Partners for Health Reform*plus*

Equity Initiative in Mali: Evaluation of the Impact of Mutual Health Organizations on Utilization of High Impact Services in Bla and Sikasso Districts in Mali

September 2006

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Village chiefs, other community leaders and the population in the two sites	Collaboration during studies and surveys

Abstract

In most African countries, including Mali, poor and rural populations have lower than desired utilization and coverage rates for key preventive and primary curative interventions, despite efforts made to increase the availability of services.

While mutual health organizations (MHO) have emerged to address this, limited evidence has been available on their effectiveness. This report presents findings on the evaluation of impact of MHO membership on use of modern treatment for fever and diarrhea, prenatal care and assisted deliveries, childhood immunizations, vitamin A supplementation, and insecticide treated mosquito nets in two districts in Mali. This study provides solid evidence on the positive effects of MHOs on utilization of many priority health services (treatment of fever and diarrhea, prenatal care, and use of insecticide treated mosquito nets) and evidence that MHOs serve many poor people, although they do not reach all of the absolute poorest. MHOs remain one viable mechanism, as a complement to others, to increase financial access to and equity in utilization of essential health services. But MHOs' potential effects on access and equity require more concerted efforts by governments to develop coherent strategies for MHO development, to build effective partnerships to develop and sustain MHO support capacities, and to continuously learn from experiences of others to strengthen MHOs and their ability to reach the key target populations: women, children and the poor.

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Acronyms

ASACO	Community Health Association (*Association de Santé Communautaire*)
ATN	*Programme Santé USAID/Assistance Technique Nationale*
CSCom	Community Health Center (*Centre de Santé Communautaire)*
CSRef	Referral Health Center (*Centre de Santé de Reference*)
DHS	Demographic and Health Survey
GOM	Government of Mali
HH	Household
IEC	Information, Education and Communication
MHO	Mutual Health Organization
NGO	Nongovernmental organization
ORF	Oral Rehydration Therapy
PHR	Partnerships for Health Reform
PHR*plus*	Partners for Health Reform*plus*
PNC	Post-natal care
PDDSS	Ten Year Social and Health Development Plan (*Plan Décennal de Développement Sanitaire et Social*)
PRODESS	Social and Health Development Program (*Programme de Développement Sanitaire and Social)*
USAID	United States Agency for International Development
UTM	*Union Technique de la Mutualité*
WHO	World Health Organization

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We would like to take this opportunity to dedicate this report to Ousmane Sidibé, without whom all this would not have been possible. He was one of the key technical managers of the baseline survey, the implementation and support to the MHO intervention, and for much of the evaluation survey. Unfortunately, he passed away before the analysis was completed. We regret his passing and hope that, in his memory, the MHO movement in Mali will grow and flourish.

We would first like to extend our thanks to the populations in the two study sites who participated in the strenuous baseline survey in 1999, the consensual process of developing possible solutions to equity and utilization issues, the development and ongoing functioning of community-based mutual health organizations, and a follow-up evaluation survey. The enthusiasm and hard work of the MHO executive committees, boards of directors, and members are reflected in their abilities to increase membership significantly after a significantly difficult economic-down turn in the two districts.

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- The High Commissions of Sikasso and Bla
- The Delegate of Bla local government
- The National Department of Statistics and Information
- Regional Directors for Planning and Statistics
- Regional Directors for Health in Sikasso and Ségou
- Regional Directors for Social Development in Sikasso and Ségou
- The Planning and Statistics Unit in the Ministry of Health
- The *Union Technique de la Mutualité* or Technical Union of Mutual Health Insurance in Mali

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Executive Summary

Introduction

In most African countries, including Mali, poor and rural populations have lower than desired utilization and coverage rates for key preventive and primary curative interventions, despite efforts made to increase the availability of services. In addition, because of poverty, they tend to suffer more health problems and because of their health problems, they tend to be poorer (Sachs et al 2001). It is in this context that the Ministry of Health, United States Agency for International Development (USAID) and UNICEF developed the Equity Initiative. The Equity Initiative, initiated in 1999, is a research-action-evaluation project funded by USAID.[1] This report focuses on the effects of one intervention developed under the Equity Initiative in Mali: mutual health organization (MHO) development in two districts of Mali (Bla and Sikasso) that aims to increase utilization of high impact services. MHOs can be defined as voluntary membership organizations providing health insurance services to their members in exchange for member premium payments, and are often called community-based health insurance or financing schemes. The government of Mali recognized the potential of mutual health organizations and included their promotion in its health and social sector development plan 1998-2007 (GOM, 1997). This paper presents findings from an evaluation of 4 community-based mutual health organizations, seeking to better understand the impact of membership on use of curative, maternal and child health inventions and on out-of-pocket expenditures, and on MHOs' ability to include the poor and key target populations. It seeks to help fill the gaps in knowledge and evidence about what MHOs can (or perhaps cannot) do.

Study Objectives and Methods

The objective of the research is to measure the impact of membership in an MHO (community based insurance scheme) on the use of key high impact or priority services: modern treatment for fever (presumed malaria)[2] and diarrhea (in children); prenatal care and assisted deliveries; childhood immunizations; vitamin A supplementation; and insecticide treated mosquito nets. Three major research questions were asked:

1. Does MHO membership affect utilization of these priority health services?

2. Are MHOs inclusive in their enrolment of members (do the poor, women of reproductive age and children under 5 years of age enroll?)

3. Does MHO membership provide financial protection?

[1] This Initiative was funded through several USAID projects: the Partnerships for Health Reform (1999-2001), the Partners for Health Reform *plus* (2001-2006), and the *Programme Santé USAID/Assistance Technique Nationale* (2003-2006).

[2] Fever is the major cause of curative care consultation in Mali, and the national treatment guidelines call for presumptive treatment of all fevers as malaria, given the level of endemicity and the low toxicity and cost of the then first line drug (chloroquine).

The research design is primarily an intervention-control group design to test the impact of MHOs on utilization of high impact services, with intervention group consisting of those who joined one of the 4 MHOs in Sikasso commune and Bla district. Controls fall into two categories: those who live in areas where there is a functioning MHO but who did not join, and those who live in areas where there is no MHO.

Evaluation of impact of the MHO intervention was based on data from a household survey conducted in September-October 2004 and on data compiled from MHO registers on membership, premium payment and services covered for the period 2002-2004. The household survey collected data relevant to the research questions above[3] at household and individual levels on socio-economic variables, self-reported distance to the nearest health facility, utilization of priority health services, reasons for non-utilization, and MHO membership. A total of 2,280 households were reached and interviews conducted with heads of households, individuals with fever in the previous two weeks (or their caretakers), women of reproductive age, women pregnant or delivering in the previous 12 months, and caretakers of children under 5.

Multivariate statistical analysis was done using STATA's survey logit regression function to ascertain whether being an MHO beneficiary was a predictor of higher utilization of priority health services, above and beyond other indivudal, household and community characteristics, and to establish determinants of MHO household enrolment and enrolment as an individual beneficiary. A multivariate linear regression was used to determine whether participation in an MHO translated into lower and less variable out-of-pocket payments for health services, both for the household and individual user level.

The Mutual Health Organization Intervention

The four mutual health organizations were developed, through a process of participatory study and design. Members paid in one-time enrollment fee and a monthly or annual premium (based on the number of beneficiaries enrolled) to the MHO. Members were asked to pledge, upon joining, to make use of preventive care services, such as immunizations, insecticide treated mosquito nets, and prenatal care. The MHOs signed agreements with local public health facilities including primary health care centers and referral health centers (where available). When members or their beneficiaries needed curative or maternal care, and were up-to-date on their premium payments, they paid a portion (normally 20-25%) of charges at the time of service, and the MHO covered the larger, remaining portion. The MHOs varied in size from 126-850 member households and 374-6508 enrolled beneficiaries. The percentage of households up-to-date in premium payments at the time of the survey ranged from 34%-100%.

Results

Who joins an MHO?

Demographic characteristics of households that positively contribute[4] to the likelihood of enrollment in an MHO include the size of the household, the number of women of childbearing age in

[3] A separate sub-study was conducted in Bla District where an additional intervention of IEC on maternal health issues was also implemented. See Franco et al (2006b) for more information.
[4] Only those variables that were significant at the 10% or lower probability level in the multivariate analysis are reported here.

the household, and the gender (female) of the head of household. Ethnic groups reveal different patterns of enrollment in MHOs. Geographical accessibility of health facilities is positively associated with higher enrollment in MHOs. After controlling for other factors, only the richest (5^{th} quintile) SES group was significantly more likely to join than households in the poorest quintile, both at a household and individual beneficiary level. No other SES groups are statistically and significantly different from the poorest group in terms of joining MHO and remaining as active members. The observed patterns of relationships between demographic and health status characteristics of individuals and coverage of individuals by MHOs suggest the prevalence of adverse selection processes in coverage of individuals in MHOs in the Bla and Sikasso districts. Individuals over 50 years of age, individuals who reported to have a handicap, and individuals who reported to suffer from a chronic illness are more likely to be covered by MHOs than their counterparts. Households in the rural area disproportionately enroll the elderly, young children, and women of reproductive age. In the urban areas, the pattern tends to be toward enrolling all demographic groups equally. Individuals who self-reported a poorer health status are more likely to be covered by MHOs than individuals who self-reported a better health status.

Does MHO Membership Affect the Likelihood of Seeking Curative Services?

The main source for the treatment of fever in both districts remains home care and self-medication through the purchase of drugs at pharmacies and from street venders. MHOs are contributing to desired changes in this general pattern: to treatment in a modern facility for the population in general, and for early treatment for children under 5 years of age. For diarrhea in children, MHOs also show an important impact. Higher SES is a significant predictor of modern care seeking behavior for treatment of fever, but this result is inconsistent across the SES quintiles. More than a third of those not seeking modern care cited financial constraints, particularly those living in smaller urban and rural areas where incomes are lower. SES is hardly a factor at all for children under 5 in terms of seeking care for fevers or diarrhea.

Does MHO membership affect the likelihood of seeking maternal health services?

MHOs appear to have an impact on use of prenatal care and use of insecticide treated nets during pregnancy. MHOs do not show a significant impact on deliveries, though this may be due to the small sample size, since 22 of 25 women with MHO coverage used a modern facility. However, it appears that distance to a modern facility is the major barrier to receiving the skilled assistance usually available in such facilities, both from the multivariate analysis and from reasons stated for not delivering in a modern health facility (distance/transport issues and labor coming too quickly).

Does MHO membership affect likelihood of using high impact preventive health services for children?

Enrollment of children as beneficiaries appears to be determined by household characteristics, but not SES and access, and is hardly related to individual characteristics of the child. Household MHO membership is a positive predictor of use of insecticide-treated mosquito nets in children under 5, but not of immunizations or Vitamin A supplementation.

Does the MHO protect against large household health expenditures?

Active household membership in an MHO does not seem to be associated with lower total household health spending, and has a weak negative association with health care expenditures as a percent of overall cash expenditures. However, active membership does appear to offer some income protection (as shown by the ratios of mean to median expenditures). Further, active MHO members

tend to spend less on care for fevers in general and on care for fevers obtained in modern healthcare facilities. The costs of MHO premiums appear to make relatively more cash-poor households (in Bla) choosier about the number and types of household members to enroll as beneficiaries. Finally, the large gaps between median and mean household spending on health as a percent of total cash expenditure show that there is a relatively strong need for additional protection from the financial risk of healthcare in the studied populations.

Conclusions

MHOs organized under the Equity Initiative provided an opportunity for Malians to examine the feasibility and effectiveness of alternative institutional arrangements within the mutual health insurance movement. The social bases for resource mobilization and risk-pooling in the Equity Initiative's MHOs were not limited to "employment" and "membership in a socio-professional association", but were "residence" and "community based organizations". Thus, these MHOS seek to rearrange community financing arrangements, building on the structural equivalence of community-based organizations in Malian towns and villages in order to mitigate the financial barriers associated with Bamako Initiative resource mobilization strategies, and to improve access to health care services while protecting the income of the poor and strengthening their power and voices in the health sector.

MHOs do have a positive impact on utilization of many priority interventions

Being eligible for MHO coverage (registered as a beneficiary in a household that is up-to-date on premium payments) is a positive predictor for use of many of the priority interventions. Up-to-date MHO members and beneficiaries were:

- 1.7 times more likely to treat their fever in a modern health facility
- 4.6 times more likely to take their children under 5 years of age for early treatment of fever
- 7 times more likely to take their children under 5 years of age for treatment of diarrhea
- 3 times more likely for their children under 5 with diarrhea to use ORS or seek modern care
- 2 times more likely to make at least 4 prenatal visits during pregnancy
- 2 times more likely for women during pregnancy and children under 5 years of age to sleep under an insecticide treated mosquito net

MHOs reach most parts of the population, and do not exclude the poor

The patterns of the effects of SES were often inconsistent, with only an intermediate quintile being a significant predictor. Socioeconomic status itself was a predictor for initial household enrolment in an MHO only for the 5th (richest) quintile. Approximately half of the Sikasso population and about 80% of the Bla population fall below the poverty line. MHO membership is drawn from a broad cross-section of both. While the very poor may have difficulty joining and paying premiums, they join as frequently as those in other quintiles, with the exception of the richest quintile. One year's worth of premiums plus co-payments for the entire household would average 15,000-28,000 FCFA per year, and represents approximately 2-3% of annual household income at the poverty line in Mali, and 2-8% of household cash income of MHO households. MHO membership did appear to provide some income protection by reducing the variability of health care spending, and saved

households money on care for fevers, though there was no reduction or savings for active members in terms of overall spending on health.

MHOs could face some risks to their sustainability

The four MHOs have shown their resilience in continuing to function despite extremely difficult economic circumstances of their members and the surrounding communities. They have shown that there is a demand for such a service and they have continued to grow. However, there are some results that indicate some potential dangers for the sustainability of these MHOs (and others): adverse selection, difficulties in maintaining regular premium payments, increasing use of health care services among MHO members and beneficiaries.

Geographic accessibility remains a key barrier to use

Across the various priority health interventions, physical distances to health facilities are significantly negative predictors of utilization. Results reflect this pattern for treatment of fever, prenatal services, and deliveries, indicating that in some cases, even 2 kms present a geographic barrier to use. Preventive child services, because of outreach activities, appear to have overcome geographic barriers. The distance barrier was especially strong for deliveries, indicating that inclusion of coverage for transportation for deliveries in the MHO package might help resolve some of these issues.

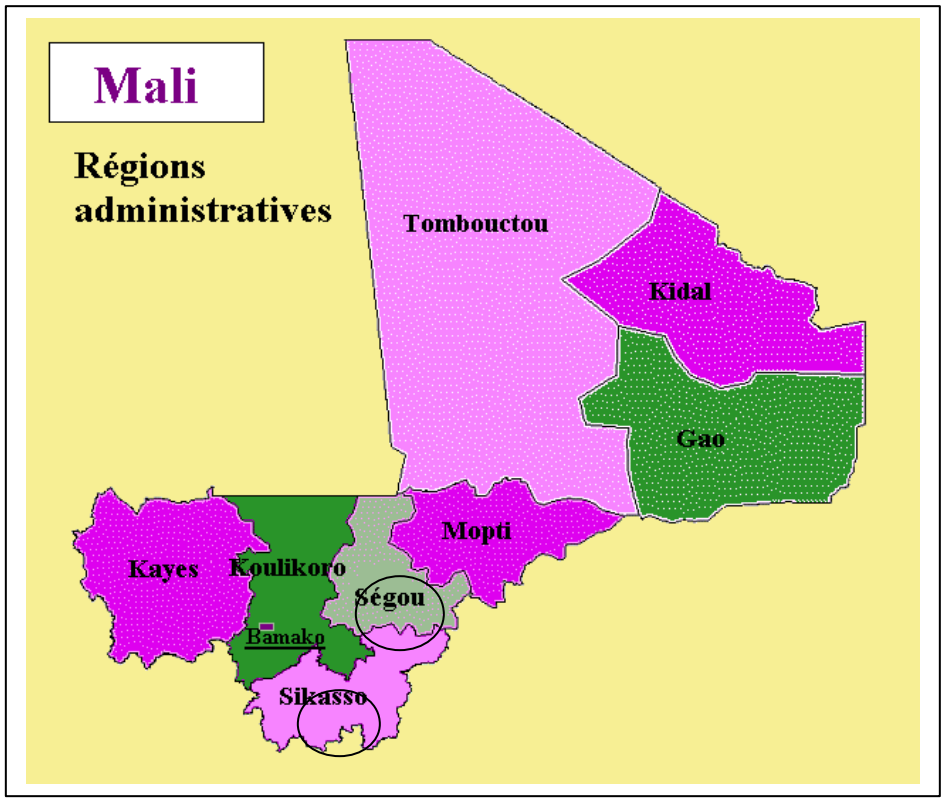
Next Steps

In developing countries where health insurance coverage tends to be limited to urban formal sector employees, MHOs are viewed as a promising insurance mechanism for reaching households in the rural and informal sector, which represent the majority of the population in Mali and other developing countries. This study has provided further solid evidence on the positive effects of MHOs on utilization of many priority health services and evidence that MHOs serve many poor people and provide some income protection related to health care expenditures, although they do not reach all of the absolute poorest. Issues of MHO functioning identified by this study can be addressed by strategies have been tested elsewhere (Gamble Kelley et al, 2006). MHOs remain one viable mechanism, as a complement to others, to increase financial access to and equity in utilization of essential health services. But its potential effects on access and equity require more concerted efforts by governments to develop coherent strategies for MHO development, to build effective partnerships to develop and sustain MHO support capacities, and to continuous learn from experiences of others to strengthen MHOs and their ability to reach the key target populations: women, children and the poor.

1. Introduction

Mali is a large land-locked West African country. It covers 1.2 million square kilometers and has an estimated population of 13 million (2004). In 1989, Mali introduced cost recovery (through user fees) into the health system while simultaneously making considerable investments in health policies and infrastructure throughout the 1990s. However, Mali's utilization rates and health indicators remain low. The 2001 Demographic and Health Survey (DHS) (Ballo et al., 2002; henceforth, this pob referred to as DHS/Mali, 2001) confirmed this trend and showed little improvement in the high rates of infant and child mortality in Mali since the 1996 DHS. Utilization of curative services remained low – 0.24-0.30 new visits per person per year to public health facilities in 1999, and coverage with preventive services was inadequate – only 36 percent children 12-23 months fully immunized (Gamble Kelley et al, 2001). Infant mortality in Mali was 113 deaths per1,000 live births, while the maternal death rate was 582 maternal deaths per 100,000 live births (DHS/Mali, 2001), higher than the average in sub-Saharan Africa. Yet, most of these deaths can be avoided by improving access to and the use of maternal and child health care.

Figure 1: Map of Mali with Equity Initiative Districts Circled



It is in this context that the Ministry of Health, United States Agency for International Development (USAID) and UNICEF developed the Equity Initiative. The Equity Initiative, initiated in 1999, is a research-action-evaluation project funded by USAID,[5] with the goal of testing the hypothesis that cost recovery as a mechanism for community participation limits the use of care, in particular for the poor and vulnerable populations. The Equity Initiative was implemented in close collaboration with the Government of Mali (GOM) and other health-sector partners, and had two main objectives:

- contribute to increasing use of malaria treatment and pregnancy-related services,[6] in particular for the poor and vulnerable populations; and
- help the government develop strategies to improve access to health care in a cost-recovery context

Mutual health organizations are voluntary membership organizations providing health insurance services to their members.

The Equity Initiative consisted of three phases: a study phase to determine appropriate interventions; an implementation phase that some interventions were put into action; and an evaluation phase which sought to analyze the effects of the interventions implemented. This report focuses on the effects of mutual health organization (MHO) membership on utilization of high impact services in two districts of Mali, Bla and Sikasso (circled in Figure 1), while a separate report covers the effects of information, education, and communication (IEC) and MHO interventions in Bla District (Franco et al, 2006). This report discusses the context of the Equity Initiative in Mali in Section 2, the process of intervention selection in Section 3, and a more detailed description of the interventions themselves in Section 4. Section 5 discusses the study methodology (including sample and analysis). Section 6 presents characteristics of the study population, while sections 7-11 present the findings from this evaluation. Section 12 presents conclusions and future directions.

[5] This Initiative was funded through several USAID projects: the Partnerships for Health Reform (1999-2001), the Partners for Health Reform *plus* (2001-2006), and the *Programme Santé USAID/Assistance Technique Nationale* (2003-2006).

[6] As the activities evolved and with the change in USAID's Strategic Objectives in 2003, the services targeted by this evaluation study expanded to cover a range of high impact services: immunizations, family planning, assisted deliveries, intermittent preventive treatment for malaria in pregnancy, use of insecticide treated mosquito nets, treatment of diarrhea with oral rehydration therapy, vitamin A supplementation in children 6-59 months.

2. The Context for the Equity Initiative in Mali

2.1 Mali's Health Sector

Since the country gained independence in 1960, the GOM has repeatedly stated its commitment to provide health care to the greatest number of Malians possible. Many reforms were designed and implemented throughout the 1960s-1980s to strengthen basic health infrastructure and to create functioning health districts. Most of these reforms had limited success, due to resource and other limitations.

Mali entered the 1990s with a resolve to revitalize the primary health care strategy and local health services, using the Bamako Initiative framework. This framework was built on, among other aspects, health care financing arrangements which stipulated cost-sharing between the state, communities, and external donors. The Malian Government and Ministry of Health offered communities assistance to build community health infrastructures, but communities would be responsible for ensuring the sustainability of their community health services through the mobilization of community resources for funding the recurrent costs and management of the community health services. By shifting the burden of recurrent funding and management of local health services to communities, both external donors and the Ministry of Health focused their resources on infrastructure development to face a key challenge in such a vast and poor country as Mali: improving the geographical accessibility of health services. Such a course of action resulted in the development of community health centers (French CSCOM) and community health associations (French ASACOM), which provided a vehicle for community participation in health. Investments in facility construction and equipment came through a World Bank loan, complemented by community in-kind contributions. User fees were instituted for all curative and some preventive services to ensure funds to pay for community-hired staff, and for drugs and supplies. Referral health centers (*Centre de Santé de Référence (CSRef)*) and referral hospitals were established at the district level.

Beginning in 1998, the GOM and its development partners launched a 10-year (1998-2007) social and health strategic development plan (*Plan Décennal de Développement Sanitaire et Social* (PDDSS) and began to make sectoral investments every five years through the (Social and Health Development Program (*Programme de Développement Sanitaire and Social* (PRODESS). The PRODESS focused on increasing utilization of health services and promoting social protection mechanisms. The PDDSS and the PRODESS were instruments designed to improve the impact of health and social welfare programs on the most vulnerable populations. Yet, even while Mali still needed sustained efforts to expand the geographical coverage of its basic health infrastructure, existing capacities were (and are) underutilized as a consequence of barriers associated with community resource mobilization strategies and household financial constraints. In this light, the Equity Initiative sought to assist the GOM to better understand the factors that impede utilization of health care services and to develop and implement interventions to address these factors. Because few quantitative studies existed, the Equity Initiative was designed as a research-action-evaluation endeavor, providing evidence of the issues, assistance with interventions to address issues, and

evaluation of the results of the interventions. Following a situation analysis (described in section 3), local, regional, and national stakeholders chose to start with mutual health organizations (MHOs) as a mechanism to increase equity and access and thus, increase utilization of priority or high impact services.

2.2 MHOs as a Mechanism to Increase Equity and Access

Implementation of cost recovery schemes without effective protection mechanisms has shown negative impacts on the poor. In 1997, the Addis Ababa consensus (ECA-CEA et al, 1998) of 17 sub-Saharan countries stated that while cost recovery is necessary, it may have an impact on equity, quality, and access especially for the poor. Evidence demonstrates that the impact of cost recovery on access and equity depends on how the initiatives are designed and implemented (Leighton, 1995). As the Equity Initiative was starting in the late 1990s, increasing evidence was becoming available about risk-sharing and prepayments schemes and their ability to mitigate the impact of user fees on the poor (Diop et al, 1995). Such schemes are often called "mutual health organizations" (see Box).

Mutual Health Organizations

Mutual health organizations (MHOs) are voluntary membership organizations providing health insurance services to their members. MHOs are also commonly known as community-based health insurance or community-based health financing schemes. Different countries may also have different names for MHOs: in West Africa, for example, they are called *mutuelles de santé*. MHOs are owned[0], designed, and managed by the community that they serve. Members pay a small premium on a regular basis to offset the risk of having to pay for high health care costs in case of illness, injury, childbirth, or another event requiring expensive medical services. Typically, MHOs develop around a geographical entity (such as a district or a village), trade or professional group (such as a trade union or agricultural cooperative), or a health care facility (provider-initiated schemes). MHOs differ from commercial insurance organizations in several ways, most importantly in two respects: they are always not-for-profit, and they are based on the ethic principles of mutual aid and social solidarity. Like commercial insurance schemes, contributions made by members are used to meet the costs of health benefits for all beneficiaries and any administrative costs (typically 5-10 percent of scheme costs) (Bennett et al, 2004).

There is a growing demand for such schemes, as evidenced by the rapid increase in schemes around the world (Bennett et al, 2004) and especially in West Africa (La Concertation, 2004). Another example is Rwanda, where the number of MHOs rose from just one in 1998 to 224 in 2005, covering 40 percent of the population, or more than 3 million Rwandans. Rwanda's experience shows that MHO members utilize "modern" health services four times more often than non-members. The members also utilize reproductive health services, prenatal care, and delivery assistance more often than non-members (Diop and Butera, 2005).

There have been a number of reviews in recent years to assess the potential and the impact of MHOs. The World Health Organization's (WHO's) Macroeconomics and Health Commission (Sachs et al, 2001; Preker et al, 2002) found that MHOs "improve access to drugs, basic health care, and even hospital care." The data from household surveys consistently show that MHOs provide financial protection by lowering payments made by members at the time of service delivery, while increasing their use of health services." Moneti (2004) in a study conducted by the International Labor Organization (ILO/STEP) examining the role of MHOs in reproductive health, indicates that the

process of setting up and running MHOs improves women's health by increasing interactions between providers and community, increasing access to reproductive health care, and increasing the use of assisted deliveries.

Although there is significant local enthusiasm for MHOs and a sense that the principles and concepts behind the movement are worthy (Carrin et al, 2005), there are also critiques of its ability to deliver all that is wanted from it. There is still little evidence of MHO cost-effectiveness, ability to cover a significant part of the population they target, sustainability over the long run, and even less of effectiveness in increasing access and financial protection. Baeza et al (2002) and Ekman (2004), both conducting a broad review of the literature on MHOs, found few studies that effectively examined the effects of MHOs on utilization and Eckman found only five that had used econometric regression analysis to study the effects of MHOs on use of care (primarily curative).

What is known about MHOs from the few studies that have rigorously investigated their effects is that there is an ever-growing demand for such types of financial protection mechanisms, that they do seem to able to enroll individuals from a variety of socio-economic layers of society although perhaps not the very poor (Jutting 2003; Schneider and Diop, 2001; Gumber 2001); that members tend to have lower out-of-pocket expenditures (Jutting 2003; Schneider and Diop 2001; Jowett et al 2003); that members tend to use health services more in case of need (Schneider and Hanson 2006; Jutting 2003; Diop et al 1995). It is also know that MHOs require technical support to get them up and running, that they still tend to be small, and they are likely only to be one of many mechanisms for financing the health sector (Preker and Carrin 2004, Carrin et al 2005. Baeza et al 2002).

2.3 MHOs in Mali at the Time of the Equity Initiative

The GOM has highlighted mutual health insurance as a modern method for achieving solidarity and an alternative health financing system in its health and social development policies. PRODESS encourages the implementation of MHOs for better access and greater utilization of health services offered by the CSComs.

The first-generation of MHOs in Mali were developed in the 1950s for the Post Office/Telecommunications, the Railroads, and the Archdiocese. By 1983, the *MHO des Travailleurs de l'Education et de la Culture* began to pave the way for thinking about how to organize solidarity mechanisms to confront poverty.

The combined effects of the structural adjustment policies, characterized by significant layoffs of many workers in the private and public sectors in 1990, and the advent of democracy in Mali in 1991, created favorable conditions for the emergence of a stronger civil society whose voice could be heard through associations and nongovernmental organizations. Social movements took off, with new dynamics: new stakeholders now met with the government to take part in devising new social policies to combat poverty and to support policies aimed at achieving greater equity in access to basic services.

In 1996, as coverage with CSComs was increasing, the GOM began to define the legislative and regulatory framework for MHOs. Mali was the very first country in West Africa to establish a legislative framework for MHOs (1996).[7] This law, with its subsequent decrees, was extremely detailed. In addition, the GOM signed an agreement to develop technical support for the Malian mutual organization movement by creating the *Union Technique de la Mutualité* (UTM) in 1998. Thus, Malian responses to the barriers associated with the government's community resource mobilization strategies and household financial constraints emerged first from the socio-professional associations that initiated MHOs for their members. While these internal responses should be credited for launching a movement for the development of mutual health insurance in the country, their institutional arrangements left behind the majority of Malians who are not members of urban-based and well-organized socio-professional associations: the majority of the Malian poor are employed in either the informal sector or the rural economy.

At the beginning of the Equity Initiative, there were only a small number of MHOs in the country and population coverage with MHOs was still low: 0.4 percent at the time of the PRODESS mid-term evaluation in 2002. By 2005, coverage had grown to 0.85 percent through 101 MHOs of which 58 are officially recognized under the law and of which 53 cover health care services (Togo, 2005). The GOM's goal is to reach 3 percent by the end of the second phase of PRODESS.

[7] This framework consists of Law No. 96-022 that governs MHOs in Mali. It is supplemented by the following decrees and orders: 1) Decree No. 96-136 PRM, establishing the conditions for investing and depositing funds of MHOs; 2) Decree No. 96-137 PRM, establishing the standard articles of association for MHOs and unions and federations of MHOs; 3) Inter-ministerial Order No. 97- 0477 MSSPA/MATS-SG, which determines the procedures for certifying MHOs; 4) Order No. 02-1742 MDSSPA-SG on the administrative and financial control system for MHOs and mutual organizations.

3. The First Stage of the Equity Initiative

The Equity Initiative was carried out in three phases:

1. an initial situation analysis in Sikasso Urban Commune and Bla District, which served as both input into determining priority interventions and as a baseline in 1999 (Gamble Kelley et al, 2001)

2. implementation of selected interventions with USAID support: MHOs in selected areas of Bla District and Sikasso Commune (2000-2004), and subsequently information, education and communication (IEC) for maternal health in selected areas of Bla District only (2003-2004)

3. evaluation of the impact of these interventions on utilization of key health care services (2004)

The final phase – evaluation of the Equity Initiative interventions -- sought to assess the effects of the MHO and IEC interventions, in comparison with both baseline information and a control group, while controlling for factors such as socio-economic status (SES) and rural versus urban residence. Figure 2 presents a timeline for the various measurement and intervention activities. This report will cover only the MHO intervention, while the IEC intervention is covered in a separate report (Franco et al, 2006).

Figure 2: Timeline of Evaluation and Interventions

Year	1999		2000		2001		2002		2003		2004	
Semesters	1	2	1	2	1	2	1	2	1	2	1	2
Evaluation Bla District Sikasso Commune		Equity Initiative Baseline							IEC baseline			Final
MHOs Selected areas of Bla District and Sikasso commune				Selection of inter-ventions	Initial working groups; awareness raising	Feasi-bility studies	Formation MHOs	MHOs start providing services			Re-launching promotion	
IEC Selected areas of Bla District									develop messages	Radio program; home visits	sketches; radio	

3.1 Organization and Structure of the Equity Initiative

The Equity Initiative was designed to be an integral part of the GOM decisionmaking: steering committees for the Initiative were established at national and regional levels to strengthen institutional links with the health sector policy framework and to ensure regular monitoring and facilitate integration with other activities in the area of health and social action. The Director of the Planning and Statistics Unit in the Ministry of Health chaired the national Steering Committee, and members included representatives of the central structures of the Ministries of Health and Social Development, representatives of other ministerial departments and civil society, such as the National Federation of Community Health Associations, the UTM, the private sector, and the professional councils (physicians, pharmacists, and midwives), as well as development partners such as USAID, the World Bank, WHO, and UNICEF.

At the level of the intervention sites, steering committees in Ségou and Sikasso Regions were set up in a similar fashion. The regional steering committees were chaired by the governor or his representative for monitoring the project. The regional committees included the representatives of the local radio stations working with the Equity Initiative. In addition, an Equity Initiative focal person was appointed within the regional health office and the regional social development office to follow up the operational aspects of Equity Initiative activities.

3.2 Site Selection for the Equity Initiative

The national-level Steering Committee selected an urban center (secondary city) and one rural district as the sites for the Equity Initiative activities. These two sites were selected to ensure generalizable results and to be able to discern differences due to supply of private providers, easier geographic access to health facilities, a higher incidence of HIV/AIDS and other sexually transmitted diseases, and, potentially, different manifestations of solidarity that might occur in urban settings. In addition to the urban/rural criterion, other criteria included:

- Health district has a sufficient network of first-line health facilities offering reasonable quality of health care, either under community management or private providers that offer a package of health services and a CSRef that has a functioning emergency transportation referral system;
- Existence and interest of a health/social development team responsible for training, planning, and technical support activities for the first-line health facilities and coordination with private entities, including NGOs capable of transferring skills and leveraging experience;
- Existence of solidarity mechanisms

Based on these criteria, the Steering Committee chose Bla District in Ségou Region and the Sikasso Urban Commune in Sikasso Region (see Figure 1 and Box).

Sikasso Commune: Sikasso Commune has a population of 110,000, and is a urban center on the major axis Abidjan-Bamako. The surrounding areas are fertile farmland with adequate rainfall for a variety of crops. Major economic activities include agriculture, commerce, transportation, and artisanry. The population is largely Senofo, with significant Peulh and Bambara populations.

Bla District: Bla District is a primarily rural district on the major road running from Bamako to Mpoti. The entire district has a population of 236,000. Agriculture (farming and animals) dominates the economy, with cotton as a major cash crop,. The population is largely Bambara, an ethnic group that holds fairly strongly to their traditions.

3.3 The Situation Analysis

The first stage of the Equity Initiative was to study the situation closely at two sites to understand the subtleties and reasons why utilization of "modern" health care was low, and specifically to test the hypothesis that SES was a major determinant of health care utilization, given the presence of user fees. Two "tracer" indicators were selected to study the population's behavior relative to basic health care: utilization of services for fever (presumptive malaria)[8] and utilization of services related to deliveries – prenatal consultation services, delivery, and postnatal – consultation services. The situation analysis, conducted in 1999, included:

- A household survey that focused on utilization of the two tracer health services and socioeconomic status of the household
- Patient interviews on satisfaction with care
- Provider characteristics, structural quality and drug availability, quality of care
- Presence of solidarity mechanisms

The full description of the methods and results of the baseline can be found in Gamble Kelley et al (2001). In summary, the results of the situation analysis household survey revealed a complex picture of the supply and demand for health care, a picture in which the price, quality, geographical access, and knowledge about acceptable health care practices by the populations are all important factors. From the demand side, the utilization of care (whether for fever or maternal health services) tended to be higher in urban areas (Sikasso) than in rural areas (Bla), and among the better educated. The very poor were less likely to use modern care for fever treatments but no clear pattern for effect of SES was seen for assisted deliveries and pre- and postnatal care. User charges did not appear to be a factor in the choice of provider, but respondents often stated that they did not have money to pay for care. Among the people who do not utilize care for fever, the reasons most often given were lack of money and the expressed preference for home treatment. Most people who sought modern care had to pay for it, while less than four percent benefited from some kind of protection (reduced price) or solidarity mechanism.

[8] In 1999, as is the case today, malaria is the highest cause of morbidity in Mali and therefore accounts for the largest number of outpatient consultations.

Related to supply, there were problems related to human resources and also quality of care. As for fee-setting, the public providers are more likely to have an official schedule of fees for their services and, consequently, they are more likely to require payment for these services. Nonetheless, overall, the average fees of private providers were the highest, followed by the fees of informal providers, and public providers. Solidarity mechanisms were offered most often in the informal sector.

3.4 Selecting Equity Initiative Interventions

The results of the situation analysis were shared at both the national and local levels in July/August 2000 with health sector officials, elected officials, representatives of women's and professional associations, the media (radio), and villages/neighborhood chiefs. Workshops were held in Bla and in Sikasso to identify the priority issues and to select interventions to address the priority issues. The intervention strategies considered were ones that could be initiated with minimal external support and that would be sustainable with local resources. Table 1 shows the priority issues and the interventions proposed at these workshops at the two sites.

The Equity Initiative team worked with stakeholders in October 2000 to prioritize the interventions and to identify what would be necessary to implement them. This process consisted of identifying potential external partners for technical and financial support for initiation, appointing an organization/local entity "responsible" for each strategy, developing a provisional work plan to make each strategy operational (with certain key indicators), and identifying members and officers for a monitoring committee in each site.

PHR*plus* offered assistance with two of the identified interventions: community-based MHOs and an IEC/maternal health intervention.[9] As the key partner for MHO development, PHR*plus* has been supporting the Sikasso Urban Commune and Bla District to initiate the MHO development strategy since mid-2001.[10] The experimentation with community-based health insurance under the Equity Initiative provided an opportunity for Malians to test alternative institutional arrangements within the mutual health insurance movement where the social bases for resource mobilization and risk-pooling were no longer "employment" and "membership in a socio-professional association," but "residence" and "community-based organizations," which permit the possibility of inclusion of MHOs for most Malian local communities and which are built on key features of social capital in Malian communities.

It should be noted that no other donor provided support for other interventions, although the Ministry of Health and the Ministry of Social Development have made efforts to strengthen drug availability, IEC, training of personnel and economic and solidarity mechanisms.

[9] This second intervention is discussed in a separate report (see Franco et al, 2006)

[10] Support for MHO development was provided by USAID/Mali and USAID/West Africa Regional Office through PHR*plus*. In 2003-2004, USAID/Mali provided its support through their Programme Santé USAID/Assistance Technique Nationale (ATN).

Table 1: Issues and Interventions for the Equity Initiative

Site	Priority Issues	Interventions
Bla	▲ Insufficient skilled personnel ▲ Very low utilization of health services during deliveries ▲ Low postnatal consultation rates ▲ Weak solidarity mechanisms ▲ Low level of financing for health personnel by the community	▲ Train health personnel ▲ IEC ▲ Integrate vaccination and postnatal care services ▲ Establish MHOs
Sikasso	▲ Low postnatal consultation rates ▲ Poor women delivering at home and traditional locations ▲ Certain essential drugs and vaccinations are frequently out of stock ▲ High rate of self-medication ▲ Insufficient solidarity mechanisms ▲ Poor knowledge of STDs among youth (15 to 24 years old)* ▲ Low utilization of condoms by sexually active youths ▲ Low utilization of health services by youths with an STD	▲ IEC ▲ Expand health coverage ▲ Improve availability of essential drugs ▲ Establish MHOs ▲ Improve reception ▲ Literacy training ▲ Create listening centers for youth

NB: The interventions often were designed to address several issues on the list

*Because of USAID's Youth focus during this period, the baseline questionnaire included a Youth Module, which helped highlight these types of issues

4. Implementing the MHO Intervention

Following the selection of interventions in 2000, the Equity Initiative initiated the MHO development process in 2001, in two neighborhoods of the Sikasso Urban Commune and the Bla Central *arrondissement* (which included Bla Town and Kemeni) in Bla District. No MHOs were set up to serve the populations in the remainder of Sikasso Commune and Bla District. The populations in these areas where no MHO is available serve as control for the evaluation study (see Section 12).

