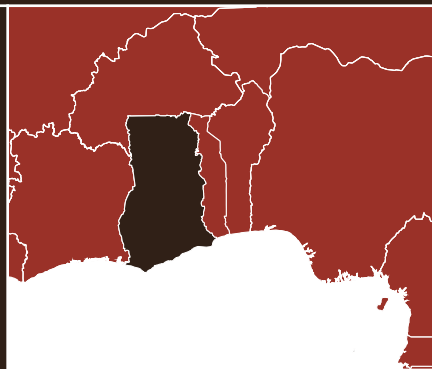


June 2015

HOW GHANA CAN SAVE LIVES AND MONEY



*The Benefits of
Financing Family
Planning Through
National Health
Insurance*

This publication was prepared by Michael Chaitkin, Melissa Schnure, Donald Dickerson, and Sarah Alkenbrack of the Health Policy Project.

Suggested citation: Chaitkin, M., M. Schnure, D. Dickerson, and S. Alkenbrack. 2015. *How Ghana Can Save Lives and Money: The Benefits of Financing Family Planning through National Health Insurance*. Washington, DC: Futures Group, Health Policy Project.

ISBN: 978-1-59560-100-1

The Health Policy Project is a five-year cooperative agreement funded by the U.S. Agency for International Development under Agreement No. AID-OAA-A-10-00067, beginning September 30, 2010. It is implemented by Futures Group, in collaboration with Plan International USA, Avenir Health (formerly Futures Institute), Partners in Population and Development, Africa Regional Office (PPD ARO), Population Reference Bureau (PRB), RTI International, and the White Ribbon Alliance for Safe Motherhood (WRA).

How Ghana Can Save Lives and Money

The Benefits of Financing Family Planning Through National Health Insurance

JUNE 2015

This publication was prepared by Michael Chaitkin,¹ Melissa Schnure,² Donald Dickerson,² and Sarah Alkenbrack.²

¹ T. H. Chan School of Public Health, Harvard University; ² Health Policy Project, Futures Group

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ACKNOWLEDGMENTS

This review of the benefits of financing family planning in Ghana through the country's National Health Insurance Scheme has been undertaken with support from the U.S. Agency for International Development (USAID) in Ghana and Washington, DC. We would like to thank the following people for the thoughtful and incisive comments that strengthened the analysis in this report: Patrick Aboagye, Family Health Division, Ghana Health Services; Marian Kpakpah, National Population Council; Akua Kwateng-Addo and Vandana Stapleton, USAID/Ghana; and Diana Harper, USAID Global Health Bureau. Last, we thank Debbie McGill and Erin Crandell for their editorial and design support.

EXECUTIVE SUMMARY

Access to maternal health services in Ghana has improved significantly over the past 15 years—most dramatically since 2008, when the government began providing free general care for pregnant women, as well as a maternal benefit package covering deliveries, antenatal and postnatal care, and pediatric care for the first three months of life. The National Health Insurance Fund finances all of these services.

Progress in increasing access to family planning has been limited in comparison. As of 2011, only 34.7 percent of women of reproductive age (ages 15–49) were using some form of contraception, and 27 percent reported an unmet need—that is, they wanted to space births or have no more children but were not using any method. In 2012, the National Health Insurance Act included full coverage of family planning services in its list of benefits. This step should reduce unmet need to some extent among the 2.4 percent of women who say that cost is a barrier, but so far the law has not been implemented.

Increasing the prevalence of contraceptive use would benefit Ghana in several ways. First, family planning is a well-documented strategy for ending preventable maternal and child deaths and improving the health of mothers, babies, and communities. Second, improving access to family planning reduces overall costs of healthcare delivery, by averting unintended pregnancies and induced abortions and by improving maternal health—thus reducing the costs of operating a health system. Third, expanding access to family planning will help Ghana meet its international and national commitments: for example, the country's 1994 National Population Policy, which will require a contraceptive prevalence rate of 50 percent by 2020, and the international Vision 2020 Plan of Action, which embraces family planning as an element of economic development.

To help Ghana's policymakers anticipate the health and economic benefits at varying levels of investment in family planning from 2014–2020, the USAID-funded Health Policy Project (HPP) conducted an analysis, using its new ImpactNow model. HPP made the following four projections:

- Baseline, assuming no new funds or interventions to improve access to family planning and an annual increase in contraceptive prevalence of less than 1 percent—the pattern in Ghana since 1993
- Scenario 1, assuming the baseline projection of contraceptive prevalence and an additional annual increase of 2.4 percent—the result of eliminating the unmet need of women who say cost prevents them from using a family planning method
- Scenario 2, assuming a moderate annual increase in contraceptive prevalence of 5 percent over the baseline, reflecting both the removal of the financial barrier to access and some interventions to address other barriers, such as the fear of side effects
- Scenario 3, assuming an ambitious annual increase in contraceptive prevalence of 10 percent over baseline, which would exceed the National Population Policy's goal of 50 percent by 2020 through significant interventions to increase demand for family planning

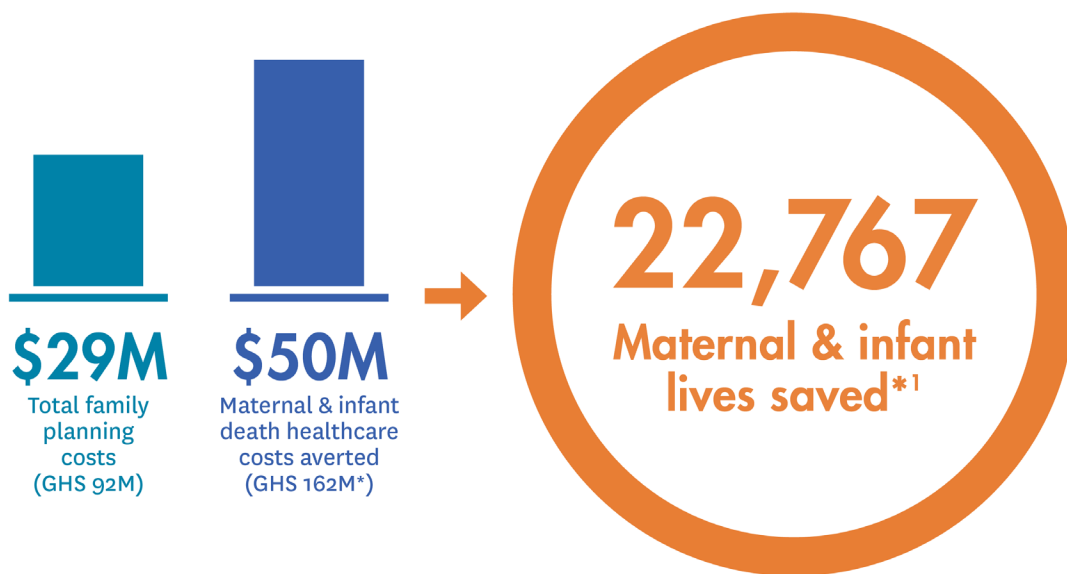
All four scenarios—even the baseline, with no new government funding—save the lives of mothers and infants. If family planning use increases by Scenario 2's moderate 5 percent a year over the baseline projection, there will be 805,993 fewer births between 2014 and 2020. Given Ghana's current maternal and infant mortality ratios, this translates to 2,079 fewer maternal deaths and 20,688 fewer infant deaths (see Figure 1).

