have to be financed with its own funds.

The Urban Institute made several assumptions to obtain these anticipated figures. Current Medicaid coverage costs provide the basis for the projected cost of $4,600 per BHP adult. The respective federal BHP payment of $5,665 is, indeed, a projection made upon more projections. A state will receive 95 percent of the BHP-eligible population’s federal subsidies to put into its BHP trust fund. The subsidies are directly linked to the cost of plans offered in the exchange. The problem is that no one is certain what the premiums will be in each HIE. Dorn et al. assumed that the costs of insurance in an HIE after 2014 are “much like those in current markets.”

If an HIE is successful in reducing premiums, then the subsidies will decrease accordingly. This scenario implies that the federal BHP payment received by a state diminishes, and the Urban Institute’s 23 percent surplus estimate would erode. This limitation of the study shows that a well-operated exchange which lowers premiums exposes a state to certain BHP risks.

**Figure 2: Cost v. Federal Payment for a BHP Adult**

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A BHP's existence is hypothesized to threaten the viability of an HIE; those who earn between 133 and 200 percent FPL will be removed from the risk pool that constitutes the exchange's individual market. There is a risk of adverse selection in the HIE if this demographic is too large, and/or is significantly healthier than what is remaining in the exchange. In their report, the Urban Institute found no such threat related to the size of the BHP population:

“In terms of the exchange as a whole...the proportion of residents covered through the exchange would decline from 9.8 to 8.2 percent, which represents a 16 percent relative decrease...Even without BHP consumers, exchanges would clearly be large enough to remain stable and to attract insurers on favorable terms.”

The BHP demographic is healthier and therefore cheaper to insure, however. BHP-eligible adults would incur costs that are 21 percent lower than the overall exchange’s individual market average. This is rightfully worrisome. Leaving the exchange with a population that has an expensive risk profile could induce a death spiral. That is, the premiums in the exchange will increase to accommodate the high health costs. The premiums may increase so drastically that insurance outside of the exchange will actually be cheaper by comparison, and the HIE will be left unused and may collapse eventually.

But once again, Dorn et al. find this apprehension to be misplaced. The implementation of a BHP is, in fact, predicted to increase HIE premiums for the remaining

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12 Washington State Health Care Authority, p. 20.
14 Stan Dorn, et al. Using the Basic Health Program..., p. 15.
15 This is what happened when Texas experimented with an exchange in the 1990s: “Our exchange was overwhelmed with people who had high health care costs, and too few healthy people to share the risk. The premiums we offered rose significantly. Insurance on the exchange was no longer a bargain, and employers began backing away. Insurance companies, too, began leaving the alliance.” McGarr, Cappy, A Texas-Sized Health Care Failure, NYT Oct. 5 2009.
individual exchange market participants.\textsuperscript{16} Regardless, it is argued that there are numerous regulations in place (the risk-adjustment and reinsurance mechanisms, for instance) after 2014 to keep the HIE stabilized. The study relies heavily on the success of these regulations in order to formulate its projections; if vital aspects of the PPACA do not function as healthcare policy-makers intend, the effects would change Dorn et al.’s promising vision of BHP success.

The findings of a Milliman report parallel those of the Urban Institute, listing a number of reasons why there is little risk associated with creating a BHP. Primarily, BHP costs correspond with Medicaid costs, which grow at 6 percent per year compared to the commercial-market costs which grow at 8 percent per year.\textsuperscript{17} Accordingly, the federal subsidies will outweigh the costs of insuring a BHP adult, as displayed above in Figure 2, far into the future.\textsuperscript{18}

The Urban Institute applied its model to each state, and the result was a series of projections based on unknowns that vary across states. These included variation in the states’ demographics, the premiums in the exchanges – yet to be constructed – and therefore the subsidy sizes and federal BHP payments, healthcare cost trends, among others. The Milliman report made similar assumptions, but its analysis is based entirely on the Massachusetts Commonwealth Care data.\textsuperscript{19} This was significantly beneficial because Massachusetts most closely represents the healthcare industry as it will be on the federal level after 2014. For example, one benefit of Milliman’s analysis of Massachusetts is that the federal BHP payment, and the costs to insure the demographic, is comparably easy to

\textsuperscript{18} Palmer predicts that, in Massachusetts, the federal subsidy payment for one BHP individual is $6,900 while the cost to insure that same individual is $5,550 – a 20% gap, similar to the surplus found by Dorn et al.
\textsuperscript{19} Palmer, 4.
predict; the state already has an exchange in operation in which subsidies are based on a sliding scale.

Although both reports rely on numerous assumptions, they complement each other. The Urban Institute gave a projected surplus for each state, on average, while Milliman specifically showed with the aid of unique Massachusetts data that the state will monetarily benefit from a BHP.

These two studies are convinced that the benefits accrued by implementing a BHP exceed the risks. As mentioned above, there are benefits extended to individuals in the form of cheaper coverage, as well. We hypothesize, as others have, that there are more than monetary benefits for the BHP demographic; there exists a chance of greater insurance concordance among families.
DEFINITIONS OF CONCORDANCE

Our study and previous studies have investigated the effects of similarity in family insurance coverage patterns on access to care and healthcare utilization. While this subject is not entirely new, it is still lacking an accepted lexicon. The most accepted terms appear to be “concordant coverage” and “discordant coverage.” In the context of our study, concordant coverage is achieved when every member of a family is enrolled in an insurance program. Conversely, discordant coverage occurs when a family features a mixture of insured and uninsured individuals. For instance, DeVoe et al. (2009) similarly considered a family as having concordant coverage if all members were insured, irrespective of the type of insurance. This paper will build upon DeVoe’s terminology and define “true concordance” as a family that shares the same coverage type.\(^{20}\) The limitations of the data prohibit us from analyzing a family that is on a one-card policy: a family sharing provider networks, co-pays, and other benefits associated with true concordance. However, since an aspect of our work distinguishes between public (Medicaid and SCHIP) and private insurance, it is thus one step closer to analyzing true concordance.