4.1 Design, Process and Timeline for Establishing and Supporting MHOs in Bla and Sikasso

From January 2001 to April 2002, PHR*plus* supported the administrative and functional establishment of four MHOs. *Keneya Ton de Wayerma* and *Keneya Ton de Bougoulaville* are located in two adjoining neighborhoods in the urban center of Sikasso. *Lafia de Blaville* is located in town of Bla and its surrounding villages, and *Danaya de Kéméni* in the village and hamlets of Kemeni, both in Bla District. The main characteristics of these MHOs are:

- Community-based MHO, created within a geographic community and not related to any specific professional group[11]
- Family membership encouraged
- Decentralized management with small offices in villages or neighborhoods surrounding the site of the main management office
- Benefits package covering all services in the official minimum package of activities defined by the Ministry of Health and, in some cases, hospitalization (Blaville)
- Reproductive health services covered (family planning, antenatal care, postnatal care, tetanus vaccination for pregnant women, simple and complicated deliveries).
- Commitment by MHO members to utilize preventive care, such as prenatal care, vaccinations, and insecticide-treated mosquito nets.
- Agreements/conventions with a total of 11 public health care providers (one regional hospital, two CSRefs and eight CSComs)

Table 2 presents enrollment fees (paid once at the time of joining), monthly premiums (although sometimes they are paid in advance for a longer period than one month, such as in Kemeni where the

[11] This characteristic of being community-based is in contrast to many of the MHOs established with support of UTM, which tended to focus on professional groups and associations as a basis for membership.

majority pay on a six-month or annual basis), and the percentage of service/care charges covered by the MHO.

Table 2: Comparison of MHO Benefits Packages (% of Provider Charges Covered)

	Bougoulaville	Wayerma	Kemeni	Blaville
One-time enrollment fees per household	F 500 / $0.95	F 1,000/ $1.90	F 1,000/ $1.90	F 1,000/ $1.90
Monthly premiums (per beneficiary)	F 190 / $0.36	F 135 / $0.26	F 155 / $0.29	F 260 / $0.49
Frequency premium payment: monthly (M), quarterly (Q), semi or annual S/A)	M – 72% Q – 13% S/A – 9%	M – 71% Q – 18% S/A – 6%	M – 3% Q – 8% S/A – 85%	M – 82% Q – 15% S/A – 3%
Consultation	75%	75%	75%	75%
Drugs	80%	80%	75%	75%
Normal delivery	75%	75%	75%	75%
Complicated delivery	100%	100%	100%	100%
Hospitalization	No	No	75% medical 75% surgical	75% medical 75% surgical

N.B. US$1 = 527 FCFA during the time of the survey in 2004

The process used to set up these four MHOs generally followed the standard sequence of events used by MHO promoters in West Africa.[12] The following paragraphs describe briefly how these steps were carried out, and Annex A presents more details about the process and timing.

***Create and train an initial working group (Comité d'initiative*):** Selected from the most representative existing community organizations, initial working groups were established in both Bla and Sikasso. Members included artisan associations, women's groups, local government officials, technical staff from the Ministries of Health and Social Development, local NGOs, the media, and community health committees. These working groups received training in the concept of insurance and how to set up an MHO.

Raise awareness in the community about MHOs: Starting with the working group and later continuing with community mobilizers, a series of information campaigns were developed, including radio programs, comic strips and other media). The content of these campaigns was developed with the working groups (including local radio personnel). In the early phases, awareness-raising focused on social mobilization about MHOs: what are they, how they work, and how people can benefit from them. Later campaigns focused on member rights and responsibilities and the importance of paying premiums regularly.

Build capacity among other stakeholders (providers, community mobilizers, and government technical staff): Training workshops were organized for a range of important stakeholders on how they could support the MHOs and their role relative to the MHOs. Health care providers received information about how MHOs work and on contracting with MHOs; community mobilizers already

[12] Several guides and manuals exist to facilitate setting up and running MHOs. A full inventory exists on the website for the *La Concertation entre les acteurs de developpement des mutuelles de santé en Afrique* (www.concertation.org).

active in the area learned how they could include MHOs as topics in their IEC campaigns, and GOM technical staff, NGOs, and UTM staff received training in how to provide and coordinate support to development of MHOs in their areas.

Conduct feasibility studies and design benefit package/premium scenarios: In order to identify where to locate the MHOs, which providers to contact with, and determine enrollment fees and premiums to be paid, the working groups conducted feasibility studies in Bla and in Sikasso. Data were collected at household level and from providers, as well as on organizational capacity and other general socioeconomic factors. Using this information, sites for four MHOs were selected and three scenarios for premiums and benefits packages were developed.

Set up the MHOs administratively: Based on the information from the feasibility studies, the working groups prepared draft statutes and bylaws and organized a General Assembly meeting to vote on their adoption, on the premium/benefits package, and to elect members of the board of directors, the executive committee, supervisory committee and the technical committee. Local authorities, health care providers, government officials, and future members attended the meeting. After adoption of statutes and bylaws, each MHO submitted a formal application for certification and serial number under the law.

Build capacity of MHO officers and managers: Training in all the various managerial aspects of MHO functioning was provided to the executive committees, boards of directors, and other committees: financial and administrative management (membership, premiums, financial situation, monitoring, and the provision of care), ongoing awareness-raising, and action planning. Tools for management and monitoring were provided. In addition, as the MHOs grew and expanded to new neighborhoods or villages, decentralized management committees were formed and trained.

Begin enrollment of members and premiums collection: Community mobilization activities were conducted to inform the population about the MHOs, register them as members, and begin the collection of membership fees and premiums. The premiums were collected for six months before the MHOs became operational to allow them to build up a financial reserve and to protect against adverse selection.

Implementation of MHO activities: At the end of the six month waiting period, the MHOs started paying providers the agreed reimbursement schedules for services received by their members. At this stage, ongoing monitoring and technical support was provided as needed.

Changing interactions between providers and communities – an example

Problem: difficulties with stock-outs of essential drugs (Sikasso)
Consequences: MHO members became discouraged, reimbursement of prescriptions for brand name drugs were becoming a financial burden on the MHOs' budgets
Support: Problem identification (poor management of the pharmacy), facilitation of discussions between the MHO officers and the health authorities, agreement to give the pharmacies a minimum inventory to avoid emergencies and ensure continuity.

Because the MHO movement in Mali has been relatively limited, local people with skills in MHO development were few. Thus, PHR*plus* (which had extensive experience in MHO development in West Africa) provided technical assistance from Senegalese experts to support the PHR*plus*/Mali technical team throughout the implementation phase (January 2001 to April 2002) and to build skills in the GOM's technical departments, especially in the

Social Development Department and local NGOs[13] in both sites. The MHO development process implemented in these four MHOs in Mali melded experiences with MHOs in several West African countries with new elements that fit in with the Malian health sector context.

The MHO development process focused on extensive involvement of stakeholders, in particular health personnel and local NGOs. The involvement of health personnel was essential to support the development of MHOs with respect to the provision of health services. NGO involvement was also crucial for technical support to develop and expand the MHOs at both sites. In Sikasso, where UTM had a branch office, PHR*plus*/Mali asked the local representative to take part in all the stages of initiating the MHOs. The ASACOs and health facility steering committees (CSComs and CSRefs) were also involved from the outset to facilitate contractual relations. The rural radio stations also played an important role in all the stages of the intervention by developing programs to mobilize the populations around the concept of MHOs for better access to health care.

4.2 MHO Functioning, Performance, and Environmental Constraints

Before presenting data on MHO performance (membership, premium payments, etc.), it is useful to describe the contextual conditions under which these MHOs had to function. All four MHOs held their statutory General Assembly meetings in April 2002, at which point individuals were to pay enrollment fees and start paying premiums. None of the four MHOs grew as quickly as hoped, due to socioeconomic and political context changes that affected the development and balance of the relatively fragile new MHOs. In both Bla and Sikasso, environmental conditions made start-up difficult:

- **Climatic and agricultural production variables:** The 2002 rainy season was very poor, resulting in very poor crop production and low incomes, especially in Bla District. In addition, because of low prices being offered by the Textile Development Company of Mali (*Compagnie Malienne de Développement du Textile*) since 2000, many farmers stopped growing cotton, which was their major source of monetary income. As a result of these two economic factors in the rural areas, few people had extra cash to spare to pay enrollment fees and premiums, especially for the Kemeni MHO, which opted for annual premiums payments after the harvests were marketed, especially cotton.

- **The conflict in Ivory Coast:** The 2002 eruption of civil war in Ivory Coast created significant disruption to the local economy in Sikasso Commune. Because of its location on the main road from Bamako to Abidjan, Sikasso is a crossroads and large trading center. When the borders were closed, commerce with Ivory Coast came to a halt, and income from the trade in goods and services fell, drastically reducing buying power and the ability to pay premiums. Moreover, Malians who had lived and worked in Ivory Coast were returning, placing additional burdens on families.

As a result, in addition to any of the usual problems MHOs face of getting individuals to sign up to a new, untested organization, potential members faced economic barriers that could effectively reduce their willingness to invest in something that may not feel "sure" to them. Thus, after the slow membership growth in 2002-2003, all four MHOs decided, in late 2003, to conduct "re-launching" promotional campaigns to increase their membership. At this time, they offered shorter waiting

[13] NGOs included the Association for Development of Population Activities (*Association pour le développemnt des activities de population (ASDAP))* and the Association of Malian Artisans (*Association des artisans du Mali).*

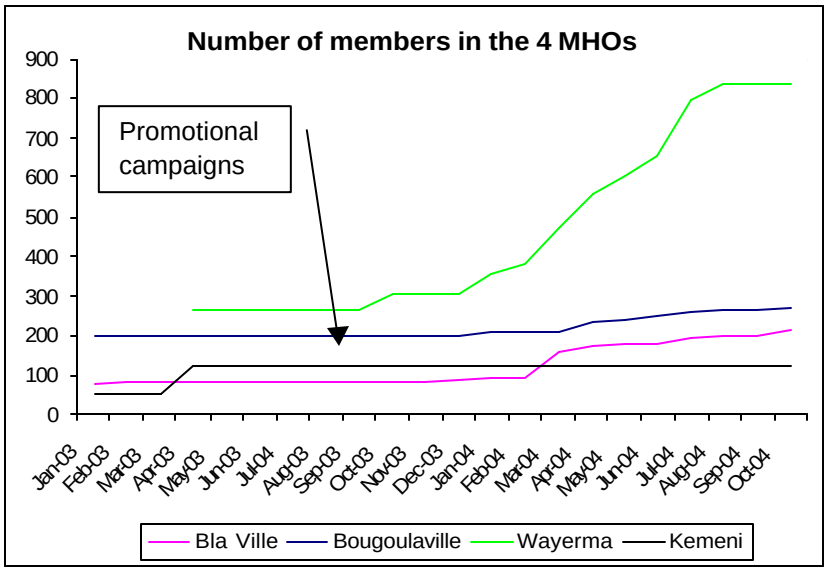
periods and lower enrollment fees. The MHOs resumed active awareness-raising campaigns in February and March 2004 with themes such as: why join? why pay premiums regularly?

The following sections describe MHO performance in terms of membership growth, premium payments, cost of care covered, and services per household, and these results must be analyzed within the above context.

4.2.1 Membership, Coverage, and Premium Payments

Figure 3 shows the evolution of membership numbers over time. MHOs started providing services to their members in early 2003. It also shows the increases following the promotion campaigns in early 2004.

Figure 3: Evolution of Membership in the Four MHOs: Jan. 2003 to Oct. 2004



Source: MHO registers
N.B. The data available for the Wayerma.
MHO begin in April 2003.

However, several of the MHOs still remain fairly small, relative to the population of potential members. Table 3 shows the number of members, beneficiaries, and the percentage of the target population having ever joined a MHO as of October 2004 (at the time of the evaluation survey).

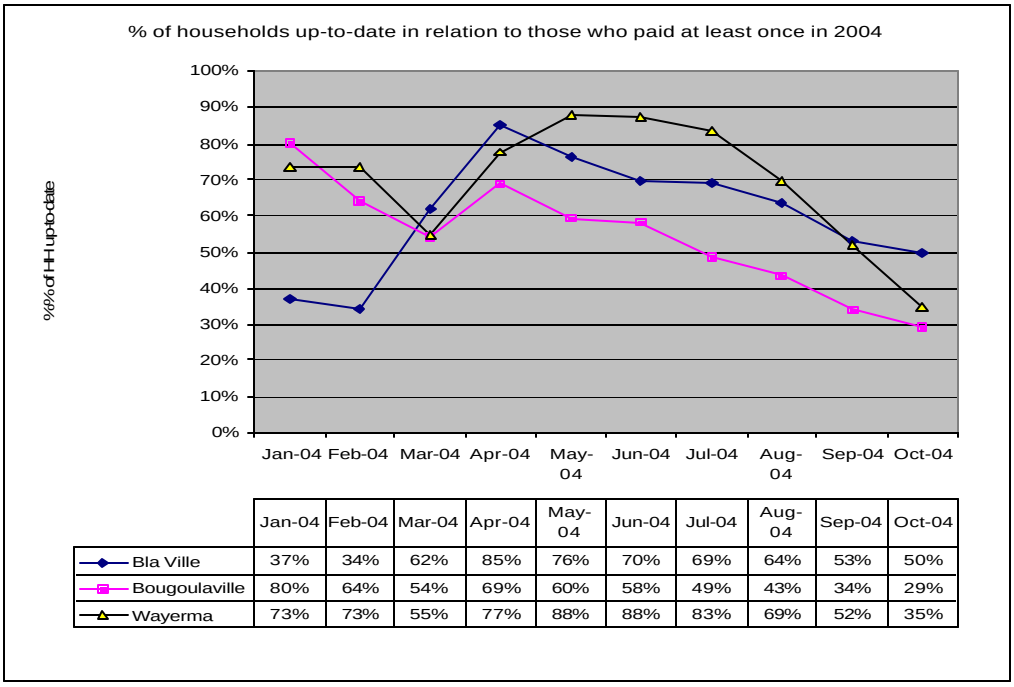
Table 3: Coverage of Target Population by MHOs as of October 2004

MHO	# of Members	# of Beneficiaries	% pop. covered
Bla	218	875	4.1% overall 5.8% Bla town 0.4% Rural areas
Kemeni	126	374	4.5%
Wayerma	850	6508	11.4%
Bougoulaville	276	915	3.3%

Source: MHO registers and Mali General Census data (estimated 2004 population)

Given economic and other constraints described above, all the MHOs have experienced difficulties with routine payments of premiums, not an uncommon problem for MHOs in general. For example, among those joining in 2002 and 2003, many member households had become totally inactive and paid no premiums between January and October 2004: 68 percent in Wayerma, 73 percent in Bougoulaville, and 61 percent in Blaville. Periodically, PHR*plus* organized coordination sessions in the two sites to address common issues facing MHOs, such as problems collecting premiums. Strategies were implemented to improve collection. Monthly premium payments still remain problematic, but among more recent members (joining after the re-launching promotion campaign in early 2004), premium payments are more regular. Figure 4 shows that, among member households that paid at least once in 2004, the percentage continuing to pay premiums ranged from 38 percent to 88 percent in any one month. The average of rate over the 10 months was 60 percent in Blaville, 54 percent in Bougoulaville and 69 percent in Wayerma. It can also be noted that the propensity to pay premiums appears to drop off beginning in September, when crops are planted but not yet harvested. The Kemeni MHO is not included in this analysis because less than 10 percent of their members pay monthy – most pay premiums annually after the cotton harvest (65 percent) or semi-annually (21 percent), and recruiting new members is the key concern.

Figure 4: Percentage of Households Up-to-date with Premiums, among Those Active in 2004



	Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04
Bla Ville	37%	34%	62%	85%	76%	70%	69%	64%	53%	50%
Bougoulaville	80%	64%	54%	69%	60%	58%	49%	43%	34%	29%
Wayerma	73%	73%	55%	77%	88%	88%	83%	69%	52%	35%

Source: MHO registers
N.B. Data from Kemeni are not presented because members pay six monthly or annually.

4.2.2 Coverage of Care for MHO Members

Table 4 shows the total value of care received by MHO members, the amount that was covered by the MHO for their members and beneficiaries, and the average co-payments paid by members when they sought care. This data is shown for the period April 2004 to September 2004, following the re-launching the promotion campaign.

Table 4: Expenditures by MHOs on Care for Members (April-September 2004)

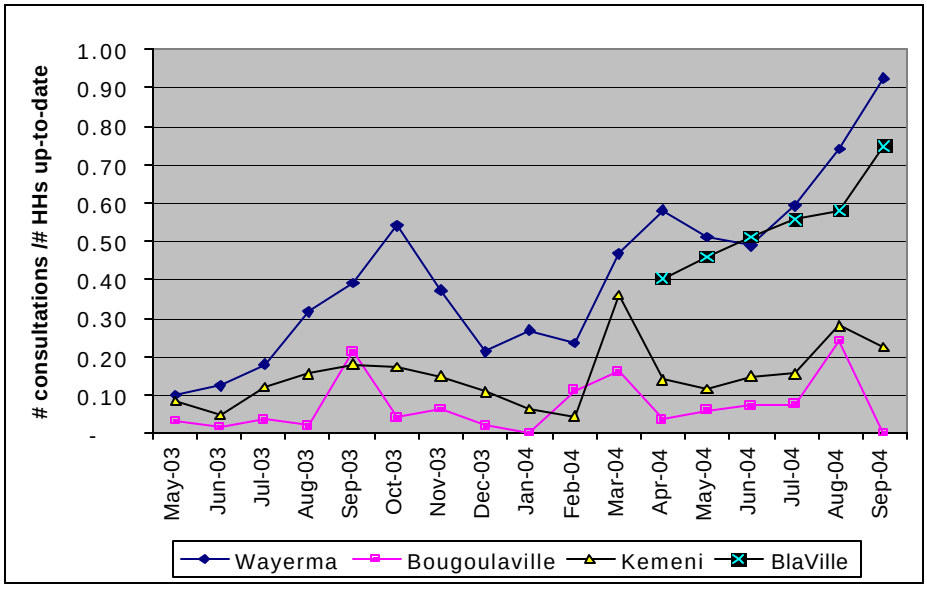
MHO	Total value of care (in FCFA and $US)	% of costs of care covered by MHO	Average co-payment by members per visit (in FCFA and $US)
Bougoulaville	156,575 F $297	80%	488 F $0.93
Wayerma	2,426,286 F $4,604	80%	509 F $0.97
Blaville	445,445 F $845	75%	418 F $0.79
Kemeni	200,444 F $380	75%	394 F 0.75

Source: MHO registers
NB. US$ 1 = 527 FCFA in October 2004.

4.2.3 Volume of Services Covered

From Figure 5, one can see that the volume of care provided in Wayerma and Blaville is higher than in the other MHOs, and Bougoulaville has relatively low utilization of care by members compared to other MHOs. Average co-payments appear higher in the Sikasso MHOs than in those in Bla, as shown in Table 4. The total value of care in Table 4 also reflects differences in both size of membership and premium payment rates (percentage of households up-to-date). Figure 5 presents "utilization" rates of MHO members, controlling for the number who are up-to-date in the premium payments and thus would be eligible for MHO coverage of their care (minus the co-payment). One sees increasing utilization rates by members in both Wayerma and Blaville MHOs.

Figure 5: Number of Consultations Covered by the MHO per Up-to-date Member Household per Month



Source: MHO register data
N.B. Data on the services in Blaville were only available starting April 2004

4.2.4 Engagement and Satisfaction of Member Households

Households that join MHOs have the right and the duty to attend General Assemblies, where management committees are elected, where policy decisions are discussed and voted, and where they can get up-to-date information about the financial status of their MHO. Table 5 presents data from the evaluation household survey on participation and satisfaction with the governance of their MHOs (for those member households interviewed.

Table 5: Household Responses on Governance of the MHO

	Sikasso		Bla	
	Wayerma N=383	**Bougoulaville N=166**	**Kemeni N=117**	**Bla N=148**
Member households having participated in a General Assembly				
	4%	53%	56%	26%
Member households aware of control mechanisms currently in place for good MHO management				
	26%	39%	38%	30%
Level of trust in MHO management				
Very confident	39%	53%	52%	45%
Confident	46%	33%	42%	34%
Fairly confident	10%	10%	4%	11%
Not very confident	3%	3%	1%	6%
Not at all confident	2%	1%	1%	4%
Level of satisfaction with MHO in general				
Very satisfied	32%	39%	52%	43%
Satisfied	33%	32%	14%	31%
Satisfied but needs improvement	27%	19%	28%	17%
Not very satisfied	5%	5%	4%	5%
Very unsatisfied	3%	5%	2%	5

Source: Evaluation household survey, 2004

Data about MHO service coverage priorities were collected from MHO beneficiaries who had suffered a case of fever in the previous two weeks. Consultations and drugs for curative treatments were listed as highest priorities among members of all four MHOs, followed by complicated deliveries, normal deliveries, and laboratory, all of which are included in the MHOs' benefits packages. In Kemeni, the rural MHO, referral (transport) and hospitalization were also considered high priorities, which had not been included in their package originally because of its impact on premium levels.

4.3 Conclusions and Lessons Learned

These four community-based MHOs were among the first of their kind in Mali, building on the social basis of residence and community, in contrast to much of the previous experience with MHOs in Mali, which was and continues to be linked to formal sector employees or socio-professional organizations affiliated with a large nationwide mutual insurance network through the UTM. These

four MHOs have managed to survive and grow, despite difficult economic conditions. In fact, three other MHOs were established independently in Bla and Sikasso, following the model of these four MHOs (see box), demonstrating an existing demand for this kind of solidarity mechanism.

Spontaneous Expansion of MHOs in Other Areas

Using the expertise of stakeholders involved in PHR*plus*' capacity-building activities for the first four MHOs, interested individuals in neighboring zones and neighborhoods created three additional MHOs with extremely limited external resources to expand access to MHOs at a lower cost than the cost to start the four MHOs studied in this evaluation: Hamdallaye MHO in Sikasso Commune and the Touna and Diaramana MHOs in Bla District. These MHOs show that there is an unmet demand for MHOs and that it is possible to expand access to MHOs without making the same level of investments that was needed to start those in Blaville, Kemeni, Wayerma, and Bougoulaville. The table below shows membership and the characteristics of two MHOs in Bla District.

Characteristics	Touna	Diaramana
Date founded	May 2003	May 2003
Enrollment Fee	F 1,000/$1.90	F 1,000/$1.90
Monthly Premiums	F 190/$0.36	F 165/$0.31
Nb. members	133	69
Nb. beneficiaries	478	117

N.B. The areas in which these additional MHOs operate were not included in the evaluation due to their more recent start-up. These geographical areas were excluded from the control groups as well.

Although the concept of a community-based MHO is beginning to take hold in the districts of Bla and Sikasso, there is still more to do in awareness-raising about the benefits of MHOs and about the need to regularly pay premiums. The support structures currently in place need strengthening, but the capacities built in terms of trained personnel, management systems, and tools for awareness-raising – with local radio stations, etc. – are still in place and can be used to help the support these and other MHOs.

5. Research and Evaluation Methodology of the MHO Intervention

5.1 Objectives and Principal Research Questions

The objective of the evaluation is to measure the impact of membership in an MHO on the use of key high-impact or priority services. High-impact service coverage to be assessed includes:

- treatment of fever
- prenatal care
- assisted deliveries
- childhood immunizations
- vitamin A supplementation for young children
- use of oral rehydration therapy (ORT) for diarrhea
- use of insecticide-treated mosquito nets for children under 5 and pregnant women
- prophylaxis of malaria in pregnant women
- iron and folic acid supplementation of pregnant women

A number of factors other than the MHO intervention may affect the use of these priority health services, and the research literature indicates SES, age, sex, educational attainment, distance to a facility, rural versus urban residence, and ethnic group can affect utilization of these services in African settings (Ndiaye et al, 2006; Onwuyekwe, 2005; Taffa and Chepngeno, 2005; Kamau and Esamai, 2001; Addai, 2000; Develay et al, 1996).

The five research questions were:

1. Who joins an MHO – are the MHOs inclusive in their enrollment (poor, women of reproductive age, children under 5)?
2. Does MHO membership affect utilization of curative services?
3. Does MHO membership affect utilization of maternal health services?
4. Does MHO membership affect utilization of childhood preventive services?
5. Does MHO membership provide financial protection related to health expenditures?

5.2 The Evaluation Methodology and Research Design

The research design is primarily an intervention-control group design to test the impact of MHOs on utilization of high-impact services, and specifically on fever treatment and assisted deliveries. In some cases, data from the Equity Initiative 1999 baseline survey are available and are presented for comparison. Detailed information about the 1999 Equity Initiative baseline survey can be found in the baseline survey report (Gamble Kelley et al, 2001). The remainder of this section will focus on data collection for the 2004 evaluation survey.

The intervention group consists of those who joined one of the four MHOs in Sikasso and Bla districts. There are two types of control groups: those who live in areas where there is a functioning MHO but who did not join, and those who live in areas where there is no MHO.

5.3 Sampling for the Evaluation Survey

Sampling in Bla District and Sikasso Commune was organized to ensure adequate representation of three groups in each area: MHO member households, household which had access to an MHO but chose not to join, and households with no access to an MHO. Sample household selection was conducted separately for members and non-members.

MHO households: All member household in the Blaville, Kemeni, and Bougoulaville MHOs were included in the sample. For Wayerma MHO, a sample of 350 households was selected, divided into three groups: (1) members joining prior to April 2004, (2) members joining after April 2004 and having paid premiums for September 2004, and (3) members joining after April 2004 but who were not up-to-date in their premium payments. Lists of member households were derived from MHO registers.

Non-member households: Sampling of non-member households was conducted in two stages. First, a random selection of enumeration areas was chosen. Then, using an updated mapping of all households in the selected enumeration areas, a systematic selection of individual households was done, based on a random start. Table 6 presents sample sizes for all sampling groups and for all priority health service target populations.

Table 6: The Sample Surveyed

M = MHO member household; NM = Non-member households with MHO access; C = households in control area

	Bla			Sikasso*		Overall			Total
	M	NM	C	M	NM	M	NM	C	
Nb. households (HH)	268	341	676	549	446	817	787	676	2,280
Nb. individuals in HH	2113	2157	4473	3663	2604	5786	4761	4473	15,020
Nb. fever cases	251	268	611	299	272	550	540	611	1,701
Nb. women 15-49 yrs	405	393	819	125	163	530	556	819	1,905
Nb. women delivering in last 12 months/currently pregnant	144	177	366	114	151	258	328	366	952
Nb. women delivering in last 12 months	102	118	246	76	101	178	219	246	643
Nb. children < 5 years **	294	270	486	135	215	429	485	486	1,400

* Non-MHO access control group does not exist for Sikasso because the two MHOs cover the entire urban area.

** There were about 3,500 children < 5 living in sampled households, but utilization data was only collected on a subset of these (children whose mothers were pregnant or had delivered in the 12 months prior to the survey).

Detailed information about the sampling procedures and results can be found in Annex B.

5.4 Data Collection Instruments Used in the Evaluation Survey

To answer the research questions, the evaluation household survey used five modules:

1. **Household module:** for socio-demographic data, information about the head of household, habitat, value of consumption, information about MHO membership, and knowledge of the household head about maternal health

2. **Fever module:** for data on household members having experienced fever in the 15 days prior to the survey – treatment, health care expenses, satisfaction with care

3. **Women of reproductive age module:** for data on women 15-49 years of age – sociodemographic data and data on knowledge of maternal health

4. **Maternal health module:** for data on pregnant women and women having delivered in the previous 12 months – use of prenatal, delivery, and postnatal care, health care expenditures, satisfaction and use of mosquito nets during pregnancy

5. **Children under 5 module:** utilization of vaccinations, Vitamin A, mosquito nets, and treatment of diarrhea.

The modules were developed in French, and then translated into Bambara (the local language). Interviews were generally conducted in Bambara, but occasionally in French if the respondent did not speak Bambara. Evaluation household survey modules can be found in Annex C.

5.5 Data Collection

Data collection started on September 18, 2004, following 10 days of training for interviewers and five additional days for supervisors. Ten teams were formed, each with a team leader/supervisor, five interviewers, a driver, and a vehicle. Data collection lasted 44 days, finishing on November 1, 2004. Radio announcements requesting cooperation with the survey were made twice a day during the 10 days prior to the survey in each locality: in Bla, announcements were made in French and Bambara, and in Sikasso, in French, Bambara, and Senofo. Team leader/supervisors were responsible for quality control, direct observation of data collection, and the technical team did final quality control.

In each selected household, the head of household was interviewed, as well as all women in the household who were currently pregnant or had delivered in the previous 12 months, and all household members (or their caretakers) who had had fever in the previous 15 days. For women of reproductive age (15-49 years), sampling varied between Bla and Sikasso due to evaluation of the IEC intervention in Bla (Franco et al, 2006). In Bla district, all women 15-49 years of age were interviewed for their knowledge of maternal health. In Sikasso, only women who were currently pregnant or delivered in the previous 12 months were asked about their maternal health knowledge. The Children under 5 module was administered to caretakers only for those children under 5 years of age whose mother

was currently pregnant or had delivered in the previous 12 months, with the exception of MHO households in Bla District, where all children under 5 were taken into account.[14]

MHO registers on membership and health care services covered from 2002-2004 were photocopied, and data on frequency of premium payments by household and health services covered by the MHOs were entered, using the household identification numbers from the household module, allowing linking the MHO register data with the household survey data.

5.6 Data Entry and Analysis

The household survey data were entered in Access. MHO register data was entered in EXCEL. All data manipulation and analysis was performed using Intercooled Stata 8.0.

Multivariate statistical analysis was done using Stata's survey logit regression to ascertain whether being a beneficiary of an MHO (and eligible to have cost of care covered partially or totally by the MHO), controlling for other factors, was a predictor of higher utilization of priority, high-impact services, and to ascertain which factors were predictors of enrollment in an MHO. Dependent variables of interest were:

- **Curative care** : use of modern facilities in case of fever (all and for children under 5), early (within 48 hours) treatment of fever (all and children under five), and use of modern facilities and/or ORT for treatment of diarrhea with ORT (children under 5)
- **Maternal care** : utilization of early antenatal care (first trimester), routine (4+) antenatal care, delivery in a modern facility (public, private, missionary health centers, maternities, or hospitals) and delivery with a skilled birth attendant, use of an insecticide-treated net during pregnancy, use of malaria prophylaxis, use of iron and folic acid for prevention of anemia

Definition of Active Member Household and Beneficiary Status for Analysis Purposes

Active member household*:* household has joined the MHO and has paid premiums at least once in the past 12 months

Treatment of fever and diarrhea*:* ill individual is part of an MHO member household, is registered as a beneficiary in that household, and the household paid premiums in the month before or during the survey

Use of prenatal care, malaria prophylaxis, iron/folic acid and an impregnated net: women delivering in past 12 months is part of an MHO member household, is registered as a beneficiary in that household, and the household paid premiums at least once in the six months before delivery

Use of assisted deliveries: women delivering in past 12 months is part of an MHO member household, is registered as a beneficiary in that household, and the household paid premiums in the month of delivery

Use of child health interventions: child under 5 years of age is part of an MHO member household, is registered as a beneficiary in that household, without regard to payment status, as child health services are free

[14] This "oversampling" of children under 5 years of age in Bla was done to compensate for the small number of MHO households in order to ensure an adequate sample size.

- **Child health**: use of immunizations (before age 1); use of vitamin A supplementation; use of insecticide-treated nets

- **Enrollment**: household and individual enrollment (both for those having paid enrollment fees and for active MHO households having recently paid premiums – see box for definition)

Independent variables included:

- **individual characteristics**: age, gender, self-reported health status, beneficiary status (see box for definitions)

- **household characteristics**: household size and composition, education of the head of household and caretakers, gender of head of household, ethnic group, occupation of household head, SES

- **community characteristics**: living in an area zone with an operative MHO, distance to closest health facility and urban/rural residence.[15]

A multivariate linear regression was used to examine whether participation in an MHO indeed translated into lower out-of-pocket payments for health services, both for the household overall and specifically for women who delivered in the 12 months prior to the survey. Further analysis was conducted to establish determinants of MHO enrollment, both at a household and individual level.

Household data were weighted by the inverse of the probability of selection at the household level, and weights were incorporated into all subsequent analyses. Non-MHO households were weighted based on the probability of the enumeration section being selected, and on the probability of a household being selected in that enumeration area. The base sampling weight for MHO households, for which a complete sample was sought, was adjusted for non-response.

SES was measured by an approximation of consumption and expenditures (instead of revenue/income),[16] as is commonly done in low-resource settings where the non-cash economy is large, a substantial share of production is non-market and the vast majority of household production is consumed (Deaton and Zaidi, 2002). The interviewers asked the head of household a series of questions related to food consumption, transportation, lodging, utilities (water, electricity, combustibles, etc.), school fees, health, and clothing. The questions were adapted to appropriate recall intervals: for example, lodging costs were estimated for the previous month, school expenses for the previous school year, and food for the previous week. Questions about consumption of household-produced foods were especially important, as this was often a large portion of consumed foods. All estimations were then annualized and summarized for the household in order to develop the estimated value of consumption as an indicator of SES of each household. This total household SES indicator was then adjusted for household size, by dividing it by the total of adults (= 14) + (children < 14)*75 percent.

[15] Urban residence was subdivided into two categories: large urban center (Sikasso) and small urban center (Bla Town).

[16] Data were also collected on assets, with the intent to create two SES indicators, one based on consumption and the other on assets. However, the factor analysis revealed the asset variables were not statistically discriminating among households of the Bla and Sikasso sample. Instead of resulting into a limited set of factors, which explained a large share of the variability in the data, the analysis produced 19 factors – almost the same number of initial variables and which did not account for a large part of the variability in the data.

Using this last calculation (value of household consumption adjusted for household size), quintiles were developed such that five equally sized groups were formed. Quintile 1 represents the poorest SES (20 percent of households with the lowest level of per capita consumption) and Quintile 5 presents the richest (20 percent of households with the highest level of per capita consumption). These quintiles were used to compare health needs, utilization of health services, health care expenditures across SES groups.

5.7 Limitations of the Study

This study has certain strengths in that it collected data from households and was able to link household data with MHO register data, allowing detailed information about premium payments, use of services, etc. However, because MHO membership numbers were relatively small, sample sizes among MHO beneficiaries were not as large as desired, particularly for women delivering and children in specific age categories. A control area had been devised for Sikasso as well, but during the survey, it was found that the population in the control area was substantially rural, and quite different from the urban population. Because the two Sikasso MHOs had expanded their activities into neighboring areas, there were no longer any urban neighborhoods without access to MHOs. Finally, it was not possible to access the full set of baseline data for comparison.

6. Characteristics of the Sample

The study sample was drawn from areas with three different levels of urbanization: a large urban center (Sikasso city – population 110,000), a smaller urban center (Bla town – population 15,000, which is on the main road that traverses Mali from West to East), and the rural villages in Bla District (total population in areas sampled – 163,000). Table 7 presents a comparison of these three areas.

Generally speaking, the study population living in Bla District and Sikasso Town live in households of about six persons, with 1.4 women and 1.2 children under 5 years of age. About half of head of households having some formal education, work in agriculture, and live in a rural area. The population is primarily Muslim. The population represents a multiplicity of ethnic groups, with predominance of Bambara (42 percent) and Senofo (25 percent). About 76 percent live within five kilometers of a health facility.

Comparisons between large urban, small urban, and rural households reveal a number of differences. Households in the rural areas are larger than those in the urban areas, and there are more children under 5 per household as well. The smaller urban center had significantly more handicapped and chronically ill, more households headed by older (50+ years) men, more female-headed households, and more economically inactive household heads than the other two areas. Occupation of the head of household also differed – while 82 percent of households in the rural areas made their living from agriculture, in the urban areas working in commerce or administration was more common. Educational attainment was also higher in the urban areas than in the rural areas. Mean income and distribution of income quintiles also indicated higher levels in the urban areas, with the larger city (Sikasso) having the highest. The pattern of socio-economic quintiles corresponds with data on occupation (which were primarily commerce and administration jobs in the urban areas) and educational levels. Access to health facilities was much higher in the urban areas than in the rural areas, due to both higher population densities and to a greater number of facilities per location (including private facilities).

Table 7: Characteristics of the Sample Population Households

		Large Urban N = 995	Small Urban N = 270	Rural N = 1,015	Total N = 2,280
Household Characteristics					
MHO member	Yes	6%	5%	0.7%	3%
MHO active member	Yes	4%	4%	0.6%	2%
Self-reported health status of head of household (HH)	Bad/ average	26%	29%	28%	27%
	Good	52%	48%	43%	47%
	Excellent	22%	23%	29%	26%
Head of HH has chronic health condition	Yes	15%	22%	13%	15%

Head of HH handicapped	Yes	4%	8%	4%	5%
Average HH size		5.9	6.1	6.6	6.3
Avg. nb. women 15-49		1.4	1.3	1.4	1.4
Avg. nb. children <5 in HH		1.0	1.0	1.4	1.4
Female-headed HH	Yes	7%	13%	2%	5%
	No	93%	87%	98%	95%
Age head of HH	<50	70%	63%	69%	69%
	50+	30%	37%	31%	31%
Head of HH education	No ed	36%	50%	60%	49%
	Primary	49%	39%	39%	43%
	Secondary	15%	12%	1%	8%
Head of HH occupation	No outside work	16%	25%	12%	15%
	Agriculture	12%	24%	82%	48%
	Commerce/admin	68%	46%	5%	35%
	Other	4%	5%	0.9%	3%
Age head of HH	<50	70%	63%	69%	69%
	50+	30%	37%	31%	31%
Ethnic group	Bambara	18%	44%	62%	42%
	Senofo	39%	15%	15%	25%
	Other	43%	41%	12%	33%
Distance to health facility	1 km or less	88%	97%	30%	59%
	2 to 5 km	12%	3%	24%	17%
	6 to 10 km	0%	0%	34%	17%
	11 or more km	0%	0%	13%	7%
Mean per capita income**		$510 268,734 F	$357 188,020 F	$231 121,564 F	$358 188,410 F
Mean per capita income by SES	Poor	52,788 F	57,123 F	52,391 F	52,778 F
	Middle-poor	92,220 F	90,804 F	90,546 F	90,960 F
	Middle	137,460 F	135,776 F	132,673 F	134,919 F
	Middle-Rich	207,303 F	195,752 F	199,924 F	203,729 F
	Rich	483,554 F	464,591 F	363,703 F	460,154 F

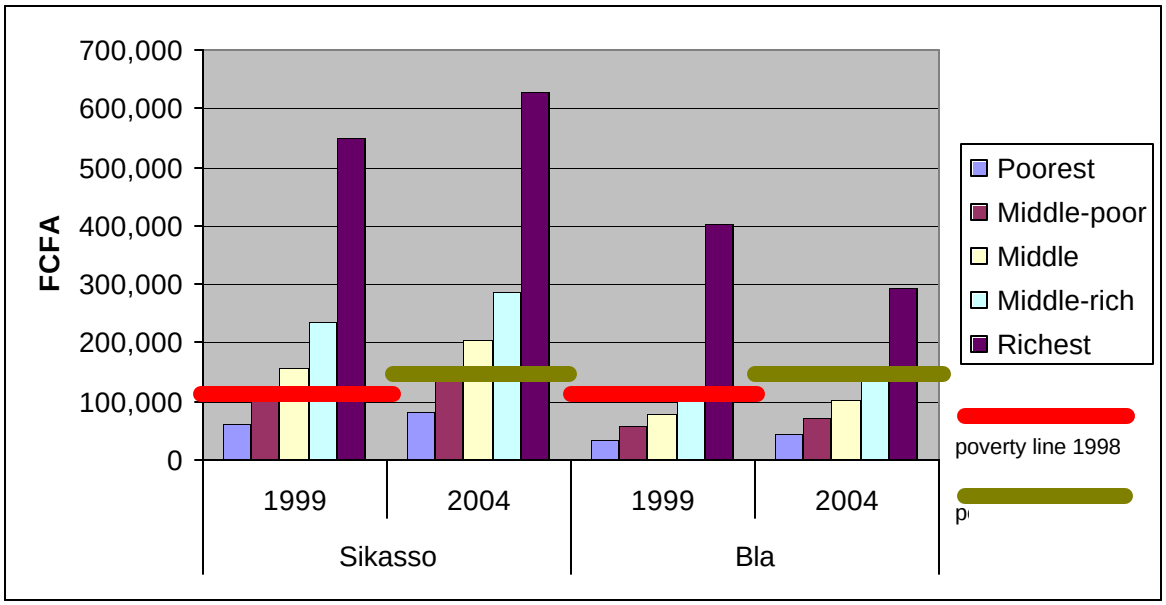
** 1$US = 527 FCFA in October 2004

Comparing general population characteristics in 2004 with the 1999 baseline found similar birth rates in urban and rural areas:

- Bla District: 1999 baseline – 54 births/1000 inhabitants compared to 53/1000 in the 2004 survey
- Sikasso: 1999 baseline – 29/1000 and 2004 final survey – 20/1000.