Achieving these results yields dividends for Ghana's healthcare budget. In all four scenarios—even the baseline—the health benefits of government investment in family planning save the healthcare system more money than the government must spend to provide the services. For example, to achieve the

moderate annual increase in contraceptive prevalence from Scenario 2, Ghana would have to spend \$US29 million (GHS 92 million) but the savings in averted maternal and infant healthcare costs would be \$US50 million (GHS 162 million).

The cost-effectiveness of investments in family planning is a strong argument for Ghana to move the National Health Insurance Act off the books and into operation. Combining full coverage of this service with even a modest investment to promote the use of family planning methods and address concerns can bring Ghana much closer to meeting its own targets by 2020, when its national and international commitments will come due.

Figure 1. Costs and Lives Saved from 2014–2020 with Scenario 2's Moderate Family Planning Investment



*Cumulative 1805,993 births averted
Source: Health Policy Project

ABBREVIATIONS

ANC	antenatal care
CPR	contraceptive prevalence rate
DHS	Demographic and Health Survey
FP	family planning
FP2020	Family Planning 2020
HPP	Health Policy Project
MDG	Millennium Development Goal
MH	maternal health
MICS	Multiple Indicators Cluster Survey
MMR	maternal mortality ratio
NHIF	National Health Insurance Fund
NHIS	National Health Insurance Scheme
RH	reproductive health
USAID	United States Agency for International Development

INTRODUCTION

Ghana has made great strides in improving access to maternal health services in the past 15 years, largely because of the president's launch of the free maternal health initiative, financed through the National Health Insurance Scheme (NHIS). However, progress in increasing access to family planning (FP) has been more limited. Recognizing the need to promote greater contraception uptake, the 2012 National Health Insurance Act mandated inclusion of free FP services in the benefits package of the NHIS (Republic of Ghana, 2012). By passing the law, the government of Ghana signaled its general understanding of the benefits of family planning: saving lives and averting costs in the national healthcare program. Still, the law is not yet operational, so the country is missing its chance to reap these benefits.

This report estimates the impact that enacting the law would have on maternal morbidity and mortality and, as a result, on the national healthcare budget. It poses the following questions:

- To what extent would the inclusion of family planning in the insurance scheme increase FP access?
- What factors other than cost must be addressed to improve access to family planning?

To answer these questions, the USAID-funded Health Policy Project (HPP) conducted a review of the evidence in Ghana and internationally, as well as a modeling exercise that examines the costs and impacts of investing in family planning through the NHIS. HPP's results, reported here, should help stakeholders understand the relationship between FP use and insurance. This information will be important to the government of Ghana as it works to increase the depth (the number of services covered), breadth (the percentage of the population covered), and height (the extent to which the scheme covers out-of-pocket expenditures) of health coverage within a sustainable national system.

REPRODUCTIVE AND MATERNAL HEALTH IN GHANA

Over the past 15 years, Ghana has made significant progress in increasing the use of reproductive health (RH) and maternal health (MH) services and improving health outcomes. Between 1993 and 2014, the number of births that took place in facilities increased from 42 percent to 73 percent (GSS and Macro International Inc., 1994; GSS and Macro International Inc., 1999; GSS et al., 2004; GSS et al., 2009; GSS, 2012; and GSS 2014). During this same time, use of antenatal care (ANC) given by a trained health professional¹ increased from 86 percent to 97 percent (see Figure 2). Meanwhile, the maternal mortality ratio (MMR) declined by 50 percent, from 760 deaths per 100,000 live births in 1990 to 380 deaths in 2013 (World Health Organization (WHO), 2014b). Experts believe that the number is in fact much higher, but if 380 per 100,000 live births is accurate, Ghana's MMR is far below that of other low-income countries in sub-Saharan Africa, where the MMR averages 510 per 100,000 live births (see Figure 3).

Any actual decline in maternal mortality would be for the following reasons:

- Per capita health spending in Ghana has more than doubled, from approximately US\$43 in 1995 to US\$106 in 2012 (WHO, 2014a).
- Expanding the Community-Based Health Planning and Services program has strengthened healthcare systems and community-level access to care.
- Reducing user fees for maternal health services to zero has improved access to these services.

¹ Trained health professionals are doctors, nurses, and midwives.

How Ghana Can Save Lives and Money: The Benefits of Financing Family Planning Through National Health Insurance

Ghana has demonstrated significant political will to improve women’s access to maternal health services. In 2008, the president launched a free maternal healthcare initiative, which granted all pregnant women free access to general medical benefits and a maternal benefit package covering deliveries, antenatal and postnatal care, and free newborn care for infants for a three-month period. Evaluations have found that the policy—backed by financing from the National Health Insurance Fund (NHIF)—has increased women’s uptake of services (HERA and Health Partners Ghana, 2013). Including family planning as a benefit in the NHIS, by operationalizing the National Health Insurance Act, gives Ghana a chance to make FP services more accessible and achieve further gains in reproductive and maternal health.