\(^{20}\) Some scholars refer to this scenario as “Family Unity.”
We conducted a review of published studies that examine the effect of family insurance patterns on child health outcomes. Every study found positive child health outcomes associated with increases in coverage that targeted families. There were very few differences in methodology across these studies. Outcome variables focused on child access and utilization, while explanatory variables focused on parent or family access. Usually, controls included income, age, race, region, and parental education. Logistic regression was the preferred modeling method. These studies varied in conclusions due to different research questions, but found similar policy implications. Seven out of eight studies suggested extending public insurance to low-income parents as a mechanism to expand coverage to uninsured children, with the exception being Guendelman and Pearl (2004). Further analysis of methodology and conclusions will be discussed below.

Depending on the author’s research question, outcome variables measured either child access to care or utilization. Some studies measured both. DeVoe et al. (2009), Gifford et al. (2005), and Hanson (1998) used child utilization as the primary outcome variable. Examples of these variables included missing doctor visits, missing dentist visits, reporting unmet healthcare needs, and number of yearly preventive visits. Dubay and Kenney (2003) and Sommers (2005) measured the effect of parental access on child access only. Their access-oriented outcome variables analyzed child insurance status and child Medicaid dropout rates. The remaining three studies used both child access to care and child utilization as outcome variables. These studies included Davidoff et al. (2003), Guendelman and Pearl (2004), and Guendelman et al. (2006). Their variables were similar to those listed above.
Concerning our study, we constructed our outcome variables based on access and utilization for children and adults. We hypothesize that access to care and healthcare utilization will be increased through BHP implementation. For these reasons, DeVoe et al (2009) became the primary reference article for our research.

There was less variation in explanatory variables among those same studies. Explanatory variables were based on family access and key demographic features. Access variables were defined in terms of insurance status. Seven out of the eight studies used some form of parental insurance status as an explanatory variable. Only Hanson (1998) measured the effect of parental utilization rather than parental access. Among those that examined parental access, there were significant differences in the classification of insurance status. Dubay and Kenney (2003) and Davidoff (2003) both examined the insurance status of one parent into three categories: public, private, and uninsured. While this method separated public from private insurance, it did not measure family coverage or the benefits of concordant coverage. The remaining studies examined concordant coverage.

Sommers (2005) investigated the effect of parent and sibling enrollment in Medicaid on Medicaid dropout rates for children. Parent-child Medicaid concordance was found to correspond with a lower dropout rate than situations where the parent was not enrolled in Medicaid. Similarly, Gifford et al. (2005) dealt only with Medicaid enrollees. This study separated one parent and one child into “Medicaid pairs,” “Mixed pairs,” and “Uninsured pairs.” Both Guendelman and Pearl (2004) and Guendelman et al. (2006) measured family coverage in a similar manner to Gifford et al. (2005). If a child and at least one parent were both insured it was said to be “family coverage.” Family coverage was compared against child-only coverage and “no family coverage,” with no distinction between types of insurance. Guendelman’s two studies pooled public and private coverage together and assigned a group for “family coverage” if one parent was insured and the other one was not.
Lastly, DeVoe et al. (2009) featured six different categories of family insurance coverage: Child insured, parents insured; Child insured, 1 parent insured, 1 parent uninsured; Child insured, parents uninsured; Child uninsured, parents insured; Child uninsured, 1 parent insured, 1 parent uninsured; Child uninsured, parents uninsured. This thorough approach to insurance status classification measured more discordant situations than the other studies. DeVoe did not differentiate between public and private insurance, however. None of these studies measured the effects of concordant care while accounting for differences in public and private insurance.

Despite large differences in outcome and explanatory variables across our literature review, the control variables were nearly identical throughout. Certain factors like age, race, household income, parental education level, country of origin, region of residence, family structure, child’s health status, and parental employment served as control variables in almost every model. Mostly, these control variables were featured as explanatory variables in logistic regressions. Sommers (2005) also used fixed year and fixed state effects to control for variations in policy and economic conditions within his CPS dataset.

As stated above, all of the studies in this literature review utilized logistic regression. Sommers supplemented his usage of logistic regression with linear probability modeling as well as instrumental variable regressions and two-stage least squares regressions. Dubay and Kenney employed difference-in-difference regression on several control variables in addition to logistic regression modeling. Their list of controls included the year due to expansions in Medicaid coverage for low income families between the two years in their survey.

The definition of family or household was relatively uniform throughout. In general, these studies defined a family as one parent with a child under the age 17 or 18. This was partially explained when we described the differences in parental insurance classification.
DeVoe varied slightly by allowing for the inclusion of a second parent. Dubay and Davidoff, on the other hand, both used NSAF data and allowed a second child to be counted within a family. Our study uses the same dataset as DeVoe, the Medical Expenditure Panel Survey. Like DeVoe, we chose to define family as at least one child under 18 accompanied by at least one parent.

The conclusions drawn by researchers were naturally dependent on their initial research aims. The group of studies that measured child access as the primary outcome variable found that increasing coverage to parents increased access for their children. Notably, Dubay and Kenney (2004) determined that states extending Medicaid coverage to low income parents experienced a Medicaid participation rate that was 20 percentage points higher for children already eligible for Medicaid. Sommers (2005) revealed that a child’s likelihood of Medicaid dropout was 76 percent lower if their parents were enrolled in public insurance as well. Since the primary aim of our study was to measure the effect of concordant care on healthcare utilization in families, the most informative studies in this process were Gifford et al. (2005) and DeVoe et al. (2009). Gifford’s analysis of parent-child pairs found that 29 percent of children in uninsured pairs would receive Well Child Visits—preventive care-like checkups and immunizations. This percentage increased to 43 percent when the child became insured and then again to 67 percent when the child and parent were provided coverage, making a “Medicaid Pair.” Gifford lauded the “spillover” benefits to children associated with offering public insurance to low-income parents. While these results do not explicitly use the terminology “concordant care” or “family unity,” it is evident that expanding public coverage to low-income parents will increase the likelihood of concordant care and spillover benefits.