The percentage of the population experiencing a fever was 7 percent in the baseline, but 11 percent in the final survey.[17] Figure 6 compares average annual consumption between the baseline survey in 1999 and the results of the 2004 survey.

Figure 6: Comparison of Consumption Quintiles and Poverty from 1999 and 2004 Household Surveys in Sikasso and Bla Districts



Poverty line = 102,930 F in 1998 and 156,071in 2005 (CSLP)
N.B. quintiles calculated for Sikasso and Bla separately

Figure 6 indicates that incomes rose slightly in all income quintiles, with the exception of those in the 5th quintile in Bla, but the proportion of the population living below the poverty line has not changed. In Bla, only those in the 5th quintile (20 percent of the population) live above the poverty line. In Sikasso, the situation is better, with only the lower two quintiles (40 percent of the population) living below the poverty line.

[17] The baseline survey took place in October-November, while the final survey took place in September-October. The rainy season generally ends in October.

7. Who Joins a MHO?

This chapter examines the factors that could influence the decision of a household to join an MHO and to enroll specific household members. It also discusses why non-member households did not join an MHO, why MHO member households discontinued paying premiums, and whether MHOs have a protective effect on out-of-pocket expenditures.

Analyses performed to address these questions are based on MHO member households and non-member households residing in areas where there is an existing MHO and that therefore had the opportunity to enroll in an MHO, those living in areas without MHO access were not included in the analysis. The next section presents bivariate analysis results of independent variables related to enrollment, followed by sections that present results of binary logistic regression techniques, which are used to assess the direction and strength of the contribution of key household and individual characteristics while controlling for the effects of other factors, on the likelihood to enroll in one of the four MHOs in Bla and Sikasso districts.

7.1 Comparison of Members and Non-members

Table 8 presents a comparison of MHO and non-MHO populations (both those with and without access to a functional MHO). Households that enrolled in an MHO tend to have a better-educated head than those not enrolled, to be Senofo,[18] to be a female-headed household, to have more women of reproductive age, to be better off, and to live closer to a health facility. These hold true whether comparing to those with MHO access or those without access. However, those without access to an MHO are more likely to be headed by someone with no formal education, to be Bambara, to work in agriculture, to have less access to a health facility, and to be poorer than either the MHO members or non-members having access. This is primarily because those without access in the sample are all from rural areas, as noted in Section 5.3.

[18] This predominance of Senofo holds true even in Bla, where they are the minority group.

Table 8: Characteristics of the MHO and Non-MHO Populations

		MHO members N = 817	Non MHO with MHO access N = 784	No MHO access N = 676	Total N = 2,277
Age head of household	<= 24	3%	6%	4%	5%
P = 0.055	25 to 34	17%	27%	31%	28%
	35 -49	39%	37%	34%	36%
	50+	41%	30%	31%	31%
Head of HH education	No ed	26%	43%	61%	49%
P < 0.001	Primary	43%	47%	38%	43%
	Secondary	31%	11%	1%	8%
Ethnic group head of HH	Bambara	18%	29%	64%	42%
P = 0.001	Senofo	43%	34%	10%	25%
	Other	39%	37%	26%	33%
Female-headed HH	Yes	21%	6%	2%	5%
P < 0.001	No	79%	94%	98%	95%
Avg. HH size		7.0***	6.0***	6.6***	6.3
Avg. # women 15-49		1.7***	1.4	1.4	1.4
Avg. # children < 5		0.9**	1.1**	1.4***	1.2
Religion	Muslim	97%	97%	95%	96%
	Other	3%	3%	5%	4%
Occupation of head of HH	None	21%	17%	10%	15%
P < 0.001	Agriculture	21%	25%	83%	48%
	Commerce	55%	54%	6%	35%
	Other	3%	4%	1%	3%
Distance to health facility	1 km or less	88%	77%	30%	59%
P < 0.001	2 to 5 km	8%	13%	24%	17%
	6 to 10 km	1%	8%	32%	17%
	11 + km	3%	2%	14%	7%
Residence	Rural	10%	19%	100%	50%
P < 0.001	Small urban	13%	14%	0%	9%
	Large urban	77%	67%	0%	41%
Avg. per capita income+		283,738 F	227,644 F	121,097 F	188,409 F
		$538	$432	$230	$358
Income quintiles (SES)	Poor	5%	12%	33%	20%
P < 0.001	Middle poor	12%	16%	27%	20%
	Middle	17%	21%	19%	20%
	Middle rich	25%	24%	14%	20%
	Rich	41%	27%	7%	20%

* p < 0.10; ** p < 0.05; *** p < 0.001

+ Mean income is calculated based on family consumption divided by household size (527 FCFA=$1 US).

7.2 Predictors of Household and Individual Enrollment in an MHO

The decision to enroll in the MHO is a one-time decision; however, households and their members are eligible to the benefits of the MHO under the condition of regular payment of their contribution to the MHO. In all four MHOs, as discussed in Section 4.2, some households that joined the MHOs continued to be active members (by continuing to pay the premiums), while others do not. Thus, analysis of predictors of household and individual enrollment is performed on two dependent variables:

1. MHO member households that have paid the membership fee and received a membership booklet

2. households that are active members of a MHO, measured by payment of MHO premiums at least once in the past year.

Household enrollment refers to a situation in which someone in the household has joined an MHO and has enrolled at least him/herself and possibly other members of the family. Individual enrollment refers to individual household members who have been enrolled as beneficiaries in the household membership.

7.2.1 Predictors of Household Enrollment

Error! Reference source not found. Table 9 presents the results of an analysis of predictors of household enrollment.

Demographic characteristics of households influence the choice to enroll in an MHO. Larger households are more likely to enroll and be active members. While the pattern indicates that households with more children under 5 years of age are less likely to enroll or be active, only households with three or more children under 5 years of age were significantly less likely to enroll. On the other hand, the pattern was the opposite for women of reproductive age: the higher the number of women of reproductive age in the household, the higher the likelihood of the household to enroll in an MHO.

Certain characteristics of the head of household also contribute to the likelihood of the household enrollment in an MHO. Households where the head self-reports being in less than excellent health are significantly more likely to enroll in an MHO; however, having a handicapped head is not significant factor. Female-headed households are six times more likely to enroll in an MHO than households headed by a male. Ethnicity contributes to the likelihood of household enrollment: heads of household who are members of the Bambara ethnic group are significantly less likely to enroll in an MHO. The level of education of the head of the household has a positive effect on the likelihood of enrollment in an MHO: households headed by an individual with a primary or higher level of education are 2.6 times more likely to enroll in an MHO than household headed by an individual with no schooling.

SES, as measured by income quintiles, only showed an effect for the highest income quintile. Interestingly, those working in agriculture were significantly more likely than those with no occupation to join an MHO, but neither working in commerce, administration, or other occupations made a household more likely to enroll than those whose head of household had no occupation.

Finally, constraints associated with the geographical accessibility of health services contribute to the likelihood of households to enroll in an MHO. Indeed, the likelihood of enrollment decreases

significantly with distance from health facilities, with the exception of those living more than 10 kms.[19] In other words, the higher the access costs to the MHO benefits associated with distance from health facilities, the lower the likelihood of enrollment in an MHO.

Table 9: Predictors of Household MHO Enrollment for Those Living in an area with a Functional MHO

	Household Registered as MHO Member (n=1,493)	Household Active Member of MHO (n=1,493)
R = reference group	**Odds ratio**	**Odds ratio**
Household Characteristics		
HH head health status+ (R = excellent)		
Average to bad health	1.576**	1.634**
Good health	1.398*	1.337
Head of HH chronically ill* (R = no)		
Chronically ill	1.261	1.372
Head of HH handicapped (R = no)		
Handicapped	1.111	1.208
Household size	1.072**	1.093**
Number children <5 (R = 0-1 child)		
2 children <5 in household	0.792	0.851
3+ children < 5 in household	0.510**	0.591*
Number women 15-49 (R = 0-1 woman)		
2 women 15-49 in household	1.204	0.921
3 women 15-49 in household	1.695*	1.347
4+ women 15-49 in household	2.815***	2.264**
Number elders in HH (R = 0-1 person 50+)		
2 elders in household	1.283	0.965
3+ elders in household	1.766	1.266
Gender of HH head (R = male)		
Female	5.587***	5.575***
Age of HH head (R = <25 years old)		
HH head 25-34 years	1.024	1.186
HH head 35-49 years	1.583	1.828
HH 50+ years	1.267	1.473
Ethnic group of HH head (R = Bambara)		
Senofo	1.748***	1.819***
Other	1.406*	1.618**
Education of HH head (R = no education)		
Primary+	2.631***	2.388***

[19] It should be noted that there are several villages in outlying area of Sikasso that joined an MHO en masse, which could explain this result.

Occupation of HH head (R = none)		
Agriculture	1.550*	1.793**
Commerce/Administration	0.897	0.073
Other	1.208	1.477
Income quintiles (SES) of HH (R = poor)		
Middle-poor	0.831	0.826
Middle	0.952	1.104
Middle-rich	0.831	0.810
Rich	1.758***	1.704***
Community Characteristics		
Access to health facility (R= <=1 km)		
2-5 kms	0.526**	0.493***
6-10 kms	0.255***	0.174***
11+ kms	2.194**	1.720
Urban/Rural Residence (R = rural)		
Large urban	1.209	0.614*
Small urban	0.994	0.630

+ self-reported; * p < 0.10; ** p < 0.05 ; *** p < 0.01

Among member households, the percentage who were active members (paid premiums at least once in the past year) varied by MHO: 64 percent of member households in Wayerma were active, 45 percent in Bougoulaville, 100 percent in Kemeni and 73 percent in Blaville, for an overall percentage of 64 percent of all MHO households in the sample.

A regression analysis was also conducted to identify significant predictors of active MHO enrollment among member households. Results indicate that households with two or more women of reproductive age were less likely to be active members, as were households with more than one elder (over 50 years of age). Those involved in agriculture and living in rural areas were also significantly more likely to be active. This likely reflects the high percentage of Kemeni MHO members who are up-to-date on their premiums that are made semi-annually or annually at cotton harvest time. Additionally, those in the 3rd SES (middle) quintile were 1.8 times more likely than those in the 1st quintile to be active. This was the only quintile that was a significant predictor of active membership and there was no general pattern over all quintiles.

7.2.2 Predictors of Individual Enrollment

Table 10 presents an analysis of predictors of individual enrollment in an MHO. In the MHOs in Bla and in Sikasso, although family enrollment was encouraged, one was not required to list as beneficiaries all household members. Thus, Table 10 helps understand which household members were more likely to be enrolled – relating both to adverse selection and to target groups for priority health services.

Household decision-makers have the option to enroll as beneficiaries under their membership up to 19 household members,[20] including spouses, children less than 18 years of age (21 years in Sikasso), parents, and other dependents. In addition, newborns and new spouses are automatically enrolled without additional membership payment or waiting period. Regardless of periodicity of payment (monthly, annually, etc.), premiums are calculated on a monthly basis for each member household, based on the number of beneficiaries enrolled. Accordingly, households have the opportunity to cover all members of the household or to select specific members of the household for coverage by the MHO.

Individual characteristics that predict individual enrollment in an active MHO household include being over 50 years old and being in less than excellent health. Being chronically ill or handicapped were positive predictors for being a beneficiary in any MHO household. Being a child less than 5 years of age was a negative predictor for being a beneficiary in an MHO household. The same factors were significant predictors of being in an active MHO household, with the exception of being a child under 5.

In contrast to the household-based results where residence had no significant effect on household enrollment, the individual-based analysis suggests that urban dwellers are more likely to be covered by an MHO than are rural dwellers: such a pattern may reflect the relationship between household size and household enrollment and the tendency of member households in urban areas to cover a larger proportion of their member through the MHOs (see Table 11).

Regarding the SES of the households, those in 5th quintile are significantly more likely to be enrolled as beneficiaries and remain as active members compared to individuals in the 1st quintile. There is no statistically significant difference in the odds of being MHO members among people in the middle-income groups (middle-poor, middle, and middle-rich) compared to those in the poorest group.

The patterns of relations between demographic characteristics of individuals and the perception of the health status of individual members of the household on the one hand and coverage by an MHO on the other hand, however, suggest adverse selection in coverage of individuals in MHOs in the Bla and Sikasso districts. Indeed, individuals over 50 years of age who reported having a handicap, suffer from a chronic illness, or have a poorer health status are more likely to be covered by MHOs. This was the case for those covered by the original enrollment in the MHO and it also was true for individuals in active member households.

[20] If a household wishes to enroll more than 19 individuals, the household would have to acquire a second membership and pay the enrollment fee.

Table 10: Predictors of Individual Enrollment in an MHO for Those Living in an Area with a Functional MHO

	Individual listed as a Beneficiary in MHO member household (n=9,813)	Individual listed as a Beneficiary in an *Active* MHO Member Household (n=9,813)
R = reference group	**Odds ratio**	**Odds ratio**
Individual Characteristics		
Sex of Individual (R = male)		
Female	0.962	0.955
Age of Individual (R = < 50 years)		
50+ years old	1.297***	1.241**
Women of reproductive age (R = no)		
Woman 15-49 years	1.12	1.103
Child < 5 (R = non)		
Child < 5 years of age	0.845**	0.893
Self-reported health status (R = excellent)		
Average to bad health	1.014	1.240
Good health	1.102*	1.100
Individual chronically ill (R = no)		
Chronically ill	1.323**	1.360**
Individual handicapped (R = no)		
Handicapped	1.792***	1.624**
Household Characteristics		
Household size	1.077***	1.071***
Gender of HH head (R = male)		
Female	5.298***	5.169***
Age of HH head (R = <25 years old)		
HH head 25-34 years	0.925	0.899
HH head 35-49 years	1.450**	1.379
HH 50+ years	1.276	1.107
Ethnic group of HH head (R = Bambara)		
Senofo	2.018***	2.148***
Other	1.613**	1.908***
Education of HH Head (R = no education)		
Primary +	2.356***	2.225***
Occupation of HH Head (R = none)		
Agriculture	1.674*	1.869**
Commerce/Administration	0.854***	0.949
Other	1.047	1.426
Socioeconomic Status of HH (R = poor)		
Middle-poor	0.912	0.992

Middle	1.099	1.367
Middle-rich	0.837	0.815
Rich	1.769***	1.623**
Community Characteristics		
Access to health facility (R= <=1 km)		
2-5 kms	0.527**	0.498**
6-10 kms	0.297**	0.246***
11+ kms	3.974***	3.421**
Urban/Rural residence (R = rural)		
Large urban	2.344***	1.423***
Small urban	1.952**	1.354***

* p < 0.10; ** p < 0.05 ; *** p < 0.01

One of the major mechanisms through which MHOs can facilitate utilization of high-impact services is through the enrollment of women of reproductive age and children under 5 so they can benefit from MHO coverage for their service needs. In Sikasso (large urban), households in Wayerma and Bougoulaville enrolled 81 percent of their members on average, compared to 69 percent in Bla Town (small urban) and 50 percent in Kemeni (rural) (Table 11). Children 0 to 5 years of age in the household were more frequently enrolled in MHO households in Sikasso (82 percent), compared to 58 percent in Bla and 59 percent in Kemeni, mirroring overall differences in overall household enrollment. Differences were less stark for women of reproductive age: 75 percent of women 15-49 years of age in the households in Sikasso compared to 68 percent in Bla and 55 percent in Kemeni. However, if one examines children under 5 or women of reproductive age as a percentage of total enrollees, a different picture emerges. In all three residential areas, 13 percent of enrollees were children 0-5 years of age. Women 15-49 years of age were 24 percent of enrollees in Sikasso, 30 percent of enrollees in Bla Town and 36 percent of enrollees in Kemeni. Thus, although rural households are less likely to enroll all their household members as beneficiaries, they are more likely to enroll their women, children 0-5 years of age, and elderly than other household members.

Table 11: Comparison of Percentage of Household Members (by Age Group) Enrolled by Residence (N = 817 Households)

	URBAN1 -- Sikasso			URBAN2 – Bla Town			RURAL -- Kemeni		
	Mean # in house-hold	Mean # enrolled	% enrolled	Mean # in house-hold	Mean # enrolled	% enrolled	Mean # in house-hold	Mean # enrolled	% enrolled
Child 0-5	0.83	0.68	82	1.16	0.67	58	1.55	0.68	59
Women 15-49	1.67	1.25	75	2.00	1.36	68	1.92	1.06	55
Over 50	0.84	0.65	77	0.57	0.50	89	0.48	0.30	62
All others	3.36	2.60	77	3.91	2.30	59	4.21	1.51	36
Total	6.70	5.18	77	7.66	4.82	63	8.17	3.54	43

7.3 Reasons for Not Joining an MHO or Not Continuing to Pay Premiums

Because a major research question was to what extent SES inhibits MHO membership, it is important to understand the reasons given for never joining or not continuing to pay premiums. Table 12 presents the reasons why individuals living in an area with a functioning MHO chose to not enroll. The majority of individuals overall attributed their failure to join to not being informed about the MHO's existence. Those living in rural areas are more likely than urban dwellers to say they cannot afford the premiums.

Table 12: Reasons for Not Joining an MHO among Households Having Access to an MHO

	Large Urban N = 433	Small Urban N = 133	Rural N = 206	Total N = 772
Did not know about MHO	74%	74%	61%	71%
Premiums too expensive	11%	13%	22%	13%
Other reasons	15%	13%	17%	16%

Table 13 examines factors that led member households to miss a premium payment. Not all MHOs had the same difficulties in having households miss payments. In fact, Bougoulaville had many inactive members, and Kemeni's payment system and community cohesion aids premium payments. In most cases, a majority of individuals cited financial constraints as the reason for missing a payment, with the exception of Bla MHO where many households said they found it inconvenient to pay (traveling, forgot, etc).

Table 13: Reasons Member Households Missed a Premium Payment

	Sikasso		Bla	
	Wayerma N= 383	Bougoulaville N = 166	Kemeni N = 117	Bla N = 148
Households declaring having ever missed premium payment	39%	70%	3%	53%
Principal reason for missing premium payment	N=136	N=96	N=3	N=72
Financial	51%	57%	100%	36%
Unhappy with MHO	9%	15%	0%	14%
No need to be member	4%	0%	0%	1%
Inconvenient to pay	18%	18%	0%	32%
Other	18%	10%	0%	17%

Financial = no money/too expensive; Unhappy = package too limited, no trust in providers or MHO mgmt, not interested; No need to be a member = covered elsewhere, not sick; Inconvenient to pay = forgot, traveling

7.4 Summary of MHO Enrollment

The analyses presented in this section on MHO enrollment behavior suggest the following patterns. Demographic characteristics of households that positively contribute to the likelihood of enrollment in an MHO include the size of the household, the number of women of childbearing age in the household, and the gender (female) of the head of household. Ethnic groups reveal different patterns of enrollment in MHOs: Bambara are less likely to join MHOs than other ethnic groups, while Senofo have a higher propensity to enroll. In addition, the higher the level of education of the head of the household, the more likely the household is to enroll in an MHO. Geographical accessibility of health facilities is positively associated with higher enrollment in MHOs.

After controlling for other factors, only the richest (5^{th} quintile) SES group was significantly more likely to join than households in the poorest quintile, both at a household and individual beneficiary level. No other SES groups are statistically and significantly different from the poorest group in terms of joining MHO and remaining as active members.

The observed patterns of relationships between demographic and health status characteristics of individuals and coverage of individuals by MHOs suggest the prevalence of adverse selection processes in coverage of individuals in MHOs in the Bla and Sikasso districts. Individuals over 50 years of age, individuals who reported to have a handicap, and individuals who reported to suffer from a chronic illness are more likely to be covered by MHOs than their counterparts. Households in the rural area disproportionately enroll the elderly, young children, and women of reproductive age. In the urban areas, the pattern tends to be toward enrolling all demographic groups equally. Individuals who self-reported a poorer health status are more likely to be covered by MHOs than individuals who self-reported a better health status.

8. Does MHO Membership Affect Likelihood of Seeking Curative Services?

The household survey collected information about curative care seeking behavior for all cases of fever (presumed malaria) and for cases of diarrhea in children under 5 years of age occurring in the two weeks preceding the survey. This section examines fever treatment for the population in general, and treatment of children under 5 for fever and for diarrhea.

8.1 Treatment of Fevers in the General Population

Although cholorquine was still the first-line drug for treating malaria in 2004, the GOM is changing its treatment policy to an artemisin-based combination therapy which will require visits to a health center, and these results should be viewed in this light.

A total of 1,701 persons reported having fever in the previous 15 days, representing 11 percent of the total population. Among these fever cases, 9 percent were self-reported as very serious and 52 percent as serious. About 32 percent of all fever cases were in children under 5 (children under 5 are 22 percent of the sample), and 10 percent in individuals over 50 years of age (over 50s are 10 percent of the sample). A total of 177 of all fever cases were eligible for MHO coverage.[21]

Individuals with fever dealt with their fever in many different ways: no treatment, self-treatment, or seeking recourse with traditional healer or a modern provider. Many who sought modern care had also self-treated (20 percent). Table 14 examines treatment patterns by level of self-reported severity; it indicates that very serious and serious cases of fever were most likely to seek modern care, and although a smaller proportion than non-serious cases, a substantial number were self-treated as well. Recourse to traditional healers did not vary by severity. No significant differences were found in type of treatment by age group.

Table 14: Treatment of Fever According to its Severity (1,701 Fever Cases)

	No treatment N = 67	Self-treatment N = 1,275	Traditional Healer N = 424	Modern care N = 628
Very serious	0.3%	76%	28%	47%
Serious	5%	74%	29%	39%
Not Serious	5%	83%	28%	22%
TOTAL	4%	78%	29%	33%
	p = 0.0538	p = 0.0069	p = 0.8993	p < 0.001

N.B. Because individuals could seek more than one type of treatment, rows do not add up to 100%

[21] Those eligible for MHO coverage in the case of fever treatment are those registered as a beneficiary and whose household paid premiums in the month of the survey or the month prior.

8.1.1 Treatment in a Modern Facility

In the total sample, 33 percent of those with fever in the previous two weeks sought treatment by a modern health care provider, whether at home or in a health facility: 48 percent in Sikasso and 31 percent in Bla. These rates are very similar to those in the 1999 baseline survey where 47 percent of those with fever in Sikasso sought modern treatment and 33 percent of those in Bla did so. In the final survey, among those eligible for MHO coverage, 49 percent sought modern care ($p < 0.001$), compared to the 33 percent among those not eligible for MHO coverage.

Table 15 presents results of multivariate logit regression on use of a modern provider and early care seeking behavior for fever. For treatment with a modern provider (shown in the first set of columns in Table 15), as expected, individuals who perceived that their fever was very serious were almost four times more likely to seek care with a modern health care provider than individual who reported that the illness was not serious; and those individuals who perceived that their fever was serious are 2.8 times more likely to seek care at a modern health care provider. Being eligible for MHO coverage made one 1.7 times more likely to seek modern care, all other things being equal.

In terms of household characteristics, ethnic group and SES were significant predictors. The Senofo were more likely than other ethnic groups to seek modern treatment for fever. With regard to SES, those in the 2nd quintile (middle-poor) were significantly less likely to seek modern care than the poor, while the 5th quintile (rich) were significantly more likely to seek modern care than those in the 1st quintile. Surprisingly, the level of education of the head of household did not contribute significantly to the decision to seek care at a modern health care provider.

As distance from modern health facilities increases to more than two kilometers, the likelihood of use of modern health care drops significantly (by about half) compared to distances less than two kilometers. In addition, those living in the large urban area (Sikasso) are 1.8 times more likely to use modern health care services for the treatment of fever than those in rural areas.

The second set of columns in Table 15 present the results, among those seeking care in a modern facility, related to early care seeking behavior (within 48 hours). Only being in the 5th (richest) quintile had a significant impact of early use of fever treatment among those seeking modern care.

Table 15: Predictors of Entry into the Modern Health Care System (public or private) for Treatment of Fever (all ages)

	Individuals reporting having fever in the previous 2 weeks who sought care in a modern health facility (n = 1,599)	Individuals reporting fever and seeking care in a modern facility who sought care within 48 hours (n = 543)
R = reference group	**Odds ratio**	**Odds ratio**
Individual Characteristics		
Covered by the MHO (R = no)		
Eligible (up-to-date and beneficiary)	1.686**	1.432
Sex of Individual (R = male)		
Female	0.870	0.692
Child < 5 (R = non)		
Child < 5 years of age	1.159	0.658

Perceived seriousness (R = no serious)		
Serious	2.759***	0.706
Very Serious	4.018***	1.170
Household Characteristics		
Gender of HH head (R = male)		
Female	0.852	0.941
Ethnic group of HH head (R = Bambara)		
Senofo	1.475*	1.685
Other	1.246	0.705
Education of HH Head (R = no education)		
Primary+	1.200	1.377
Socioeconomic Status of HH (R = poor)		
Middle-poor	0.606**	1.178
Middle	1.053	0.656
Middle-rich	1.120	1.073
Rich	1.553*	2.274**
Community Characteristics		
Access to an MHO (R = no)		
Has access to MHO	0.826	0.769
Access to health facility (R= <=1 km)		
2-5 kms	0.578**	0.801
6-10 kms	0.511***	0.732
11+ kms	0.541*	0.876
Urban/Rural residence (R = rural)		
Large urban	1.802**	1.467
Small urban	0.638	0.608

* p < 0.10; ** p < 0.05 ; *** p < 0.01

8.1.2 No Treatment, Home Treatment and Traditional Healers

No treatment: As seen in Table 14, most fever cases received some kind of treatment. Significant predictors (regression results not shown) for no treatment were living 6-10 kms from a health facility, the case not being very serious, and being in the 2nd SES quintile (middle poor).

Self-care: Seventy-Eight percent of those with fever used self-care, including both traditional treatments and modern drugs. Forty-six percent purchased drugs for their self-care; the main sources of these drugs were pharmacies (29 percent of individuals) and street venders (32 percent of individuals). In other words, home care to treat fever is highly prevalent in the Bla and Sikasso districts, but the sources of drugs for self-medication suggest that a significant share of these drugs is from uncontrolled sources. Of those eligible for MHO coverage, only 69 percent (compared to 78 percent in the total sample population) used home care ($p < 0.01$). Few individual household, or community characteristics discriminated significantly between individuals who used home care to treat their fever and individuals who did not. Traditional determinants of health seeking behavior that are expected to affect the use of home care, such as education, distance from health facilities, or

household SES, do not display any distinct patterns. Significant predictors of home care included not being eligible for MHO coverage (2.5 more likely to self-treat) and non-serious cases of fever.

Traditional healers: Traditional healers were used less often by those eligible for MHO coverage (29 percent compared to 18 percent; $p < 0.005$). Eligibility for MHO coverage was not significant in logit regression. Only living more than 10 kilometers, having a primary level of education, and being from the 3rd (middle) quintile were significant predictors of use of traditional healers.

8.2 Reasons for Curative Care Seeking Behavior for Fever

Those who did not seek modern health care for fever were asked why they did not, while those who sought care at a modern facility were asked why they chose the facility they used, their perception of the quality of care, and their level of satisfaction.

8.2.1 Reasons for Not Seeking Care

Of the 825 individuals from the total sample answering that they did not seek modern care for fever (including 214 (39 percent) MHO members), 36 percent cited lack of money as the reason, 20 percent said they did not need treatment, and 42 percent said they had already treated at home. Those who were eligible for MHO coverage gave significantly different answers ($p = 0.002$): only 14 percent cited financial constraints and 57 percent said they had already treated at home. Financial constraints were also more likely to be cited among those living in smaller urban or rural areas (37-40 percent compared to 25 percent in Sikasso town).

8.2.2 Choice of Health Facility for Fever Treatment

For the 542 individuals who sought care at a modern facility and provided reasons for seeking care, 28 percent cited personnel competency, 23 percent cited having had themselves or heard of others having been effectively treated there before, and 36 percent said the facility was close to their home. No differences were found among types of residence. Although generally 93 percent thought the quality was usually or always good, and 76 percent were satisfied or very satisfied with the care they received, it appears that those eligible for MHO coverage were more likely to be critical of the level of quality (15 percent compared to 6 percent, $p = 0.06$). In addition, those residing in Bla Town were significantly more likely to criticize the quality of care (18 percent compared to 6 percent, $p = 0.02$) and to be dissatisfied with the care provided (20 percent compared to 3-9 percent, $p = 0.01$).

8.3 Curative Care for Children

8.3.1 Treatment for Fever

Nineteen percent of children less than five years of age reported having a fever in the previous two weeks. Because fevers can be more deadly in children, it is especially important to treat them correctly and early. Of the 503 fever cases in children under 5 years of age, only 33 percent of children were treated by a modern provider (54 percent among those eligible for MHO coverage – $p <$

0.01). Those children with fever and eligible for MHO coverage (N = 43) were no more or less likely to receive no treatment or to use traditional healers. Slightly fewer eligible for MHO coverage were treated at home by the family (p = 0.06). However, while only 47 percent of children in general were taken for treatment within 48 hours, 80 percent of those eligible for MHO coverage were treated early (p = 0.007).

Table 16 presents the results of logit regression for treatment of fever in the modern health care system for children under 5 years of age. Significant predictors of receiving modern treatment (see the first column of odds ratios in Table 16) included the seriousness of the illness, being male, living closer to a health facility, and having access to an MHO. Only children in the 2nd quintile were significantly less likely than the poor (1st SES quintile) to seek modern care for fever. Living in a small urban town made a child one-third as likely to seek modern care.

For early care seeking behavior (see the second column in Table 16), only eligibility for MHO coverage was significant, with MHO beneficiaries being 4.6 times more likely to seek care early.

Table 16: Predictors of Entry into the Modern Health Care System (public or private) for Treatment of Fever for Children under 5 Years of Age

	Children under 5 having fever in the previous 2 weeks who sought care in a modern health facility (n=478)	Children under 5 reporting fever and seeking modern health care who sought care within 48 hours (n =174)
R = reference group	**Odds ratio**	**Odds ratio**
Individual Characteristics		
Covered by the MHO (R = no)		
Eligible (up-to-date and beneficiary)	1.514	4.611*
Sex of Individual (R = male)		
Female	0.615*	0.680
Perceived seriousness (R = no serious)		
Serious	3.125***	0.511
Very Serious	4.176***	1.368
Household Characteristics		
Gender of HH head (R = male)		
Female	0.985	1.889
Ethnic group of HH head (R = Bambara)		
Senofo	1.609	0.522
Other	1.477	0.516
Education of HH Head (R = no education)		
Primary+	1.328	1.249
Socioeconomic Status of HH (R = poor)		
Middle-poor	0.398***	1.688
Middle	1.128	1.360
Middle-rich	1.015	0.687
Rich	1.087	1.467

Community Characteristics		
Access to an MHO (R = no)		
Has access to MHO	2.134**	1.024
Access to health facility (R= <=1 km)		
2-5 kms	0.492*	0.504
6-10 kms	0.435**	0.759
11+ kms	0.577	1.530
Urban/Rural residence (R = rural)		
Large urban	1.077	1.748
Small urban	0.327*	0.607

* p < 0.10; ** p < 0.05 ; *** p < 0.01

8.3.2 Treatment for Diarrhea

A total of 339 children (13 percent of all children) were reported as being ill with diarrhea in the two weeks preceding the survey. Although ORT is the official norm for treatment of diarrhea, only 8 percent of children with diarrhea received ORT. Twenty-seven percent of children with diarrhea were taken to a modern facility for treatment. However, a large percentage of children received antibiotics, whether treated at home or in a facility (42 percent) with little difference between those eligible for MHO coverage and those not. While seeking care in a modern facility may not lead to treatment in compliance with standards (use of ORT), it does reflect care seeking behavior that MHOs might influence. In fact, 44 percent of those eligible for MHO coverage (N = 29) sought treatment, significantly higher than the general population ($p < 0.003$). Of those ill with diarrhea, 17 percent overall were either treated with ORT and/or went to a modern facility, while 46 percent of those eligible for MHO coverage were so treated ($p < 0.0003$).

Table 17 presents the results of logit regression on use of modern facility and use of a modern facility and/or receiving ORT in children under 5 years of age with diarrhea. Those eligible for MHO coverage[22] were six times as likely to seek care in a modern facility, and this was the only significant predictor of seeking modern care for diarrhea in children. Those eligible for MHO coverage were also three times as likely to have received ORT and/or seek care in a modern facility. Being from a non-Bambara and non-Senofo ethnic group was also a positive predictor, while living in Bla Town was a negative predictor for receiving ORT and/or seeking care for diarrhea in a modern facility.

[22] Those eligible for MHO coverage in the case of diarrhea treatment are those registered as a beneficiary and whose household paid premiums in the month of the survey or the month prior.

Table 17: Predictors of Entry into the Modern Health Care System (public or private) for Treatment of Diarrhea in Children under 5 Years of Age

	Children under 5 having diarrhea in the previous 2 weeks and seeking care in a modern health facility (n=284)	Children under 5 with diarrhea in the last 2 weeks who received ORS and/or sought care in a modern facility (n = 284)
R = reference group	**Odds ratio**	**Odds ratio**
Individual Characteristics		
Covered by the MHO (R = no)		
Eligible (up-to-date and beneficiary)	6.912**	3.014*
Sex of individual (R = male)		
Female	1.017	1.046
Household Characteristics		
Gender of HH head (R = male)		
Female	1.383	1.451
Ethnic group of HH head (R = Bambara)		
Senofo	0.799	2.191
Other	1.538	2.215
Education of HH head (R = no education)		
Primary +	1.526	0.907
Education of caretaker (R = no education)		
Primary +	0.963	0.881
Socioeconomic status of HH (R = poor)		
Middle-poor	0.369	1.045
Middle	1.141	1.885
Middle-rich	2.142	1.699
Rich	0.812	3.660
Community Characteristics		
Access to an MHO (R = no)		
Has access to MHO	1.950	2.059
Access to health facility (R= <=1 km)`		
2-5 kms	0.414	0.800
6-10 kms	0.906	0.712
11+ kms	0.684	0.819
Urban/Rural residence (R = rural)		
Large urban	0.588	0.380
Small urban	0.174	0.133*

* $p < 0.10$; ** $p < 0.05$; *** $p < 0.01$

8.4 Summary for Curative Care

Does membership in an MHO increase the likelihood of seeking treatment for fever in the Bla and Sikasso districts? The main source for the treatment of fever in both districts remains home care and self-medication through the purchase of drugs at pharmacies and from street venders. MHOs are contributing to desired changes in this general pattern: to treatment in a modern facility for the population in general, and for early treatment for children under 5 years of age. For diarrhea in children, MHOs also show an important impact.

Higher SES is a significant predictor of modern care seeking behavior for treatment of fever, but this result is inconsistent across the five SES quintiles. More than a third of those not seeking modern care cited financial constraints, particularly those living in smaller urban and rural areas where incomes are lower. SES is hardly a factor at all for children under 5 in terms of seeking care for fevers or diarrhea.

9. Does MHO Membership Affect the Likelihood of Seeking Maternal Health Services?

Women need a variety of health care services during their pregnancy and delivery period, both to ensure their own well-being and that of the infant. This section examines the effects of MHOs on utilization of prenatal care, insecticide-treated mosquito nets, and assisted deliveries.

9.1 Predictors of Enrollment of Women of Reproductive Age as Beneficiaries in an MHO

For women to be able to take advantage of the MHO coverage for prenatal and delivery services, they need to be registered as a beneficiary in a member household, and that household needs to be up-to-date in their premium payments. Table 18 presents results of logit regression on the likelihood of a woman 15-49 years old being listed as a beneficiary in an active MHO member household.[23]

Among individual characteristics of the woman, primary or higher education was a strong positive predictor of enrollment, and self-reported health status of average to bad was a mildly significant positive predictor. Having an occupation other than agriculture or commerce/administration (which includes making things for market [soap, textiles, etc.]) was a strongly negative predictor for enrollment. At the household level, similar factors to general enrollment of beneficiaries were significant (see Table 10 second column [*active* MHO households] for comparison): women living in larger, female-headed, and non-Bambara households, in households where the head is employed, especially in a non-agricultural job, and households in the 5th SES quintile (richest) were strongly more likely to be enrolled.

Community characteristics predictors were also similar to general enrollment of beneficiaries (Table 10): those living farther from a health facility were less likely to enroll. However, with respect to residence, the patterns were different. Whereas urban residence was a positive predictor of general enrollment, residence in a large urban center was a significant negative predictor of enrollment for women of reproductive age.

[23] An active MHO household is one that has paid premiums at least once in the last 12 months.