Figure 2. Trends in RH/MH Services Use

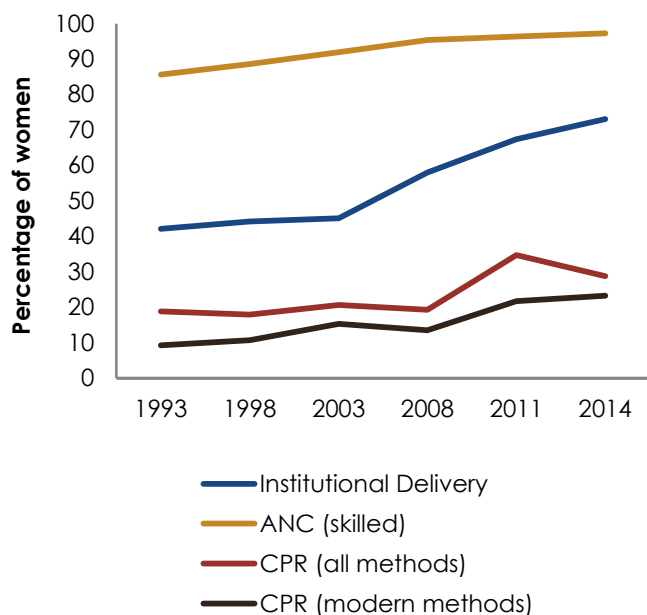
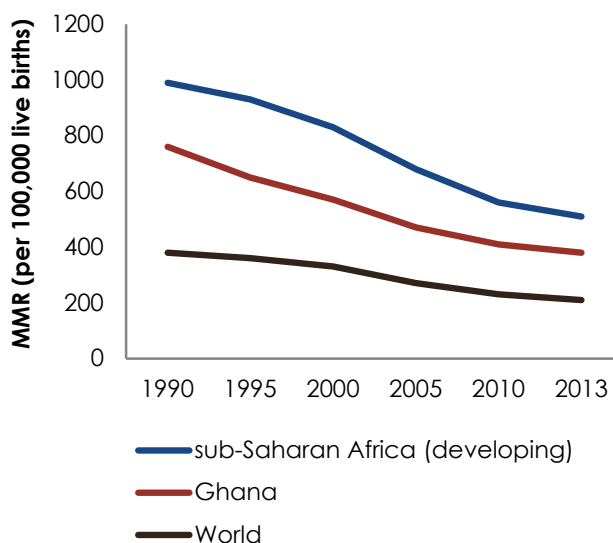


Figure 3. Trends in Maternal Mortality



Sources—Figure 2: GSS and Macro International Inc., 1994; GSS and Macro International Inc., 1999; GSS et al., 2004; GSS et al., 2009; and GSS, 2012. Figure 3: WHO, 2014b.

Despite progress in increasing access to maternal health services, the following challenges remain:

- The contraceptive prevalence rate (CPR) is low. Only slightly less than one-third (28.8%) of women of reproductive age (ages 15–49) were using some form of contraception in 2014 (see Figure 2). This rate is a marked improvement over that of 1993, however, when the rate was 20.3 percent.
- Unmet need—the share of women of reproductive age who say they would like to space births or have no more children, but who are not using family planning—is high: 30.1 percent in 2014.
- More women are choosing longer-term methods, and the government will need to ensure the availability of commodities and trained personnel to meet this increased demand (GSS et al., 2008 and GSS, 2011). Globally, as a country’s CPR rises, women tend to choose longer-acting methods of contraception. In Ghana, the increase in CPR from 1993–2011 was also accompanied by an increasing preference for longer-acting methods: about 14 percent of women using contraceptives in 1993 were using longer-acting methods, compared with 55 percent in 2014.

BENEFITS OF IMPROVING ACCESS TO FAMILY PLANNING IN GHANA

First, **family planning is a central part of ending preventable child and maternal deaths and improving the health of mothers, babies, and communities.** The links between FP use and reductions in maternal mortality are well-documented. Ensuring access to family planning by women and couples is essential to securing the well-being of women and supporting the health and development of communities. Some FP methods also help prevent the transmission of HIV and other sexually transmitted infections. Furthermore, family planning enables people to make informed choices about their sexual and reproductive health and provides opportunities for economic empowerment and gender equality (GSS et al., 2008).

Second, **improving access to family planning reduces the overall costs of healthcare delivery.** There is strong evidence that investing in preventive services is cost-effective and can result in savings to the healthcare system in the long run (Cohen, 2010). Reducing costs, by averting unintended pregnancies and induced abortions and improving maternal health overall, can translate into cost savings in maternal healthcare, which will be important in Ghana, where the government faces the challenge of ensuring the NHIF's sustainability.

Third, **increasing access to family planning delivers on Ghana's national and international commitments**, which are as follows:

- The Family Planning 2020 (FP2020) goal to expand access to contraceptives to an additional 120 million women and girls globally by 2020 (GSS et al., 2008)
- The National Population Policy (1994), which aims to reduce the total fertility rate to 3.0 by 2020 (this will require the country to reach a CPR of 50 percent by 2020)
- The Vision 2020 Plan of Action, which addresses family planning as an integral element of economic development
- Millennium Development Goal (MDG) 5b, which calls for universal access to reproductive health by 2015

HOW HEALTH INSURANCE SHRINKS THE FINANCING GAP FOR FAMILY PLANNING

HPP projected the total investment required both for commodities and program costs between 2010 and 2015, as well as examined the financing gap for the entire country, including both the public and private sectors (Ghana National Population Council and USAID, 2012). Family planning services and commodities in Ghana are currently paid for by a mix of users: the government, households, other private sources, and donors—among which the largest contribution comes from USAID. Donor funding cannot continue to meet this gap; domestic resources will need to be mobilized. Given competing priorities for resources within and outside the health sector in Ghana, new sources of financing for family planning and opportunities to increase efficiency must be found.

Box 1. Republic of Ghana

National Health Insurance Act, 2012 (Act 852)

Benefits

30. (1) The Minister shall prescribe the healthcare benefits package including any relevant family planning package to be provided under the National Health Insurance Scheme.

The country is moving toward universal health coverage through the NHIS and trying to increase uptake of family planning. Thus, one could argue that family planning should be covered by the NHIS to meet Ghana’s goals of increasing FP coverage and identifying services that are cost-effective in the long run.

To promote greater uptake of contraception, the 2012 National Health Insurance Act mandated the inclusion of FP services in the NHIS benefits package (see Box 1) (Republic of Ghana, 2012). Such services had been excluded from the minimum healthcare benefits specified in Legislative Instrument 1809 Regulation 19(1) (Seddoh et al., 2011). The inclusion of family planning in the NHIF is noteworthy, but the law is not yet operational and its benefits in terms of costs averted and lives saved are unrealized. A fundamental question is whether including family planning in the NHIS will increase its uptake. Will women who are enrolled in the NHIS be more likely to use family planning when it is included in the benefits package? The next section aims to answer this question.