Similarly, DeVoe’s results showed that concordant family coverage yields a positive effect on health care utilization for children. While DeVoe noted that uninsured children
had the highest rates of unmet needs overall, insured children with insured parents fared better than insured children with uninsured parents. These insured children with uninsured parents had higher odds of insurance coverage gap, no usual source of care, and unmet needs, in comparison to insured children with insured parents. Insured children with one parent insured and one uninsured also experienced worse health utilization than insured children with both parents insured. This group had higher odds of missing doctor visits and dental appointments than insured children with both parents insured. DeVoe concluded by explaining that discordant family coverage would likely increase due to the national decline of employer sponsored health insurance, leaving children vulnerable. DeVoe’s study was of paramount importance to our work due to its detailed analysis of discordant coverage situations.
NEW CONTRIBUTIONS

The literature review provided an excellent foundation for building our own study. In doing so, we replicated elements from past research and added components of our own. Davidoff et al. (2003), Gifford et al. (2005), Guendelman and Pearl (2004), Guendeleman et al. (2006), and DeVoe et al. (2009) shared a fundamental focus: evaluating the effect of family coverage patterns on the health outcomes for children. From that group, only DeVoe used national data from the past decade. Like Devoe, we used MEPS data. While DeVoe used 2002 through 2006, we included those years and added data from 2007 and 2008 to our study. We also created a similar list of variables with key differences discussed below.

DeVoe featured a more extensive list of outcome variables for children that included preventing counseling items. These variables measured whether doctors had spoken to children about exercise, healthy eating, wearing seatbelts, and wearing helmets on bicycles. Instead, our project focused on more substantive outcome variables which measured healthcare utilization and access to care, applying them to parents as well as children. This approach allowed us to examine the effect of concordant coverage on families as a whole, whereas previous studies were only concerned with outcomes for children. More differentiation from the existing literature is evident in our models which separated public insurance from private insurance, in addition to models which analyzed insured and uninsured individuals. This allowed us to analyze the effect of “true” concordant coverage—all family members covered by the same type of insurance. After all, our research aspires to determine whether family concordance in health insurance coverage improves health outcomes for families.
Distinguishing between private and public insurance provides a more accurate assessment of that question.

We also elected to focus on one income group rather than analyze the whole population. By limiting our analysis to individuals earning between 125-200 percent FPL, we approximated the BHP-eligible demographic. This accounts for differences in regression results with DeVoe, who included a full spectrum of income categories.21

Our project built upon work done by DeVoe and made notable additions. These additions included the usage of MEPS years 2007 and 2008, the analysis of parental health outcomes, and the separation of public and private insurance to investigate a higher degree of concordant coverage and an overarching analysis of an approximate BHP-eligible population. These additions allow for a richer understanding of the BHP-eligible population over a longer period. It is important to isolate this demographic to understand the association of a BHP with the benefits of insurance concordance among families.

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21 DeVoe's analysis included poor (<100% FPL); near poor (100% to <125% FPL); low income (100% to <200% FPL); middle income (200% to <400% FPL); and high income (>400% FPL). The FPL was $20,000 for a family of 4 in 2006.
DATA AND METHODOLOGY

We used the Consolidated Medical Expenditure Panel Survey MEPS Household Component (MEPS-HC) data for the years 2002 through 2008. MEPS is a nationally representative sample of households obtained through the National Health Interview Survey. MEPS-HC respondents are interviewed 5 times over a 2-year period. Data on family members is a key attribute for our study which is included in MEPS' interviews. Consolidated data implies the inclusion of another key variable for our study: income classification as a percentage of the federal poverty level. The survey’s interviewees provided responses about individual household members’ demographics, use of medical services, access to care, perceived health status, health conditions, insurance status, employment and education. The data, while nationally representative, indicates the household’s region of residence – northeast, Midwest, south and west – but not precise state.

A dwelling unit (DU) identifier linked members to a household, resulting in multiple individuals sharing the same DU identifier. For each round, the survey respondent provided responses about themselves and the household’s other members. Respondents stated the relationship of each member to a reference person: the household member, 16 years of age or older who owns or rents the home.

In the context of our study, a family includes children under the age of 18 who have at least one “parent” – biological, adopted, or step.

We constructed families based on a person’s number (PID) which uniquely identified individuals in the DU. We linked parents to their children to form a family. In the context of our study, a family includes children under the age of 18 who have at least one “parent” – biological, adopted, or step. After establishing whether a child had a parent(s), each row represented a child, his/her information, and information about his/her parents. If there were two children in a household, then each of two rows would contain unique data about a child, but the same data about the parents. Therefore, prior to constructing families, each row represented a member of a household. After constructing families, each row represented a child and his/her parents in a household. Our sample consists of 5,335 unique families in the BHP-eligible income range. In these families, there are 11,470 children.