Table 18: Predictors of Enrollment in an MHO of Women of Reproductive Age (15-49 years old) for Those Living in an Area with a Functional MHO

	Women 15-49 listed as a beneficiary in an *active* MHO household (n=1.033)
R = reference group	**Odds ratio**
Individual Characteristics	
Age of woman (R = 20-34 years)	
<= 19 years old	0.622
35+ years old	1.394
Reported health status (R = excellent)	
Average to bad health	1.661
Good health	1.248
Woman chronically ill (R = no)	
Chronically ill	1.222
Woman handicapped (R = no)	
Handicapped	2.969
Education of woman (R = no education)	
Primary +	2.721***
Occupation of woman (R = none)	
Agriculture	1.086
Commerce/Administration	1.192
Other	0.241**
Household Characteristics	
HH size	1.087*
Number of women 15-49 in HH (R = 1)	
Two or more women 15-49 in HH	1.123
Gender of HH head (R = male)	
Female	4.386***
Age of HH head (R = <50 years old)	
HH 50+ years	1.010
Ethnic group of HH head (R = Bambara)	
Senofo	2.934***
Other	2.062**
Education of HH Head (R = no education)	
Primary +	1.516
Occupation of HH head (R = none)	
Agriculture	1.825
Commerce/Administration	3.709***
Other	3.795*

Income quintile (SES) of HH (R = poor)	
Middle-poor	0.566*
Middle	1.039
Middle-rich	0.970
Rich	2.276**
Community Characteristics	
Access to health facility (R = <=1 km)	
2-5 kms	0.333***
6-10 kms	0.122***
11+ kms	0.775
Urban/rural residence (R = rural)	
Large urban	0.083***
Small urban	0.637

* p < 0.10; ** p < 0.05 ; *** p < 0.01

9.2 Services Used during Pregnancy

A total of 643 women who had delivered in the previous 12 months were surveyed, of which 45 were eligible for MHO coverage for prenatal care.[24] In the total sample, 74 percent made at least one prenatal visit, similar to the overall rate of 71 percent found during the 1999 baseline. Among those eligible for MHO coverage, 89 percent made at least one prenatal visit ($p = 0.037$). Only 36 percent of women in the general population had achieved four or more prenatal visits (the recommended standard), while 57 percent of those eligible for MHO coverage had ($p = 0.006$). The pattern was similar for early prenatal care (first visit in the first trimester of pregnancy): 35 percent of women in the total sample and 58 percent of those eligible for MHO coverage ($p = 0.007$). Women eligible for MHO coverage were more likely to receive malaria prophylaxis (79 percent compared to 60 percent, $p = 0.02$)[25], but no differences were seen in having received iron/folic acid (overall level – 89 percent). It should be noted that data in the survey did not permit analysis of adequacy of dosages and duration of either of these preventive interventions.

Sleeping under an insecticide-treated mosquito net is important for prevention of malaria during pregnancy. A total of 952 currently pregnant women and women delivering in the previous 12 months were asked about whether they had slept under a net, of which 200 came from active MHO households. Although sleeping under a mosquito net is a common practice in these two districts (79 percent), only 35 percent of these women slept under an *insecticide-treated* net, compared to 60 percent among those who lived in a active MHO household[26] ($p = 0.000$). Although insecticide-treated nets were not distributed or sold directly by the MHOs, the MHOs encouraged their members to make use of preventive health services.

[24] Those eligible for MHO coverage for prenatal care are those registered as a beneficiary in an MHO and whose household paid premiums at least once in the six months prior to delivery.
[25] It should be noted that logit regression on malaria prophylaxis did not show eligibility for MHO coverage as significant: only age (20-34 years), and the 3rd (middle) SES quintile were significantly positive, and ethnic group (other) and distance (6-10kms) were significantly negative.
[26] These are households which had paid a premium at least once in the previous year.

Table 19 presents the results of the logit regression on predictors of utilization of key interventions during the prenatal period. Early prenatal care (first visit in the first trimester of pregnancy) (column 1) was more frequent for women living in households with older heads of household. The only other significant predictor is distance to a health facility: those living 6-10 kilometers are only a third as likely to use prenatal care early and often enough. Being eligible for MHO coverage of prenatal care is a significant predictor of use of four or more prenatal care visits (column 2): women enrolled as a beneficiary and whose household has paid a premium at least once in the six months prior to their delivery were more than twice as likely to make the recommended minimum number of prenatal care visits than women who were not covered by an MHO, controlling for age of the woman, and household and community characteristics.

For use of insecticide-treated mosquito nets (see the third column in Table 19, living in an active MHO household was a significant predictor: such women were 2.3 times more likely to sleep under a treated net during their pregnancy than other women. Those having access to an MHO were more than twice as likely to sleep under a treated net. Distance to a health facility presented a different pattern: women living more than 10 kilometers from a health facility were twice as likely to sleep under a net as those living next to a health facility, indicating perhaps that some specific outreach to promote the use of treated nets was conducted in those villages. In addition, those living in Sikasso town were one-sixth as likely to sleep under a treated net.

Table 19: Predictors of Utilization of Prenatal Care Services Health Services

	Early prenatal care (first trimester) (n= 609 having delivered in previous 12 months)	4 or more prenatal visits during pregnancy (n= 609 having delivered in previous 12 months)	Sleeping under insecticide-treated mosquito net (n= 902 women pregnant or having delivered in previous 12 months)
R = reference group	**Odds ratio**	**Odds ratio**	**Odds ratio**
Individual Characteristics			
Beneficiary of MHO and up-to-date++	1.860	2.155*	2.262**
Age of woman (R = 20-35 years old)			
<=19 years old	0.930	0.797	0.794
35+ years old	0.920	1.307	0.972
Education of woman (R=no education)			
Primary or higher	1.302	1.476	1.979**
Household Characteristics			
Number of women 15-49 in HH (R= 1)			
2 or more women 15-49 in HH	0.807	0.724	1.095
Head of HH (R=male)			
Female	1.487	1.277	1.199
Age of HH head (R = <50 years old			
50+ years old	1.730*	1.461	0.563*
Education of HH head (R= no education)			
Primary or higher	1.096	1.222	1.456

Ethnic group (R = Bambara)			
Senofo	0.785	0.991	0.942
Other	0.709	0.891	0.944
HH wealth (R=poor)			
Middle poor	0.873	0.712	1.009
Middle	1.546	0.871	1.639*
Middle rich	0.982	0.892	0.795
Rich	1.134	0.665	0.711
Community characteristics			
Access to MHO (R = no)			
Has access to MHO	1.510	0.964	2.453***
Access to health facility (R= <=1 km)			
2-5 kms	1.009	0.692	1.431
6-10 kms	0.324***	0.279***	0.857
11+ kms	0.786	1.157	2.722**
Urban/rural residence (R = rural)			
Large urban	1.077	1.437	0.109***
Small urban	1.030	0.927	0.989

++ For ITN, the MHO variable was whether the woman lived in an active MHO household.

* p < 0.10; ** p < 0.05 ; *** p < 0.01

9.3 Assisted Deliveries

Data were available on deliveries for 446 women surveyed who had delivered in the previous 12 months, of which 25 were eligible for MHO coverage.[27] Sixty-four percent of the total sample delivered in a modern health facility. This rate is similar, although slightly lower, than the 71 percent found in the 1999 baseline survey. In contrast, 88 percent of women (22) who were eligible for MHO coverage for their delivery used a modern facility ($p < 0.01$). However, MHO coverage eligibility is not a significant predictor of use of modern health facilities for deliveries (see regression results below).

While being attended by a skilled birth attendant is the objective related to delivery care, many of the health facilities in Mali are staffed with *matrons,* women who are trained on the job to handle deliveries in a community health center. For many women living in the rural areas, there is little choice among facilities and thus little choice in what level of staff performs the delivery. Although 64 percent of women delivered at a modern health facility, only 43 percent of women delivered with a physician, midwife, or nurse, the international standard qualifications as "skilled birth attendants." Again, women eligible for MHO coverage were more likely to have an assisted delivery with a skilled birth attendant (71 percent; $p < 0.008$). If *matrones* are included in the count, 67 percent of women had an assisted delivery; including 92 percent of MHO covered women.

[27] These are women who are enrolled as beneficiaries in an MHO and whose household paid premiums for the month of their delivery.

Table 20 presents the results of multivariate logit regressions on delivery care. No individual characteristics of the women were significant, including coverage by an MHO. Women living in a household with a head older than 50 were three times more likely to deliver in a modern facility (column 1) than those living with younger household heads. Education of the household head was also a significant predictor of deliveries in a modern facility. Women from the 2nd and 5th quintiles were significantly more likely to deliver in a modern facility, but there were no significant results for the 3rd and 4th quintiles. Women living more than 1 kilometer from health facility were between one-third and one-fifth as likely to deliver in a modern facility.

When delivery with a skilled birth attendant is the subject of analysis (column 2), additional factors come into play: female-headed households are 5.5 times more likely to deliver with a skilled birth attendant. Women in households where the head is 50 years old or older were significantly more likely to have a skilled birth attendant. Women living in an area with access to an MHO were almost four times as likely to deliver with a skilled birth attendant, while women living six or more kilometers from a health facility were about a third as likely to deliver with a skilled birth attendant. It should be noted that most of the population having access to an MHO also lived in areas of easy access to health facilities.

Table 20: Predictors of having an Assisted Delivery in the Modern Health Care System (public or private)

	Women delivering in a modern health facility (n = 419 women having delivered in the previous 12 months)	**Women delivering with a skilled birth attendant (n = 414 women having delivered in the previous 12 months)**
R = reference group	**Odds ratio**	**Odds ratio**
Individual Characteristics		
Covered by the MHO (R = no)		
Eligible (up-to-date and beneficiary)	1.083	1.002
Age of woman (R = 20-34 years old)		
<= 19 years old	0.866	0.447
35+ years old	1.279	0.682
Education of woman (R = no education)		
Primary +	1.030	1.379
Household Characteristics		
Number of women 15-49 in HH (R = 1)		
2 or more women 15-49 years old in HH	0.717	1.037
Gender of HH head (R = male)		
Female	DROPPED	5.523*
Age of HH head (R = <50 years old)		
HH 50+ years	3.121**	1.992
Ethnic group of HH head (R = Bambara)		
Senofo	1.605	0.819
Other	1.564	1.370

Education of HH Head (R = no education)		
Primary +	1.795*	1.157
Socio-economic Status of HH (R = poor)		
Middle-poor	1.816*	0.963
Middle	1.206	0.968
Middle-rich	1.719	0.953
Rich	3.166*	1.493
Community Characteristics		
Access to an MHO (R = no)		
Has access to MHO	1.994	3.891***
Access to health facility (R= <=1 km)		
2-5 kms	0.305***	0.566
6-10 kms	0.176***	0.384*
11+ kms	0.231***	0.315*
Urban/rural residence (R = rural)		
Large urban	0.636	2.210
Small urban	1.205	2.266

* p < 0.10; ** p < 0.05 ; *** p < 0.01

9.4 Reasons for Maternal Care Seeking Behavior

9.4.1 Reasons for Not Seeking Modern Maternal Health Care

The major reason cited for not seeking prenatal care was lack of money (57 percent of those not seeking care), followed by distance (9 percent) and traditional or religious reasons (9 percent). No significant differences were seen between urban and rural residency types. A different pattern of reasons were cited for not delivering in a modern facility: 29 percent mentioned distance/transportation problems, 24 percent cited lack of money to pay for delivery, and 21 percent mentioned that labor came too fast and they did not have time to go to a modern health care facility. Those living in urban areas were more likely to cite lack of money (35 percent) while those in rural areas were more likely to cite distance and transportation (33 percent). The numbers for MHO beneficiaries were small, but cost was not cited at all as a reason for not seeking care (64 percent cited either distance or labor coming too quickly).

9.4.2 Reasons for Seeking Care in Modern Maternal Health Care, Perceptions of Quality and Satisfaction in Modern Health Facilities

Women who made at least one prenatal visit were asked why they chose that facility. Among those not eligible for MHO coverage, a majority cited proximity to their home (43 percent), followed by competent personnel (22 percent) and previous good experience (15 percent). Those who were eligible for MHO coverage tended to base their decisions on experience (27 percent), competent personnel (22 percent) and proximity (17 percent). Perceptions of quality were generally high

("always or usually good quality at this provider") at 90 percent, but those living in rural areas were less likely to say quality was consistently good (84 percent) compared to urban areas (97 percent) ($p < 0.001$).

With regard to deliveries, proximity was the reason most commonly cited (30 percent), followed by competent personnel (28 percent) and experience (20 percent). Not surprisingly, proximity was more frequently cited by women living in rural areas (44 percent) than in urban areas (21 percent). Perceptions of quality again were higher in urban areas (95 percent versus 87 percent, $p < 0.02$), as was satisfaction (88 percent versus 79 percent, $p < 0.06$).

9.5 Summary of Maternal Health

MHOs appear to have an impact on use of prenatal care and use of insecticide treated nets during pregnancy. MHOs do not show a significant impact on deliveries, though this may be due to the small sample size, since 22 of 25 women with MHO coverage used a modern facility. However, it appears that distance to a modern facility is the major barrier to receiving the skilled assistance usually available in such facilities, both from the multivariate analysis and from reasons stated for not delivering in a modern health facility (distance/transport issues and labor coming too quickly).

10. Predictors of Enrollment of Children under 5 as MHO Beneficiaries

This section focuses on children under the age of 5 years. It examines factors influencing enrollment of children under 5 as beneficiaries of an MHO and the effects of being in a household which is an active member of an MHO on use of immunizations, Vitamin A supplementation, and insecticide-treated mosquito nets.

10.1 Predictors of Enrollment of Children under 5 as MHO Beneficiaries

Being a beneficiary in an active MHO household gives the child access to MHO coverage for curative care services and increases contact with the health care system, facilitating access and exposure to preventive care services as well. Table 21 presents the results of logit regression on enrollment of children under 5 in an MHO, among children living in an area where there is access to a functional MHO.

Few individual characteristics of the children predicted enrollment, in contrast to general enrollment (see Table 10) but similar to the pattern for enrollment of women of reproductive age (Table 18): only age was significant, and in both cases, in younger groups. Here, children less than 1 year of age were only half as likely to be enrolled as other children under 5. In theory, newborn children and new spouses can automatically be enrolled without paying additional membership fees. However, the household head would need to declare them, have them added to the membership booklet, and pay the additional premiums for them.

Several household characteristics were significant predictors of enrollment of children under 5, and these follow similar patterns to general enrollment and that of women of reproductive age: larger households, female-headed households, non-Bambara households, and households where the child's caretaker had at least primary level education. The effects of female-headed household on child enrollment is much stronger here – children under 5 in female-headed households are more than eight times more likely to be enrolled than children in male-headed households, whereas for general enrollment (regardless of age), those living in female-headed households were only five times more likely to be enrolled and for women of reproductive age, they were only four times more likely. Children with a caretaker having at least some primary education were 2.6 times more likely to be enrolled. There was no difference in the odds of being enrolled in an MHO among children from different SES groups.

At the community level, distance continued to be a predictor of enrollment, with those living 6-10 kilometers being a quarter as likely to be members. Those living at more than 10 kilometers were five times more likely to join, but as mentioned before, there are few households in this category in the MHO access areas and they had joined in large numbers. Urban/rural residence had no effect on enrollment of children, in contrast to enrollment of individuals in general and women of reproductive age in particular.

Table 21: Predictors of Enrollment of Children under 5 in an MHO for Those Living in an Area with a Functional MHO

	Child under 5 listed as a Beneficiary in MHO member household (n=740)
R = reference group	**Odds ratio**
Individual Characteristics	
Sex of Individual (R = male)	
Female	0.908
Age of child (R = >=24 months)	
0-11 months old	0.554***
12-23 months old	1.335
Reported health status (R = excellent)	
Average to bad health	1.223
Good health	1.250
Child chronically ill (R = no)	
Chronically ill	0.712
Child handicapped (R = no)	
Handicapped	2.823
Household Characteristics	
Household size	1.119**
Gender of HH head (R = male)	
Female	8.249***
Age of HH head (R = <50 years old)	
HH 50+ years	0.716
Ethnic group of HH head (R = Bambara)	
Senofo	4.896***
Other	2.902**
Education of HH head (R = no education)	
Primary +	1.019
Education of caretaker (R = no education)	
Primary +	2.630***
Occupation of HH head (R = none)	
Agriculture	1.465
Commerce/Administration	0.875
Other	1.712
Occupation of caretaker (R = none)	
Agriculture	0.586
Commerce/Administration	0.707
Other	0.274

Income quintile (SES) of HH (R = poor)	
Middle-poor	0.751
Middle	1.949
Middle-rich	0.686
Rich	1.473
Community Characteristics	
Access to health facility (R= <=1 km)	
2-5 kms	0.452
6-10 kms	0.265*
11+ kms	5.002
Urban/rural residence (R = rural)	
Large urban	0.631
Small urban	0.732

* p < 0.10; ** p < 0.05 ; *** p < 0.01

10.2 Utilization of Preventive Child Health Services

Preventive high-impact services for children, such as immunizations, supplementation with Vitamin A, and use of insecticide-treated mosquito nets, are priority high-impact services, but none are covered directly by the MHOs: immunizations and Vitamin A supplementation are free and insecticide-treated mosquito nets are sold by the health centers but not included in the MHO benefits package. However, it was hypothesized that MHO membership would increase frequency of contact with health facilities and could therefore facilitate access to preventive care interventions. In addition, additional contact could lead to increased knowledge and demand for preventive care services for children. Table 22 presents the results of logit regression on utilization of these three services.

10.2.1 Immunizations

Immunizations are provided to children during their visits to health facilities, through outreach sessions, and during annual campaigns (National Immunization Days). Immunization coverage is measured among children 12-23 months, and 158 children in this age group were surveyed (71 children were from active member households).[28] Immunization coverage was high: 83 percent had received DPT3 before their first birthday. There was neither a difference between MHO households and the general population, nor among residence type.

Logit regression on predictors of immunization coverage indicates no effect of MHO membership (see the first set of columns in Table 22). Interestingly, being a female child makes one four times more likely to be immunized. At the household level, education of the household head has a negative effect on immunization coverage, while education of the caretaker has a positive effect.

[28] This number is small due to the sampling methodology, which focused for all households (with the exception of MHO households in Bla) in capturing information on all children under 5 in households with women either pregnant or having delivered in the previous 12 months. Because of this sampling, these women were less likely to have children in the 12-23 month age bracket.

Being in the 2nd SES quintile (middle-poor) had a negative effect on immunization status. Distance to health facilities did not show an impact but living in a large urban centre (Sikasso) had a slight negative impact.

10.2.2 Vitamin A Supplementation

Vitamin A supplementation is to be given 6 monthly from 6 months to 5 years of age, and is provided during routine immunizations (normally completed before the first birthday), during routine child visits, and during biannual campaigns (often combined with National Immunization Days). Based on information from the child's immunization card, or if no card was available, from the caretaker, 42 percent of the 707 children 6-59 months of age surveyed[29] had received a Vitamin A tablet in the previous six months.[30] Children living in active MHO member households were slightly more likely to receive Vitamin A (46 percent compared to 40 percent, $p < 0.07$). In addition, those living in the large urban area were less likely to receive Vitamin A (29 percent compared to 48 percent in the small urban area and 44 percent in the rural area; $p < 0.0005$).

Logit regression shown in the second column in Table 22 indicates that only gender of the household head and those living more than 11 kms were significant predictors, although not in the expected directions. Children living in female-headed households are much less likely to receive Vitamin A supplementation and children living more than 11 kms were more likely to have received Vitamin A.

10.2.3 Sleeping under an Insecticide-treated Mosquito Net

Of the children under 5 surveyed, 78 percent had slept under any kind of net (with 85 percent in the rural areas, 80 percent in the small urban area, and 63 percent in the larger urban area, $p < 0.000$) the previous night. However, only 38 percent had slept under an *insecticide-treated* mosquito net. Yet, among active MHO member households (N = 339), 62 percent of children under 5 were sleeping under an insecticide treated net ($p < 0.000$). This effect was reflected in the results of the logit regression shown in the third column in Table 22. Children living in active MHO households were more than twice as likely to sleep under a treated net as other children. In terms of household characteristics, the child's caretaker having at least some primary education makes the children about 1.4 times more likely to sleep under a treated net. Children in households in the 5th (rich) quintile were more likely to sleep under a treated net. Children living in Sikasso (large urban center) and those living 6-10 kilometers from a health facility are less likely to sleep under a treated net.

[29] Of these children, 200 were from active MHO households.

[30] It should be noted that children receiving Vitamin A supplementation through Intensive Nutrition Weeks or National Immunization Day campaigns generally do not have that noted on their immunization card. In this case, the coverage rate is probably an underestimation because those *with* immunization cards were not asked about whether they had received Vitamin A: the information came solely from the card itself.

Table 22: Predictors of Utilization of Preventive Child Health Services

	Immunizations: DPT 3 before first birthday (n= 158 children 12-23 months)	Vitamin A supplementation (n= 657 children 6-59 months)	Sleeping under insecticide treated mosquito net (n= 1261 children < 5)
R = reference group	**Odds ratio**	**Odds ratio**	**Odds ratio**
Individual Characteristics			
Gender (R = male)			
Female	4.028**	0.837	0.890
Household Characteristics			
Live in an MHO member HH	1.416	1.060	2.129***
Head of HH (R=male)			
Female	0.617	0.077***	0.864
Education of HH head (R= no education)			
Primary or higher	0.274**	1.175	1.067
Education of caretaker (R=no education)			
Primary or higher	3.422*	0.817	1.440*
Ethnic group (R = Bambara)			
Senofo	1.153	0.971	1.131
Other	2.576	1.334	1.005
HH wealth (R=poor)			
Middle poor	0.188**	0.981	0.916
Middle	0.305	0.792	1.158
Middle rich	0.314	1.523	1.096
Rich	0.536	1.461	1.749
Community characteristics			
Access to MHO (R = no)			
Has access to MHO	1.977	1.192	1.197
Access to health facility (R= <=1 km)			
2-5 kms	0.747	0.922	1.016
6-10 kms	0.556	0.921	0.470***
11+ kms	DROPPED	2.360*	1.499
Residence urban/rural (R = rural)			
Large urban	0.164*	1.419	0.317***
Small urban	1.060	1.172	0.804

* p < 0.10; ** p < 0.05 ; *** p < 0.01

10.3 Summary of Use of Children's high-impact Preventive Health Services

Enrollment of children as beneficiaries appears to be determined by household characteristics, but not SES and access, and is hardly related to individual characteristics of the child. Household MHO membership is a positive predictor of use of insecticide-treated mosquito nets in children under 5, but not of immunizations or Vitamin A supplementation.

11. Does the MHO Protect Against Large Household Health Expenditures?

The impact of MHO membership on financial protection was measured in terms of annual household expenditures on health and out-of-pocket expenditures at the time of care seeking for fever. The affordability of MHO costs (premiums and co-payments) is also assessed.

11.1 Household Expenditures on Health

Table 23 shows data on health expenditures by MHO members; those with access, but who were not members; and those without MHO access. Mean and median spending on health by active member MHO households in Bla were greater than for non-MHO households. In contrast, in Sikasso, median health spending was higher for active MHO households, but mean spending by active MHO households was lower than for non-MHO households. Thus, the fact of being an active MHO household does not necessarily reduce household expenditures on health.

However, the examination of the ratio of median to mean health expenditures indicates that active MHO members are gaining some financial protection. Health care expenditures are not normally distributed, and where the ratio of mean to median is greater, some individuals are spending much higher amounts than others in their group. Active MHO households in Bla have a ratio of 2.8, compared to 9.1 and 6.6 in non-MHO populations. In Sikasso the ratios are 5.6 for active households and 7.7 for others. This indicates that active MHO households face a smaller risk of having to make health expenditures above the median.

The bottom 3 rows of Table 23 show the mean and median percentages of cash expenditures by households that are spent on health. These figures show that the active MHO households spend a greater share of their cash income on health at the median than non-MHO households, though only a bit more in Sikasso. The pattern is reversed for health spending at the mean—again indicating that active MHO households gain some income protection from the risk of high health expenditures.

Finally, there are wide gaps across the board between mean and median percentages of total cash expenditures going to health; for example, looking at Bla overall, median expenditures are 7,800 FCFA per household while mean expenditures are 57,044 FCFA. Such wide gaps indicate that a relatively small number of households are bearing a high financial risk associated with health and have need for more income protection. While more narrow for MHO households, their gaps are still large: for example, MHO households in Bla had a 24,000 median and 67,855 mean for health care expenditures. While these data indicate that MHO membership helps mitigate some financial risks, there still is much financial risk in place.

Table 23: Annual Household Spending on Health

	Currency	Bla				Sikasso			Total Sample
		Active Member N = 227	MHO Access* N = 610	No MHO Access N = 676	Total Bla N= 1,513	Active Member N = 318	MHO Access N = 718	Total Sikasso N= 1,036	N=2,549
Mean total annual expenditure on health	F CFA	67,855	54,374	55,822	57,044	86,172	92,692	90,691	70,719
	USD	129	103	106	108	164	176	172	134
Median total annual expenditure on health	F CFA	24,000	6,000	8,400	7,800	15,600	12,000	12,000	9,000
	USD	46	11	16	15	30	23	23	17
Ratio: Mean to median health expenditures		2.8	9.1	6.6	7.1	5.6	7.7	6.2	7.9
Mean health expenditure as % of total cash consumption expenditure**		6.4%	7.6%	9.6%	8.9%	5.6%	6.2%	6.2%	7.8%
Median % of total cash consumption expenditure going to health**		3.2%	1.7%	3.1%	2.6%	1.7%	1.5%	1.5%	2.1%
Ratio: Mean to median health share of total cash consumption		2.0	4.5	3.1	3.4	3.3	4.1	4.1	3.7

Exchange rate: 527 F CFA=USD 1.00 on October 1, 2004

* Includes non-active member households and non-member households.

** Annual cash expenditure is used as the denominator here, rather than total value of consumption (which includes self-produced items) since health expenditures must be made in cash. N.B. about 25%the value of Bla households' consumption comes from self-produced items; about 5 percent of Sikasso households' consumption comes from self-production.

Table 24 presents regression results[31] on predictors of household expenditures, both total health expenditures and health expenditures as a percentage of total household cash consumption. Active MHO membership is only a weakly negative predictor of household expenditure going to health (tending to confirm the findings in Table 23 above). The strong positive predictors of both dependent variables are education of the household head and socio-economic status of the household. The positive predictors are as expected. That is, better educated household heads and households with higher incomes are likely to spend more on health, other things equal, and to spend more as a share of

[31] Both ordinary regressions and Tobit regressions were run on predictors of household health expenditures and health expenditures as a percentage of total consumption. The Tobit regressions take into account the "censoring" of observations where the households report no health expenditures that could bias the results. However, both regression techniques produced similar results, so only the ordinary results are presented in Table 24. Results of TOBIT regressions can be found in Annex 4.

the close proxy of their income (consumption). The strong negative predictors of both are residence in either of the urban areas. Other negative predictors (living in urban areas and distance to the nearest facility) show unusual patterns. It may be that the greater choice and availability of health services and supplies in urban areas gives households the opportunity to "shop around" for better buys. It also is possible that travel costs associated with seeking health services force rural households to spend more than their urban counterparts, other things equal. However, there are mixed results for distance to the nearest health facility, with only some of the distance variables weakly significant and, moreover, negative—indicating that distance is weakly associated with lower spending on health--(with none of the distance variables significant in the Tobit regressions – see Annex D).

Table 24: Predictors of Household Expenditures on Health

	Household expenditures on health (N=2,164)	**Household health expenditures as a percentage of total consumption (N = 2,139)**
R = reference group	**Coef. P-value**	**Coef. P-value**
Household Characteristics		
Active MHO member (R = no)		
Active	0.279	-0.141*
Number withself reported health status (R = good to excellent health)		
Average to bad health	0.018	-0.010
Number chronically ill (R = no)		
1 or more chronically ill	-0.428	-0.208
Number handicapped (R = no)		
1 or more handicapped	0.769	0.189
Household size	-0.035	0.071
Number children <5 (R = 0-1 child)		
2+ children <5 in household	0.441	0.122
Number women 15-49 (R = 0-1 woman)		
2+ women 15-49 in household	-0.235	-0.049
Number elders in HH (R = 0-1 person 50+)		
2+ elders in household	-0.127	0.002
Gender of HH head (R = male)		
Female	-1.283*	-0.183
Ethnic group of HH head (R = Bambara)		
Senofo	-0.651*	-0.108
Other	0.084	-0.020
Education of HH Head (R = no education)		
Primary	0.979***	0.162**
Secondary +	2.119***	0.390***
Occupation of HH Head (R = none)		
Agriculture	-0.221	-0.117
Commerce/Administration	-0.112	-0.132

Other	-0.650	-0.196
Socioeconomic Status of HH (R = poor)		
Middle-poor	0.451	0.172*
Middle	0.766*	0.218**
Middle-rich	1.338***	0.296***
Rich	3.558***	0.669***
Community Characteristics		
Access to health facility (R= <=1 km)		
2-5 kms	-0.489	-0.222**
6-10 kms	-0.764*	-0.209*
11+ kms	-0.128	-0.008
Urban/Rural residence (R = rural)		
Large urban	-1.477***	-0.580***
Small urban	-1.338**	-0.574***
Constant	3.964***	1.193***

* p < 0.10
** p < 0.05
*** p < 0.01

11.2 Out-of-Pocket Expenditures for Fever

The household survey asked those with fever and women making prenatal visits or having delivered about expenditures that they made related to care. However, the sample sizes for MHO members related to maternal care were too small to interpret findings.

On average, people with fever (all ages combined) spent an average of 2,003 FCFA ($3.80) (range 0 to 95,000; median 2,026 FCFA) on treatment, regardless of source of care. Figure 7 presents a comparison of out-of-pocket expenditures among those eligible for MHO coverage of treatment for their fever and those not eligible for both urban and rural populations. MHO members spent less overall, on home care and on modern care at the moment of care seeking than non-members. However, for spending on transport—the smallest component—members spend more than non-members. Figure 8 presents similar comparisons for only those who sought modern providers to treat their fever. Among those seeking modern care, MHO members consistently spend less than their non-MHO counterparts. Thus, MHO members use less home care, spend less on home care, and are more likely to seek modern care and to spend less at the time of service.

Figure 7: Out-of-pocket expenditures for fever treatment (all cases of fever, N = 1,701)

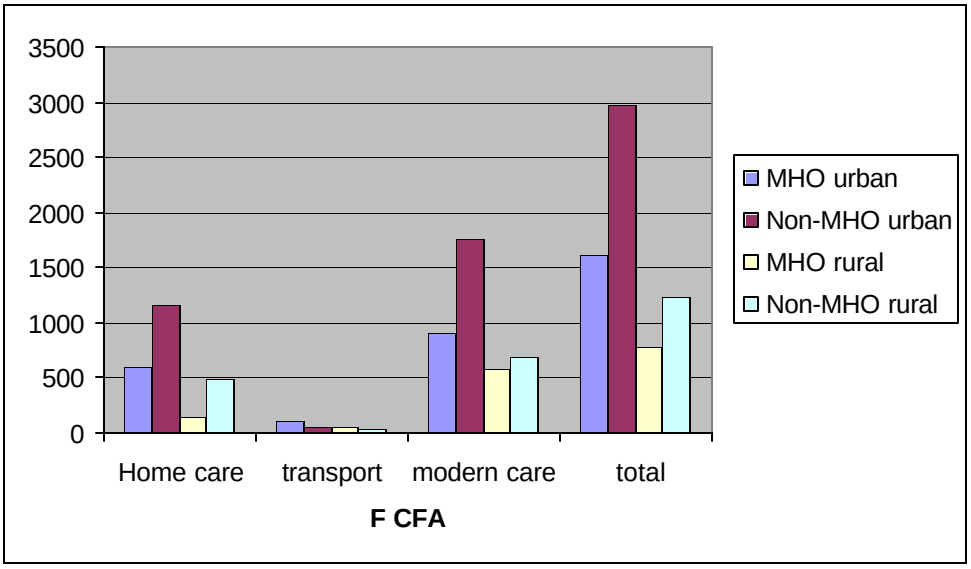


Figure 8: Out-of-pocket expenditures for fever treatment of those seeking modern care only (N = 634)

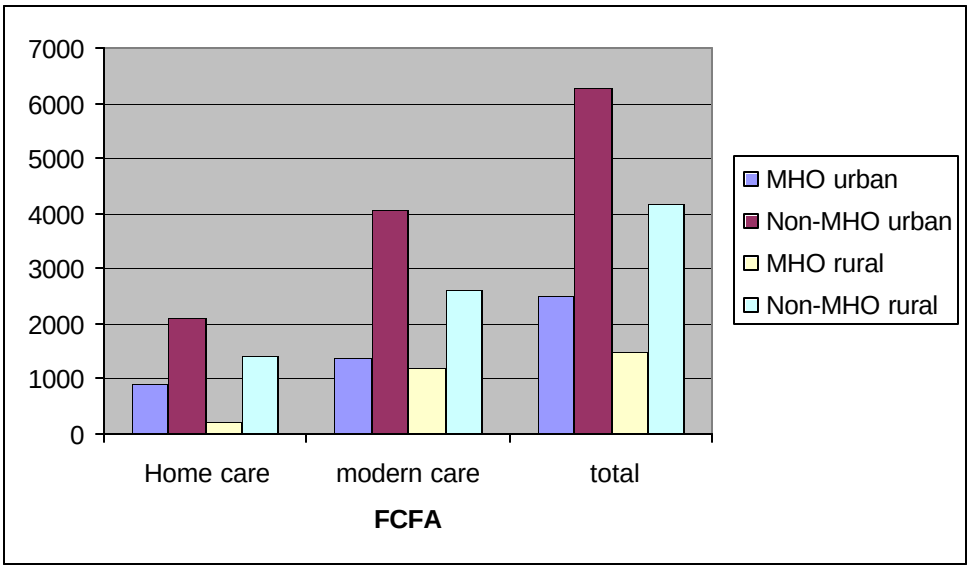


Table 25 displays results from multivariate linear regression on out-of-pocket expenditures for (1) any type of care for fever and (2) modern care for fever. These data confirm the effect of MHO membership on out-of-pocket expenditures, although more weakly on costs for all fevers since more non-members did not seek modern care. For spending on any type of care, when the individual with a fever was a child under five, spending tended to be lower, related to lower costs of drugs (as age was not a significant factor in use (see Table 15). As expected, cases reported to be more serious resulted in higher expenditures. Being in the 5th (richest) SES quintile also was associated with higher

spending. Finally, some other variables, being in the Senofo ethnic group and being engaged in an occupation other than agriculture, commerce, or administration, were associated with higher spending. For spending on modern care for fever, only being an MHO eligible (negative) and being in household with the head was employed in agriculture (positive) were significant variables. Thus, being eligible for MHO coverage tends to lower out-of-pocket spending on fever care overall and care at modern providers, other factors equal.

Table 25: Predictors of Out of Pocket Expenditures for Curative Care for Fever

	Out of pocket expenditures for all types of care: self-treatment, traditional healer, modern care (N=1,596)	Out-of-pocket expenditures for modern health care (N = 599)
R = reference group	**Coef. P-value**	**Coef. P-value**
Individual Characteristics		
Covered by the MHO (R = no)		
Eligible (up-to-date and beneficiary)	-0.637*	-1.228**
Sex of Individual (R = male)		
Female	-0.141	-0.423
Age of Individual (R = < 50 years)		
50+ years old	-0.045	0.124
Child < 5 (R = non)		
Child < 5 years of age	-0.568**	-0.530
Severity of illness (R = no serious)		
Serious	1.370***	0.579
Very Serious	1.958***	-0.531
Household Characteristics		
Household size	0.042	0.059
Gender of HH head (R = male)		
Female	-0.658	-1.017
Ethnic group of HH head (R = Bambara)		
Senofo	0.881***	0.006
Other	0.251	0.472
Education of HH Head (R = no education)		
Primary +	0.430*	0.742
Occupation of HH Head (R = none)		
Agriculture	-0.571	-1.269**
Commerce/Administration	0.103	-0.634
Other	2.127***	1.465
Socioeconomic Status of HH (R = poor)		
Middle-poor	-0.132	-0.638
Middle	0.331	-0.272
Middle-rich	0.239	-0.044

Rich	1.167***	0.268
Community Characteristics		
Access to health facility (R= <=1 km)		
2-5 kms	-0.376	-0.344
6-10 kms	-0.456	-0.769
11+ kms	-0.416	0.531
Urban/Rural residence (R = rural)		
Large urban	0.359	-0.798
Small urban	-0.287	-1.042
Constant	2.520***	6.670***

11.3 Affordability: Spending on MHO Premiums and Co-payments

One key question about MHOs is their affordability for the population, especially the poor. Table 26 estimates expenditures on premiums and co-payments, based on MHO register data and demographic data on family size and beneficiary status from the household survey. MHO members obviously pay less at the time of care seeking because they only pay a portion of the costs. However, they also make monthly or semi-annual premium payments regardless of whether anyone in their family used care.

The first section of **Error! Reference source not found.** shows estimates of annual expenditures on MHO premiums plus co-payments, based on actually enrolled members and on costs extrapolated if they had enrolled the entire household.[32] Using the 2005 poverty line set at 155,000 FCFA (*Cadre Stratégique de Lutte contre la Pauvrété*, Mali and assuming 6 members per household, annual income per household at the poverty line would be would give an annual household income of 930,000 FCFA or $1,765. Thus, household MHO related expenditures come to 1.75-3.07% of income at the poverty line.

The second section of **Error! Reference source not found.** shows these estimated expenditures on MHO premiums and co-payments in relation to household cash income. It would take only a little more than 2% of a typical Sikasso MHO household's cash income to pay for all household members' premiums and co-payments; in Bla, the percentage is higher, at more than 6%, due to lower cash income in Bla. In practice, Sikasso households enroll more than two-thirds of their members at an expenditure that is a bit less than 2% of income. In Bla, urban households (Blaville) enroll 62% of their members at a cost of 4% of income and the rural households (Kemeni) enroll 43% of their members at a cost of 3.4% of income.

The bottom section of **Error! Reference source not found.** provides information on mean and median percentage of health expenditures as a share of total cash consumption expenditures from Table 23 for comparison with the percentage of cash income spent on MHO expenditures. The percent of cash income required to enroll all household members is more than the actual median share of income spent on health, but lower than the mean share of income going to health (see the figures at the bottom for both Bla and Sikasso. This would put the households in the position of considering

[32] These estimations are based on average total MHO member co-payments, premium payments based on beneficiaries enrolled, and then adjusted for the percentage of household members not enrolled.

whether to enroll the whole household in an MHO as this would require the household to spend more than most households have to spend on healthcare (MHO charges and co-payments are greater than the median expenditure), but the financial protection of the MHO coverage would likely keep them from having to spend what the average household spends (MHO charges and co-payments are less than mean expenditure, but the MHOs do not cover all services, notably hospitalization in the Sikasso MHOs).

Table 26: Estimated Household Annual MHO Expenditures (premiums+co-payments)

	Who Covered	Bla		Sikasso	
		Kemeni	**Blaville**	**Wayerma**	Bougoula
Estimated annual total expenditures on MHO premiums and co-payments per household*	Based on current enrolled household members as beneficiaries	8,201 F $15.56	17,813 F $33.80	13,024 F $24.71	10,390 F $19.72
		43% HH enrolled	62% of HH enrolled	79% of HH enrolled	67% of HH enrolled
	Estimated cost if all HH members enrolled	19,135 F $36.31	28,575 F $54.22	16,400 F $31.12	15,464 F $29.34
MHO expenditures relative to cash income	Mean cash income	241,560 F $458	447,740 F $850	715,965 F $1,359	715,965 F $1,359
	Expenditures as % of cash income with current beneficiaries	3.4%	4.0%	1.8%	1.5%
	Expenditures as % of income with total HH covered	7.9%	6.4%	2.3%	2.2%
Actual expenditures on health as a share of total cash consumption expenditure	Median	2.6%		1.5%	
	Mean	8.9%		6.2%	

Exchange rate: 527 F CFA=USD 1.00 on October 1, 2004

* These estimations of MHO expenditures are lower than the figures in

Table because they do not include costs related to care not covered by the MHO (such as self-care and hospitalization in all MHOs but Blaville).