HOW INSURANCE COVERAGE INCREASES THE USE OF FAMILY PLANNING

In recent years, health insurance coverage has increased substantially in Ghana. In 2008, 39 percent of women were covered under the NHIS (GSS et al., 2008), and only three years later, 69 percent of women had coverage (GSS, 2011). However, whether insurance expansion increases FP use is unclear. Substantial evidence exists that the introduction of insurance in Ghana has led to increased use of general health services (Blanchet and Acheampong, 2013; Witter and Garshong, 2009; Ansah et al., 2009; Alatinga and Fielmua, 2011; Blanchet et al., 2012).² Evidence of the effect of insurance on the use of maternal health services such as ANC, assisted delivery, and facility delivery is even more substantial. A 2008 study of community-based health insurance in Ghana, Mali, and Senegal found that insurance increased the use of maternal health services when such services were included in benefits packages (Smith and Sulzbach, 2008).³ International and local studies conducted after the NHIS took effect have shown that the insured are more likely to use maternal health services (Brugiavini and Pace, 2010; Mensah et al., 2010).⁴

The link between insurance coverage and use of maternal health services is robust, but evidence of an “insurance effect” for family planning (i.e., the positive effect of insurance on FP use) is scant—both in Ghana and globally (Winfrey et al., 2004; Kohler et al., 2012a; Kohler et al., 2012b). In fact, only a handful of studies in Ghana explore the relationship between insurance and use of preventive services in general. One study showed that insurance coverage significantly increases the use of preventive general

² Blanchet and Acheampong (2013) offered a useful review of evidence connecting NHIS coverage with utilization, financial risk protection, quality of care, and health status.

³ The study’s Ghana arm examined two community-based health insurance schemes—in Nkonranza District (Brong Ahafo Region) and Offinso Municipal District (Ashanti Region)—whose benefits packages did *not* include maternal health services. There, the gap in the use of these services by insured and uninsured women was statistically insignificant, and considerably smaller than in Senegalese and Malian communities included in the study, where insurance did cover maternal health services. This study’s finding of no association in the two Ghana districts between the use of maternal health services and insurance that does not cover the services was replicated in the 2009 study by the Health Systems 20/20 Project and the Ghana Health Service. Clearly, insurance matters for service use only if the service is covered.

⁴ Mensah et al. (2010) found that NHIS-enrolled women are more likely to use ANC and institutional and assisted delivery and experience fewer birth complications in four districts: Sunyani Municipal and Nkoranza (Brong Ahafo Region), and Bolgatanga Municipal and Talensi-Nabdam (Upper East Region). Dzakpasu et al. (2012) also found that insurance coverage and the availability of free services led to increased institutional delivery in Brong Ahafo Region. Similarly, Gobah and Zhang (2011) found that NHIS coverage positively affects use of modern healthcare, including assisted and institutional delivery and postnatal care, in Akatsi District (Volta Region), by removing financial barriers to access.

health exams by women in Brong Ahafo and Upper East regions (Mensah et al., 2010), but found no significant effect on women's use of general health exams and breast exams in the Accra Metropolitan Area (Blanchet et al., 2012). Another study examined the relationship between insurance coverage and FP use in Ghana, using data from the *2008 Demographic and Health Survey* (DHS). It suggests that insurance coverage reduces the likelihood that women will choose short-term contraceptive methods and increases the likelihood that they will choose long-term methods, but neither finding was statistically significant (Kohler et al., 2012a). In an approximate replication of that analysis, using data from Ghana's 2011 Multiple Indicators Cluster Survey (MICS), we found a significant association between insurance coverage and use of either short- or long-term methods.⁵

Among women who report cost as a barrier to FP use, including family planning as a benefit in the NHIS should increase uptake. However, the impact of minimizing the cost barrier may be small. The 2011 MICS found that of all nonusers of family planning, only 2.4 percent said the reason was cost (GSS et al., 2008). Women have other reasons for not using family planning. For example, in the 2008 DHS, fear of side effects was the greatest deterrent to future contraceptive use among married women in Ghana (26%) (GSS et al., 2008). Other reasons reported included lack of information, inconvenience, and partner opposition. Demand-side strategies such as education and community outreach can help to counter such issues. Relatedly, it is important to examine how health insurance coverage can serve as an indirect mechanism for faster FP uptake, including the following ways:

- Insurance coverage of any kind generally increases women's contact with healthcare providers, who may present information about family planning and conduct FP counseling as part of routine medical care.
- When the number of insurance subscribers increases, revenue for the health sector increases, which can stabilize the supply chain of drugs and FP commodities.
- Insurance-related accreditation and payment policies may be incentives for providers to improve the quality of their FP services (Kohler et al., 2012a; Naik et al., 2014).

Strategies to promote family planning, in tandem with the expansion of insurance coverage of family planning, must account for fear of side effects and other nonfinancial barriers.

⁵ The findings could be showing a positive link between insurance and FP use, but they could also be a result of selection bias: women who are more likely to enroll in insurance may also be more likely to use family planning, while women who do not enroll may have different health-seeking behavior and attitudes toward family planning.

BENEFITS AND COSTS OF INCREASING FAMILY PLANNING COVERAGE

As the government considers options for increasing access to family planning, it will need to examine the costs and impacts of increased FP coverage, figure out how benefits will be financed, and determine whether family planning will save money in the near term. A key question for these calculations is whether the investment in increased use of family planning would yield positive returns by reducing the number of unwanted pregnancies and preventable abortions and complications. Answering this question requires an understanding of how coverage of health insurance affects women's use of FP services.

In light of the mixed evidence in Ghana and elsewhere, predicting the extent to which insurance coverage will increase FP uptake in Ghana is difficult. A 2008 analysis in Ghana assumed, without clear justification, that insurance coverage would lead to rapid annual growth in use of permanent (20%) and long-term (15%) contraceptive methods (Smith and Fairbank, 2008). On the one hand, these growth rates seem implausible given the mixed evidence on insurance and FP uptake and the fact that financial barriers are just one of many reasons why more Ghanaians do not use family planning, as cited above (GSS et al., 2008). On the other hand, the indirect effects of insurance on uptake, also cited above, could become a reality in Ghana. Given the government's stated policy of increasing the CPR,⁶ this report examines four scenarios of the benefits and costs to Ghana of fully insuring FP services at different rates of uptake.