Models

The study comprised two sets of analyses, both using logistic regression modeling. The first focused on the association between insurance statuses – whether all family members were insured – and four outcome variables used to measure access and health care utilization. If all family members were insured, they were the focus of the second set of analysis which examined the association between differing types of insurance within the family – public, private or a mix of the two – and the same outcome variables. We analyzed the marginal effects for these two sets of potential relations. We controlled for year fixed effects by including dummy variables for each year. We measured the same four outcome variables for each model: the individual’s usual source of care, whether there were unmet

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24 These are the unique families and children. Some of whom were interviewed twice in a two-year period, resulting in a sample size of 13,730 children.
healthcare needs, whether an individual visited a doctor in the last year, and whether an individual visited a dentist in the last year. In the results section, the names of these outcomes will look like this:

1. Has a usual source of care
2. Has unmet healthcare needs
3. No doctor visits in last year
4. No dentist visits in last year

Each of the four outcomes is a binary variable. We indicated responses of “yes” as 1 and “no” as 0. We performed this analysis for children, mothers, and fathers. At four outcomes each, there are 12 models in total. Families with at least one child and one parent served as the minimum criterion for inclusion. Using the child’s models to demonstrate how the four outcomes applied to family members:

1. Child has usual source of care
2. Child has unmet healthcare needs
3. Child has no doctor visits in last year
4. Child has no dentist visits in last year

Replacing “Child” with “Mother” and “Father” indicates how the four outcome variables applied to parents.

The key explanatory variables in our primary analysis explain the different levels of discordant coverage. We used these variables to answer our research question concerning whether family unity increased utilization and access to care – the four outcome variables. The types of discordant coverage are the following:

1. Child insured with one parent insured, and the other parent uninsured. This type of discordant coverage excludes single-parent families.
2. Child insured with uninsured parent(s). This type includes both single-parent and nuclear households
3. Child uninsured with both parents insured.
4. Child uninsured with one parent insured, and the other parent uninsured. Similar to category 1, this type also excludes single-parent families.
5. Child uninsured with both parents uninsured.

The reference group, to which we compared each type of discordant coverage, was a family with *concordant* coverage – each member insured. In our sample, there were 3,709 families in the reference group. This represents about 60 percent of our sample. The remaining 40 percent of the families had one of the five types of discordant coverage (Figure...
If our hypothesis is correct, this 40 percent of families will benefit if they transition to concordant coverage.

We also analyzed a child’s healthcare utilization and access to care outcomes in single-parent households; the original 12 models which accounted for child outcomes and each parent’s outcomes excluded single-parent households from two categories. We prepared four additional models to analyze child outcomes in single-parent households, resulting in 16 models to account for all household possibilities.

Similar to the primary analysis, the models in the secondary analysis focused on families with similar types of insurance. Accordingly, the distinction between the primary and secondary analysis is the key explanatory variable. Variables indicating insurance coverage type replaced the discordant coverage variables. The reference group of the primary analysis – families with all members insured – formed the entire sample used in the secondary analysis. The two new key explanatory variables are the following:

1. Child and parent enrolled in public insurance, and the other parent enrolled in private insurance
2. Child enrolled in public insurance, and parents enrolled in private insurance.

The reference group for the secondary analysis, to which we compared each type of insurance coverage mix, was a family in which all its members were enrolled in public insurance. Using these explanatory variables for public or private insurance coverage, we created 4 models measuring the outcomes for children.

Control Variables

The key explanatory variables used in both sets of analyses were not the only variables included in our study. We included multiple control variables to account for ethnicity, region of residence and health status. Also included in the study were variables on
age, income level as a percentage of the FPL, parents’ education and parents’ employment, but these additional control variables did not contain multiple categories. Concerning ethnicity, “white” served as the reference group. For region, “northeast” served as the reference group, and “excellent health” served as the reference group for health status.

For an overview of the descriptive statistics, please see the Table 5 and Table 6 in the appendix.
Table 1 shows the marginal effects of utilization and access to care for BHP-eligible children. Specifically, the variables “Child Uninsured, All Parents Insured,” “Child Uninsured, Parents: 1 Insured, 1 Uninsured,” and “Child Uninsured, Parents Uninsured” confirm expected results. Concerning the variable “Child Uninsured, All Parents Insured,” for instance, the statistically significant result of -0.318 means that a child in a family with this particular degree of discordant coverage, relative to the reference group where all members are insured, is less likely to have a usual source of care by 31.8 percentage points. This result indicates that an uninsured child is less likely to have a usual source of care than an insured child. Similar logic applies to the two other types of discordant coverage with uninsured children.

We are most interested in the results of the remaining two independent variables: “Children Insured, Parents: 1 Insured, 1 Uninsured,” and “Child Insured, All Parents Uninsured.” Results for families with these kinds of discordant coverage would show that an insured parent would benefit a child already insured. Accordingly, there would be measurable, indirect benefits to insuring all family members, which would allude to an advantage of concordance.

However, neither of these variables yielded statistically significant results. The absence of statistical significance generally contradicts results DeVoe et al.’s results, but our analysis focused on the BHP-eligible population: a subset of the entire MEPS sample. The only statistically significant result for insured children is the “Child Insured, All Parents

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25 We replicated the DeVoe et al. study to the best of our abilities, and similarly found statistical significance in some of the discordant coverage categories.
Uninsured” group where children did not visit a dentist in the last year. This result is only statistically significant at the 0.10 level, however.