11.4 Summary of Analyses of Expenditures on Health

Active household membership in an MHO does not seem to be associated with lower total household health spending, and has a weak negative association with health care expenditures as a percent of overall cash expenditures. However, active membership does appear to offer some income protection (as shown by the ratios of mean to median expenditures). Further, active MHO members tend to spend less on care for fevers in general and on care for fevers obtained in modern healthcare facilities. The costs of MHO premiums appear to make relatively more cash-poor households (in Bla) choosier about the number of household members to enroll as beneficiaries. Finally, the large gaps between median and mean household spending on health as a percent of total cash expenditure show that there is a relatively strong need for additional protection from the financial risk of healthcare in the studied populations.

12. Discussion

This study presented results of field-testing of a strategy to address barriers to health services utilization in Mali. MHOs organized under the Equity Initiative provided an opportunity for Malians to examine the feasibility and effectiveness of alternative institutional arrangements within the mutual health insurance movement. The social bases for resource mobilization and risk-pooling in the Equity Initiative's MHOs were no longer "employment" and "membership in a socio-professional association", but "residence" and "community based organizations". In other words, the institutional arrangements of the 4 MHOs in Sikasso and Bla were built on bases which are prevalent in most Malian local communities and which are key features of social capital in Malian communities. Community-based MHOs build on the themes of "accessibility" and "community participation," key pillars of Mali's health strategy. Thus, they seek to rearrange community financing arrangements, building on the structural equivalence of community-based organizations in Malian towns and villages in order to mitigate the financial barriers associated with the Bamako Initiative resource mobilization strategies, and to improve access to health care services while protecting the income of the poor and strengthening their power and voices in the health sector

The results of the evaluation indicate that coverage rates in the general population for prenatal care, deliveries and treatment of fever with a modern provider have not changed since the 1999 baseline survey in Sikasso and Bla. The MHO intervention did not influence these general population coverage levels with priority interventions, largely because MHO membership remains low, covering from 3-11% of the population living within the MHO catchment areas. There would seem to be considerable scope for increasing the proportion of the population enrolled in MHOs, however. The major reason found for not joining was "not knowing about MHOs" (61 to 74% of responses), dwarfing responses related to the expense of the premiums (11 to 22%).[33] Given this and the results of this study, MHOs would seem to have the potential to have an impact on both utilization and social inclusion.

MHOs do have a positive impact on utilization of many priority interventions

The previous sections have presented data from Bla District and Sikasso Town about the effects of MHOs on utilization of priority, high impact services. They have shown that being eligible for MHO coverage (registered as a beneficiary in a household that is up-to-date on premium payments) is a positive predictor for use of many of the priority interventions. Up-to-date MHO members and beneficiaries were:

1. 1.7 times more likely to treat their fever in a modern health facility
2. 4.6 times more likely to take their children under 5 years of age for early treatment of fever
3. 7 times more likely to take their children under 5 years of age for treatment of diarrhea

[33] Further, Rwanda has more than half of its population enrolled in MHOs in 2006.

4. 3 times more likely for their children under 5 with diarrhea to use ORS or seek modern care

5. 2 times more likely to make at least 4 prenatal visits during pregnancy

6. 2 times more likely for women during pregnancy and children under 5 years of age to sleep under an insecticide treated mosquito net

Eligibility for MHO coverage did not appear to have a significant effect for early treatment of fever (general population), modern treatment of fevers in children, early prenatal care, deliveries in a modern health care facility or with a skilled birth attendant, and the preventive child health services of immunizations and Vitamin A supplementation. It should be noted that small sample sizes for eligible women may explain the lack of a detectable MHO effect on deliveries.

MHOs reach most parts of the population, and do not exclude the poor.

While being in a highest SES quintile household was a significant predictor of utilization for fever treatments and deliveries, SES was not a significant predictor for diarrhea treatment, use of prenatal care, and vitamin A. The patterns of the effects of SES were often inconsistent, with only an intermediate quintile being a significant predictor.

Socioeconomic status itself was a predictor for initial household enrolment in an MHO only for the 5th (richest) quintile. While the 3rd-5th quintiles were significant predictors for active MHO household membership, the patterns were also inconsistent: being in 4th (middle-rich) made one significantly less likely to be enrolled as MHO beneficiary than being from the 1st (poorest) quintile. Approximately half of the Sikasso population and about 80% of the Bla population fall below the poverty line. MHO membership is drawn from a broad cross-section of both.

While the very poor may have difficulty joining and paying premiums, they join as frequently as those in other quintiles, with the exception of the richest quintile. It should be noted that Kemeni *rural* MHO had the highest rates of regular premium payment of all the MHOs. One year's worth of premiums plus co-payments for the entire household would average 15,000-28,000 FCFA per year, depending on the MHO, its premium rates, and utilization patterns of its members; this represents approximately 2-3% of annual household income at the poverty line in Mali, and 2-8% of household cash income of MHO households. MHO membership did appear to provide some income protection, and saved households money on care for fevers, though there was no reduction or savings for active members in terms of overall spending on health. While the gap between mean and median health care expenditures was smaller in MHO households, there still remains a need for additional income protection for financial risks related to health care needs. Households in rural areas (with lower cash income) tended to enroll a smaller percentage of their household members as a mechanism to reduce overall MHO expenditures.

A significant question is whether MHOs facilitated coverage of target groups for high impact interventions: women of reproductive age and children under five years of age. At a household level, the more women of reproductive age, the more likely the household was to enroll (both as members and as active members): households with 4 or more women were twice as likely to enroll. However, households with 3 or more children under 5 were less likely to enroll, but once enrolled, the number of children under 5 had no impact on keeping up premium payments. At the level of general individual enrolment, children under five and women of reproductive age were no more or less likely to be enrolled than others. However, when enrolment was examined for these specific groups, younger women (less than 20 years of age) and younger children (0-11 months) were about half as likely to be enrolled. Both these groups represent specifically vulnerable sub-populations. In both

small urban and rural Bla, enrollment of less than all household members was more frequent than in Sikasso. When this was the case, the households tended to disproportionately enroll children under 5, women of reproductive age, and the elderly.

MHOs could face some risks to their sustainability

The four MHOs have shown their resilience in continuing to function despite extremely difficult economic circumstances of their members and the surrounding communities. They have shown that there is a demand for such a service and they have continued to grow. However, there are some results that indicate some potential dangers for the sustainability of these MHOs (and others): adverse selection, difficulties in maintaining regular premium payments, increasing use of health care services among MHO members and beneficiaries.

Adverse selection can increase the costs of care covered by the MHO if the beneficiaries are more ill than the normal population because the risks are not been spread among as many healthy people. This creates financial risks for the MHO. Enrolment patterns indicate some adverse selection, and the patterns are similar whether discussing the head of household specifically or beneficiaries in general. Those who self reported being poor health, average or good health were 1.2 times more likely to be enrolled than those in excellent health. Those who reported being chronically ill ere 1.4 times more likely and individuals who are handicapped were 1.8 times more likely to be enrolled as a beneficiary in an active MHO household than those who were not. No adverse selection variables were significantly related to women of reproductive age or children under five years of age. However, households that enrolled less than all members tended to enroll under 5s, women of reproductive age, and the elderly. Although evidence of adverse selection is seen, there are mechanisms that MHOs can put in place to reduce it and its effects, such as requiring whole family membership and increasing the overall size of the risk pool.

Irregularity of premium payments also causes difficulties for MHOs: premium payments are important to cover the costs of care and to provide a large enough pool of individuals to spread the risk. If few members are up-to-date, the financial risks are similar to those associated with small membership numbers. As shown in **Error! Reference source not found.**, there is significant variation from month to month in the rate of premium payments (% of members paying their monthly premiums), with an average of 60%. MHOs will need to continue to strengthen strategies to facilitate payment (decentralized offices, reminders, arranging varying payment schedules).

Utilization patterns are important factors in MHO sustainability. If utilization increases, it can go beyond the capacity of premium rates to cover the costs of care. Figure appears to indicate that utilization rates (number of visits per up-to-date household) are on the increase. These would call for verification over time of this pattern and possible modification of premiums to better match costs to the MHO.

Geographic accessibility remains a key barrier to use

Across the various priority health interventions, physical distances to health facilities are significantly negative predictors of utilization. Results reflect this pattern for treatment of fever, prenatal services, and deliveries, indicating that in some cases, even 2 kms present a geographic barrier to use. Preventive child services, because of outreach activities, appear to have overcome geographic barriers. The results were especially strong for deliveries, indicating that inclusion of coverage for transportation for deliveries in the MHO package might help resolve some of these issues.

13. Next Steps

In developing countries where health insurance coverage tends to be limited to urban formal sector employees, MHOs are viewed as a promising insurance mechanism for reaching households in the rural and informal sector, which represent the majority of the population in Mali and other developing countries. Growing evidence of MHOs' potential led the World Health Organization's (WHO) Commission on Macroeconomics and Health and the World Bank, in 2001, to endorse mutual health insurance (or community based health insurance) as an alternative health financing option (Sachs et al, 2001). Enthusiasm for MHOs has also grown among governments and communities in developing countries, which, combined with external support for the development of MHOs, has resulted in a proliferation of schemes, particularly in Sub-Saharan Africa (*La Concertation*, 2006). The number of schemes in this region has grown from under a handful in the 1980s to hundreds today. In addition, MHOs have been incorporated into national health financing strategies in several countries, including Tanzania, Ghana, Mali, Rwanda, Senegal, Uganda and Benin.

Further study is needed to understand better how to effectively increase MHO membership. Bringing the impact of MHOs to scale will require broader government support for a mutual health insurance strategy. The lessons from these MHOs in Bla and Sikasso districts demonstrate areas for further strengthening in recruiting members, increasing access to the MHO through mechanisms such as decentralized offices (used successfully in Senegal), initiating mechanisms to smooth out the effects of fluctuations in the cash economy that hamper the ability of households to pay premiums during periods of disruption in the market for the main cash crop, and subsidizing memberships for those who cannot afford to pay. A recent PHRplus publication presents a series of strategies that have shown their effect on MHO strengthening (Gamble Kelley et al, 2006), such as in Rwanda where a "tontine" system was created in which participating households could make installments until they had accumulated the full enrolment fee at which point they would join the MHO; in another district, a local church subsidized enrolment for orphans and widows (Schneider and Diop, 2001).

Conclusions of Feedback Workshop:

MHOs have an important contribution to make in ensuring financial access to care, but strategies are needed to address the following weaknesses related to MHOs on a national and local level:

Weaknesses in the institutional and policy framework:

1. Insufficient resources to support MHO development
2. Cumbersome procedures for registration of MHOs and expensive feasibility studies
3. No network or framework for mutual sharing and learning among partners

Weakness in MHO implementation:

4. Inadequate awareness among the population about MHOs
5. Poor quality of care provided at health facilities, leading to lack of interest in MHOs
6. Weakness in MHO management structures
7. Weak financial capacity of poor households to join

MHOs in Mali are mentioned in the GOM's development plans, yet, nationwide they continue to remain small and their "market penetration" is low. MHOs have demonstrated their potential in Mali to assist the population working in the informal sectors to access priority health care services. And they have the potential to be a vehicle for health promotion – results of this study

indicate that, even though sale of insecticide-treated mosquito nets was not an MHO activity or part of their benefits package, they did promote them and the results are telling. MHOs could do similar types of promotion among their members for other preventive services, including Vitamin A supplementation, etc.

It should be noted that although MHOs can play a role in increasing utilization, membership tends to be among those already have physical access to health services. Data from this study indicates that distance to a health facility still plays a significant role in determining utilization for deliveries, treatment of fever, and prenatal care. Thus, MHOs cannot be seen as a solution to all barriers to utilization of priority interventions.

Preliminary results of this study were presented in Bamako, Mali to over 60 stakeholders[34] in August 2005 for discussion implementation of the MHO interventions and outlining future directions. The box on the previous page states conclusions and weaknesses identified, and participants summarized the following actions:

- *National government*: create a budget line for MHO support, develop a strategic plan for MHO development, build capacity in MHO development, decentralize licensing process and simplify the process, create a national level *concertation* (forum for harmonization of efforts and lesson sharing) for sharing and discussion, develop an IEC strategy for MHO promotion, take steps to improve the quality of care provided at CSComs and CSRefs, create mechanisms for subsidizing the very poor

- *Technical and Financial Partners*: provide budgetary and technical support to MHO development according to a national strategic plan for MHO development, coordinate their efforts

- *MHOs themselves*: create learning and sharing mechanisms among themselves, participate in the development of the MHO strategic plan, work with health facilities to improve the quality of care, develop strategies to help cover the very poor

- *Local government and civil society*: provide financial and moral support to MHO development in their areas, participate in the development of the MHO strategic plan, provide support to premium payments of the very poor.

The community-based nature of the MHOs is the key institutional feature which underlies the policy implications of the findings presented in this report, because it presents an option for risk pooling and community resource mobilization in a context that could be replicated and scaled-up throughout the country. Expanding or scaling up community based MHOs could be done in Mali by one of two options:

- Maintaining MHO autonomy from ASACO and CSCom as they are in the West Africa's MHO model

- Transforming the ASACO into community-based mutual health organizations: in this case, the MHOs will be partnerships between CSCom and the community as in the Rwanda model.

[34] Participants at this workshop included key Ministry of Health and Ministry of Social Affaires officials from national and regional level, MHO representatives, and partners (including WHO, UNICEF, etc.)

This latter option would build on the recognition of the scarcity of human resources for providing strategic and technical support to MHOs and the organization and management of MHOs in the rural context of Mali.

This study has provided further solid evidence on the positive effects of MHOs on utilization of many priority health services and evidence that MHOs serve many poor people and provide some income protection related to health care expenditures, although they do not reach all of the absolute poorest. It has presented data about MHO functioning which point to areas of strengths and weaknesses for which strategies have been tested elsewhere (Gamble Kelley et al, 2006). MHOs remain one viable mechanism, as a complement to others, to increase financial access to and equity in utilization of essential health services. But its potential effects on access and equity require more concerted efforts by governments to develop coherent strategies for MHO development, to build effective partnerships to develop and sustain MHO support capacities, and to continuous learn from experiences of others to strengthen MHOs and their ability to reach the key target populations: women, children and the poor.

Annex A: MHO Implementation Steps

Stage of Intervention	Principal Activities/Findings	Timeline/Duration
1. Appoint Initial Working Group members	Chosen by the MHO focal person and the Social Development Department officer from among the most representative organizations in the two sites (artisans, women's groups, local elected officials, ASACO representatives, NGOs, technical and administrative services, and the media). Benefits – management experience, community confidence, existing solidarity links, dynamics	January 2001
2. Build the Initial Working Group's capacities	Two workshops, five days each per site, 30 participants each. Principal themes: health insurance, identification and basic principles of an MHO (including MHO, joining an MHO, internal organization of an MHO, services offered by an MHO, the process of setting up an MHO).	January 2001 One five-day workshop per site
3. Raise Awareness	Multi-phase activity, ongoing throughout the lifespan of an MHO. Developing materials (comic strips, contracts with rural radio stations) through a participatory process. Done at the beginning by the Working Group and after also with the participation of the community mobilizers. ▲ During set-up, the goal is social mobilization, explaining what an MHO is, and testing the idea of setting up an MHO. About 40 sessions on awareness-raising in Sikasso (1,691 members reached) and 110 in Bla (3,506 people) to reach the ASACOs, the media, and the associations. ▲ After social mobilization, continuous awareness-raising takes place, with themes as follows: ▲ How an MHO operates ▲ The importance of paying premiums regularly ▲ Member rights and responsibilities ▲ Relations between MHOs and health care providers	February 2001 ongoing
4. Train stakeholders	▲ Workshops to train health personnel about MHOs in Sikasso and Bla so that they could support MHOs in social mobilization and contracting. The themes are: characteristics of an MHO, the role that MHOs can play in improving access to care, and relations between MHOs and care providers. (20 participants in the two sites (divided evenly, i.e. eight physicians and the head nurses of the medical facilities) ▲ Workshops to train the community mobilizers, already active in the neighborhood/villages in health to support the MHOs in their social mobilization and awareness-raising campaigns. Conducted in the local language, these workshops produced IEC messages aimed at the identified target groups (30 mobilizers trained per site, i.e. 60 people reached). ▲ Workshops to strengthen capacities of the support structures (GOM technical departments, NGOs, including the UTM, etc.) at the two sites in the area of MHOs to foster and facilitate the implementation of MHOs, and to support the existing MHOs. Officials appointed to coordinate social mobilization and awareness-raising in the various neighborhoods/villages. The NGOs in charge of coordination prepared activity plans and attended the PHR*plus*/Mali monthly monitoring meetings. (70 employees reached at both of the sites.)	Several sessions from December 12 to 23, 2002

Stage of Intervention	Principal Activities/Findings	Timeline/Duration
5. Perform feasibility studies	Necessary for checking the conditions for setting up MHOs, such as health, social, demographic, technical, economic, and financial considerations. The feasibility studies made it possible: ▲ To identify the services to be covered ▲ To choose the health care providers with which the MHOs would sign agreements ▲ To calculate the amount of premiums to be collected ▲ To estimate operating expenses ▲ To set up an appropriate organization and management system Five stages for performing the feasibility studies ▲ Methodology development workshop (6 Working Group members at each site) ▲ Prepare data collection tools (household questionnaires and provision of care, health services, technical and socio-economic data) ▲ Develop sample of households to be surveyed ▲ Collect household, provider, health services, technical and socio-economic data and data processing ▲ Develop three scenarios for benefits package and premiums	July 2001 1 month Validation of studies Dec. 2001
6. Set up MHOs	Prepare and hold the statutory General Assembly meetings. Principal activities: ▲ Preparatory meetings with the Working Groups and future members to prepare draft statutes and bylaws and to select the benefits package to be adopted ▲ Organize a general meeting with governmental authorities, health authorities, local government, NGOs, administrative technical departments, and future members ▲ Discuss, amend, and adopt the rules that govern operation ▲ Set up bodies to administer and manage the MHO (boards of directors, executive committee, supervisory committee, and technical committee) ▲ Formally submit the application for certification and serial number (to the Ministry of Territorial Administration and local governments)	March 2002
7. Build the MHO's capacities	▲ The first stage of capacity building took place after the statutory General Assembly meeting, but before payment of services begins. Train the (newly installed) MHO bodies on financial and administrative management of an MHO (operation of MHO bodies, memberships, premiums, financial situation, monitoring, and the provision of care). Develop/provide management tools and a monitoring system (89 persons reached).	5 days per site April 2002

Stage of Intervention	Principal Activities/Findings	Timeline/Duration
	▲ Create and train the decentralized management committees (when the MHO is being expanded to cover additional villages or neighborhoods). The sessions addressed: premiums collection, recruiting, carrying out awareness-raising activities, managing relations with the care providers, and producing an action plan and decentralized management tools.	
8. Make the MHO operational	After the six-month waiting period (May to October 2002), the MHOs become "operational," in other words, the MHOs begin to pay for/reimburse the provision of care for the members. After the MHO is made operational, technical support turns to periodic monitoring.	Oct. to Dec. 2002
9. Ad hoc monitoring and support	Monthly monitoring by the PHR*plus*/Mali technical team, assistance in solving problems.	April 2002 to October 2004 (ongoing but declining over time)

Annex B: Details of Sampling Methods in Final 2004 Survey

For the purpose of drawing the sample for the evaluation survey, the population in Bla District and Sikasso Commune were divided into the following groups:

1. Residents of Bla district exposed to the MHO intervention, who chose to join an MHO (Blaville and Kemeni)

2. Residents of Bla district exposed to the MHO intervention, who chose not to join an MHO (Blaville and Kemeni)

3. Residents of Bla district with no exposure to any interventions (the Bla controls)[35]

4. Residents of Sikasso commune exposed to the MHO intervention (Wayerma and Bougoulaville) who chose to join an MHO

5. Residents of Sikasso commune exposed to the MHO intervention (Wayerma and Bougoulaville) who chose not to join an MHO

6. Residents of Sikasso commune with no exposure to any intervention (the Sikasso controls)[36]

Sampling for MHO member households (groups A, D): Because the numbers of MHO households in Bla, Kemeni, and Bougoulaville were not very large, the entire membership was included in the sample. For Wayerma in Sikasso, with its total of 850 member households, a sample of 350 households was selected, divided into three groups: (1) members joining prior to April 2004, (2) members joining after April 2004 and who were up-to-date in their premium payments at the time of the survey, and (3) members joining after April 2004 but who were not up-to-date in their premium payments. Based on the Member Register for each MHO, a list was created of all members and their addresses.

Sampling for control areas and those exposed to MHOs but not members (groups B, C, E, F): For each of the other groups, the sample was drawn in the following manner:

1. Determination of the number of households to sample in order to have a sufficient number of women delivering in the previous 12 months to be able to evaluate differences with the baseline surveys, the MHO households, and the control groups[37]

[35] The MHOs operating in Touna and Diaramana were not included in the sampling because they had not been operational long enough to have an impact. The catchment areas for these MHOs were excluded from the sampling entirely.
[36] As the two MHOs in Sikasso covered the entire urban center, the non-MHO access control group was drawn from village surrounding Sikasso town.

2. Determination of the number of census sections (*section d'énumeration*) to be selected for the sample (probability proportional to size)

3. Classification of census sections by distance to a health facility and systematic selection of census sections

4. Determination of the number of households to be selected in each census section.

A mapping team visited the selected census sections one month prior to the survey to create a map of each census section and list all the households in that section. Using the specific number of households to be selected in each census section, and using a random number to start, a sampling interval was chosen and used to select the specific households to be surveyed. During the early analysis phase, it was noted that the households in Group F surveyed (Sikasso control group) were not an appropriate control group for Sikasso: they were more truly rural than peri-urban villages, and individual, household, and community characteristics were very different from Sikasso Town residents. They were dropped from the subsequent analysis. Table B-1. shows the actual sample from which information was collected resulting from the household survey, minus Group F.

Table B-1. The Sample Surveyed

M = MHO member household; NM = Non-member households with MHO access; C = household in control area

	Bla			Sikasso			Overall			Total
	M (A)	NM (B)	C (C)	M (D)	NM (E)	C (F)	M	NM	C	
Nb. households	268	341	676	549	446	Dropped	817	787	676	2,280
Nb. individuals in households	2113	2157	4473	3663	2604		5786	4761	4473	15,020
Nb. fever cases	251	268	611	299	272		550	540	611	1,701
Nb. women 15-49 yrs	405	393	819	125	163		530	556	819	1,905
Nb. women delivering in previous 12 months or currently pregnant	144	177	366	114	151		258	328	366	952
Nb. women delivering in previous 12 months	102	118	246	76	101		178	219	246	643
Nb. children under 5 years	294	270	486	135	215		429	485	486	1,400

Table B-2 presents the percentage of MHO member households actually surveyed, based on the number of households in the MHO registers. As mentioned above, a purposeful sampling was conducted for Wayerma. For Bla, Kemeni and BougoulaVille, households not interviewed were ones that the MHO Management Committee members could not identify where they lived (and generally were households no longer active in the MHO).

[37] "Women delivering" was chosen as the basis for sample size calculations because the number of women delivering in the last 12 months would be smaller than the number of cases of fever.

Table B-2. Percentage of Member Households Interviewed

	Bla	Kemeni	Bougoula	Wayerma	TOTAL
Number households in the MHO registers	202	121	272	824	1419
Number member households interviewed	139	113	173	380	805
% of member households in sample	69%	93%	64%	N/A*	

* Wayerma was purposefully sampled.

Annex C: Modules from 2004 Evaluation Household Survey

PHRPlus
INITIATIVE POUR L'EQUITE - ENQUÊTE EVALUATION
16 Sepembre 2004 **– corrigé après le nettoyage des données**

QUESTIONNAIRE MÉNAGE

NOM DE CHEF DE MENAGE:	
ADRESSE OU DESCRIPTION:	

AIRE DE santé _____
_

NUMERO DE LA SECTION D'ENUMERATION: | | | |

NUMERO DE LA CONCESSION (CARTOGRAPHIE): | | | |

NUMERO DU MENAGE DANS LA CONCESSION (CARTOGARPHIE): | | | |

NUMERO DE MENAGE (ECHANTILLONNAGE): | | | | |

NUMERO D'ADHESION (se ménage est mutualiste) | | | |

Numéro de répondant (M101) | |

SIKASSO/BLA (SIKASSO=1, BLA=2): | |

DATE DE PREMIER CONTACT:

J	J	M	M

HEURE DU DEBUT DE PREMIER CONTACT:

H	H	M	M

NOM DE L'ENQUETEUR/ENQUETRICE :	

VISITES D'enquêteurs				**RESULTAT FINAL**
	1	2	3	
DATE DE CONTACT:				JOUR:
RESULTAT* DE LA VISITE:				MOIS:
RENDEZVOUS PAR LA SUITE (SI L'INTERVIEW N'EST PAS TERMINE):				
DATE:				RESULTAT* FINAL
HEURE:				

CODES RESULTAT :
1 REMPLI 2 PAS A LA MAISON 3 DIFERE 4 REFUSE 5 PARTIELLEMENT REMPLI
6 INCAPACITE 7 AUTRE (PRECISER): _____

CONTROLE

SUPERVISEUR MANAGER SAISI

CODE :		CODE :		CODE :	
PARAPHE:		PARAPHE:		PARAPHE:	
DATE:		DATE:		DATE:	

SECTION 1: MENAGE

Bonjour, je m'appelle [NOM DE L'ENQUETEUR] et je suis venu en tant qu'enquêteur pour l'Initiative USAID-MSPAS pour l'Equité. Cette Initiative est organisée avec l'accord des autorités régionales (Ségou et Sikasso). Nous sommes en train de faire une recherche pour mieux comprendre le recours aux soins de santé. L'intention de cette enquête auprès de ménages est pour recueillir des données sur l'accès et l'utilisation des services de santé. Les données pour cette enquête vont aide à rendre les soins de santé plus accessi bles à tout le monde et en particulière aux personnes les plus vulnérables. Avec votre permission, je voudrais vous poser des questions ainsi qu'à certains membres de votre ménage. Ces questions concernent surtout les recours aux soins, mais aussi la situation socio-économique du ménage. Je vais solliciter vos opinions sur certains aspects du système socio-sanitaire. Ceci vous donne l'opportunité de vous exprimer directement aux autorités, sans être personnellement identifie. C'est à dire que nous allons utiliser vos réponses aux questions dans les rapports livrés aux autorités, mais nous n'allons pas donner les noms des individus qui ont participé dans l'enquête. Je ne suis pas employée de USAID ou du Ministère de Santé et je ne révélerai votre identité à personne. Votre participation est volontaire. Votre participation n'empêchera pas votre capacité d'obtenir les soins de santé maintenant ni dans le futur. Vous pouvez refuse de répondre à toute question et vous pouvez arrête l'enquête à tout moment sans peine ou perte de bénéfice.

Cette enquête n'offre pas des soins au cas où quel qu'un dans votre ménage serait malade. Cependant, je pourrais vous aider à identifier le CSCOM le plus proche.

Avez-vous des questions?

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
FIL01	Acceptez-vous de participer à cette enquête?			
		OUI	1	
		NON	2	**FIN**

Je vais commencer en vous posant des renseignements sur les personnes qui vivent habituellement dans votre ménage ou qui vivent chez vous actuellement.

SECTION 1 : CARACTERISTIQUES DES MEMBRES DU MENAGE

N° LIGNE	Prenom	Lien avec le CM	Sexe	Age	Situa-tion de Resi-dence	Personnes Agees de 10 Ans et Plus			Situation Vis-A-Vis Mutuelle		Etat De Sante		Eligibilite				
						Situation Matrimoniale	Instruction	Occupation	Adherent	Mutuelle	Handicap	Maladie Chronique	Perception	Soins Curatifs	Enfant	Femme	
M101	S'il vous plaît, donnez-moi le prénom des personnes qui vivent habituellement dans votre ménage et des visiteurs qui ont passé la nuit dernière ici, en commençent par le chef de ménage. **(IL NE FAUT PAS NOTER LE NOM – S'IL Y A DEUX PERSONNES AVEC LE MEME PRENOM, UTILISEZ L'INITIALE AUSSI)**	Quel est le lien de parenté de (NOM) avec le chef de menage?*	(NOM) est-il de sexe masculin ou féminine? 1 Homme 2 Femme	Quel âge a (NOM)?	Quelle est la situation de résidence de (NOM)? 1.RP 2.RA 3.VIS	Quel est le statut matri-monial de (NOM)? 1.CELIBAT 2.MARIE 3.VEUF 4.DIVORCE 5.AUTRE	Quel est le plus haut niveau d'études que (NOM) a atteint?	Quel est l' occupation de (NOM)? 1.OCCUPE 2.CHOMEUR 3.FEMME AU FOYER 4.ELEVE OU ETUDIANT 5. AUTRE	(NOM) est-il un adherent ou un beneficiaire de la mutuelle de santé? 1.ADR 2.BEN 3.NB ENQUETEUR : SAUTER 110 SI LA PERSONNE N'EST NI ADHERENT NI BENEFICIAIRE	Quelle Mutuelle de santé? VOIR CODE Mutuelles	(NOM) est-il atteint d'un handicap? (VOIR DEFINITION DU MANUAL) 1.OUI **2.NON**	Souffre-t-il d'une maladie chronique? (VOIR DEFINITION DU MANUAL) 1.OUI 2.NON	Selon vous, quelle est l'état de santé de (Vous-Même/NOM)? (ENQ: LIRE) 1. TRES BONNE 2.BONNE 3.MOYENNE 4.MAUVAISE 5.TRES MAUVAISE	(NOM) a-t-il eu la fievre au cours des 15 derniers jours? 1.OUI 2.NON	ENQ: VOIR QM105: (NOM) A-T-IL <5ANS? 1.OUI 2.NON	ENQ: VOIR M104 et M105 LA FEMME EST-ELLE AGEE DE 15-49 ANS? 1.OUI 2.NON	ENQ : VOIR M 117 A-t-elle eu un enfant depuis la même saison de l'annee dernier e ou est-elle enceinte ? 1.OUI **2.NON**
	(M102)	(M103)	(M104)	(M105)	(M106)	(M107)	(M108)	(M109)	(M110)	(M111)	(M112)	(M113)	(M114)	(M115)	(M116)	(M117)	(M118)
01																	
02																	
03																	
04																	
05																	
06																	
07																	
08																	
09																	
10																	
11																	

***CODES POUR QM103: LIENS DE PARENTÉ AVEC LE CHEF DE MÉNAGE**

01=CHEF DE ménage
02=MARI OU FEMME
03=FILS OU FILLE
04=GENDRE/BEAU FILS/BELLE-FILLE
05=PETIT-FILS OU PETITE FILLE
06=PERE O MERE
07=BEAU-PERE OU BELLE-MERE
08=FRERE OU SŒUR
09=CO-EPOUSE
10 AUTRES PARENTS
11=ENFANT ADOPTE/EN GARDE
12=SANS PARENTÉ
98=NE SAIT PAS

***CODES POUR QM106: RESIDENT**

1.RP=RESIDENT PRESENT
2.RA=RESIDENT ABSENT
3.VIS=VISITEUR

Mutuelles:
1 Wayerma
2 Bougoulaville
3 Kemeni Dannaya
4 Bla Ville/Mitiyelilafia
5 Miprosiki
6 UTM
7 INPS
98 autres

***CODES POUR QM108:ETUDES**

0=AUCUN
1=ALPHABETISE
2=ECOLE CORANIQUE
3=FONDAMENTAL 1 (PRIMAIRE)
4=FONDAMENTAL 2 (COLLEGE)
5=SECONDAIRE/LYCEE TECHNIQUE
6=SUPÉRIEUR
7=AUTRE
8=NE SAIT PAS

***CODES POUR QM110: ADHERENT**

1.ADR=ADHERENT ACTUEL DE LA MUTUELLE
2.BEN=ACTUELLEMENT BENEFICIAIREE
3.NB=N'EST PAS BENEFICIARE

SECTION 1 : CARACTERISTIQUES DES MEMBRES DU MENAGE

N° LIGNE	Prenom	Lien avec le CM	Sexe	Age	Situa-tion de Resi-dence	Personnes Agees de 10 Ans et Plus			Situation Vis-A-Vis Mutuelle		Etat De Sante		Eligibilite				
						Situation Matrimoniale	Instruction	Occupation	Adherent	Mutuelle	Handicap	Maladie Chronique	Perception	Soins Curatifs	Enfant	Femme	
M101	S'il vous plaît, donnez-moi le prénom des personnes qui vivent habituellement dans votre ménage et des visiteurs qui ont passé la nuit dernière ici, en commençent par le chef de ménage. **(IL NE FAUT PAS NOTER LE NOM – S'IL Y A DEUX PERSONNES AVEC LE MEME PRENOM, UTILISEZ L'INITIALE AUSSI)**	Quel est le lien de parenté de (NOM) avec le chef de menage?*	(NOM) est-il de sexe masculin ou féminine?	Quel âge a (NOM)?	Quelle est la situation de résidence de (NOM)? 1.RP 2.RA 3.VIS	Quel est le statut matri-monial de (NOM)? 1.CELIBAT 2.MARIE 3.VEUF 4.DIVORCE 5.AUTRE	Quel est le plus haut niveau d'études que (NOM) a atteint?	Quel est l'ccupation de (NOM)? 1.OCCUPE 2.CHOMEUR 3.FEMME AU FOYER 4.ELEVE OU ETUDIANT 5. AUTRE	(NOM) est-il un adherent ou un beneficiaire de la mutuelle de santé? 1.ADR 2.BEN 3.NB ENQUETEUR : SAUTER 110 SI LA PERSONNE N'EST NI ADHERENT NI BENEFICIAIRE	Quelle Mutuelle de santé? 1 WAYERMA 2 BOUGOU 3 KEMENI 4 BLA VILLE 5 = AUTRE	(NOM) est-il atteint d'un handicap? (VOIR DEFINITION DU MANUAL) 1.OUI **2.NON**	Souffre-t-il d'une maladie chronique? (VOIR DEFINITION DU MANUAL) 1.OUI 2.NON	Selon vous, quelle est l'état de santé de (Vous-Même/NOM)? (ENQ: LIRE) 1. TRES BONNE 2.BONNE 3.MOYENNE 4.MAUVAISE 5.TRES MAUVAISE	(NOM) a-t-il eu la fievre au cours des 15 derniers jours? 1.OUI 2.NON	ENQ: VOIR QM105: (NOM) A-T-IL <5ANS? 1.OUI 2.NON	ENQ: VOIR M104 LA FEMME EST-ELLE AGEE DE 15-49 ANS? 1.OUI 2.NON	ENQ : VOIR M 117 A-t-elle eu un enfant depuis la même saison de l'annee dernier e ou est-elle enceinte ? 1.OUI **2.NON**
	(M102)	(M103)	(M104)	(M105)	(M106)	(M107)	(M108)	(M109)	(M110)	(M111)	(M112)	(M113)	(M114)	(M115)	(M116)	(M117)	(M118)
12																	
13																	
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	

22													

SECTION 2 : CARACTERISTIQUE DU CHEF DE MENAGE

N°	QUESTIONS ET FILTRES	REPONSES	ALLER A
Maintenant, je voudrais vous poser des questions sur les caracteristiques de votre ménage.			
M201	En quel mois et en quelle année êtes-vous né?	MOIS…… ☐☐ NSP MOIS..... 98 ANNEE…... ☐☐☐☐ NSP ANNEE..... 9998	
M202	Quel âge avez-vous?	AGE EN ANNEES REVOLUES ☐☐ 97ET PLUS …97 NSP ….98	
M203	Avez-vous fréquenté l'école ou participé à un programme d'alphabétisation?	OUI 1 NON 2	? M206
M204	Quel est le plus haut niveau d'études que vous avez atteint : alphabétisé, primaire, secondaire 1er cycle, secondaire 2er cycle ou supérieur?	ALPHABETISE 1 ECOLE CORANIQUE 2 FONDAMENTAL 1 (PRIMAIRE) 3 FONDAMENTAL 2 (COLLEGE) 4 SECONDAIRE/LYCEE TECHNIQUE 5 SUPERIEUR 6 AUTRE 7 NE SAIT PA S 8	? M206 ? M206 ? M207 ? M207 ? M206 ? M206
M205	Quelle est la plus haute classe que vous avez terminée?	CLASSE ☐☐	
M206	Pouvez-vous lire et comprendre une lettre ou un journal facilement, avec difficulté ou pas du tout?	FACILEMENT 1 DIFFICILEMENT 2 PAS DU TOUT 3	 ? M208
M207	En quelle langue êtes-vous alphabétisé? ENQUETEUR: REPONSES MULTIPLES POSSIBLES	FRANÇAIS 1 2 ARABE 1 2 BAMBARA 1 2 MALINKE 1 2 PEULH 1 2 AUTRE (PRECISER) : 1 2	

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
M208	Quelle est votre religion?	MUSULMAN	1	
		CHRÉTIEN	2	
		RELIGION TRADITIONNELLE	3	
		AUTRE (A PRECISER)	8	
M209	Etes-vous malien?	OUI	1	
		NON	2	? M211
M210	Quelle est votre ethnie?	BAMBARA	01	
		MALINKE	02	
		PEULH	03	
		SARKOLE/SONINKE/MARKA	04	
		SONGHAI	05	
		DOGON	06	
		TAMACHEK	07	
		SENOFO/MINIANKA	08	
		BOBO	09	
		SAMOGO	10	
		AUTRE (PRECISER) :	11	
M211	Quel est votre statut d'occupation actuel?	OCCUPE	1	
		CHOMEUR	2	? M301
		INACTIF	3	? M301
M212	Dans quel domaine exercez-vous votre activité principale?	AGRICULTURE	1	
		ELEVAGE	2	
		PECHE	3	
		COMMERCE	4	
		INDUSTRIE/**TRANSFORMATION**	5	
		MINES	6	
		ADMINISTRATION/SERVICE	7	
		AUTRE (PRECISER) :	8	
M213	Quel est votre statut dans cette activité? ENQUETEUR: LIRE LES MODALITES	PROPRE COMPTE	1	
		POUR UN PARENT	2	
		POUR QUELQU'UN D'AUTRE	3	
		APPRENTI	4	
		POUR L'ETAT/ADMINISTRATION	5	
		AUTRE A PRECISER	6	
M214	Quelle est la périodicité de votre activité?	PERMANENT	1	
		TEMPORAIRE	2	
		OCCASIONNEL	3	
		AUTRE	8	

N°	QUESTIONS ET FILTRES	REPONSES	ALLER A
M215	Combien de mois avez-vous travaillé dans cette activité au cours des 12 derniers mois?	MOIS [ ][ ] NSP 98	