Modeling Approach

HPP used ImpactNow, a new model developed by the project that allows users to input demographic and cost data to project the health and economic benefits of investments in family planning and the resources needed to achieve FP goals. The projection was done for the near term (2–7 years) and therefore excludes any longer-term effects of family planning. In this section, findings from ImpactNow are presented to inform policymakers of the potential impacts of increased investment in and use of family planning.

The data inputs from ImpactNow are drawn from various internationally recognized sources, but these data can be overwritten. HPP replaced the defaults where newer or more precise data were available. First, ImpactNow's indicators for health status and service utilization are drawn from the 2008 DHS, so HPP substituted data from the 2011 MICS. Second, the model adopts the Reproductive Health Costing Tool's projected rate for caesarian section (10% of live births), but HPP opted for the World Health Organization's threshold rate (15%) (WHO, 2009).⁷ Finally, the model also contains method-specific data on the direct costs of delivering FP services in Ghana, based on country and regional data from *Adding It Up*—a report published by the Guttmacher Institute and the United Nations Population Fund (Singh and Darroch, 2012). These estimates include the direct costs of commodities and other supplies and the labor costs for counseling, method provision and supply, follow-up care, and removal.

⁶ See, for example, MOH and UN Country Team, 2011 and PMA2020, 2013.

⁷ The caesarian section rate measured in Ghana's 2011 MICS was 11 percent, but was much higher in urban areas (17%) and among wealthier women (26% in the top quintile) and better-educated women (30% for those with secondary or higher education). Thus, one would expect the overall figure to continue rising as the country continues to urbanize and household wealth and women's level of education increases.

To conduct this analysis, we considered a baseline case and three additional scenarios based on assumptions about FP uptake and shifts in method mix between 2014 and 2020. The four scenarios are

- Base.* A baseline scenario assuming an increase in CPR of 0.88 percentage points per year, which was the annual average change in Ghana from 1993–2011.⁸ In the absence of any policy or financing interventions, this pattern is expected to continue.
- S1.* A conservative scenario, in which CPR in 2020 is 2.5 percentage points higher than in the baseline scenario, reflecting the removal of financial barriers for 2.4 percent of women and almost no other insurance effects (given that 2.4 percent of women have expressed that they do not use family planning for financial reasons, uptake should increase by roughly that percentage if insurance coverage removes the financial barrier).
- S2.* A moderate scenario, in which CPR in 2020 is five percentage points higher than in the baseline scenario, reflecting both the removal of financial barriers and modest alleviation of other barriers to use, such as fear of side effects.
- S3.* An ambitious scenario, in which CPR in 2020 is 10 percentage points higher than in the baseline scenario, reaching slightly more than the government’s CPR coverage goal of 50 percent by 2020 (this scenario incorporates the assumptions in the other three and introduces substantial demand creation).

In all scenarios, HPP assumed that the number of FP users in the public sector remains relatively constant as the government moves toward universal health coverage. Even though the private sector will likely continue to play a role in family planning, as well as other health service delivery, this analysis outlines the costs and benefits of family planning in the public sector only. In the last MICS (2011), 39 percent of users received their contraceptives in the public sector; in the absence of a national campaign supported by the government that explicitly and actively promotes an increased share of services provided by the private sector, this percentage is likely to remain relatively constant.

For the method mix in 2014—an input shared by all four scenarios—HPP computed the changes reported between the 2008 DHS and 2011 MICS and extrapolated to 2014. The method mixes for 2020 was based on a multivariate regression analysis of global DHS data since the 1980s (Ross et al., 2005). This analysis shows that as FP programs mature, there is also a shift in the method mix. This shift is in line with the government of Ghana’s effort to increase access to a wider range of longer-acting and permanent methods (FP2020, 2013; Ross et al., 2005).

Covering FP services and commodities through health insurance might break down some of the financial and nonfinancial barriers to use and, in so doing, increase access to family planning for those with unmet need for a modern method. Insurance alone cannot break down all of the barriers, but when combined with other approaches, the impact could be greater. Thus, Scenarios 2 and 3 anticipate the results of efforts to increase demand for family planning through advocacy and promotion. (The “real man” campaign under way in Ghana to improve men’s involvement in family planning is a good example [GSS et al., 2008]). They do not, however, account for the cost of reaching people in remote areas or those who are part of vulnerable groups. Nor do they account for the non-FP cost savings that the insured will realize once they are enrolled. The four scenarios consider only program costs.

⁸ Note that data from the 2014 Ghana DHS was not used in this analysis, though it was included in the background data. The 2014 data only became available after the analysis was conducted.

Findings from this Analysis

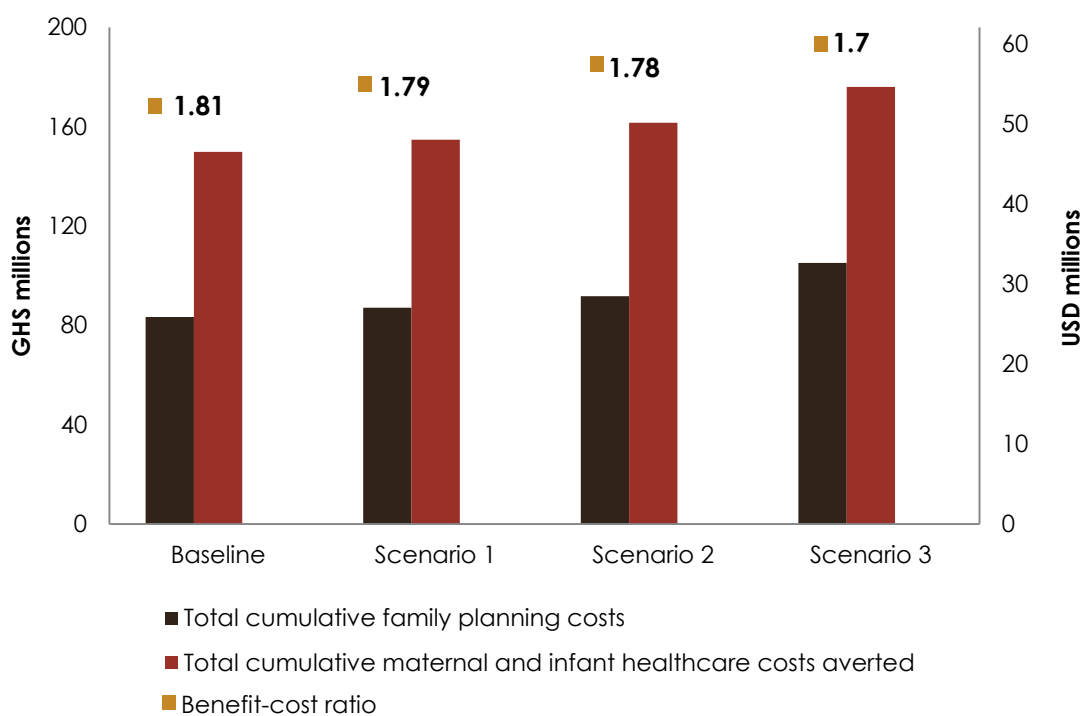
In all scenarios, the expected health benefits are substantial and, not surprisingly, they increase with increasing coverage.