**Table 1: Marginal effects of outcomes for children in BHP-eligible households, 2002-2008**

<table>
<thead>
<tr>
<th>Type of Discordant Coverage</th>
<th>Has usual source of care (mean= 0.85)</th>
<th>Has unmet health needs (mean=0.96)</th>
<th>No doctor visits in past year (mean = 0.96)</th>
<th>No dentist visits in past year (mean =0.66)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Uninsured, All Parents Insured</td>
<td>-0.318*** (0.019)</td>
<td>0.018*** (0.004)</td>
<td>0.020*** (0.004)</td>
<td>0.208*** (0.013)</td>
</tr>
<tr>
<td>Child Uninsured, Parents: 1 Insured, 1 Uninsured</td>
<td>-0.225*** (0.028)</td>
<td>0.020*** (0.005)</td>
<td>0.025*** (0.005)</td>
<td>0.195*** (0.020)</td>
</tr>
<tr>
<td>Child Insured, Parents: 1 Insured, 1 Uninsured</td>
<td>0.002 (0.008)</td>
<td>0.003 (0.003)</td>
<td>0.001 (0.004)</td>
<td>0.001 (0.011)</td>
</tr>
<tr>
<td>Child Insured, All Parents Uninsured</td>
<td>-0.015 (0.012)</td>
<td>-0.003 (0.005)</td>
<td>-0.001 (0.005)</td>
<td>0.025* (0.015)</td>
</tr>
<tr>
<td>Child Uninsured, All Parents Uninsured</td>
<td>-0.265*** (0.033)</td>
<td>0.025*** (0.004)</td>
<td>0.025*** (0.006)</td>
<td>0.184*** (0.022)</td>
</tr>
</tbody>
</table>

Levels of statistical significance: ***P<0.01, **P<0.05, *P<0.10
Reference Group: Child Insured, Parents Insured

Table 2 shows significant results of maternal outcomes. The reference group of a fully-insured family remains the same. Two of the four outcome variables in row 2 indicate that insured mothers, whose spouses and children are uninsured, are more likely to have unmet healthcare needs and no dentist visits in the last year compared to the reference group. These BHP-eligible mothers were 4.8 percentage points more likely to have unmet healthcare needs, and 12.5 percentage points more likely not to have visited a dentist in the last year, compared to the reference group. These two results provide statistically significant, examples in which concordant coverage is associated with benefits to a family. Specifically, in this case, if two uninsured family members – child and father – obtained
coverage, the mother would have greater access to care and increase at least one measure of healthcare utilization.

Concordant coverage is positively related with utilization and access to care for the insured mother.

Furthermore, if mothers and their children are insured, then the mothers will benefit from spouses gaining coverage, as indicated by row 3. The variable in row 3 shows that the mother was 4 percentage points less likely to have a usual source of care, 2.9 percentage points more likely to have unmet healthcare needs, and 2.7 percentage points more likely not to visit a doctor in the past year, compared to the reference group in which all members of a family were insured. These results suggest that insuring fathers is associated with their spouse’s utilization and access to care, particularly if their child is also insured. This result shows, again, that concordant coverage is positively related with utilization and access to care for the insured mother.

Table 2: Marginal effects of outcomes for insured mothers earning 133-200% FPL, 2002-2008

<table>
<thead>
<tr>
<th>Type of Discordant Coverage</th>
<th>Has usual source of care (mean = 0.82)</th>
<th>Has unmet health needs (mean = 0.91)</th>
<th>No doctor visits in past year (mean = 0.89)</th>
<th>No dentist visits in past year (mean = 0.58)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Uninsured, All Parents Insured</td>
<td>-0.007 (0.018)</td>
<td>0.014 (0.011)</td>
<td>0.007 (0.013)</td>
<td>-0.024 (0.025)</td>
</tr>
<tr>
<td>Child Uninsured, Mother Insured, Father Uninsured</td>
<td>-0.084 (0.053)</td>
<td>0.048*** (0.018)</td>
<td>0.036 (0.025)</td>
<td>0.125** (0.052)</td>
</tr>
<tr>
<td>Child Insured, Mother Insured, Father Uninsured</td>
<td>-0.040** (0.019)</td>
<td>0.029*** (0.010)</td>
<td>0.027** (0.012)</td>
<td>0.019 (0.024)</td>
</tr>
</tbody>
</table>

Levels of statistical significance: ***P<0.01, **P<0.05, *P<0.10
Reference Group: Child Insured, Parents Insured
Table 3 shows results of father outcomes. The reference group – a fully-insured family – remains the same. The results are not statistically significant, and imply that insuring mothers and children is not associated with a father’s utilization and access to care.

Table 3: Marginal effects of outcomes for insured fathers earning 133-200% FPL, 2002-2008

<table>
<thead>
<tr>
<th>Type of Discordant Coverage</th>
<th>Has usual source of care (mean = 0.79)</th>
<th>Has unmet health needs (mean = 0.92)</th>
<th>No doctor visits in past year (mean = 0.90)</th>
<th>No dentist visits in past year (mean = 0.59)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Uninsured, All Parents Insured</td>
<td>-0.032 (0.024)</td>
<td>-0.008 (0.015)</td>
<td>-0.015 (0.017)</td>
<td>-0.038 (0.029)</td>
</tr>
<tr>
<td>Child Uninsured, Father Insured, Mother Uninsured</td>
<td>0.036 (0.043)</td>
<td>-0.016 (0.034)</td>
<td>-0.007 (0.035)</td>
<td>-0.061 (0.061)</td>
</tr>
<tr>
<td>Child Insured, Father Insured, Mother Uninsured</td>
<td>-0.032 (0.021)</td>
<td>0.017 (0.014)</td>
<td>-0.005 (0.014)</td>
<td>0.004 (0.026)</td>
</tr>
</tbody>
</table>

Levels of statistical significance: ***P<0.01, **P<0.05, *P<0.10
Reference Group: Child Insured, Parents Insured

These results complement Table 2’s results; concordant care provides benefits for a family when the father and child gain coverage. These benefits are evident through greater utilization and access to care metrics for the mother.