SECTION 3 : CARACTERISTIQUE DE L'HABITAT

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
M301	ENQUETEUR : ENREGISTRER L'OBSERVATION PRINCIPAL MATÉRIA L DU MUR DU LOGEMENT	PAILLE	1	
		TERRE	2	
		CIMENT	3	
		AUTRES (PRECISER) :	8	
M302	ENQUETEUR : ENREGISTRER L'OBSERVATION PRINCIPAL MATÉRIA DU TOIT DU LOGEMENT	PAILLE	1	
		BANCO	2	
		BÉTON	3	
		TÔLE	4	
		AUTRES (PRECISER)	8	
M303	ENQUETEUR : ENREGISTRER L'OBSERVATION PRINCIPAL MATÉRIA L DU SOL DU LOGEMENT	SABLE	1	
		TERRE STABILISÉÉ	2	
		CIMENT	3	
		CARREAUX	4	
		AUTRES (PRECISER)	8	
M304	Dans votre menage, combien de pieces ou chambres utilisez-vous pour dormir?	NOMBRE DE PIECES [ ][ ]		
M305	Quelle est la principale source de l'eau que boit le ménage?	ROBINET RACCORDE RESEAU OU FORAGE		
		DANS LE LOGEMENT	01	? M308
		DANS LA CONCESSION	02	? M308
		EXTERIEUR DE LA CONCESSION	03	
		PUITS PROTEGE		
		DANS LE LOGEMENT	04	? M308
		DANS LA CONCESSION	05	? M308
		EXTERIEUR DE LA CONCESSION	06	
		PUITS NON PROTEGE		
		DANS LE LOGEMENT	07	? M308
		DANS LA CONCESSION	08	? M308
		EXTERIEUR DE LA CONCESSION	09	
		RIVIERE, FLEUVE, PLUIE	10	
		CAMION CITERNE	11	
		EAU EN BOUTEILLE	12	? M309
		AUTRE	13	
M306	A quelle distance se trouve cette source?	DISTANCE EN METRES [ ][ ][ ][ ] 10 KM ET PLUS……9999 NSP……9998		
M307	Quel temps faut-il pour aller puiser de l'eau à la source et revenir (y compris le temps d'attente sur place)? ENQUETEUR: CONSULTER LA PERSONNE RESPONSIBLE, SI NECESSAIRE	TEMPS EN MINUTES [ ][ ][ ] 1000 MINUTES ET PLUS…999 NSP……998		

N°	QUESTIONS ET FILTRES	REPONSES			ALLER A
M308	Dans quel reservoir est-ce que vous conservez de l'eau chez vous une fois puisé?	CALABAS		1	
		MARMITE		2	
		CANARIE		3	
		SOU		4	
		AUTRE A PRECISER		5	
M309	Quel type de toilettes utilisez-vous principalement dans votre ménage?	CHASSE D'EA U PERSONNEL		1	
		CHASSE D'EAU EN COMMUN		2	
		FOSSE/LATRINE RUDIMENTAIRE		3	
		FOSSE/LATRINE AMELIOREE		4	
		PAS DE TOILETTES/NATURE		5	
		AUTRES (PRECISER) :		8	
		NSP		98	
M310	Dans votre menage, avez vous l'éléctricité?	OUI		1	
		NON		2	
M311	Quel mode principal d'éclairage est utilisé dans le menage?	ELECTRICITE		1	
		GAZ		2	
		LAMPE A PETROLE		3	
		BOUGIE		4	
		BOIS		5	
		AUTRE (A PRECISER) :		8	
M312	Quelle énergie utilisez-vous principalement pour la cuisson?	ELECTRICITE		1	
		GAZ		2	
		KEROSENE/PETROLE		3	
		CHARBON		4	
		BOIS		5	
		AUTRE (A PRECISER) :		8	
M313	Dans votre ménage y-a-t-il : ENQUETEUR: LIRE LES REPONSES LISTEES		OUI	NON	
		A. ELECTRICITE	1	2	
		B. RADIO	1	2	
		C. TELEVISION	1	2	
		D. TELEPHONE	1	2	
		E. REFRIGERATEUR	1	2	
		F. CUISINIERE	1	2	
M314	Votre ménage possède-til : ENQUETEUR: LIRE LES REPONSES LISTEES		OUI	NON	
		A. BICYCLETTE	1	2	
		B. MOBILETTE/MOTO	1	2	
		C. VOITURE/CAMION	1	2	
		D. CHARRETTE	1	2	

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
M315	De combien dispose votre ménage pour chacun des biens suivants : chevaux? Bœufs? Anes? Porcs? Moutons et chèvres?	NOMBRE CHEVAUX BŒUFS ANES PORCS MOUTONS ET CHEVRES AUCUN……00 NSP……98 96 OU PLUS……..96		
M316	Est-ce que vous cultivez ?	OUI	1	
		NON	2	? M318
M316A	Etes vous proprietaire du champs que vous cultivez ?	OUI	1	
		NON	2	? M318
M317	Est-ce que vous ou des members de votre ménage travaillez ce(s) terrain(s)?	OUI	1	
		NON	2	
M318	Y-a-t-il une structure sanitaire dans votre localité?	OUI	1	? M401
		NON	2	
M319	A quelle distance de votre localité se trouve la structure sanitaire la plus proche?	DISTANCE EN KILOMETRES Moins de 1 km… 00 NSP…98		
M320	Quel moyen de transport utilisez-vous pour vous rendre à cette structure sanitaire?	A PIED	1	
		CHARRETTE	2	
		VOITURE	3	
		BUS/CAR	4	
		AUTRE A PRECISER	8	

SECTION 4 : CARACTERISTIQUES ECONOMIQUES DU MENAGE

N°	QUESTIONS ET FILTRES	REPONSES	ALLER A
Maintenant, je voudrais vous poser des questions sur vos dépenses du ménage.			
M401	Est-ce que vous êtes propriétaire ou locataire de votre logement?	PROPRIETAIRE 1 LOCATAIRE 2 AUTRE A PRECISER 3	 ? M403
M402	Si vous auriez voulu donner cette maison en location, à combien est-ce que ce peut vous revenir ?	MONTANT EN FCFA [ ][ ][ ][ ][ ] NSP…….. 99998	? M404
M403	Combien le ménage a payé LE MOIS PASSE pour la location du logement?	MONTANT EN FCFA [ ][ ][ ][ ][ ] NSP…….. 99998	
M404	Combien votre ménage a dépensé en transport LE MOIS PASSE? ENQUETEUR: CONSULTER LES AUTRES DANS LE MENAGE, SI NECESSAIRE	MONTANT EN FCFA CM [ ][ ][ ][ ][ ] EPOUSES [ ][ ][ ][ ][ ] ENFANTS [ ][ ][ ][ ][ ] AUTRES a preciser [ ][ ][ ][ ][ ] NSP……..99998	
M405	Evaluer approximativement ce que le ménage a payé LE MOIS PASSE pour chacun de produits cités	MONTANT EN FCFA BOIS [ ][ ][ ][ ][ ] CHARBON [ ][ ][ ][ ][ ] ELECTRICITE [ ][ ][ ][ ][ ] EAU [ ][ ][ ][ ][ ] TELEPHONE [ ][ ][ ][ ][ ] PETROLE [ ][ ][ ][ ][ ] NSP…….. 99998	
M406	Combien les membres du ménage ont dépensé pour la santé au cours DU MOIS PASSE?	MONTANT EN FCFA CONSULTATIONS [ ][ ][ ][ ][ ] MEDICAMENT [ ][ ][ ][ ][ ] HOSPITALISATION [ ][ ][ ][ ][ ] AUTRES à preciser [ ][ ][ ][ ][ ] NSP…….. 99998	

N°	QUESTIONS ET FILTRES	REPONSES	ALLER A
M407	Durant la dernière ANNEE SCOLAIRE, combien avez-vous dépensé pour la scolarité de vos enfants?	MONTANT EN FCFA | | | | | | | NSP……..999998	
M408	Combien les membres du ménage ont dépensé pour leurs habits au cours des 12 DERNIERS MOIS?	MONTANT EN FCFA CM | | | | | | EPOUSES | | | | | | ENFANTS | | | | | | AUTRES à preciser | | | | | | NSP…….. 99998	
M409	Combien de repas avez-vous eu hier?	NOMBRE | |	
M410	Durant le mois passé (30 jours), pendant combien de jours est ce que votre ménage n'a pas eu assez à manger?	NOMBRE DE JOURS | | | NSP……98	
M411	Pendant la saison ou les aliments coûtent les plus chers (Juin à Aout), votre ménage, manque –t-il à manger?	OUI 1 NON 2 | |	
M412	Quelles sont les principales sources de revenus de votre ménage par ordre d'importance? Quelle source de la liste suivante est le plus importante? Quelle serait le source qui viendrait en second lieu? Lequelles des sources viendrait en troisième lieu? etc. ENQUETEUR: IL FAUT RANGER LES RUBRIQUES SELON L'IMPORTANCE DE LEUR CONTRIBUTION DANS LA FORMATION DU REVENU DU MENAGE. 1 = PLUS IMPORTANT … 10 = MOINS IMPORTANT SI L'ACTIVITE N'EST PAS DU TOUT IMPORTANTE, NE LA RANGEZ PAS	RANG AGRICULTURE | | | ÉLEVAGE | | | PÊCHE/CHASSE | | | COMMERCE | | | INDUSTRIE/ARTISANAT | | | EXPLOITATION MINIÈRE | | | ADMINISTRATION/SERVICES | | | TRANSFERT D'ARGENT | | | ARTS | | | AUTRES (PRECISER) : | | |	

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
M413	Selon vous où classez-vous votre ménage du point de vue pauvreté ou richesse par rapport aux autres ménages de Sikasso/Bla?			
		MENAGE TRES PAUVRE	1	
		MENAGE PAUVRE	2	
		MENAGE MOYEN	3	
		MENAGE RICHE	4	
		MENAGE TRES RICHE	5	

CONSUMPTION

Je vais citer quelques produits que le ménage aurait pu utilisés ou consommés au cours des 7 DERNIERS JOURS. Si le ménage a utilisé ou consommé ces produits cités au courant de la SEMAINE PASSEE, pouvez-vous m'indiquer **le montant total** que vous avez payés pour chaque produit au cours des 7 derniers jours? Ensuite, pouvez-vous estimer les montants que vous avez payés pour chaque produit, ou bien la valeur au marché, si le produit était de l'autoproduction? S'il vous parrait plus facile, vous pouvez me donner les prix unitaires ET les quantités des produits. Rappelez-vous qu'il s'agit des tous produits utilisés ou consommés au cours de la SEMAINE PASSEE par votre ménage.

ENQUETEUR/TRICE: REMPLIR TOUTE COLONNE (PRIX ET QUANTITE) **ET** (MONTANT TOTAL)

	ACHETE			AUTOPRODUCTION		
	Quantite	**Prix Unitaire (FCFA)**	**Montant Total (FCFA)**	**Quantite**	**Prix Unitaire (FCFA)**	**Montant Total (FCFA)**
GRAINS ET PRODUITS CEREALIERS						
A. Riz	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|
B. M il/sorgho	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|
C. Mais	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|
D. Fonio	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|
E. Haricots	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|
F. Autres grains	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|
VIANDES ET POISSONS						
G. Mouton	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|
H. Chèvres	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|
I. Bœufs	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|
J. Poulets	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|
K. Poissons	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|
L. Autres viandes	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|
TUBERCULES						
M. Patates	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|
N. Igname	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|	|___|___|___|	|___|___|___|___|___|___|	|___|___|___|___|___|___|

	ACHETE			AUTOPRODUCTION		
	Quantite	Prix Unitaire (FCFA)	Montant Total (FCFA)	Quantite	Prix Unitaire (FCFA)	Montant Total (FCFA)
O. Manioc						
P. Pommes de terre						
Q. Autres tubercules						
FRUITS ET LEGUMES						
R. Orange/mandarine						
S. Banane						
T. Choux						
U. Carottes						
V. Salade						
W. Aubergine						
X. Autres fruits/légumes						
PRODUITS LAITIERS ET ŒUFS						
Y. Lait						
Z. Fromage						
AA. Beurre						
AB. Œufs						
AC. Autres produits laitiers						
AUTRES PRODUITS						
AD. Savon						
AE. Hile de cuisine						
AF. Thé						

	ACHETE			AUTOPRODUCTION		
	Quantite	Prix Unitaire (FCFA)	Montant Total (FCFA)	Quantite	Prix Unitaire (FCFA)	Montant Total (FCFA)
AG. Cola	|___|___|___|	|___|___|___|| ___|___|___|	|___|___|___|| ___|___|___|	|___|___|___|	|___|___|___|| ___|___|___|	|___|___|___|| ___|___|___|
AH. Cigarettes	|___|___|___|	|___|___|___|| ___|___|___|	|___|___|___|| ___|___|___|	|___|___|___|	|___|___|___|| ___|___|___|	|___|___|___|| ___|___|___|

AI. Sucre

SECTION 5 : MUTUALITE

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
5A. ADHESION ET COTISATION A LA MUTUELLE DE SANTE				
Maintentant, je voudrais vous parler de votre participation dans une mutuelle de santé.				
N501	Etes-vous adhérent actuellement à la mutuelle de santé?	OUI	1	? N506
		NO	2	
N502	Avez-vous été adhérent à la mutuelle de santé dans le passé?	OUI	1	? N504
		NON	2	
N503	Pourquoi n'avez-vous jamais adhéré à la mutuelle?	PAS INFORME EXISTENCE MUTT	1	? FIL601
		COTISATION TROP CHERE	2	
		SERVICES TROP REDUITS	3	
		PAS CONFIANCE DE LA GESTION	4	
		PAS CONFIANCE AUX PRESTATAIRES CONVENTIONNE	5	
		PERIODE D'ATTENTE LONGUE	6	
		PRIS EN CHARGE PAR AILLEURS	7	
		JAMAIS MALADE	8	
		AUTRE (PRECISER) :	9	
		PAS ICI	**10**	
N504	Quelle est la raison principale pour laquelle vous n'êtes plus adhérent à la mutuelle?	PAS D'ARGENT	1	
		COTISATION TROP CHERE	2	
		SERVICES TROP REDUITS	3	
		PAS CONFIANCE DE LA GESTION	4	
		PAS CONFIANCE AUX PRESTATAIRES CONVENTIONNE	5	
		PERIODE D'ATTENTE LONGUE	6	
		PRIS EN CHARGE PAR AILLEURS	7	
		JAMAIS MALADE	8	
		AUTRE (PRECISER) :	9	
N505	A quelle mutuelle etiez -vous membre/bénificiaire? (ENQUETEUR: UTILISER L'INVENTAIRE DES MUTUELLES POUR INSERER LE CODE PRECIS DE LA MUTUELLE) NOM MUTUELLE_____	CODE 1 WAYERMA 2 BOUGOU 3 KEMENI 4 BLA VILLE 5 Miprosik 6 UTM 7 INPS 98 Autres		? FIL601

N°	QUESTIONS ET FILTRES	REPONSES	ALLER A
N506	A quelle mutuelle êtes-vous membre/bénificiare? (ENQUETEUR: UTILISER L'INVENTAIRE DES MUTUELLES POUR INSERER LE CODE PRECIS DE LA MUTUELLE) NOM MUTUELLE_____	CODE ☐☐	
N507	Depuis quand êtes-vous adhérent de façon continue à la mutuelle?	MOIS ☐☐ NSP ……98 ANNEES ☐☐ NSP ……98	
N508	Quelle est la périodicité des cotisations du ménage dans la mutuelle?	PAR MOIS 1 PAR TRIMESTRE 2 PAR AN 3 AUTRE A PRECISER 8	
N509	Avez-vous manqué de payer les cotisations à la mutuelle?	OUI 1 NON 2	**? N512**
N510	Quelle est la raison principale pour laquelle vous avez manqué de payer les cotisations ?	PAS D'ARGENT 1 COTISATION TROP CHERE 2 SERVICES TROP REDUITS 3 PAS CONFIANCE DE LA GESTION 4 PAS CONFIANCE AUX PRESTATAIRES CONVENTIONNE 5 PERIODE D'ATTENTE LONGUE 6 PRIS EN CHARGE PAR AILLEURS 7 JAMAIS MALADE 8 AUTRE (PRECISER) : 9	
N511	La mutuelle vous a suspendu pour ne pas avoir payé les cotisations régulièrement?	OUI 1 NON 2	
N512	Comment payez-vous les cotisations à la mutuelle? Par individu, par famille ou d'un autre façon?	PAR INDIVIDIVIDU 1 PAR FAMILLE 2 AUTRE (PRECISER) : 8	
N513	Qui principalement paie la cotisation du ménage à la mutuelle? ENQUETEUR : CONSULTEZ M101 POUR LE CODE APPROPRIE SI LA PERSONNE N'EST PAS DU MENAGE, PRECISER SON RAPPORT AVEC LE MENAGE	MEMBRE MENAGE : N° DE LIGNE ☐☐ **Autre personne …… 00** **AUTRE PERSONNE a preciser :** _____	

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
N514	D'où provient l'argent avec lequel le ménage paie ses cotisations? ENQUETEUR: PLUSIEURS REPONSES SONT PERMISES	SALAIRE	1	
		VENTE RECOLTE	2	
		EPARGNE	3	
		VENTE EXCEPTIONNELLE DE MIL	4	
		VENTE EXCEPTIONNELLE BETAIL	5	
		VENTE EXCEPTIONNELLE DE BIENS	6	
		TRANSFERT ARGENT	7	
		AUTRE (PRECISER) :	8	
N515	Quelle est la date de votre dernière cotisation à la mutuelle?	MOIS NSP.. 98	ANNEE NSP .. 98	
N516	Quel est le montant de cette dernière cotisation?	MONTANT DERNIER COTISATION EN FCFA **NSP …. 999998**		
N517	Cette cotisation correspond à combien de mois de cotisations à la mutuelle?	NOMBRE MOIS DE COTISATION **NSP … 98**		
N518	Cette cotisation correspond à la cotisation de combien de membres de votre ménage?	NOMBRE DE MEMBRES **NSP …98**		
	5B. PARTICIPATION ET GOUVERNANCE DE LA MUTUELLE DE SANTE			
N519	Avez-vous jamais participé à une assemblée générale de la mutuelle de santé?	OUI	1	
		NON	2	? N521
N520	A combien d'assemblées générales avez-vous participé?	UN	1	
		DEUX	2	
		TROIS ET PLUS	3	
		NSP	98	
N521	Quel est votre niveau de confiance par rapport aux responsables de la mutuelle de santé? ENQUETEUR: LIRE LES MODALITES	TRES CONFIANT	1	
		CONFIANT	2	
		ASSEZ CONFIANT	3	
		PEU CONFIANT	4	
		MECONFIANT	5	
FIL 03	ENQUETEUR ; VERIFIER SI LE MENAGE EST LOCALISE A :	CERCLE DE BLA	1	? N523
		QUARTIER WAYERMA	2	? N523
		QUARTIER BOUGOULAVILLE	3	? N523
		AUTRES QUARTIERS SIKASSO	4	
N522	Quel est votre niveau de confiance par rapport aux bureaux décentralisés de la mutuelle de santé? ENQUETEUR: LIRE LES MODALITES	TRES CONFIANT	1	
		CONFIANT	2	
		ASSEZ CONFIANT	3	
		PEU CONFIANT	4	

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
		MECONFIANT	5	
N523	Etes-vous informé des mécanismes de contrôle des fraudes et abus au niveau des responsables, prestataires et bénéficiaires de la mutuelle de santé?			
		OUI	1	
		NON	2	
5C. ATTITUDES : SATISFACTION AVEC LA MUTUELLE				
N524	En somme, êtes-vous satisfait avec les services couverts par la mutuelle de santé?			
		OUI	1	? N526
		NON	2	
N525	Quels sont les autres services prioritaires que vous voudriez que la mutuelle prenne en charge?			
		ACCOUCHEMENTS COMPLIQUES	1	
		ANALYSES LABO	2	
		MEDICAMENTS	3	
		EVACUATION	4	
		HOSPITALISATION	5	
		CHIRUGIE	6	
		AUTRES (PRECISER) :	7	
		NSP	98	
N526	En somme, diriez-vous que vous etiez très satisfait, satisfait, satisfait-mais besoins d'être amélioré, peu satisfait, ou pas du tout satisfait avec la mutuelle de santé?			
		TRES SATISFAIT	1	
		SATISFAIT	2	
		SATISFAIT MAIS BESOIN D'ETRE AMELIORE	3	
		PEU SATISFAIT	4	
		PAS DU TOUT SATISFAIT	5	
		NSP	98	

SECTION 6 : CONNAISSANCES

N°	QUESTIONS ET FILTRES	REPONSES				ALLER A
Maintenant, je voudrais vous entretenir sur vos connaissances de certains sujets liés à la santé de votre ménage.						
FI601	VERIFIER SI LE CHEF DE MENAGE EST UNE FEMME DE 15 A 49 ANS. SI OUI, FIN INTERVIEW	OUI	1			FIN
		NON	2			
FIL 601A	VERIFIER A BLA : S'IL Y A LES FEMMES DE 15 A 49 ANS DANS LE MENAGE (M117) A SIKASSO : S'IL Y A UN FEMME QUI A ACCOUCHE DANS LES 12 DERNIERS MOIS OU ENCEINTE (M118)	OUI	1			
		NON	2			FIN
N602	Etes-vous membre d'une organisation ou association communautaire?	OUI	1			
		NON	2			? N605
N603	Quelle est la nature de cette/ces organisations? Depuis combien d'années êtes-vous membre de cette association? ENQUETEUR : SI MOINS D'UNE ANNÉE, INSCRIVEZ '00' ANNÉE **ILN'Y A PAS DE « D »**		OUI	NON	DUREE	
		A. ASSOCIATION CULTURELLE ET SPORTIVE	1	2		
		B. GROUPEMENT FEMININ	1	2		
		C. TONTINE	1	2		
		E. ASSOCIATION RELIGIEUSE	1	2		
		F. AGR	1	2		
		G. ASACO	1	2		
		H. GROUPE D'AGE	1	2		
		I. AUTRE (PRECISER)	1	2		
N604	Faites vous partie du bureau de votre organisation ou association [d'au moins une de vos organisations ou associations]?	OUI	1			
		NON	2			
	Maintenant nous allons parler de vos connaissances liées à la grossesse.					
N605	Avez-vous reçu des informations relatives aux problèmes ou soins de santé associés à la grossesse durant les derniers 12 mois?	OUI	1			
		NON	2			? N608
N606	Pouvez-vous me dire de quoi parler les informations que vous avez entendues sur les problèmes ou soins de santé associés à la grossesse? REPONSES MULTIPLES POSSIBLES : ENREGISTRER TOUTES LES REPONSES DONNEES SPONTAN EEMENT PAR LE CHEF DE MENAGE.	**MESSAGES PORTANT SUR :**		**OUI**		**NON**
		NECESSITE DES SOINS PRENATALS		1		2
		DEBUT DES SOINS PRENATALS		1		2
		NOMBRE DE CONSULTATIONS PRENATALES		1		2
		FIEVRE DURANT LA GROSSESE		1		2
		PROPHYLAXIE ANTIPALUDEEN		1		2
		ESSOUFLEMENT DURANT LA GROSSESE		1		2
		SAIGNEMENTS DURANT LA GROSSESSE		1		2
		OEDEMES AU COURS DE LA GROSSESSE		1		2
		AUTRES M ESSAGES		1		2
		(LISTER LES AUTRES MESSAGES MENTIONNEES PAR LE CHEF DE MENAGE)				

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
N607	Quelles sont les sources des informations relatives aux problèmes ou soins de santé associés à la grossesse que vous avez reçues durant les 12 derniers mois? REPONSES MULTIPLES POSSIBLES : ENREGISTRER TOUTES LES REPONSES DONNEES SPONTANEEMENT PAR LE CHEF DE MENAGE.	SOURCES MENTIONNEES SPONTANEEMENT PAR LA FEMME :	OUI	NON
		EMISSIONS RADIO	1	2
		SEANCES DE CAUSERIE AU VILLAGE	1	2
		VISITES A DOMICILE	1	2
		SKETCH DE THEATRE	1	2
		PERSONNEL DE SANTE AU CSCOM	1	2
		AMIE	1	2
		PARENT	1	2
		AUTRES SOURCES : _____ (PRECISER)	1	2
N608	Combien de fois avez-vous écouté une émission à la radio portant sur les problèmes ou soins de santé associés à la grossesse durant les 12 derniers mois?	JAMAIS ECOUTE	1	
		UNE FOIS	2	
		DEUX FOIS	3	
		TROIS FOIS	4	
		AU MOINS QUATRE FOIS	5	
N609	Combien de fois avez-vous assisté à une séance de causerie éducative au village ou au quartier portant sur les problèmes ou soins de santé associés à la grossesse durant les 12 derniers mois?	JAMAIS ASSISTE	1	
		UNE FOIS	2	
		DEUX FOIS	3	
		TROIS FOIS	4	
		AU MOINS QUATRE FOIS	5	
N610	Combien de fois avez-vous reçu une visite à domicile pour vous informer sur les problèmes ou soins de santé associés à la grossesse durant les 12 derniers mois?	JAMAIS RECU	1	
		UNE FOIS	2	
		DEUX FOIS	3	
		TROIS FOIS	4	
		AU MOINS QUATRE FOIS	5	
N611	Combien de fois avez-vous assisté à un sketch de théâtre portant sur les problèmes ou soins de santé associés à la grossesse durant les 12 derniers mois?	JAMAIS ASSISTE	1	
		UNE FOIS	2	
		DEUX FOIS	3	
		TROIS FOIS	4	
		AU MOINS QUATRE FOIS	5	
N612	A quel moment de sa grossesse une femme doit-elle aller en consultation prénatale pour la première fois?	QUAND SES REGLES S'ARRETENT	1	
		LORS DU TROISIEME MOIS	2	
		UN MOIS AVANT L'ACCOUCHEMENT	3	
		QUAND IL Y A UN PROBLEME	4	
		QUAND ELLE SENT LE MOUVEMENT DU FŒTUS	5	
		AUTRE (PRECISER)	6	
		NE SAIT PAS	98	

N°	QUESTIONS ET FILTRES	REPONSES	ALLER A
N613	De combien de visites une femme a-t-elle besoin en consultation prénatale avant l'accouchement?	NOMBRE DE VISITES ☐ SEPT ET PLUS…….. 7 NE SAIT PAS…….. 8	

N°	QUESTIONS ET FILTRES		OUI	NON
N614	Quels sont les symptômes durant la grossesse qui indiquent qu'il faut rechercher des soins de santé en dehors des consultations normales? ENQUETEUR: REPONSES MULTIPLES POSSIBLES : ENREGISTRER TOUTES LES REPONSES DONNEES SPONTAN EEMENT PAR LE CHEF DE MENAGE.	FIEVRE	1	2
		ESSOUFLEMENT	1	2
		SAIGNEMENTS	1	2
		ŒDEME CORPS/MAIN/VISAGE	1	2
		ANEMIE (MANQUE DE SANG)	1	2
		EVANOUISSEMENT	1	2
		CONVULSIONS	1	2
		DOULEURS ABDOMINALES	1	2
		MAUX DE TETE SEVERES	1	2
		AUTRES SYMPTOMES	1	2
		(LISTER LES AUTRES SYMPTOMES MENTIONNES PAR LE CHEF DE MENAGE)		

N°	QUESTIONS ET FILTRES				ALLER A
N615	A quel moment après un accouchement normal une femme doit-elle chercher des soins postnatals? ENQUETEUR: REPONSES MULTIPLES POSSIBLES : ENREGISTRER TOUTES LES REPONSES DONNEES SPONTAN EEMENT PAR LE CHEF DE MENAGE.	MOINS D'UNE SEMAINE APRES	**1**	**2**	
		UNE SEMAINE APRES	**1**	**2**	
		DEUX SEMAINES APRES	**1**	**2**	
		TROIS SEMAINES APRES	**1**	**2**	
		QUATRE SEMAINES APRES	**1**	**2**	
		5-6 SEMAINE / UN MOIS APRES L'ACCOUCHEMENT	**1**	**2**	
		SI LA FEMME A DES PROBLEMES	**1**	**2**	
		N'IMPORTE QUAND	**1**	**2**	
		PAS BESOIN	**1**	**2**	
		AUTRE (PRECISER) :	**1**	**2**	

N°	QUESTIONS ET FILTRES		OUI	NON
N616	Quels sont les signes de danger après un accouchement qui indiquent la nécessité de rechercher des soins de santé? ENQUETEUR: REPONSES MULTIPLES POSSIBLES : ENREGISTRER TOUTES LES REPONSES DONNEES SPONTAN EEMENT PAR LE CHEF DE MENAGE.	FIEVRE	1	2
		PERTES DE SANG VAGINALES	1	2
		ECOULEMENTS VAGINAUX MALODORANTS	1	2
		EVANOUISSEMENT	1	2
		PERTES REPETEES DE CONSCIENCE	1	2
		TROUBLE DE LA VISION	1	2
		MAUX DE TETE PERSISTANTS	1	2
		VOMISSEMENTS	1	2
		FORTE FIEVRE	1	2
		AUTRE (PRECISER):	1	2

A SIKASSO : Je vous remercie pour votre participation dans la première partie de cette enquête. Maintenant, je voudrais parler aux membres du ménage qui ont souffert d'une fièvre forte au cours des 15 derniers jours. Nous voudrions aussi parler aux femmes qui ont donné naissance à un enfant depuis la même saison/période de l'année dernière ou qui sont actuellement enceinte. S'il y a des enfants qui ont souffert d'une fièvre forte au cours des 15

N°	QUESTIONS ET FILTRES	REPONSES	ALLER A

derniers jours, je voudrais parler à l'adulte responsable pour cet(ces) enfant(s). C'est à dire : [REFEREZ-VOUS A LA LISTE DES MEMBRES DU MENAGE ET CITER LES ELIGIBLES]

A BLA : Je vous remercie pour votre participation dans la première partie de cette enquête. Maintenant, je voudrais parler aux membres du ménage qui ont souffert d'une fièvre forte au cours des 15 derniers jours. Nous voudrions aussi parler aux femmes du 15 à 49 ans. S'il y a des enfants qui ont souffert d'une fièvre forte au cours des 15 derniers jours, je voudrais parler à l'adulte responsable pour cet(ces) enfant(s). C'est à dire : [REFEREZ-VOUS A LA LISTE DES MEMBRES DU MENAGE ET CITER LES ELIGIBLES]

Je vous remercie pour votre participation dans 'enquête de PHRplus.
Vos réponses vont contribuer à la réussite de notre travail.

Fin de l'Igntervіew						
Indiquez l'heure de la fin de l'enquête	*Heure_____*					
Indiquez la durée de l'enquête	*Durée*					

SECTION 1: RECOURS AUX SOINS

Bonjour ! Je m'appelle [NOM DE L'ENQUETEUR]. Je suis venu en tant qu'enquêteur pour l'initiative USAID-MSPAS pour l'équité. Cette recherche vise à recueillir des donnes en vue d'améliorer l'accès aux soins de santé. Nous regardons tous particulièrement la fièvre et l'utilisation des soins de santé pour une des maladies les plus fréquentes ou Mali. Que fait vous quand vous avez une fièvre, votre appréciation sur les soins disponibles et la préoccupation éventuelle des coûts que cela nécessite. C'est à dire que nous allons utiliser vos réponses aux questions dans les rapports livrés aux autorités, mais nous n'allons pas donner les noms des individus qui ont participé dans l'enquête. Je ne suis pas employée de USAID ou du Ministère de Santé et je ne révélerai votre identité à personne. Votre participation est volontaire. Votre participation n'empêchera pas votre capacité d'obtenir les soins de santé maintenant ni dans le futur. Si vous soufrez toujour de fièvre je peux vous dire ou trouves des soins. Vous pouvez refuse de répondre à toute question et vous pouvez arrête l'enquête a tout moment sans peine ou perte de bénéfice.

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
FIL01	Acceptez-vous de participer à cette enquête? (VERIFIEZ SI LA PERSONNE EST ADULTE OU MINEUR ET SI MINEUR, INTERROGER LE TUTEUR)	OUI	1	
		NON	2	FIN
	SECTION 1A: RECOURS AUX SOINS – PERCEPTION GRAVITE DE LA MALADIE			
S101	Je voudrais vérifier que vous avez souffert ou que votre enfant a souffert d'une fièvre forte au cours des 15 derniers jours?	LA PERSONNE SOUFFRANTE		
		ENQUETEE LUI-MEME	1	? S103
		ENFANT	2	
		NI L'UN NI L'AUTRE	3	FIN
S102	Quel est le lien de parenté entre vous et l'enfant qui a souffert d'une fièvre?	PERE OU MERE	1	
		BEAU-PERE OU BELLE-MERE	2	
		FRERE OU SOEUR	3	
		AUTRE (PRECISER):	8	
S103	La fièvre est-elle terminée ou elle continue?	TERMINEE	1	
		CONTINUE	2	
S104	Pendant combien de temps avez-vous (votre enfant) souffert de cette fièvre?	NOMBRE DE JOURS ☐☐ NSP… 98		
S105	Selon vous, votre fièvre (la fievre de l'enfant) était très grave, grave, ou pas grave?	TRES GRAVE	1	
		GRAVE	2	
		PAS GRAVE	3	
		NE SAIT PAS	98	
S106	Avez-vous (votre enfant) dû interrompre vos activités (travail, études)?	OUI	1	
		NON	2	? S108
S107	Combien de temps avez-vous (votre enfant) arrêté vos activités (travail, études)?	NOMBRE DE JOURS ☐☐ NSP… 98		
	SECTION 1B : SOINS RECUS A LA MAISON AVANT TOUT RECOURS A UN PRESTATAIRE			
S108	Etes-vous (votre enfant) membre/bénéficière d'une mutuelle de santé?	OUI	1	
		NON	2	? S111

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
S109	Quel est le nom de la mutuelle de laquelle vous (votre enfant) êtes membre ou bénéficiaire? Nom _____ UTILISER L'INVENTAIRE DES MUTUELLES POUR INSERER LE CODE PRECIS DANS LES CASES A DROIT	CODE DE LA MUTUELLE 1 WAYERMA 2 BOUGOU 3 KEMENI 4 BLA VILLE 5 Miprosik 6 UTM 7 INPS 98 Autres		
S110	Si vous aviez à ranger les services offerts selon leur priorité d'être pris en charge par la mutuelle, quel service de la liste suivante est le plus important d'être pris en charge? Quel serait le service qui viendrait en second lieu? Lequel des services viendrait en troisième lieu? Etc.. lequel viendrait en septième position? NOTE: LIRE LES MODALITES. ET INSCRIRE LE RANG QUE DONNE L'ENQUETE DANS LA CASE. 1= PLUS IMPORTANT	RANG		
		CONSULTATIONS		
		ACCOUCHEMENTS SIMPLES		
		ACCOUCHEMENTS COMPLIQUÉS		
		ANALYSES LABO		
		MÉDICAMENTS		
		EVACUATION		
		HOSPITALISATION		
		AUTRES (PRÉCISER):		
S111	Avez-vous reçu à la maison un personnel de santé (médecin, infirmier) ou un guérisseur traditionnel pour soigner la fièvre?	OUI	1	
		NON	2	? S117
S112	Qui est venu à la maison pour vous soigner?	MÉDECIN	1	
		INFIRMIER	2	
		AUTRE PERSONNEL DE SANTÉ	3	
		GUERRISSEUR TRADITIONNEL	4	
		AUTRES (PRECISER):	8	
S113	Avez-vous payé la personne qui est venu vous soigner à la maison pour cette fièvre?	OUI	1	
		NON	2	? S116
S114	Avez-vous payé en espèces ou autres choses? ENQUETEUR : PRECISER LE TYPE DE NATURE	ARGENT	1	
		ARGENT ET EN NATURE	2	
		EN NATURE SEULEMENT	3	? S115A
		TOUT NATURE A PRECISER		
S115	Combien avez-vous payé à cette personne en espèces ?	MONTANT (FCFA) NSP 9998		
S115A	Quelle est la valeur de ce que vous avez payé en nature ?	MONTANT ESTIMÉ (FCFA) NSP 99998		
S116	Est-ce que ce traitement à la maison est couvert par la mutuelle de santé, même partiellement?	OUI	1	
		NON	2	
		NE SAIT PAS	98	
S117	Avez-vous pris des médicaments dont vous disposiez à la maison pour soigner cette fièvre?	OUI	1	
		NON	2	
S118	Avez-vous dû aller acheter des médicaments pour soigner la fièvre à la maison?	OUI	1	
		NON	2	? S123
S119	Où avez-vous acheté les médicaments?	PHARMACIE	1	
		CSCOM/CSAR/CSC	2	

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
		REVENDEUR	4	
		TRADI - PRATICIEN	5	
		DISPONIBLES À LA MAISON	6	
		AUTRE (PRÉCISER):	7	
		NSP	98	
S120	Combien avez-vous payé pour l'achat des médicaments que vous avez utilisés pour vous soigner à la maison?	MONTANT (FCFA) NSP (REMPLIR 99998)		
FIL A	ENQUETEUR VERIFIER SI LA PERSONNE EST BENEFICIAIRE/ADHERENT D'UNE MUTUELLE (S108)	OUI	1	
		NON	2	S123
S121	Est-ce que cette dépense a été prise en charge totalement, partiellement, ou pas du tout par la mutuelle de santé?	TOTALEMENT	1	
		PARTIELLEMENT	2	
		PAS DU TOUT	3	? S123
S122	Combien la mutuelle de santé a-t-elle payé pour les médicaments que vous avez utilisés pour vous soigner à la maison?	MONTANT (FCFA) NSP …….99998 POURCENTAGE NSP……98		
	SECTION 1C : SOINS RECUS EN DEHORS DE LA MAISON/PREM IER CONTACT			
S123	Avez-vous cherché des soins en dehors de la maison pour traiter cette fièvre?	OUI	1	? S126
		NON	2	
S124	Pourquoi vous n'avez pas cherché de soins en dehors de la maison pour traiter cette fièvre?	PAS D'ARGENT	1	
		CENTRE ÉLOIGNÉ	2	
		PAS DE PRISE EN CHARGE	3	
		MALADIE VA PASSER/**MALADIE GUERRIE**	4	
		TRAITEMENT À DOMICILE	5	
		AUTRES RAISONS (A PRECISER):	6	
		NE SAIT PAS	98	
S125	Etes-vous (votre enfant est-il) guéri?	OUI	1	? FIN
		NON	2	
S126	Quel est le prestataire ou la formation sanitaire que vous avez utilisé en premier recours?	HÔPITAL	1	
		CENTRE DE SANTÉ/PRESTATAIRE MODERNE	2	
		TRADI-PRATICIEN	3	FIN
		AUTRES (A PRECISER):	8	
S127	Quel est le nom précis de la formation et le lieu précis? ENQUETEUR: ECRIRE LE NOM ET LIEU	CODE: NOM :_____		

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
	UTILISER L'INVENTAIRE DES PRESTATAIRES POUR IDENTIFIER LE CODE PRECIS DU PRESTATAIRE	LIEU :_____		
		SIKASSO 001 CSCom de Wayerma 002 CSRef de Sikasso (Tripano, Centre momo) 003 CSCom de Sanoumbougou 1 004 Hopital Regional de Sikasso 005 AM (Assistance Medicale) 777 Autres Prives a Sikasso (petit cabinet medical) 666 Autre en dehors de Sikasso	BLA 101 CSCom de Blaville 102 CSRef de Bla 103 CSCom de Kemeni 104 CSCom de Yangasso 105 CSCom de Falo 106 Centre Confessionnel de Koutienso (a Yangasso) 107 Centre Confessionel de Somaso (a Bla Central) 888 Autres prives a Bla ~~666~~ **555** Autre en dehors de Bla	
S128	Etes-vous allé chez ce prestataire pour vous soigner dès le premier jour, deux jours après le début de la fièvre, trois jours après, quatre à six jours après, ou une semaine ou plus après le début de la fièvre?	PREMIER JOUR	1	
		DEUXIÈME JOUR	2	
		3IÈME JOUR	3	
		AU 4-6 IÈME JOUR	4	
		7 JOURS OU PLUS	5	
		NE SAIT PAS	98	
S129	Quelle est la raison principale pour laquelle vous avez choisi d'aller vous soigner chez ce prestataire? NOTE: NE PAS LIRE LES MODALITES.	PERSONNEL COMPETENT	01	
		J'Y AI DÉJÀ ÉTÉ TRAITÉ ET GUÉRI	02	
		CONNAIS QUELQU'UN QUI A ÉTÉ TRAITÉ ET GUÉRI	03	
		PERSONNEL ACCUEIL CHALEUREUX	04	
		PERSONNEL DEMANDE LES PROBLÈMES ET EXPLIQUE CE QU'IL FAIT	05	
		PROPRETÉ ET CONFORT	06	
		MÉDICAMENTS DISPONIBLES	07	
		SERVICES MOINS CHERS	08	
		PROCHE DE CHEZ MOI	09	
		RAISON RELIGIEUSE OU TRADITION.	10	
		PERSONNEL FÉMININ	11	
		AUTRES (PRECISER):	96	
		NE SAIT PAS	98	
S130	Pensez-vous que les soins offerts chez ce prestataire est un travail de qualité toujours, souvent, parfois, rarement, ou jamais?	TOUJOURS	1	
		SOUVENT	2	
		PARFOIS	3	
		RAREMENT	4	
		JAMAIS	5	
		NSP	98	
S131	En somme, diriez-vous que vous étiez très satisfait, satisfait, satisfait mais besoins d'être amélioré, peu satisfait, ou pas du tout satisfait par les soins reçus chez ce prestataire?	TRES SATISFAIT	1	
		SATISFAIT	2	
		SATISFAIT MAIS BESOIN D'ETRE AMELIORE	3	
		PEU SATISFAIT	4	
		PAS DU TOUT SATISFAIT	5	
		NSP	98	
S132	Est-ce que ce prestataire est conventionné par la mutuelle de santé?	OUI	1	
		NON	2	
		NE SAIT PAS	98	

SECTION 2: PAIEMENT DES SOINS/PREMIER CONTACT

Je vais vous poser des questions concernant le paiement des soins pour la consultation qu'on vient de discuter. Je vous prie de me donner vos meilleures estimations des montants dépensés et du temps passé comme réponses.