Costs averted

Figure 4 summarizes the FP costs to the public sector if family planning were covered, as well as the maternal health costs that would be saved with greater access to family planning. The FP costs come from global Guttmacher Institute studies (Cohen, 2010; Singh and Darroch, 2012). The projection results show that the baseline scenario will cost the government approximately US\$25.9 million (GS 83.4 million), but will save US\$46.5 million (GS 150 million) in maternal and infant healthcare costs. Additional savings could be realized after 2020, such as the averted costs of children’s healthcare beyond one year of age, but these were not factor into the analysis.

As the benefit-cost ratios indicate, even in the baseline scenario—in which government spending on FP coverage remains steady—the health benefits will save Ghana’s health system more money than the government will spend to provide FP services.⁹ Thus, family planning not only improves the lives of women and children but also decreases the cost to the government of Ghana.

Figure 4. Total Family Planning Costs vs. Healthcare Costs Averted, 2014–2020

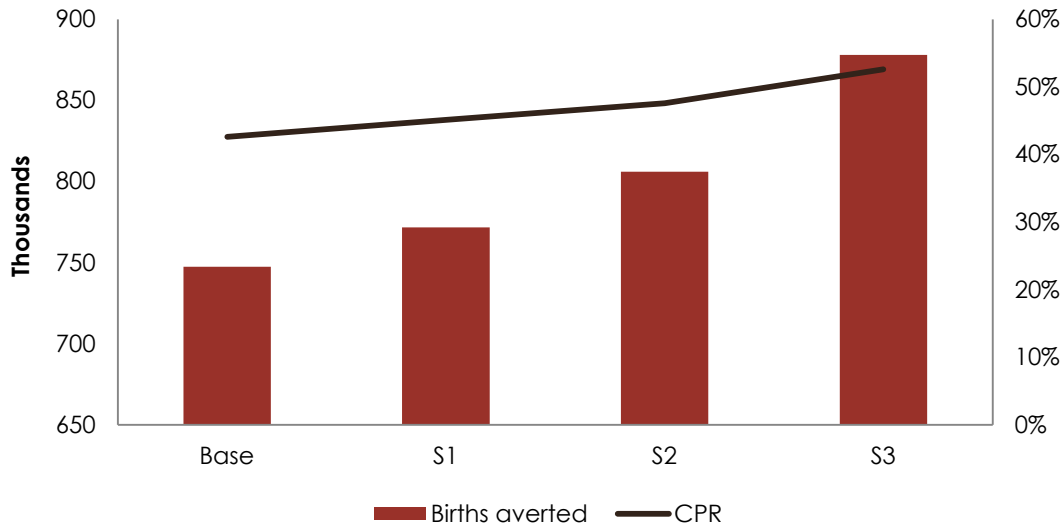


⁹ Note that estimates of costs for FP service provision and costs averted as the result of various health benefits only include *direct* costs. Though it would be ideal to compare total costs and costs averted, there is no reason to believe that the indirect costs of FP services (for example, facility-level overhead and system-level implementation and oversight) substantially outstrip, as a share of total cost, those of antenatal, delivery, and postpartum services.

Unintended births averted

Figure 5 shows the number of unintended births averted in each scenario. The baseline scenario indicates that the current public-sector FP program will avert 747,495 unintended births between 2014 and 2020. An increase in CPR of 2.5 percent increases unintended births averted by 3.2 percent, whereas in the most ambitious scenario, family planning increases the number of unintended births averted by 17.5 percent.

Figure 5. Unintended Births Averted and CPR, by Coverage Scenario, 2014–2020

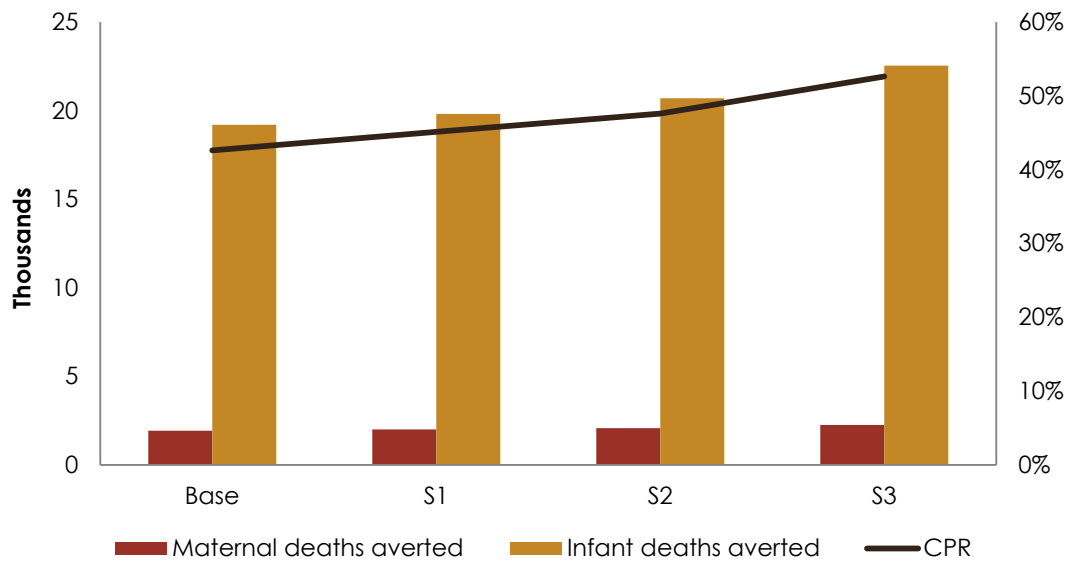


Maternal and infant deaths averted

Similarly, the number of deaths averted increases across the scenarios (see Figure 6). The baseline scenario saves an estimated 19,187 infant deaths and 1,936 maternal deaths between 2014 and 2020. These deaths will be averted without any intervention, as long as women continue using family planning. However, increasing FP use along the lines of the ambitious scenario—which will need to take place to reach the government’s CPR target for 2020—will avert 22,537 infant deaths and 2,253 maternal deaths. The larger reduction in infant deaths relative to maternal deaths is due to the following:

- Maternal deaths occur at the time of birth, whereas infant deaths may take place anytime in the first year.
- As of 2013, infant mortality was almost 14 times higher than maternal mortality in Ghana (53 deaths per 1,000 infants, compared with an MMR of 380 per 100,000).