Table 4 displays the results of our secondary analysis of true concordance – the benefits of fully-insured families having all members on the same type of coverage. Accordingly, the sample is composed of what was the reference group for the primary analysis – fully-insured families. Analysis of this group resulted in three subcategories as indicated by the key independent variables: “Child on Public Insurance, Parents on Public Insurance,” “Parents: 1 Public Insurance, 1 Private Insurance,” and “Parents: All Private Insurance.”
Table 4: Marginal effects of outcomes for publicly insured children in families with insurance concordance (133-200% FPL), 2002-2008

<table>
<thead>
<tr>
<th>Type of Concordant Coverage</th>
<th>Has usual source of care (mean = 0.91)</th>
<th>Has unmet health needs (mean = 0.96)</th>
<th>No doctor visits in past year (mean = 0.96)</th>
<th>No dentist visits in past year (mean = 0.63)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents: 1 Public Insurance, 1 Private Insurance</td>
<td>-0.006 (0.020)</td>
<td>0.008 (0.009)</td>
<td>0.013 (0.009)</td>
<td>0.012 (0.033)</td>
</tr>
<tr>
<td>Parents: All Private Insurance</td>
<td>-0.011 (0.015)</td>
<td>0.005 (0.010)</td>
<td>0.007 (0.010)</td>
<td>0.009 (0.028)</td>
</tr>
</tbody>
</table>

Levels of statistical significance: ***P<0.01, **P<0.05, *P<0.10
Reference Group: Child on Public Insurance, Parents on Public Insurance

The results do not indicate statistical significance. Accordingly, we cannot determine an association between true concordance and an increase in a child’s healthcare utilization and access to care.

Analyzing the implications of utilization and access for mothers and fathers required a model that compared a family in which one parent was on private insurance with a family who had true concordance – every member on Medicaid/SCHIP in our case. Because our base group is a family in which the child has public insurance, this meant that the observed benefits to the mothers and fathers were associated with insuring their spouses with similar insurance. Similar to the models outlined in Table 4, these models did not provide statistically significant results. Accordingly, there were no observed benefits of such an association.
LIMITATIONS

The key limitation with using MEPS data is that there is a time lag. Although the most current comprehensive data incorporates the effects on families during the beginning of the recession, the data required for our study is available only through 2008. Comprehensive data includes income levels for individuals. Another data limitation is the lack of consistency among key variables, such as poverty category as a percentage of the FPL. Accordingly, we could not isolate the BHP-eligible income category of 133-200 percent FPL for all years. Instead, we were limited to the use of the category 125-200 percent FPL when isolating the BHP demographic.

Furthermore, we have a narrow definition of what constitutes a family; children were paired with their parents as primary caregivers. We excluded families in which the grandmother, grandfather, aunt, uncle, and other non-nuclear members were considered the head of the household. The concern is that these types of excluded households may prove to be ones in which the head of the household is an effective advocate. Consequently, our models are unable to fully measure the benefits of concordance.

As previously mentioned, including the years 2007 and 2008 to the sample adds the effects of the beginnings of the Great Recession to our models. Inevitably, there are families that transitioned to lower income categories. Accordingly, the BHP demographic in those years, and its members’ habits, are not representative of what they are normally.

This is not a significant concern. We were able to isolate the BHP demographic in the years 2007 and 2008, and discovered that a negligible amount of families were in the gap of 125-133 percent FPL.
An endogeneity bias exists. Individuals may choose to be insured or uninsured. This possibility means that we do not have a random sample. It is difficult to conclude that families have better access to care and higher utilization solely because they are insured. Instead, it is more likely that insured individuals are more inherently active in seeking healthcare. Accordingly, while insuring someone will increase his/her access and utilization, insuring his family members will likely not have the same effect. We imagine that the unobservable effects that influence families to actively seek care are more significant. While we controlled for many variables, we are unable to control for a family’s intangible attitude toward seeking care.

Finally, although our sample extends over seven years, we limited the scope of our analysis to the BHP-eligible population. This restriction reduced our sample to one that is smaller than comparable studies.
POLICY IMPLICATIONS AND CONCLUSIONS

- A state with a BHP is more susceptible to risk financially than if it simply allows the BHP-eligible population to use the HIE. Research shows that the risk is low, however; the benefits of high federal BHP payments and low premiums outweigh the additional administrative costs, the costs of possible new infrastructure, and volatile federal funding and healthcare cost trends.
  - The surplus for states projected by the Urban Institute and Milliman must be reinvested into the BHP. Accordingly, there is a significant possibility that physicians seeing BHP patients will have increased reimbursement rates.
- Given the existence of a BHP, the health insurance exchange is vulnerable to higher premiums for low- and medium-income adults, but is not susceptible to the death spiral induced by adverse selection.
- A BHP will increase the number of families in which all members are insured. Within the context of the BHP-eligible population:
  - There is no evidence that insuring parents will increase utilization and access to care for their already insured child/children. Previous literature indicates contrary findings, but only for the entire population not limited to the BHP-eligible demographic.27
  - There is some evidence that currently insured mothers will benefit if other nuclear family members are insured, however. This finding is particularly significant because fathers currently face more stringent barriers in obtaining Medicaid; insuring BHP-eligible fathers (and children) will be easier after 2014,

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27 Further differences between our model and previous literature are outlined earlier in this paper.
and will have multiplicative effects with regard to the mother's utilization and access to care.

- A BHP will increase the number of families in which all members will be covered by the same type of insurance – Medicaid/SCHIP. Within the context of the BHP-eligible population:
  - There is no evidence that families in which all members are covered by public insurance have children with higher utilization and better access to care than those that do not.
  - There is no evidence of an association between true concordance and better access to care and utilization. To be precise, we could not find that families on the same type of insurance are associated with better outcomes.


WORKS CITED


Gilmer T, Kronick R, Rice T. Children welcome, adults need not apply: changes in public program enrollment across states and over time. *Medical Care Research and Review, 62*(1) 56-78.