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
S201	Par quel moyen de transport êtes-vous allé chez ce prestataire?	A PIED	1	? S204
		TAXI	2	
		MOTO/MOBYLETTE	3	
		BICYCLETTE	4	
		AMBULANCE	5	
		CHARRETTE	6	
		AUTRES (À PRÉCISER)	7	
		NE SAIT PAS	98	
S202	Avez-vous payé le transport?	OUI	1	
		NON	2	? S204
S203	Combien avez-vous payé pour le transport?	MONTANT (FCFA) ☐☐☐☐☐ NSP 99998		
S204	Combien de temps avez-vous mis pour arriver chez ce prestataire?	DUREE — HEURES ☐☐ MINUTES ☐☐ NSP 9998		
S205	Une fois arrivé chez le prestataire, combien de temps avez-vous attendu avant d'être soigné?	DUREE — HEURES ☐☐ MINUTES ☐☐ NSP … 99 98		

SECTION 2A : PAIEMENT CONSULTATION/PREMIER CONTACT

S206	Avez-vous été consulté par un médecin, un infirmier, ou autre personnel de santé au lieu de votre premier recours?	MEDECIN	1	
		INFIRMIER	2	
		AUTRE PERSONNEL DE SANTÉ APRECISER:	3	
		PAS DE CONSULTATION	9	FIN
FIL b	ENQUETEUR VERIFIER SI LA PERSONNE EST BENEFICIAIRE/ADHERENT D'UNE MUTUELLE (S108)	OUI	1	
		NON	2	S209
S207	Avez-vous bénéficié de la prise en charge de la mutuelle de santé pour cette consultation?	OUI	1	
		NON	2	? S209
S208	Combien la mutuelle de santé a payé pour la consultation reçue chez ce prestataire? ENQUETEUR : SI NE SAIT PAS LE MONTANT, DEMANDER LE POURCENTAGE	MONTANT ☐☐☐☐☐ NSP 99998 POURCENTAGE ☐☐ NSP 98		
S209	Avez-vous payé pour la consultation reçue auprès de ce prestataire, même un ticket modérateur?	OUI	1	? S211
		NON	2	
S210	Pourquoi vous n'avez pas payé pour la consultation reçue chez ce prestataire?	PAS D'ARGENT	1	
		PRIS EN CHARGE TOTALEMENT PAR LA MUTUELLE	2	

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
		AUTRES (PRÉCISER)	8	? S214
S211	Combien avez-vous payé pour la consultation reçue chez ce prestataire?	MONTANT (FCFA) NSP……99998		
S212	Avez-vous eu des difficultés pour payer pour la consultation reçue auprès de ce prestataire?	OUI	1	
		NON	2	
S213	D'où provient l'argent utilisé pour payer pour la consultation reçue auprès de ce prestataire? ENQUETEUR: LIRE LES MODALITES. PLUSIEURS MODALITES SONT PERMISES.		OUI / NON	
		VOUS-MÊME	1 / 2	
		MEMBRE DU MÉNAGE	1 / 2	
		PARENT/HORS MÉNAGE	1 / 2	
		AMI	1 / 2	
		FONDS DE SOLIDARITÉ	1 / 2	
		AUTRES (PRÉCISER):	1 / 2	
	SECTION 2B: PAIEMENT MEDICAMENTS/PREMIER CONTACT			
S214	Vous (votre enfant) a-t-on prescrits des médicaments au cours de votre premier recours?	OUI	1	
		NON	2	? S302
S215	C'était quoi comme medicament?	ASPIRIN/**PARACETAMOL**	1 / 2	
		NIVAQUINE/**CHOLORQUINE**	1 / 2	
		VITAMIN A	1 / 2	
		METRONDIAZOLE/**VERMOX**	1 / 2	
		COTRIMOXAZOLE/**BACTRIM**	1 / 2	
		FANSIDAR/**SP**	1 / 2	
		CAMOQUINE	1 / 2	
		AMOXICILINE	1 / 2	
		QUININE/QUINIMAX	1 / 2	
		AUTRES A PRECISER	1 / 2	
		NSP	98	
S216	Avez-vous acheté les médicaments prescrits au cours de votre premier recours?	OUI	1	? S218
		NON	2	
S217	Pourquoi vous n'avez pas acheté les médicaments prescrits?	PAS D'ARGENT	1	
		PRIS EN CHARGE TOTALEMENT PAR LA MUTUELLE	2	? S219
		AUTRES (PRÉCISER):	8	FIN
FIL C	ENQUETEUR VERIFIER SI LA PERSONNE EST BENEFICIAIRE/ADHERENT D'UNE MUTUELLE (S108)	OUI	1	
		NON	2	S220
S218	Avez-vous bénéficié de la prise en charge de la mutuelle de santé pour ces médicaments?	OUI	1	
		NON	2	? S220

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
S219	Combien la mutuelle de santé a payé pour les médicaments prescrits au cours du premiers recours?	MONTANT (FCFA) [ ][ ][ ][ ][ ] NSP……..99998 POURCENTAGE [ ][ ] NSP……99998		
S220	Avez-vous payé pour les médicaments au cours du premier recours?	OUI	1	? S222
		NON	2	
S221	Pourquoi vous n'avez pas payé pour les médicaments au cours du premier recours?	PAS D'ARGENT	1	↓
		PRIS EN CHARGE TOTALEMENT PAR LA MUTUELLE	2	
		AUTRES (PRÉCISER):	8	? S301
S222	Combien avez-vous payé pour les médicaments au cours du premier recours?	MONTANT (FCFA) [ ][ ][ ][ ][ ] NSP……99998		
S223	Avez-vous eu des difficultés pour payer pour les médicaments au cours du premier recours?	OUI	1	
		NON	2	
S224	D'où provient l'argent utilisé pour payer pour les médicaments au cours du premier recours? NOTE: LIRE LES MODALITES. PLUSIEURS MODALITES SONT PERMISES.	VOUS-MÊME	1	
		MEMBRE DU MÉNAGE	2	
		PARENT/HORS MÉNAGE	3	
		AMI	4	
		FONDS DE SOLIDARITÉ	5	
		AUTRES (PRÉCISER)	8	
SECTION 3: RECOURS AUX CONTACTS SUIVANTS				
S301	Etes-vous (votre enfant) guéri après avoir reçu les soins chez le premier recours?	OUI	1	**FIN**
		NON	2	
S302	Le responsable du centre ou le prestataire vous a t - il référé à une autre formation/ personne pour vous soigner?	OUI	1	
		NON	2	FIN

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INITIATIVE POUR L'EQUITE - ENQUÊTE EVALUATION

16 Septembre 2004 -- **corrigé après le nettoyage des données**

QUESTIONNAIRE RECOURS AUX SOINS CURATIFS EN CAS DE FIEVRE

NOM D'ENQUETEE	
AIRE DE SANTE	
NUMERO DE LA SECTION D'ENUMERATION:	
NUMERO DE LA CONCESSION (CARTOGRAPHIE):	
NUMERO DU MENAGE DANS LA CONCESSION (CARTOGARPHIE):	
NUMERO DE MENAGE (ECHANTILLONNAGE):	
NUMERO D'ADHESION (se ménage est mutualiste)	
NUMERO DE LA PERSONNE AVEC FIEVRE (M101, N° LIGNE, QUESTIONNAIRE MENAGE):	
SI LA PERSONNE AVEC FIEVRE EST UN ENFANT, NUMERO DU REPONDANT (M101, N° LIGNE, QUESTIONNAIRE MENAGE):	
DATE DE PREMIER CONTACT:	J J M M
HEURE DU DEBUT DE PREMIER CONTACT:	H H M M

NOM DE L'ENQUETEUR/ENQUETRICE :	

VISITES D'ENQUETEURS	1	2	3	**RESULTAT FINAL**
DATE DE CONTACT:				JOUR:
RESULTAT* DE LA VISITE:				MOIS:
RENDEZVOUS PAR LA SUITE (SI L'INTERVIEW N'EST PAS TERMINE):				
DATE:				RESULTAT* FINAL
HEURE:				

CODES RESULTAT :

1= REMPLI 2 = PAS A LA MAISON 3 = DIFERE 4 = REFUSE 5 = PARTIELLEMENT REMPLI

6 =INCAPACITE 7 = AUTRE (PRECISER): _____

CONTROLE

SUPERVISEUR		MANAGER		SAISI	
CODE :		CODE :		CODE :	
PARAPHE:		PARAPHE:		PARAPHE:	
DATE:		DATE:		DATE:	

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
S303	Le prestataire vous a référé à quelle formation sanitaire? ENQUETEUR: DEMANDER LE NOM DE PRESTATAIRE OU DE LA FORMATION ET LIEU PRECIS. UTILISER L'INVENTAIRE DES PRESTATIRES POUR IDENTIFIER LE CODE PRECIS DU PRESTATAIRE	CODE: [ ][ ][ ] NOM :_____ LIEU :_____		
		SIKASSO 001 CSCom de Wayerma 002 CSRef de Sikasso (Tripano, Centre momo) 003 CSCom de Sanoumbougou 1 004 Hopital Regional de Sikasso 005 AM (Assistance Medicale) 777 Autres Prives a Sikasso (petit cabinet medical) 666 Autre en dehors de Sikasso	BLA 101 CSCom de Blaville 102 CSRef de Bla 103 CSCom de Kemeni 104 CSCom de Yangasso 105 CSCom de Falo 106 Centre Confessionnel de Koutienso (a Yangasso) 107 Centre Confessionel de Somaso (a Bla Central) 888 Autres prives a Bla 555 Autre en dehors de Bla	
S304	Etes-vous allé à ce centre de référence?	OUI	1	FIN
		NON	2	
S305	Pourquoi n'êtes vous pas allé vous soigner dans ce centre de référence ou chez un autre prestataire?	GUÉRI	1	
		PAS D'ARGENT	2	
		CENTRE ELOIGNE	3	
		PAS DE PRISE EN CHARGE	4	
		TRAITEMENT À DOMICILE	5	
		AUTRES RAISONS (PRÉCISER):	8	
		NSP	98	

Je vous remercie pour votre participation dans l'enquête de PHRplus\Mali.
Vos réponses vont contribuer à la réussite de notre travail.

Fin de l'Interview

Indiquez l'heure de la fin de l'interview	***Heure***				
Indiquez la durée de l'enquête	***Durée***				

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INITIATIVE POUR L'EQUITE - ENQUÊTE EVALUATION

16 Septembre 2004 **– corrigé après le nettoyage des données**

QUESTIONNAIRE SANTE DE LA REPRODUCTION
PARTE 1 – CARACTERISTIQUES DES FEMMES, CONNAISSANCES

NOM D'ENQUETEE

AIRE DE Santé

numéro DE LA SECTION D'ENUMERATION:			
NUMERO DE LA CONCESSION (CARTOGRAPHIE) :			
NUMERO DU MENAGE DANS LA CONCESSION (CARTOGRAPHIE) :			
NUMERO DE ménage (ECHANTILLONNAGE):			
NUMERO D'ADHESION (se ménage est mutualiste)			
NUMERO DU REPONDANT (DE M101, Nº LIGNE, QUESTIONNAIRE MENAGE):			

DATE DE PREMIER CONTACT:	J	J	M	M

HEURE DU DEBUT DE PREMIER CONTACT:	H	H	M	M

NOM DE L'ENQUETEUR/ENQUETRICE :

VISITES D' enquêteurs	1	2	3	RESULTAT FINAL
DATE DE CONTACT:				JOUR:
RESULTAT* DE LA VISITE:				MOIS:
RENDEZVOUS PAR LA SUITE (SI L'INTERVIEW N'EST PAS TERMINE):				
DATE:				RESULTAT* FINAL
HEURE:				

CODES RESULTAT :

1= REMPLI 2 = PAS A LA MAISON 3 = DIFERE 4 = REFUSE 5 = PARTIELLEMENT REMPLI

6 =INCAPACITE 7 = AUTRE (PRECISER): _____

contrôle

SUPERVISEUR		MANAGER		SAISI	
CODE :		CODE :		CODE :	
PARAPHE:		PARAPHE:		PARAPHE:	
DATE:		DATE:		DATE:	

Bonjour ! Je m'appelle [NOM DE L'ENQUETRICE]. Je suis venu en tant qu'enquêtrice dans le cadre du projet USAID pour l'équité au Mali. L'objectif de cette enquête est de recueillir des donnes relatives aux connaissances et pratiques sur à l'accouchement et aux soins prénatals et post-natals Cette information va aide à rendre les soins de santé plus accessibles à tout le monde et en particulière aux personnes les plus vulnérables. C'est à dire que nous allons utiliser vos réponses aux questions dans les rapports livrés aux autorités, mais nous n'allons pas donner les noms des individus qui ont participé à l'enquête. Je ne suis pas employée de USAID ou du Ministère de Santé et je ne révélerai votre identité à personne. Votre participation est volontaire. Votre participation n'empêchera pas votre capacité d'obtenir les soins de santé maintenant ni dans le futur. Vous pouvez refuse de répondre à toute question et vous pouvez arrête l'enquête a tout moment sans peine ou perte de bénéfice.

SECTION 1: CARACTERISTIQUES DE LA FEMME

Nº	QUESTIONS ET FILTRES	REPONSES		ALLER A
FIL01	Acceptez-vous de participer à cette enquête?	OUI	1	
		NON	2	FIN
F100	Etes-vous bénéficiaire de la mutuelle de santé?			
		OUI	1	
		NON	2	? F102
F101	Depuis combien de temps, êtes-vous bénéficiaire de façon continue à la mutuelle? ENQUETEUR : ENREGIST RER LE NOMBRE DE MOIS	NOMBRE DE MOIS [ ][ ] NSP … 98		
F102	Pour commencer, je voudrais vous poser des questions sur vous même et sur votre ménage. Jusqu'à l'âge de 12 ans, avez-vous vécu la plupart du temps à Bamako, dans une autre grande ville, dans une ville ou en milieu rural?	BAMAKO	1	
		GRANDES VILLES	2	
		AUTRES VILLES	3	
		MILIEU RURAL	4	
F103	Depuis combien de temps habitez-vous (de façon continue) à [NOM DU LIEU ACTUEL DE RÉSIDENCE]? ENQUETEUR : SI MOINS D'UNE ANNÉE, INSCRIVEZ '00' ANNÉE.	NOMBRE D'ANNEES [ ][ ] TOUJOURS……..88 VISITEUR…….. 89 NSP …….98		Se toujours ? F105
F104	Juste avant de vous installer ici, viviez-vous à Bamako, dans une autre grande ville, dans une ville, ou en milieu rural?	BAMAKO	1	
		GRANDES VILLES	2	
		AUTRES VILLES	3	
		MILIEU RURAL	4	
F105	Rappelez-moi votre âge?	NOMBRE D'ANNEES [ ][ ] NSP …. 98		
F106	Quel est votre état matrimonial?	CELIBATAIRE	1	
		MARIEE MONOGAME	2	
		MARIEE POLYGAME	3	
		VEUVE	4	
		DIVORCEE OU SEPAREE	5	
		AUTRES A PRECISER	8	

Nº	QUESTIONS ET FILTRES	REPONSES		ALLER A
F107	Avez-vous fréquenté l'école ou suivi un programme d'alphabétisation?	OUI	1	
		NON	2	? F109
F108	Quel est le plus haut niveau d'étude que vous avez atteint?	ALPHABETISEE	1	
		ECOLE CORANIQUE	2	
		FONDAMENTAL 1 (PRIMAIRE)	3	
		FONDAMENTAL 2 (COLLEGE)	4	
		SECONDAIRE / LYCEE TECHNIQUE	5	
		SUPERIEUR	6	
		AUTRE (PRECISER) :	7	
		NE SAIT PAS	8	
F109	Etes-vous malienne?	OUI	1	
		NON	2	? F111
F110	Quelle est votre ethnie?	BAMBARA	1	
		MALINKE	2	
		PEULH	3	
		SARKOLE/SONINKE/MARKA	4	
		SONRAI	5	
		DOGON	6	
		TAMACHEK	7	
		SENOFO/MINIANKA	8	
		BOBO	9	
		SAMOGO	10	
		AUTRE (PRECISER):	11	
F111	Quelle est votre religion?	MUSULMAN	1	
		CHRETIEN	2	
		RELIGION TRADITIONNELLE	3	
		AUTRE (PRECISER):	4	
F112	En dehors de votre travail domestique, est-ce que vous travaillez actuellement?	OUI	1	
		NON	2	? F117
F113	Quelle est votre occupation, c'est-à-dire quel genre de travail faites-vous principalement? ENQUETEUR: LIRE LES MODALITES	AGRICULTURE	1	
		OUVRIERE AGRICOLE	2	
		OUVRIERE JOURNALIERE NON AGRICOLE	3	
		ELEVEUR	4	
		ARTISAN QUALIFIE	5	
		DOMESTIQUE	6	
		PETIT COMMERCE	7	
		MOYEN OU GRAND COMMERCE	8	
		SALARIEE/FONCTIONNAIRE	9	
		ELEVE/ETUDIANTE	10	
		AUTRE (PRECISER):	98	

Nº	QUESTIONS ET FILTRES	REPONSES		ALLER A
F114	Quelle est la périodicité de votre activité?	PERMANENT	1	
		TEMPORAIRE	2	
		OCCASIONNEL	3	
		AUTRE (PRECISER):	4	
F115	Cette activité vous rapporte-t-il de l'argent ou quelque chose d'autre en nature?	DE L'ARGENT SEULEMENT	1	
		EN ARGENT ET EN NATURE	2	
		EN NATURE SEULEMENT	3	
		NON N'EST PAS PAYE	4	? F117
F116	Qui décide comment les ressources que vous gagnez sont utilisées?	ENQUETEE SEULE	1	
		CONJOINT SEUL	2	
		ENQUETEE ET CONJOINT	3	
		PERE OU MERE D'ENQUETEE	4	
		AUTRE PERSONNE ET CONJOINT (PRECISER):	5	
		ENQUETEE ET PERSONNE AUTRE QUE CONJOINT (PRECISER) :	6	
		AUTRE (PRECISER) :	8	
F117	Pouvez-vous lire et comprendre une lettre ou un journal facilement, avec difficulté ou pas du tout?	FACILEMENT	1	
		DIFFICILEMENT	2	
		PAS DU TOUT	3	? F119
F118	Lisez-vous un journal ou un revue pratiquement chaque jour, au moins une fois par semaine, moins d'une fois par semaine ou pas du tout?	CHAQUE JOUR	1	
		TOUS LES JOURS SAUF LE WEEK-END	2	
		AU MOINS UNE FOIS PAR SEMAINE	3	
		MOINS D'UNE FOIS PAR SEMAINE	4	
		PAS DU TOUT	5	
F119	Écoutez-vous la radio pratiquement chaque jour, au moins une fois par semaine, moins d'une fois par semaine ou pas du tout?	CHAQUE JOUR	1	
		AU MOINS UNE FOIS PAR SEMAINE	2	
		MOINS D'UNE FOIS PAR SEMAINE	3	
		PAS DU TOUT	4	
F120	Regardez-vous la télévision pratiquement chaque jour, au moins une fois par semaine, moins d'une fois par semaine ou pas du tout?	CHAQUE JOUR	1	
		AU MOINS UNE FOIS PAR SEMAINE	2	
		MOINS D'UNE FOIS PAR SEMAINE	3	
		PAS DU TOUT	4	
F121	Etes-vous membre d' une organisation ou association communautaire?	OUI	1	
		NON	2	F124

N°	QUESTIONS ET FILTRES	REPONSES	ALLER A

F122 Quelle est la nature de cette/ces organisations?

Depuis combien d'années êtes-vous membre de cette association?

ENQUETEUR: SI MOINS D'UNE ANNÉE, INSCRIVEZ '00' ANNÉE

	OUI	NON	DUREE	
ASSOCIATION CULTURELLE ET SPORTIVE	1	2		
GROUPEMENT FEMININ	1	2		
TONTINE	1	2		
ASSOCIATION RELIGIEUSE	1	2		
AGR	1	2		
ASACO	1	2		
GROUPES D'AGES	1	2		
AUTRE (PRECISER):	1	2		

F123 Faites vous partie du bureau de votre organisation ou association [d'au moins une de vos organisations ou associations]?

OUI	1
NON	2

F124 Dans votre famille, qui a généralement le dernier mot dans les décisions suivantes:

ENQUETEUR: LIRE LES MODALITES

ENREGISTRER UNE DES REPONSES SUIVANTES POUR CHAQUE DECISION

1=ENQUETEE ELLE-MEME
2=CONJOINT
3= ENQUETEE ET CONJOINT
4= PERE OU MERE
5= AUTRE PERSONNE (PRESICER)
6= ENQUETEE ET PERSONNE AUTRE QUE LE CONJOINT (PRECISER)

A. VOS PROPRES SOINS DE SANTE?	
B. LES SOINS DE SANTE DES ENFANTS?	
C. LES ACHATS DE CHOSES IMPORTANTES POUR LE MENAGE?	
D. LES ACHATS POUR LES BESOINS QUOTIDIENS DU MENAGE?	
E. LES VISITES A LA FAMILLE, AUX AMIS OU PARENTS?	
F. QUELLE NOURRITURE SERA PREPAREE CHAQUE JOUR?	

F125 Avez-vous reçu des informations relatives aux problèmes ou soins de santé associés à la grossesse durant les derniers 12 mois ?

OUI	1	
NON	2	? F128

F126 Pouvez-vous me dire de quoi parler les informations que vous avez reçues sur les problèmes ou soins de santé associés à la grossesse?

ENQUETEUR: REPONSES MULTIPLES POSSIBLES

ENREGISTRER TOUTES LES REPONSES DONNEES SPONTANEEMENT PAR LA FEMME.

MESSAGES PORTANT SUR:	**OUI**	**NON**
NECESSITE DES SOINS PRENATALS	1	2
DEBUT DES SOINS PRENATALS	1	2
NOMBRE DE CONSULTATIONS PRENATALES	1	2
FIEVRE DURANT LA GROSSESE	1	2
PROPHYLAXIE ANTIPALUDEEN	1	2
ESSOUFLEMENT DURANT LA GROSSESE	1	2
SAIGNEMENTS DURANT LA GROSSESSE	1	2
OEDEMES AU COURS DE LA GROSSESSE	1	2
AUTRES MESSAGES	1	2

(LISTER LES AUTRES MESSAGES MENTIONNEES PAR LA FEMME)

N°	QUESTIONS ET FILTRES	REPONSES			ALLER A
F127	Quelles sont les sources des informations relatives aux problèmes ou soins de santé associés à la grossesse que vous avez reçues durant les 12 derniers mois ? ENQUETEUR: REPONSES MULTIPLES POSSIBLES ENREGISTRER TOUTES LES REPONSES DONNEES SPONTANEEMENT PAR LA FEMME.	**SOURCES MENTIONNEES SPONTANEEMENT PAR LA FEMME :**	**OUI**	**NON**	
		EMISSIONS RADIO	1	2	
		SEANCES DE CAUSERIE AU VILLAGE	1	2	
		VISITES A DOMICILE	1	2	
		SKETCH DE THEATRE	1	2	
		PERSONNEL DE SANTE AU CSCOM	1	2	
		AMIE	1	2	
		PARENT	1	2	
		AUTRES SOURCES (PRECISER):	1	2	
F128	Combien de fois avez-vous écouté une émission à la radio portant sur les problèmes ou soins de santé associés à la grossesse durant les 12 derniers mois ?	JAMAIS ECOUTE	1		
		UNE FOIS	2		
		DEUX FOIS	3		
		TROIS FOIS	4		
		AU MOINS QUATRE FOIS	5		
F129	Combien de fois avez-vous assisté à une séance de causerie éducative au village ou au quartier portant sur les problèmes ou soins de santé associés à la grossesse durant les 12 derniers mois ?	JAMAIS ASSISTE	1		
		UNE FOIS	2		
		DEUX FOIS	3		
		TROIS FOIS	4		
		AU MOINS QUATRE FOIS	5		
F130	Combien de fois avez-vous reçu une visite à domicile pour vous informer sur les problèmes ou soins de santé associés à la grossesse durant les 12 derniers mois ?	JAMAIS RECU	1		
		UNE FOIS	2		
		DEUX FOIS	3		
		TROIS FOIS	4		
		AU MOINS QUATRE FOIS	5		
F131	Combien de fois avez-vous assisté à un sketch de théâtre portant sur les problèmes ou soins de santé associés à la grossesse durant les 12 derniersmois ?	JAMAIS ASSISTE	1		
		UNE FOIS	2		
		DEUX FOIS	3		
		TROIS FOIS	4		
		AU MOINS QUATRE FOIS	5		
F132	A quel moment de sa grossesse une femme doit-elle aller en consultation prénatale pour la première fois?	QUAND SES REGLES S'ARRETENT	1		
		LORS DU TROISIEME MOIS	2		
		UN MOIS AVANT L'ACCOUCHEMENT	3		
		QUAND IL Y A UN PROBLEME	4		
		QUAND ELLE SENT LE MOUVEMENT DU FŒTUS	**5**		
		AUTRE (PRECISER):	**6**		
		NE SAIT PAS	998		
F133	De combien de visites une femme a-t-elle besoin en consultation prénatale avant l'accouchement?	NOMBRE DE VISITES ☐ SEPT ET PLUS…… .. 7 NE SAIT PAS…… 8			

N°	QUESTIONS ET FILTRES	REPONSES			ALLER A
F134	Quels sont les symptômes durant la grossesse qui indiquent qu'il faut rechercher des soins de santé en dehors des consultations normales? ENQUETEUR: REPONSES MULTIPLES POSSIBLES ENREGISTRER TOUTES LES REPONSES DONNEES SPONTAN EEMENT PAR LA FEMME.		OUI	NON	
		FIEVRE	1	2	
		ESSOUFLEMENT	1	2	
		SAIGNEMENTS	1	2	
		ŒDEME CORPS/MAIN/VISAGE	1	2	
		ANEMIE (MANQUE DE SANG)	1	2	
		EVANOUISSEMENT	1	2	
		CONVULSIONS	1	2	
		DOULEURS ABDOMINALES	1	2	
		MAUX DE TETE SEVERES	1	2	
		AUTRES SYMPTOMES A PRECISER	1	2	
F135	A quel moment après un accouchement normal une femme doit-elle chercher des soins postnatals? ENQUETEUR: REPONSES MULTIPLES POSSIBLES ENREGISTRER TOUTES LES REPONSES DONNEES SPONTAN EEMENT PAR LA FEMME.				
		MOINS D'UNE SEMAINE APRES	**1**	**2**	
		UNE SEMAINE APRES	**1**	**2**	
		DEUX SEMAINES APRES	**1**	**2**	
		TROIS SEMAINES APRES	**1**	**2**	
		QUATRE SEMAINES APRES	**1**	**2**	
		5-6 SEMAINE / UN MOIS APRES L'ACCOUCHEMENT	**1**	**2**	
		SI LA FEMME A DES PROBLEMES	**1**	**2**	
		N'IMPORTE QUAND	**1**	**2**	
		PAS BESOIN	**1**	**2**	
		AUTRE (PRECISER):	**1**	**2**	
F136	Quels sont les signes de danger après l un accouchement qui indiquent la nécessité de rechercher des soins de santé? ENQUETEUR: REPONSES MULTIPLES POSSIBLES ENREGISTRER TOUTES REPONSES DONNEES SPONTANEMENT PAR LA FEMME		Oui	non	
		FIEVRE	1	2	
		PERTES DE SANG VAGINALES	1	2	
		ECOULEMENTS VAGINAUX MALODORANTS	1	2	
		EVANOUISSEMENT	1	2	
		PERTES REPETEES DE CONSCIENCE	1	2	
		TROUBLE DE LA VISION	1	2	
		MAUX DE TETE PERSISTANTS	1	2	
		VOMISSEMENTS	1	2	
		FORTE FIEVRE	1	2	
		AUTRE (PRECISER):	1	2	
F137	Avez-vous eu une naissance vivante, ou une grossesse qui s'est terminée autrement depuis la même période/saison de l'année dernière ?				
		OUI, UNE NAISSANCE VIVANTE	1	? Soins Prenatal	
		OUI, SANS NAISSANCE VIVANTE	2	? Soins Prenatal	
		NON	3		
		OUI	1	? Soins Prenatals	
		NON	2		
		NSP	3		
FIL 02	VERFIER SI LA FEMME EST D'UN MENAGE MUTUALISTE DU BLA (M110) ET QU'ELLE A DES ENFANTS MOINS DE 5 ANS (M116)	MUTUALISTE A BLA AVEC ENFANT MOINS DE 5 ANS	1	Soins Enfant	
		MUTUALISTE A BLA SANS ENFANT MOINS DE 5 ANS	2	FIN	
		NON MUTUALISTE A BLA	3	FIN	
		MENAGE SIKASSO	4	FIN	

	Nº	QUESTIONS ET FILTRES	REPONSES	ALLER A
		Je vous remercie pour votre participation dans 'enquête de PHRplus. *Vos réponses vont contribuer à la réussite de notre travail.*		
		Fin de l'Interview		
		ndiquez l'heure de la fin de l'enquête	*Heure_____*	
		ndiquez la durée de l'enquête	*Durée*	

PHRPlus

INITIATIVE POUR L'EQUITE - ENQUÊTE EVALUATION

16 Septembre 2004 **– corrigés après le nettoyage des données**

QUESTIONNAIRE SANTE DE LA REPRODUCTION
PARTE 2 – SOINS PRENATAL, ACCOUCHEMENT, ET SOINS POST-NATAL

NOM D'ENQUETEE

AIRE DE SANTE

NUMERO DE LA SECTION D'ENUMERATION:	
NUMERO DE LA CONCESSION (CARTOGRAPHIE):	
NUMERO DU MENAGE DANS LA CONCESSION (CARTOGARPHIE):	
NUMERO DE MENAGE (ECHANTILLONNAGE):	
NUMERO D'ADHE SION (se ménage est mutualiste)	
NUMERO DU REPONDANT (DE M101, Nº LIGNE, QUESTIONNAIRE MENAGE):	

DATE DE PREMIER CONTACT:	J	J	M	M

HEURE DU DEBUT DE PREMIER CONTACT:	H	H	M	M

NOM DE L'ENQUETEUR/ENQUETRICE :

VISITE S D'ENQUETEURS				RESULTAT FINAL
	1	2	3	
DATE DE CONTACT:				JOUR:
RESULTAT* DE LA VISITE:				MOIS:
RENDEZVOUS PAR LA SUITE (SI L'INTERVIEW N'EST PAS TERMINE):				
DATE:				RESULTAT* FINAL
HEURE:				

CODES RESULTAT :

1= REMPLI 2 = PAS A LA MAISON 3 = DIFERE 4 = REFUSE 5 = PARTIELLEMENT REMPLI

6 =INCAPACITE 7 = AUTRE (PRECISER): _____

CONTROLE

SUPERVISEUR		MANAGER		SAISI	
CODE :		CODE :		CODE :	
PARAPHE:		PARAPHE:		PARAPHE:	
DATE:		DATE:		DATE:	

Section 1: SOINS PRENATALS				
N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
F301	Vous avez dit que vous avez eu une naissance vivante, ou une grossesse qui s'est terminée autrement depuis la même saison/période de l'année dernière ?	OUI, UNE NAISSANCE VIVANTE	1	
		OUI, SANS NAISSANCE VIVANTE	2	
		NON	3	? F303
F302	En quel mois et quelle année a eu lieu cette naissance?	MOIS DE NAISSANCE ☐☐ ANNEE DE NAISSANCE ☐☐ NSP……98		? F305A
F303	Etes-vous actuellement enceinte?	OUI	1	
		NON	2	FIN
		NSP	3	FIN
F304	Depuis combien de mois êtes vous enceinte?	NOMBRE DE MOIS ☐☐ NSP…….. 98		
Maintenant, je voudrais parler de votre dernière grossesse (grossesse actuelle).				
F305A	Durant votre dernière grossesse (ou pendant la grossesse actuelle), combien de nuits durant les sept nuits de la semaine dormiez-vous sous une moustiquaire?	NUITS PAR SEMAINE ☐		
		AUCUNE	0	? F306
F305B	Est-ce que la moustiquaire a été imprégnée?	MOUSTIQUAIRE SIMPLE	1	
		MOUSTIQUAIRE IMPREGNEE	2	
F306	Durant votre dernière grossesse (pendant la grossesse actuelle) avez-vous fait des consultations prénatales?	OUI	1	? F308
		NON	2	
F307	Pour quelle raison n'avez-vous pas effectué aucune consultation prénatale au cours de cette grossesse? **NB. VEUT ATTENDRE = PAS ENCORE LE MOMENT ET GROSSESSE PAS AVANCÉE**	PAS D'ARGENT	1	**? FIL03** (Section accouchement) – page 9 ??)
		FORMATION SANITAIRE TROP LOIN	2	
		PAS DE PRISE EN CHARGE	3	
		RAISON TRADITIONNELLE OU RELIGIEUSE	4	
		AUTRE (PRECISER):	**5 OU** 8	
		VEUT ATTENDRE	**6**	
		NE SAIT PAS	98	
F308	Combien de mois après le début de votre grossesse avez-vous commencé les consultations prénatales?	NOMBRE DE MOIS ☐☐ NE SAIT PAS……. 98		

N°	QUESTIONS ET FILTRES	REPONSES	ALLER A
F309	Où êtes-vous allée pour votre PREMIERE visite prénatale? ENQUETEUR: DEMANDER LE NOM DE PRESTATAIRE OU DE LA FORMATION ET LIEU PRECIS. UTILISER L'INVENTAIRE DES PRESTATIRES POUR IDENTIFIER LE CODE PRECIS DU PRESTATAIRE	CODE: [ ][ ][ ] NOM :_____ LIEU :_____ SIKASSO 001 CSCom de Wayerma 002 CSRef de Sikasso (Tripano, Centre momo) 003 CSCom de Sanoumbougou 1 004 Hopital Regional de Sikasso 005 AM (Assistance Medicale) 777 Autres Prives a Sikasso (petit cabinet medical) 666 Autre en dehors de Sikasso BLA 101 CSCom de Blaville 102 CSRef de Bla 103 CSCom de Kemeni 104 CSCom de Yangasso 105 CSCom de Falo 106 Centre Confessionnel de Koutienso (a Yangasso) 107 Centre Confessionel de Somaso (a Bla Central) 888 Autres prives a Bla 555 Autre en dehors de Bla	
F310	Quelle est la raison principale pour laquelle vous avez choisi d'aller faire les consultations prénatales avec ce prestataire ? ENQUETEUR: REFERER AU PRESTATAIRE CITE DANS LA QUESTION F309 ENQUETEUR: NE PAS LIRE LES MODALITES. ENCERCLER UNIQUEMENT LA RAISON PRINCIPALE DONNEE.	PERSONNEL COMPETENT 1 J'Y AI DEJA ACCOUCHE SANS DIFFICULTE POUR MOI ET MON ENFANT 2 CONNAIS QUELQU'UN QUI A ACCOUCHE SANS DIFFICULTE 3 PERSONNEL ACCUEIL CHALEUREUX 4 PERSONNEL DEMANDE LES PROBLEMES ET EXPLIQUE CE QU'ILS FONT 5 PROPRETE ET CONFORT 6 MEDICAMENTS DISPONIBLES 7 SERVICES MOINS CHERS 8 PROCHE DE CHEZ MOI 9 RAISON RELIGIEUSE OU TRADITION. 10 PERSONNEL FEMININ 11 PRESTATAIRE CONVENTIONNE PAR LA MUTUELLE 12 AUTRES (PRECISER): 96 NE SAIT PAS 98	
F311	Pensez-vous que le travail qui se fait chez ce prestataire est un travail de qualité toujours, souvent, parfois, rarement, ou jamais?	TOUJOURS 1 SOUVENT 2 PARFOIS 3 RAREMENT 4 JAMAIS 5 NSP 98	
F312	En somme, étiez-vous satisfaite avec les consultation prénatales réalisées chez ce prestataire? Etiez-vous très satisfaite, satisfaite, satisfaite–mais besoin d'être amélioré, peu satisfaite, ou pas du tout satisfaite?	TRES SATISFAITE 1 SATISFAITE 2 SATISFAITE, MAIS BESOIN D'ETRE AMELIORE 3 PEU SATISFAITE 4 PAS DU TOUT SATISFAITE 5	

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
F313	Est-ce que ce prestataire est conventionné par la mutuelle de santé?	OUI	1	
		NON	2	
		NE SAIT PAS	8	
F314	Combien de visites prénatales avez-vous effectuées?	1 VISITE	1	
		2 VISITES	2	
		3 VISITES	3	
		4 VISITES ET +	4	
		NSP	8	
F315	De combien de mois étiez-vous enceinte la dernière fois que vous avez passe une visite prénatale?	NOMBRE DE MOIS		
F316	Avez-vous un carnet de santé? Puis-je le voir s'il vous plait? ENQUETEUR : OBSERVER LE CARNET	OUI, VU	1	
		NON DISPONIBLE	2	? F318
		NSP	8	? F318
F317	ENQUETEUR : LIRE SUR LE CARNET LE NOMBRE DE VISITES PRENATALES DE LA FEMME	1 VISITE	1	
		2 VISITES	2	
		3 VISITES	3	
		4 VISITES ET +	4	