Figure 6. Deaths Averted, by Coverage Scenario, 2014–2020



CONCLUSION

This study explains why family planning is important to the government of Ghana and how it can help to achieve broader development objectives. The ImpactNow projections show that increased coverage of family planning will save both lives and costs—no matter who is paying for the services. Even so, it is clear from the review of national and international literature that health insurance alone does not necessarily assure an increase in uptake. But, for women with unmet need for family planning who report not using services because of their cost, health insurance is likely to remove this barrier. Thus, it is plausible to think that, at a minimum, FP uptake would increase along the lines of Scenario 1. However, this prediction assumes that user fees for family planning, which insurance would eliminate, are the services' only cost, which may not be the case. Access to family planning can incur additional costs: for example, transportation and lost wages (Ensor and Cooper, 2004). Moreover, other barriers to FP use exist, such as fear of side effects and concerns about the quality of counseling and care; these also need to be addressed.

This analysis makes some assumptions about how insurance might indirectly affect the use of FP services—for example, by increasing women's contact with the health system, and thus their potential exposure to messages and counseling about family planning. In addition to HPP's assumptions, other unconsidered factors may support the expansion of family planning. For example, Ghana's commitment to FP2020 has led the government to increase young people's access to FP services by making the services more youth-friendly. This effort can increase demand for family planning, complementing financing mechanisms such as insurance.

The discussion among policymakers needs to move away from **whether** insurance can increase uptake of family planning, to **how** insurance—and the health system as a whole—can accomplish this. In the meantime, this study offers clear evidence that the benefits of financing family planning through the public sector outweigh the costs. The government of Ghana is interested not only in expanding the number of people with insurance but also in increasing the depth of services, with a benefits package that is cost-effective. Thus, the political interest served by covering family planning may be just as important as the financial and should also be considered.

REFERENCES AND RESOURCES

- Alatinga, K. and N. Fielmua. 2011. "The Impact of Mutual Health Insurance Scheme on Access and Quality of Health Care in Northern Ghana: The Case of Kassena-Nankana East Scheme." *Journal of Sustainable Development* 4(5): 125–138.
- Ansah, E., S. Narh-Bana, S. Asiamah, V. Dzordzordzi, K. Biantey, et al. 2009. "Effect of Removing Direct Payment for Care on Utilisation and Health Outcomes in Ghanaian Children: A Randomized Control Trial." *PLoS Medicine* 6(1): e1000007.
- Asante, F. 2012. *Cost of Family Planning Services in Ghana*. Washington, DC: Health Policy Project, Futures Group.
- Blanchet, N. and O. Acheampong. 2013. *Building on Community-based Health Insurance to Expand National Coverage: The Case of Ghana*. Bethesda, MD: Health Systems 20/20 project, Abt Associates Inc.
- Blanchet, N., G. Fink, and I. Osei-Akoto. 2012. "The Effect of Ghana's National Health Insurance Scheme on Health Care Utilisation." *Ghana Medical Journal* 46(2): 76–84.
- Brugiavini, A. and N. Pace. 2010. "Extending Health Insurance: Effects of the National Health Insurance Scheme in Ghana." *EUI Working Paper RASCAS 2011/27*, Fiesole, Italy.
- Cohen, S. 2010. "Family Planning and Safe Motherhood: Dollars and Sense." *Guttmacher Policy Review* 13(2): 12–16.
- DeVoe, J., G. Fryer, R. Phillips, and L. Green. 2003. "Receipt of Preventive Care Among Adults: Insurance Status and Usual Source of Care." *American Journal of Public Health* 93(5): 786–791.
- Dzakpasu, S., S. Soremekun, A. Manu, G. Ten Asbroek, C. Tawiah, et al. 2012. "Impact of Free Delivery Care on Health Facility Delivery and Insurance Coverage in Ghana's Brong Ahafo Region." *PLoS ONE* 7(11): e49430.
- Ensor, T. and J. Ronoh. 2005. "Effective Financing of Maternal Health Services: A Review of the Literature." *Health Policy* 75(1): 49–5.
- Ensor, T. and S. Cooper 2004. "Overcoming Barriers to Health Service Access: Influencing the Demand Side." *Health Policy and Planning* 9(2): 69–79.
- FP2020. *FP2020 Progress Report 2012–2013: Partnership in Action*. Washington, DC: FP2020. Available at http://www.familyplanning2020.org/images/content/documents/FP2020_Partnership_in_Action_2012-2013.pdf.
- Ghana National Population Council and United States Agency for International Development (USAID). 2012. *GAP: Estimating the Resources Required to Achieve Family Planning Targets in Ghana*. Washington, DC: Futures Group, Health Policy Project.
- Ghana Statistical Service (GSS) and Macro International Inc. 1994. *Demographic and Health Survey, 1993*. Calverton, MD: Macro International Inc.