**APPENDIX**

Table 5: Descriptive statistics of outcome variables for children, mothers, and fathers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Child:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has a usual source of care</td>
<td>0.878</td>
<td>0.328</td>
<td>0</td>
<td>1</td>
<td>70,013</td>
</tr>
<tr>
<td>Has unmet health care needs</td>
<td>0.964</td>
<td>0.186</td>
<td>0</td>
<td>1</td>
<td>70,672</td>
</tr>
<tr>
<td>No doctor visit in last year</td>
<td>0.961</td>
<td>0.194</td>
<td>0</td>
<td>1</td>
<td>70,672</td>
</tr>
<tr>
<td>No dentist visit in last year</td>
<td>0.597</td>
<td>0.491</td>
<td>0</td>
<td>1</td>
<td>70,672</td>
</tr>
<tr>
<td><strong>Mother:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has a usual source of care</td>
<td>0.737</td>
<td>0.440</td>
<td>0</td>
<td>1</td>
<td>65,060</td>
</tr>
<tr>
<td>Has unmet health care needs</td>
<td>0.927</td>
<td>0.260</td>
<td>0</td>
<td>1</td>
<td>66,121</td>
</tr>
<tr>
<td>No doctor visit in last year</td>
<td>0.908</td>
<td>0.288</td>
<td>0</td>
<td>1</td>
<td>66,121</td>
</tr>
<tr>
<td>No dentist visit in last year</td>
<td>0.641</td>
<td>0.480</td>
<td>0</td>
<td>1</td>
<td>66,121</td>
</tr>
<tr>
<td><strong>Father:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Has a usual source of care</td>
<td>0.721</td>
<td>0.449</td>
<td>0</td>
<td>1</td>
<td>47,175</td>
</tr>
<tr>
<td>Has unmet health care needs</td>
<td>0.929</td>
<td>0.256</td>
<td>0</td>
<td>1</td>
<td>47,981</td>
</tr>
<tr>
<td>No doctor visit in last year</td>
<td>0.912</td>
<td>0.283</td>
<td>0</td>
<td>1</td>
<td>47,981</td>
</tr>
<tr>
<td>No dentist visit in last year</td>
<td>0.646</td>
<td>0.478</td>
<td>0</td>
<td>1</td>
<td>47,981</td>
</tr>
</tbody>
</table>
Table 6: Descriptive statistics of explanatory variables for children, mothers, and fathers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Min</th>
<th>Max</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Insured, All Parents Insured</td>
<td>0.625</td>
<td>0.484</td>
<td>0</td>
<td>1</td>
<td>70,672</td>
</tr>
<tr>
<td>Child Insured, Parents: 1 Insured, 1 Uninsured</td>
<td>0.168</td>
<td>0.374</td>
<td>0</td>
<td>1</td>
<td>70,672</td>
</tr>
<tr>
<td>Child Insured, Parents Uninsured</td>
<td>0.090</td>
<td>0.287</td>
<td>0</td>
<td>1</td>
<td>70,672</td>
</tr>
<tr>
<td>Child Uninsured, Parents Insured</td>
<td>0.052</td>
<td>0.223</td>
<td>0</td>
<td>1</td>
<td>70,672</td>
</tr>
<tr>
<td>Child Uninsured, Parents: 1 Insured, 1 Uninsured</td>
<td>0.016</td>
<td>0.124</td>
<td>0</td>
<td>1</td>
<td>70,672</td>
</tr>
<tr>
<td>Child Uninsured, Parents Uninsured</td>
<td>0.013</td>
<td>0.115</td>
<td>0</td>
<td>1</td>
<td>70,672</td>
</tr>
<tr>
<td>Child Publicly Insured, Parents: 1 Public, 1 Private</td>
<td>0.117</td>
<td>0.321</td>
<td>0</td>
<td>1</td>
<td>20,009</td>
</tr>
<tr>
<td>Child Publicly Insured, Parents Privately Insured</td>
<td>0.737</td>
<td>0.440</td>
<td>0</td>
<td>1</td>
<td>20,009</td>
</tr>
<tr>
<td>Parent education</td>
<td>13.317</td>
<td>2.819</td>
<td>0</td>
<td>17</td>
<td>67,673</td>
</tr>
<tr>
<td>Parent employment</td>
<td>0.824</td>
<td>0.381</td>
<td>0</td>
<td>1</td>
<td>67,781</td>
</tr>
<tr>
<td><strong>Child Health status:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>0.476</td>
<td>0.499</td>
<td>0</td>
<td>1</td>
<td>70,562</td>
</tr>
<tr>
<td>Good</td>
<td>0.305</td>
<td>0.460</td>
<td>0</td>
<td>1</td>
<td>70,562</td>
</tr>
<tr>
<td>Poor</td>
<td>0.219</td>
<td>0.414</td>
<td>0</td>
<td>1</td>
<td>70,562</td>
</tr>
<tr>
<td><strong>Mother Health status:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>0.229</td>
<td>0.420</td>
<td>0</td>
<td>1</td>
<td>65,782</td>
</tr>
<tr>
<td>Good</td>
<td>0.318</td>
<td>0.466</td>
<td>0</td>
<td>1</td>
<td>65,782</td>
</tr>
<tr>
<td>Poor</td>
<td>0.454</td>
<td>0.498</td>
<td>0</td>
<td>1</td>
<td>65,782</td>
</tr>
<tr>
<td><strong>Father Health status:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent</td>
<td>0.234</td>
<td>0.424</td>
<td>0</td>
<td>1</td>
<td>47,738</td>
</tr>
<tr>
<td>Good</td>
<td>0.316</td>
<td>0.465</td>
<td>0</td>
<td>1</td>
<td>47,738</td>
</tr>
</tbody>
</table>
BASIC HEALTH PROGRAMS
AND
IMPLICATIONS
FOR
CONCORDANT
FAMILY INSURANCE COVERAGE