- GSS and Macro International Inc. 1999. *Demographic and Health Survey, 1998*. Calverton, MD: Macro International Inc.
- GSS, Noguchi Memorial Institute for Medical Research, and ORC Macro. 2004. *Demographic and Health Survey, 2003*. Calverton, MD: ORC Macro.
- GSS, Ghana Health Service (GHS), and ICF Macro. 2008. *Demographic and Health Survey, 2008* [Data set]. Rockville, MD: ICF International.
- GSS, GHS, and ICF Macro. 2009. *Demographic and Health Survey, 2008*. Calverton, MD: ICF Macro.
- GSS. 2011. *Multiple Indicator Survey with an Enhanced Malaria Module and Biomarker, 2011* [Data set]. New York: United States Children's Fund.
- GSS. 2012. *Multiple Indicator Survey with an Enhanced Malaria Module and Biomarker, 2011*. Accra: Ghana Statistical Service.
- GSS, GHS, and ICF International. 2015. *Demographic and Health Survey, 2014: Key Indicators*. Rockville, MD: ICF International.
- Gobah, F. and L. Zhang. 2011. "The National Health Insurance Scheme in Ghana: Prospects and Challenges: A Cross-Sectional Evidence." *Global Journal of Health Science* 3(2): 90–101.
- Health Systems 20/20 Project and Ghana Health Service. 2009. *An Evaluation of the Effects of the National Health Insurance Scheme in Ghana*. Bethesda, MD: Health Systems 20/20 project, Abt Associates Inc.
- HERA and Health Partners Ghana. 2013. *Evaluation of the Free Maternal Health Care Initiative in Ghana. Draft Report*. Available at http://www.unicef.org/evaldatabase/files/Ghana_130517_Final_Report.pdf.
- Johar, M. 2009. "The Impact of the Indonesia Health Card Program: A Matching Estimator Approach." *Journal of Health Economics* 28: 35–53.
- Kohler, J., K. Switlick-Prose, A. Comfort, and L. Hatt. 2012a. *The "Insurance Effect": A Statistical Analysis of the Relationship Between Health Insurance and Family Planning in Seven Countries*. Bethesda, MD: Health Systems 20/20 Project, Abt Associates Inc.
- Kohler, J., F. Ngabo, A. Makaka, K. Switlick-Prose, and L. Hatt. 2012b. *The "Insurance Effect": Exploring Health Insurance and Family Planning Uptake in Rwanda*. Bethesda, MD: Health Systems 20/20 project, Abt Associates Inc.
- Mensah, J., J. Opong, and C. Schmidt. 2010. "Ghana's National Health Insurance Scheme in the Context of the Health MDGs: An Empirical Evaluation Using Propensity Score Matching." *Health Economics* 19(S1): 95–106.
- Ministry of Health (MOH), Government of Ghana, and United Nations Country Team in the Republic of Ghana. 2011. *MDG Acceleration Framework and Country Action Plan: Maternal Health*. Accra: MOH, Government of Ghana.
- Morgan, L. 2012. *Can Incentives Strengthen Access to Quality Family Planning Services? Lessons from Burundi, Kenya, and Liberia*. Bethesda, MD: Health Systems 20/20 Project, Abt Associates Inc.

How Ghana Can Save Lives and Money: The Benefits of Financing Family Planning Through National Health Insurance

Naik, R., L. Morgan, and J. Wright. 2014. "The Role of Health Insurance in Family Planning." Available at <http://www.prb.org/Publications/Reports/2015/family-planning-health-insurance.aspx>.

Performance Monitoring and Accountability 2020 (PMA2020) Project, Kwame Nkrumah, and University of Science and Technology (KNUST). 2013. *Detailed Indicator Report: Ghana 2013*. Baltimore, MD: PMA2020.

Republic of Ghana. 2012. National Health Insurance Act (Act 852). Accra: Republic of Ghana.

Ross, J., J. Stover, and D. Adelaia. 2005. *Profiles for Family Planning and Reproductive Health Programs: 116 Countries, 2nd Edition*. Washington, DC: Futures Group.

Seddoh, A., S. Adjei, and A. Nazzar. 2011. *Ghana's National Health Insurance Scheme: Views on Progress, Observations, and Commentary*. Accra: Centre for Health and Social Services.

Singh, S. and J. Darroch. 2012. *Adding It Up: Costs and Benefits of Contraceptive Services—Estimates for 2012*. New York: Guttmacher Institute and United Nations Population Fund.

Smith, K. and S. Sulzbach. 2008. "Community-based Health Insurance and Access to Maternal Health Services: Evidence from Three West African Countries." *Social Science & Medicine* 66: 2460–2473.

Smith, M. and A. Fairbank. 2008. *An Estimate of Potential Costs and Benefits of Adding Family Planning Services to the National Health Insurance Scheme in Ghana and the Impact on the Private Sector*. Accra: Banking on Health Project.

Sulzbach, S., B. Garshong, and G. Banahene. 2005. *Evaluating the Effects of the National Health Insurance Act in Ghana: Baseline Report*. Bethesda, MD: The Partners for Health Reformplus Project, Abt Associates Inc.

Winfrey, B., L. Dougherty, and S. Alkenbrack. 2004. *Impact of Health Insurance on the Use of Family Planning and Maternal Health Services*. Bethesda, MD: The Partners for Health Reformplus Project, Abt Associates Inc.

Witter, S. and B. Garshong. 2009. "Something Old or Something New? Social Health Insurance in Ghana." *BMC International Health and Human Rights* 9: 20–32.

World Health Organization (WHO). 2009. *Monitoring Emergency Obstetric Care: A Handbook*. Geneva: WHO.

WHO. 2014a. Global Health Expenditures Database [Data set]. Available at <http://www.who.int/health-accounts/ghed/en/>.

WHO. 2014b. Global Health Observatory Data Repository [Data set]. Available at <http://apps.who.int/gho/data/>.

ANNEX

Summary of Scenario Analysis: 2014–2020

Parameters	2014	S1 (2020)	S2 (2020)	S3 (2020)	S4 (2020)
CPR	37.3%	42.6%	45.1%	47.6%	52.6%
All modern methods*	24.8%	34.7%	37.7%	40.8%	50.5%
Traditional methods	12.5%	7.9%	7.4%	6.8%	2.1%
Health benefits (cumulative)					
Births averted		747,495	771,767	805,993	878,029
Maternal deaths averted		1,936	1,995	2,079	2,253
Infant deaths averted		19,187	19,809	20,688	22,537
Total FP costs (cumulative)					
ImpactNow costs		\$25,896,943	\$27,047,671	\$28,521,779	\$32,669,554
Absolute maternal and infant costs averted					
Maternal and infant costs averted		\$46,558,112	\$48,069,823	\$50,201,629	\$54,688,518
Benefit-cost ratio					
ImpactNow costs		1.81	1.79	1.78	1.70

For more information, contact:

Health Policy Project
Futures Group
1331 Pennsylvania Ave NW, Suite 600
Washington, DC 20004
Tel: (202) 775-9680
Fax: (202) 775-9694
Email: policyinfo@futuresgroup.com
www.healthpolicyproject.com