Jeremie Amoroso, Anthony Guth, and Lewis Woodard
December 16, 2011
PROGRAM OVERVIEW

- Medicaid expansion and Health Insurance Exchanges
- 95% of the total BHP demographics’ subsidies pooled into a trust fund
- Medicaid look-alike insurance coverage
- Potential problems associated with BHP implementation

BHP funding

Percent

0 20 40 60 80 100

Federal
Research Motivation

- Cost to States
- Family Unity

Utilization & Access to Care
Insuring fathers and/or children is associated with better outcomes for mothers
Figure 1: Discordant coverage among BHP-eligible families, 2002-2008

- Child Insured, Parents: 1 Insured, 1 Uninsured: 16.11%
- Child Insured, Parents Uninsured: 10.54%
- Child Uninsured, Parents Insured: 8.56%
- Child Uninsured, Parents: 1 Insured, 1 Uninsured: 2.52%
- Child Uninsured, Parents Uninsured: 2.33%
IMPLICATIONS FOR STATES

- BHP Cost to States Studies
  - Milliman
  - Urban Institute*

- BHPs will increase coverage nationwide

- Annual savings for states: $1.3 billion

- An average surplus of 23% expected for states

- Exchange population will be reduced, yet viable

FAMILY UNITY AND CONCORDANCE

- What is a Family?
- What is Family Unity?
  - True Family Unity
- Insurance Coverage
  - Concordant Coverage
  - Discordant Coverage
- Positive health outcomes
INSURANCE COVERAGE POSSIBILITIES: TERMINOLOGY

- **NO INSURANCE**
  - All Uninsured

- **Mixed: Insured and Uninsured**
  - Discordant Coverage

- **All Insured**
  - Concordant Coverage

- **Same Type of Insurance**
  - True Concordance

**Family Unity**
WHAT ARE THE IMPLICATIONS OF FAMILY UNITY?

- Fewer unmet healthcare needs
- Lower Medicaid dropout rate
- Increase in child Medicaid coverage
- Increase in well-child visits
- Studies recommend extending coverage to low income parents
NEW CONTRIBUTIONS

- BHP-eligible analysis

- Analysis of Parent Outcomes
  - Access to care; Utilization

- Public vs. Private insurance within families

- Differentiation from DeVoe et al.
  - Inclusion of 2007-2008 data
**METHODOLOGY**

**LOGISTIC REGRESSION OUTCOME VARIABLES**
- Having a usual source of care
- Having unmet healthcare needs
- Having no doctor visits in the last 12 months
- Having no dentist visits in the last 12 months

**PRIMARY ANALYSIS EXPLANATORY VARIABLES**
- All family members insured (reference group)
- Five variables indicating discordance and the uninsured

**SECONDARY ANALYSIS EXPLANATORY VARIABLES**
- All family members publicly insured (reference group)
- Child publicly insured, 1 parent public and 1 parent private
- Child publicly insured, both parents privately insured
RESULTS

PRIMARY ANALYSIS

- Insuring an individual promotes better outcomes for him/her
- Insuring an individual’s family members does not promote better outcomes for him/her – except with regard to mothers.

SECONDARY ANALYSIS

- No association between true concordance and better outcomes
## RESULTS

### Table 1: Marginal effects of outcomes for *children* in BHP-eligible households, 2002-2008

<table>
<thead>
<tr>
<th>Type of Discordant Coverage</th>
<th>Has usual source of care (mean = 0.85)</th>
<th>Has unmet health needs (mean = 0.96)</th>
<th>No doctor visits in past year (mean = 0.96)</th>
<th>No dentist visits in past year (mean = 0.66)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Uninsured, All Parents Insured</td>
<td>-0.318*** (0.019)</td>
<td>0.018*** (0.004)</td>
<td>0.020*** (0.004)</td>
<td>0.208*** (0.013)</td>
</tr>
<tr>
<td>Child Insured, All Parents Uninsured</td>
<td>-0.015 (0.012)</td>
<td>-0.003 (0.005)</td>
<td>-0.001 (0.005)</td>
<td>0.025* (0.015)</td>
</tr>
</tbody>
</table>

### Table 2: Marginal effects of outcomes for insured *mothers* earning 133-200% FPL, 2002-2008

<table>
<thead>
<tr>
<th>Type of Discordant Coverage</th>
<th>Has usual source of care (mean = 0.82)</th>
<th>Has unmet health needs (mean = 0.91)</th>
<th>No doctor visits in past year (mean = 0.89)</th>
<th>No dentist visits in past year (mean = 0.58)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Uninsured, Mother Insured, Father Uninsured</td>
<td>-0.084 (0.053)</td>
<td>0.048*** (0.018)</td>
<td>0.036 (0.025)</td>
<td>0.125** (0.052)</td>
</tr>
<tr>
<td>Child Insured, Mother Insured, Father Uninsured</td>
<td>-0.040** (0.019)</td>
<td>0.020*** (0.010)</td>
<td>0.027** (0.012)</td>
<td>0.019 (0.024)</td>
</tr>
</tbody>
</table>

Levels of statistical significance: ***P<0.01, **P<0.05, *P<0.10
Reference Group for each table: A family with every member insured
Data Time lag

Inexact BHP-income category

Family Definition

Individuals with different habits

Endogeneity bias
POLICY IMPLICATIONS AND CONCLUSIONS

- Low financial risk for states

- A BHP will not threaten the viability of an exchange

- A BHP will increase the number of families in which all members are insured
  - Mixed evidence that insuring all family members is associated with better outcomes
  - Mothers benefit

- A BHP will increase the number of families in which all members are on public coverage – *true* concordance
  - No association between true concordance and preferable outcomes
Insuring fathers and/or children is associated with better outcomes for mothers