F318	Durant votre grossesse avez constaté un des symptômes suivants : ENQUETEUR: LIRE LES SYMPTOMES Aucun autre?		OUI	NON	NSP
		AUCUN SYMPTOME	1	2	8
		FIEVRE	1	2	8
		ESSOUFFLEMENT	1	2	8
		SAIGNEMENTS	1	2	8
		OEDEMES AU CORPS OU MAINS OU VISAGE	1	2	8
		AUTRE (PRECISER):	1	2	8

F319	Quels sont les services que vous avez reçus au cours de ces visites prénatales? ENQUETEUR: LIRE LES MODALITES.		OUI	NON	NSP
		ANALYSE DE LABORATOIRE	1	2	8
		VACCIN ANTI-TETANOSE	1	2	8
		EVACUATION/ REFERENCE	1	2	8
		HOSPITALISATION	1	2	8

F320	Durant cette grossesse, vous a-t-on donné ou avez-vous acheté des médicaments pour éviter le paludisme?	OUI	1	
		NON	2	? F325
		NE SAIT PAS	8	? F325
F321	De quel était ce médicament? ENQUETEUR : MONTRER LES COMPRIMEES DE CHLOROQUINE ET SP	CHLOROQUINE/NIVAQUINE	1	
		FANSIDAR/MALOXINE/SP	2	
		AUTRE (PRECISER):	3	
		NSP	8	
F322	Combien de comprimés devriez-vous prendre par prise?	NOMBRE:		

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
F323	Comment devriez-vous prendre ce médicament, c'est-à-dire, tous les jours, une fois par semaine, une fois durant toute la grossesse, deux fois durant toute la grossesse?	UNE FOIS PAR SEMAINE	1	
		UNE FOIS DURANT LA GROSSESSE	2	
		DEUX FOIS DURANT LA GROSSESSE	3	
		AUTRES A PRECISER	4	
		NSP	8	
F324	Combien de fois avez-vous pris ces médicaments pendant la grossesse?	UNE FOIS	1	
		DEUX FOIS	2	
		AUTRES (PRECISER):	3	
		NSP	8	
F325	Durant cette grossesse, vous a-t-on donné ou avez-vous acheté des comprimés de fer, c'est-à-dire des petits cachets marrons/rouge ou du sirop contenant du fer?	OUI	1	
		NON	2	? F327
	ENQUETEUR: MONTRER COMPRIMES/SIROP			
F326	Durant toute la grossesse, pendant combien de jours avez-vous pris les comprimés de fer ou du sirop contenant du fer?	NOMBRE DE JOURS		
	ENQUETEUR: SI LA RESPONSE N'EST PAS QUANTIATIVE, CHERCHER A PRECISER APPROXIMATIVEMENT POUR LE NOMBRE DE JOURS	NSP……. 998		
F327	Vous a-t-on parlé des signes de complication d'une grossesse durant ces visites?	OUI	1	
		NON	2	

A. Paiement des frais pour la consultation

F328	Votre dernière consultation prénatale a-t-elle eu lieu chez le même prestataire de la première visite?	OUI	1	? F331
		NON	2	
F329	Où êtes-vous allée pour votre dernière visite prénatale? ENQUETEUR: DEMANDER LE NOM DE PRESTATAIRE OU DE LA FORMATION ET LIEU PRECIS. UTILISER L'INVENTAIRE DES PRESTATIRES POUR IDENTIFIER LE CODE PRECIS DU PRESTATAIRE	CODE: NOM :_____ LIEU :_____		
		SIKASSO 001 CSCom de Wayerma 002 CSRef de Sikasso (Tripano, Centre momo) 003 CSCom de Sanoumbougou 1 004 Hopital Regional de Sikasso 005 AM (Assistance Medicale) 777 Autr es Prives a Sikasso (petit cabinet medical) 666 Autre en dehors de Sikasso	BLA 101 CSCom de Blaville 102 CSRef de Bla 103 CSCom de Kemeni 104 CSCom de Yangasso 105 CSCom de Falo 106 Centre Confessionnel de Koutienso (a Yangasso) 107 Centre Confessionel de Somaso (a Bla Central) 888 Autres prives a Bla 555 Autre en dehors de Bla	
F330	Avez-vous été consultée par un médecin, une sage-femme, un infirmier, ou autre personnel de santé au cours de la dernière visite prénatale?	MEDECIN	1	
		INFIRMIER	2	
		SAGE-FEMME/OSTETRICIEN	3	
		AIDE SOIGNANTE	4	
		MATRONE	5	
		ACCOUCHEUSE TRADITIONELLE	6	
		AUTRES A PRECISER	7	
F331	Est-ce que ce prestataire est conventionné par la mutuelle de santé?	OUI	1	
		NON	2	? F334
		NE SAIT PAS	**3 OU** 8	? F334
FIL A	ENQUETEUR VERIFIER SI LA FEMME FAIT PARTIE D'UNE MUTUELLE (VOIR F100)	OUI	1	
		NON	2	F334
F332	Avez-vous bénéficié de la prise en charge de la mutuelle de santé au cours de cette dernière visite prénatale, même partiel ?	OUI	1	
		NON	2	? F334
F333	Combien la mutuelle de santé a payé pour la consultation reçue au cours de cette dernière visite prénatale ? ENQUETEUR : SI NE SAIT PAS LE MONTANT, DEMANDER LE POURCENTAGE.	MONTANT NSP 99998 POURCENTAGE NSP 98		
F334	Avez-vous payé directement pour la consultation reçue au cours de cette dernière visite prénatale ?	OUI	1	? F336
		NON	2	
F335	Pourquoi vous n'avez pas payé directement pour la consultation reçue au cours de cette dernière visite	PAS D'ARGENT	1	
		PRIS EN CHARGE TOTALEMENT PAR LA MUTUELLE	2	

prénatale ?	AUTRES (A PRECISER) :	3	? F339

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
F336	Combien avez-vous payé pour la consultation reçue au cours de cette dernière visite prénatale ?	MONTANT NSP ….99998		
F337	Avez-vous eu des difficultés pour payer pour la consultation reçue au cours de cette dernière visite prénatale ?	OUI NON NSP	1 2 8	
F338	D'ou provient l'argent utilisé pour payer pour la consultation reçue au cours de cette dernière visite prénatale ? ENQUETEUR : LIRE LES MODALITES. MULTIPLES MODALITES SONT PERMISES.	ENQUETEE ELLE-MEME CONJOINT/ PARTENAIRE AUTRE MEMBRE DU MENAGE PARENT HORS MENAGE FONDS DE SOLIDARITE AUTRES (PRESICER) :	1 2 3 4 5 8	

B. Paiement des soins/médicaments

F339	Vous a-t-on prescrit des médicaments au cours des visites prénatales?	OUI NON	1 2	 ? F401
F340	Avez-vous acheté des médicaments prescrits au cours des visites prénatales ?	OUI NON	1 2	 ? F401
F341	Où avez-vous acheté ces médicaments?	PHARMACIE CENTRE DE SANTE COMMUNAUTAIRE/MATERNITE RELAIS/ASC REVENDEUR PHARMACIE MARCHE TRADI – PRATICIEN DISPONIBLES A LA MAISON AUTRES (PRECISER) :	1 2 3 4 5 5 6 7 8	
FIL B	ENQUETEUR VERIFIER SI LA FEMME FAIT PARTIE D'UNE MUTUELLE (VOIR F100)	OUI NON	1 2	 F345
F342	La mutuelle de santé prend-t-elle en charge l'achat des médicaments, même partiellement ?	OUI NON	1 2	 ? F345
F343	Avez-vous bénéficié de la prise en charge de la mutuelle de santé pour les médicaments que vous avez achetés la dernière fois au cours des visites prénatales, meme partiellement ?	OUI NON	1 2	
F344	Combien la mutuelle de santé a payé pour ces médicaments? ENQUETEUR: SI NE SAIT PAS LE MONTANT, DEMANDER LE POURCENTAGE	MONTANT POURCENTAGE NSP……99998		
F345	Avez-vous payé pour ces médicaments?	OUI NON	1 2	? F347

Nº	QUESTIONS ET FILTRES	REPONSES		ALLER A
F346	Pourquoi vous n'avez pas payé pour ces médicaments ?	PAS D'ARGENT	1	
		PRIS EN CHARGE TOTALEMENT PAR LA MUTUELLE	2	
		AUTRES (A PRECISER) :	3	? F401
F347	Combien avez-vous payé pour ces médicaments ?	MONTANT **NSP….99998**		
F348	Avez-vous eu des difficultés pour payer ces médicaments ?	OUI	1	
		NON	2	
F349	D'ou provient l'argent utilisé pour payer pour ces médicaments ? ENQUETEUR : LIRE LES MODALITES. MULTIPLES MODALITIES SONT PERMISES.			
		ENQUETŒ ELLE-MEME	1	
		CONJOINT/ PARTENAIRE	2	
		AUTRE MEMBRE DU MENAGE	3	
		PARENT HORS MENAGE	4	
		FONDS DE SOLIDARITE	5	
		AUTRES (PRESICER) :	8	

SECTION II : ASSISTANCE A L'ACCOUCHEMENT

Maintenant je veux vous poser quelques questions au sujet de l'accouchement de votre enfant né au cours des douze derniers mois.

FIL03	VERIFIER A LA QUESTION F301 : LA FEMME A-T-ELLE ACCOUCHE AU COURS DES 12 DERNIERS MOIS ?	OUI	1	
		NON	2	
FIL 04	SI LA FEMME EST ACTUELLEMENT ENCEINTE DEMANDER : Est-ce celle-ci est votre première grossesse ?	OUI	1	FIN
		NON	2	? SOINS ENFANT

N°	QUESTIONS ET FILTRE	REPONSES		ALLER A
F401	Où avez-vous accouché ? ENQUETEUR : ECRIRE LE NOM ET LIEU ENQUETEUR : DONNER LE NOM DU LIEU D'ACCOUCHEMENT ET LE LIEU EXACT D'IMPLANTATION.	CODE :		? F403
		NOM : _____ LIEU : _____		
		SIKASSO 001 CSCom de Wayerma 002 CSRef de Sikasso (Tripano, Centre momo) 003 CSCom de Sanoumbougou 1 004 Hopital Regional de Sikasso 005 AM (Assistance Medicale) 777 Autres Prives a Sikasso (petit cabinet medical) 666 Autre en dehors de Sikasso	BLA 101 CSCom de Blaville 102 CSRef de Bla 103 CSCom de Kemeni 104 CSCom de Yangasso 105 CSCom de Falo 106 Centre Confessionnel de Koutienso (a Yangasso) 107 Centre Confessionel de Somaso (a Bla Central) 888 Autres prives a Bla 555 Autre en dehors de Bla	
		TRADI-PRATICIEN	~~666~~ 600	
		A LA MAISON	~~777~~ 700	
F402	Quelle est la raison principale pour laquelle vous n'êtes pas allée à la maternité ou une autre formation sanitaire pour l'accouchement?	FRAIS D'ACCOUCHEMENT TROP CHER	1	? F406
		FORMATION SANITAIRE TROP LOIN	2	
		PAS DE PRISE EN CHARGE	3	
		RAISON TRADITIONNELLE OU RELIGIEUSE	4	
		AUTRES (A PRECISER) :	5	
		PAS EU LE TEMPS (TRAVAIL TROP VIT)	**6**	
		PAS DU TRANSPORT	**7**	
		NE SAIT PAS	98	
F403	Quelle est la raison principale pour laquelle vous avez choisi d'aller accoucher à ENQUETEUR : REFERER AU PRESTATAIRE CITE DANS LA QUESTION F401	PERSONNEL COMPETENT	1	
		J'Y AI DEJA ACCOUCHE SANS DIFFICULTE POUR MOI OU MON ENFANT	2	
		CONNAIS QUELQU'UN QUI A ACCOUCHE SANS DIFFICULTE	3	
		PERSONNEL ACCUEIL CHALEUREUX	4	

	ENQUET EUR: NE PAS LIRE LES MODALITES. ENCERCLER UNIQUEMENT LA RAISON PRINCIPALE DONNEE.	PERSONNEL DEMANDE LES PROBLEMES ET EXPLIQUE CE QU'ILS FONT	5	
		PROPRETE ET CONFORT	6	
		MEDICAMENTS DISPONIBLES	7	
		SERVICES MOINS CHERS	8	
		PROCHE DE CHEZ MOI	9	
		RAISON RELIGIEUSE OU TRADITION.	10	
		PERSONNEL FEMININ	11	
		AUTRES (A PRECISER) :	98	
F404	Pensez-vous que le travail qui se fait chez ce prestataire est un travail de qualité toujours, souvent, parfois, rarement, ou jamais?	TOUJOURS	1	
		SOUVENT	2	
		PARFOIS	3	
		RAREMENT	4	
		JAMAIS	5	
		NSP	98	

N°	QUESTIONS ET FILTRE	REPONSES		ALLER A
F405	En somme, étiez-vous satisfaite avec l'accouchement réalisé chez ce prestataire? Etiez-vous très satisfaite, satisfaite, satisfaite --mais besoin d'être amélioré, peu satisfaite, ou pas du tout satisfaite?	TRES SATISFAITE	1	
		SATISFAITE	2	
		SATISFAITE, MAIS BESOIN D'ETRE AMELIORE	3	
		PEU SATISFAITE	4	
		PAS DU TOUT SATISFAITE	5	
F406	Qui vous a assisté au moment de l'accouchement?	MEDECIN	1	
		INFIRMIER	2	
		SAGE-FEMME/OSTETRICIEN	3	
		AIDE SOIGNANTE	4	
		MATRONE	5	
		ACCOUCHEUSE TRADITIONELLE	6	
		PARENT, AMI, VOISIN	7	
		PERSONNE (ACCOUCHE SEULE)	8	
		AUTRE (A PRECISER) :	9	
F407	L'enfant est-il encore en vie?	OUI	1	? F409
		NON	2	
F408	Je suis vraiment désolé. Quel âge avait-il au moment du décès? ENQUETEUR : SI L'ENFANT AVAIT MOINS D'UN MOIS, ENREGISTRER LES JOURS. AUTREMENT ENREGISTRER LES MOIS	JOURS ____ MOIS ____		
F409	Avez-vous eu des complications lors de votre accouchement?	OUI	1	
		NON	2	? FIL 05
F410	Décrivez les difficultés que vous avez eues? ENQUETEUR: MULTIPLES MODALITES SONT PERMISES.		OUI / NON	
		PERTE DE BEAUCOUP DE SANG	1 / 2	
		CONVULSIONS, HYPERTENSION, OU OEDEMES	1 / 2	
		FORTE FIEVRE APRES L'ACCOUCHEMENT	1 / 2	
		AUTRES (PRECISER) :	1 / 2	

FIL05	VERIFIER A F401 : L'ENQUETEE A ACCOUCHE A DOMICILE	OUI	1	? F501
		NON	2	

N°	QUESTIONS ET FILTRE	REPONSES		ALLER A
F411	Avez-vous subi une césarienne au cours de ce dernier accouchement?	OUI	1	
		NON	2	
F412	Vous a-t-on référé pour ce dernier accouchement à cette autre formation?	OUI	1	
		NON	2	F419

Nº	QUESTIONS ET FILTRES	REPONSES		ALLER A
F413	Etes-vous allée au centre de référence?	OUI	1	? F415
		NON	2	
F414	Pourquoi n'êtes-vous pas allée au centre de référence?	PAS D'ARGENT	1	?F419
		CENTRE ELOIGNE	2	
		CENTRE DE REFERENCE N'EST PAS CONVENTIONNE	3	
		AUTRES (A PRECISER):	8	
F415	Par quel moyen de transport êtes-vous allée chez ce prestataire?	A PIED	1	? F418
		TAXI	2	
		MOTO/MOBYLETTE	3	
		BICYCLETTE	4	
		AMBULANCE	5	
		CHARRETTE	6	
		AUTRES (A PRECISER):	7	
F416	Avez-vous payé le transport?	OUI	1	
		NON	2	? F418
F417	Combien avez-vous payé pour le transport?	MONTANT EN FCFA NSP……. 99998		
F418	Combien de temps avez-vous mis pour arriver chez ce prestataire?	HEURES		
		MINUTES		

F419	Au cours de l'accouchement, avez- vous reçu les services suivants? ENQUETEUR: LIRE LES MODALITES		OUI	NON	NSP
		CONSULTATIONS	1	2	8
		DIAGNOSTIC/LABO	1	2	8
		MEDICAMENTS	1	2	8
		EVACUATION/REF.	1	2	8
		HOSPITALISATION	1	2	8
		VACCINATION D'ENFANT:	1	2	8
		AUTRES (PRECISER):	1	2	8

FIL C	ENQUETEUR VERIFIER SI LA FEMME FAIT PARTIE D'UNE MUTUELLE (VOIR F100)	OUI	1	
		NON	2	F 422

F420	Avez-vous bénéficié de la prise en charge de la mutuelle de santé au cours de cet accouchement, même partiel?	OUI	1	
		NON	2	?F422
F421	Combien la mutuelle de santé a payé pour l'accouchement? ENQUETEUR : SI NE SAIT PAS LE MONTANT, DEMANDER LE POURCENTAGE	MONTANT POURCENTAGE NSP……99998		

Nº	QUESTIONS ET FILTRES	REPONSES		ALLER A
F422	Avez-vous payé pour l'accouchement?	OUI	1	?F424
		NON	2	
F423	Pourquoi vous n'avez pas payé pour l'accouchement?	PAS D'ARGENT	1	↓ ?F427
		PRIS EN CHARGE TOTALEMENT PAR LA MUTUELLE	2	
		AUTRES (A PRECISER):	8	
F424	Combien avez-vous payé pour l'accouchement?	MONTANT EN FCFA NSP…. 99998		
F425	Avez-vous eu des difficultés pour payer pour l'accouchement?	OUI	1	
		NON	2	
F426	D'où provient l'argent utilisé pour payer pour l'accouchement? ENQUETEUR: LIRE LES MODALITES. MULTIPLES MODALITES SONT PERMISES.	ENQUETEE ELLE-MEME	1	
		CONJOINT/ PARTENAIRE	2	
		AUTRE MEMBRE DU MENAGE	3	
		PARENT HORS MENAGE	4	
		FONDS DE SOLIDARITE	5	
		AUTRES (PRECISER) :	8	
F427	Vous a-t-on prescrit des médicaments au cours de l'accouchement?	OUI	1	
		NON	2	?F501
F428	Avez-vous pris les médicaments prescrits au cours de l'accouchement?	OUI	1	
		NON	2	?F501
F429	Où avez-vous acheté ces médicaments?	PHARMACIE	1	
		CENTRE DE SANTE COMMUNAUTAIRE/MATERNITE	2	
		RELAIS/ASC	3	
		REVENDEUR	4	
		MARCHE	5	
		TRADI - PRATICIEN	6	
		DISPONIBLES A LA MAISON	7	
		AUTRES (PRECISER) :	8	
FIL D	ENQUETEUR VERIFIER SI LA FEMME FAIT PARTIE D'UNE MUTUELLE (VOIR F100)	OUI	1	
		NON	2	F432
F430	Avez-vous bénéficié de la prise en charge de la mutuelle de santé pour les médicaments prescrits au cours de cet accouchement, meme partiellement?	OUI	1	
		NON	2	?F432

N°	QUESTIONS ET FILTRES	REPONSES		ALLER A
F431	Combien la mutuelle de santé a payé pour ces médicaments? ENQUETEUR : SI NE SAIT PAS LE MONTANT, DEMANDER LE POURCENTAGE	MONTANT [ ][ ][ ][ ][ ] POURCENTAGE [ ][ ] NSP……99998		
F432	Avez-vous payé pour les médicaments prescrits au cours de l'accouchement?	OUI	1	?F434
		NON	2	
F433	Pourquoi vous n'avez pas payé pour les médicaments prescrits au cours de l'accouchement?	PAS D'ARGENT	1	↓ F501
		PRIS EN CHARGE TOTALEMENT PAR LA MUTUELLE	2	
		AUTRES (PRESICER) :	8	
F434	Combien avez-vous payé pour les médicaments prescrits au cours de l'accouchement?	MONTANT EN FCFA [ ][ ][ ][ ] NSP…… 99998		
F435	Avez-vous eu des difficultés pour payer directement pour les médicaments prescrits au cours de l'accouchement?	OUI	1	
		NON	2	
F436	D'où provient l'argent utilisé pour payer pour les médicaments prescrits au cours de l'accouchement? ENQUETEUR: LIRE LES MODALITES. MULTIPLES MODALITES SONT PERMISES.	ENQUETEE ELLE-MEME	1	
		CONJOINT/ PARTENAIRE	2	
		AUTRE MEMBRE DU MENAGE	3	
		PARENT HORS MENAGE	4	
		FONDS DE SOLIDARITE	5	
		AUTRES (PRESICER) :	8	

SECTION III: CONSULTATIONS POSTNATALES

N°	QUESTIONS ET FILTRE	REPONSES		ALLER A
F501	Après l'accouchement, avez-vous consulté quelqu'un pour des visites post natales?	OUI	1	? F503
		NON	2	
F502	Quelle est la raison principale pour laquelle vous n'êtes pas allée pour des consultations post-natales? ENQUETEUR: NE PAS LIRE LES MODALITES. ENCERCLER LA RAISON PRINCIPALE DONNEE.	TRAITEMENT TROP CHER	1	↓ Soins Enfant
		FORMATION SANITAIRE TROP LOIN	2	
		PAS DE PRISE EN CHARGE	3	
		RAISON TRADITIONNELLE OU RELIGIEUSE	4	
		AUTRES (A PRECISER) :	8	
		NE SAIT PAS	98	

N°	QUESTIONS ET FILTRE	REPONSES	ALLER A
F503	Combien de jours après l'accouchement, avez-vous consulté quelqu'un pour des visites post-natales?	NOMBRE DE JOURS [ ][ ] NSP 98	
F504	Où êtes-vous allé pour votre première visite post-natale? ENQUETEUR: INSCRIRE LE NOM DU PRESTATAIRE ET SON EMPLACEMENT. UTILISER L'INVENTAIRE DES PRESTATIRES POUR IDENTIFIER LE CODE PRECIS DU PRESTATAIRE	CODE: [ ][ ][ ] NOM :_____ LIEU :_____ SIKASSO 001 CSCom de Wayerma 002 CSRef de Sikasso (Tripano, Centre momo) 003 CSCom de Sanoumbougou 1 004 Hopital Regional de Sikasso 005 AM (Assistance Medicale) 777 Autres Prives a Sikasso (petit cabinet medical) 666 Autre en dehors de Sikasso BLA 101 CSCom de Blaville 102 CSRef de Bla 103 CSCom de Kemeni 104 CSCom de Yangasso 105 CSCom de Falo 106 Centre Confessionnel de Koutienso (a Yangasso) 107 Centre Confessionel de Somaso (a Bla Central) 888 Autres prives a Bla 555 Autre en dehors de Bla	
F505	Pensez-vous que le travail qui se fait chez ce prestataire est un travail de qualité toujours, souvent, parfois, rarement, ou jamais?	TOUJOURS 1 SOUVENT 2 PARFOIS 3 RAREMENT 4 JAMAIS 5 NSP 98	
F506	En somme, étiez-vous satisfaite avec la visite post-natale réalisé chez ce prestataire? Etiez-vous très satisfaite, satisfaite, satisfaite--mais besoin d'être amélioré, peu satisfaite, ou pas du tout satisfaite?	TRES SATISFAITE 1 SATISFAITE 2 SATISFAITE, MAIS BESOIN D'ETRE AMELIORE 3 PEU SATISFAITE 4 PAS DU TOUT SATISFAITE 5	
F507	Combien de fois êtes-vous allé aux visites post-natales depuis votre accouchement?	1 FOIS 1 2 FOIS 2 3 FOIS ET + 3	
F508	Durant les quatre semaines qui ont suivi l'accouchement, avez-vous constaté chez vous les symptômes suivant? ENQUETEUR: LIRE OPTIONS INSISTER: D'autres symptômes?	OUI NON PERTES DE SANG VAGINALES 1 2 PERTES REPETEES DE CONSCIENCE 1 2 TROUBLE DE LA VISION 1 2 MAUX DE TETE PERSISTANTS 1 2 VOMISSEMENTS 1 2 FORTE FIEVRE 1 2 AUTRE (A PRECISER) : 1 2	

N^{O}	QUESTIONS ET FILTRE	REPONSES		ALLER A	
F509	Au cours de la première consultation post-natale, avez- vous reçu les services suivants? ENQUETEUR: LIRE SERVICES		OUI	NON	NSP
		CONSULTATIONS:	1	2	8
		DIAGNOSTIC/LABO	1	2	8
		MEDICAMENTS	1	2	8
		EVACUATION/REF.	1	2	8
		HOSPITALISATION	1	2	8
		AUTRES (A PRECISER) :	1	2	8

N°	QUESTIONS ET FILTRE	REPONSES		ALLER A
FIL E	ENQUETEUR VERIFIER SI LA FEMME FAIT PARTIE D'UNE MUTUELLE (VOIR F100)	OUI	1	
		NON	2	F511

F510	Sur la liste suivante indiquer les services reçus au cours de la première consultation post-natale, et ceux qui ont bénéficié d'une prise en charge totale, prise en charge partielle, ou d'aucune prise en charge de la mutuelle de santé (même partiellement)?		TOTAL	PARTIEL	NON
		DIAGNOSTIC/LABO	1	2	8
		MEDICAMENTS	1	2	8
		EVACUATION/REF.	1	2	8
		HOSPITALISATION	1	2	8
		AUTRES (A PRECISER) :	1	2	8

F511	Combien avez-vous payé directement pour les services reçus au cours de la première visite post-natale?		MONTANT	
		CONSULTATION		
		DIAGNOSTIC/LABO		
		MEDICAMENTS		
		EVACUATION/REF.		
		HOSPITALISATION		
		AUTRES(A PRECISER) :		

F512	Avez-vous eu des difficultés pour payer directement les soins au cours de la première visite post-natale?		
		OUI	1
		NON	2

F513	D'où provient l'argent utilisé pour payer directement pour les autres services et produits au cours de la première visite post-natale? ENQUETEUR: LIRE LES MODALITES. MULTIPLES MODALITES SONT PERMISES.		
		ENQUETEE ELLE-MEME	1
		CONJOINT/PARTENAIRE	2
		AUTRE MEMBRE DU MENAGE	3
		PARENT HORS MENAGE	4
		FONDS DE SOLIDARITE	5
		AUTRES (A PRECISER):	8

Je vous remercie pour votre participation dans l'enquête de PHRplus. Vos réponses vont contribuer à la réussite de notre travail.

Fin de l'Interview

Indiquez l'heure de la fin de l'enquête	*Heure*_____					
Indiquez la durée de l'enquête	*Durée*					

PHRPlus
INITIATIVE POUR L'EQUITE - ENQUÊTE EVALUATION
16 Septembre 2004

QUESTIONNAIRE SANTE REPRODUCTION
PARTE 3 -- SANTE DES ENFANTS MOINS DE 5 ANS

NOM D'ENQUETEE (REPONDANT) _____

AIRE DE SANTE _____

NUMERO DE LA SECTION D'ENUMERATION:			
NUMERO DE LA CONCESSION (CARTOGRAPHIE):			
NUMERO DU MENAGE DANS LA CONCESSION (CARTOGARPHIE):			
NUMERO DE MENAGE (ECHANTILLONNAGE):			
NUMERO D'ADHESION (se ménage est mutualiste)			
NUMERO DU REPONDANT (DE M101, Nº LIGNE, QUESTIONNAIRE MENAGE):			

	J	J	M	M
DATE DE PREMIER CONTACT:				

	H	H	M	M
HEURE DU DEBUT DE PREMIER CONTACT:				

NOM DE L'ENQUETEUR/ENQUETRICE :

VISITES D'ENQUETEURS				**RESULTAT FINAL**
	1	2	3	
DATE DE CONTACT:				JOUR:
RESULTAT* DE LA VISITE:				MOIS:
RENDEZVOUS PAR LA SUITE (SI L'INTERVIEW N'EST PAS TERMINE):				
DATE:				RESULTAT* FINAL
HEURE:				

CODES RESULTAT :
1= REMPLI 2 = PAS A LA MAISON 3 = DIFERE 4 = REFUSE 5 = PARTIELLEMENT REMPLI
6 =INCAPACITE 7 = AUTRE (PRECISER): _____

CONTROLE

SUPERVISEUR		MANAGER		SAISI	
CODE:		CODE:		CODE:	
PARAPHE:		PARAPHE:		PARAPHE:	
DATE:		DATE:		DATE:	

SECTION 1: SANTE DES ENFANTS DE MOINS DE 5 ANS

Maintenant, je voudrais vous poser des questions qui concernent la santé de vos enfants.

E103 ENQUETEUR:
SI LA FEMME A DES ENFANTS DE MOINS DE 5 ANS QUI VIVENT ACTUELLEMENT AVEC ELLE, DEMANDER LES NOMS DES ENFANTS EN COMMENCANT PAR LE DERNIER ENFANT, LE PLUS JEUNE. ENSUTE REMPLISSER LA COLONNE PERTINENTE DU TABLEAU SUIVANT POUR CHAQUE ENFANT.

		DERNIER ENFANT (LE PLUS JEUNE)	AVANT-DERNIER ENFANT
		NOM :_____	NOM :_____
E104	ENQUETEUR : VERIFIER LE NUMERO DE LIGNE DE L'ENFANT DANS LE QUESTIONNAIRE MENAGE (M101)	☐☐ NUMERO DE LIGNE DE L'ENFANT	☐☐ NUMERO DE LIGNE DE L'ENFANT
E105	Quel est le mois et l'année de naissance de …NOM DE L'ENFANT?	MOIS ☐☐ NSP ….98 / ANNEE ☐☐ NSP ….98	MOIS ☐☐ NSP ….98 / ANNEE ☐☐ NSP ….98
E106	Avez-vous le carnet de vaccination de …NOM DE L'ENFANT? SI OUI : Puis-je le voir s'il vous plait?	OUI, VU 1 ? E108 OUI, PAS VU 2 ? E109 PAS DE CARNET 3	OUI, VU 1 ? E108 OUI, PAS VU 2 ? E109 PAS DE CARNET 3
E107	Avez-vous jamais eu un carnet de vaccination pour …NOM DE L'ENFANT?	OUI 1 ? E109 NON 2 ? E109	OUI 1 ? E109 NON 2 ? E109

		DERNIER ENFANT (LE PLUS JEUNE)	AVANT-DERNIER ENFANT

E108

ENQUETEUR:
1. COPIER LES DATES DE VACCINATION À PARTIR DU CARNET DE VACCINATION
2. ECRIRE 44 A LA COLONNE 'JOUR' SI LE CARNET INDIQUE QUE LE VACCIN A ETE FAIT MAIS LA DATE N'A PAS ETE ENREGISTREE
3. S'IL N'Y PAS DE MENTION QUE L'ENFANT A RECU UN VACCIN DONNE, POSER LA QUESTION SUIVANTE

NOM DE L'ENFANT…a-t-il reçu …NOM DU VACCIN…qui n'est pas inscrit sur la carte?

SI OUI, INSCRIRE 66 DANS LA COLONNE 'JOUR'

4. APRES AVOIR REMPLI LE TABLEAU, PASSER À? E116

	DERNIER ENFANT						AVANT-DERNIER ENFANT					
	JOUR		MOIS		ANNEE		JOUR		MOIS		ANNEE	
BCG	B						B					
POLIO 0	P0						P0					
POLIO 1	P1						P1					
POLIO 2	P2						P2					
POLIO 3	P3						P3					
DTC 1	D1						D1					
DTC 2	D2						D2					
DTC 3	D3						D3					
ROUGEOLE	RO						RO					
FIEVRE JAUNE	FJ						FJ					
VITAMINE A (la plus récente)	VA						VA					

E109 NOM DE L'ENFANT… a-t-il jamais reçu une vaccination pour lui éviter d'attraper des maladies?

		PASSER A			PASSER A
OUI	1		OUI	1	
NON	2	? E114	NON	2	? E114
NSP	8		NSP	8	

E110 S'Il vous plait, dites-mois si …NOM DE L'ENFANT…a reçu une vaccination du BCG, contre la tuberculose, c'est a dire une injection dans l'épaule gauche qui a laissé une cicatrice?

		PASSER A			PASSER A
OUI	1		OUI	1	
NON	2		NON	2	
NSP	8		NSP	8	

E111 Dites-mois si…NOM DE L'ENFANT…a reçu une vaccination contre la polio, c'est à dire des gouttes dans la bouche?

		PASSER A			PASSER A
OUI	1		OUI	1	
NON	2	E112	NON	2	E112
NSP	8	E112	NSP	8	E112

E111A Combien de fois a-t-il reçu ?

NOMBRE DE FOIS	NOMBRE DE FOIS
☐	☐
NSP…8	NSP ….8

		DERNIER ENFANT (LE PLUS JEUNE)			AVANT-DERNIER ENFANT		
E112	S'Il vous plait, dites-mois si …NOM DE L'ENFANT…a reçu une injection contre la rougeole?			PASSER A			PASSER A
		OUI	1		OUI	1	
		NON	2		NON	2	
		NSP	8		NSP	8	
E113	Dites-mois si…NOM DE L'ENFANT a reçu une vaccination du DTCoq, c'est-à-dire une injection faite à la cuisse ou au bras, donnée généralement en même temps que les gouttes contre la polio?			PASSER A			PASSER A
		OUI	1		OUI	1	
		NON	2	E114	NON	2	E114
		NSP	8	E114	NSP	8	E114
	SI OUI: Combien de fois?	NOMBRE DE FOIS ☐			NOMBRE DE FOIS ☐		
E113A	Combien de fois a-t-il reçu ?	NOMBRE DE FOIS ☐ NSP….8			NOMBRE DE FOIS ☐ NSP…..8		
E114	NOM DE L'ENFANT… a-t-il/elle déjà reçu une capsule de vitamine A (supplément) comme celle-ci?			PASSER A			PASSER A
		OUI	1		OUI	1	
		NON	2	? E116	NON	2	? E116
	ENQUETEUR: MONTREZ LA CAPSULE OU LE FLACON	NSP	8	? E116	NSP	8	? E116
E115	Depuis combien de mois …NOM DE L'ENFANT… a pris la dernière dose de la vitamine A?	NOMBRE DE MOIS ☐ NSP……. 98			NOMBRE DE MOIS ☐ NSP……. 98		
E115A	D'où .. NOM DE L'ENFANT…a-t-il/elle obtenu cette dernière dose?	Visite de routine au centre de santé	1		Visite de routine au centre de santé	1	
		Visite d'enfant malade au centre de santé	2		Visite d'enfant malade au centre de santé	2	
		Semaines d'Intensification des Activités de Nutrition (SIAN)	3		Semaines d'Intensification des Activités de Nutrition (SIAN)	3	
		Autre (*à préciser*) :	4		Autre (*à préciser*) :	4	
		NSP	8		NSP	8	
E116	Dites-mois si …NOM DE L'ENFANT…a dormis la nuit dernière sous un moustiquaire simple ou un moustiquaire imprégné?	OUI, M.SIMPLE	1		OUI, M.SIMPLE	1	
		OUI, M. IMPREGNE	2		OUI, M. IMPREGNE	2	
		NON, AUCUN	3		NON, AUCUN	3	
		NSP	8		NSP	8	
E117	NOM DE L'ENFANT… a-t-il eu de la fièvre au cours des deux dernières semaines?			PASSER A			PASSER A
		OUI	1	? FIL 01	OUI	1	? FIL 01
		NON	2	? E119	NON	2	? E119
		NSP	8	? FIL 01	NSP	8	? FIL 01

		DERNIER ENFANT (LE PLUS JEUNE)	AVANT-DERNIER ENFANT
FIL 01	ENQUETEUR : A-T-ON REMPLI UN QUESTIONNAIRE SOINS CURATIFS POUR ..NOM DE L'ENFANT…? ENQUETEUR: VERIFIER LE STATUT D'ELIGIBILITE A LA QUESTION M113 DU QUESTIONNAIRE MENAGE	OUI 1 NON 2 SI 'NON', REMPLIR QUESTIONNAIRE DES SOINS CURATIFS POUR L'ENFANT APRES AVOIR TERMINE CE MODULE	OUI 1 NON 2 SI 'NON' REMPLIR QUESTIONNAIRE DES SOINS CURATIFS POUR L'ENFANT APRES AVOIR TERMINE CE MODULE
E119	NOM DE L'ENFANT…a-t-il eu de la diarrhée au cours des deux dernières semaines?	OUI 1 — PASSER A NON 2 — A L'ENFANT SUIVANT NSP 8 — A l'enfant suivant	OUI 1 NON 2 — FIN NSP 8 — FIN
E120	Est-ce que quelque chose a été donné à…NOM DE L'ENFANT…pour traiter la diarrhée? Quelque chose d'autre? INSCRIRE TOUT CE QUI EST CITE.	RIEN 0 SRO/KENEYADJI 1 ANTIBIOTIQUES 2 AUTRE (PRECISER): 3 NSP 8	RIEN 0 SRO/KENEYADJI 1 ANTIBIOTIQUES 2 AUTRE (PRECISER): 3 NSP 8
E121	Avez-vous demandé des conseils ou un traitement pour la diarrhée de …NOM DE L'ENFANT…?	OUI 1 NON 2 — A l'enfant suivant NSP 8 — A l'enfant suivant	OUI 1 NON 2 — Fin NSP 8 — Fin
E122	Où avez-vous demandé des conseils ou un traitement pour la diarrhée de …NOM DE L'ENFANT…? ENQUETEUR: ECRIRE LE NOM ET LIEU UTILISER L'INVENTAIRE DES PRESTATIRES POUR IDENTIFIER LE CODE PRECIS DU PRESTATAIRE	CODE: NOM :_____ LIEU :_____	CODE: NOM :_____ LIEU :_____

SIKASSO	BLA
001 CSCom de Wayerma	101 CSCom de Blaville
002 CSRef de Sikasso (Tripano, Centre momo)	102 CSRef de Bla
003 CSCom de Sanoumbougou 1	103 CSCom de Kemeni
004 Hopital Regional de Sikasso	104 CSCom de Yangasso
005 AM (Assistance Medicale)	105 CSCom de Falo
777 Autres Prives a Sikasso (petit cabinet medical)	106 Centre Confessionnel de Koutienso (a Yangasso)
666 Autre en dehors de Sikasso	107 Centre Confessionel de Somaso (a Bla Central)
	888 Autres prives a Bla
	555 Autre en dehors de Bla

SIKASSO	BLA
001 CSCom de Wayerma	101 CSCom de Blaville
002 CSRef de Sikasso (Tripano, Centre momo)	102 CSRef de Bla
003 CSCom de Sanoumbougou 1	103 CSCom de Kemeni
004 Hopital Regional de Sikasso	104 CSCom de Yangasso
005 AM (Assistance Medicale)	105 CSCom de Falo
777 Autres Prives a Sikasso (petit cabinet medical)	106 Centre Confessionnel de Koutienso (a Yangasso)
666 Autre en dehors de Sikasso	107 Centre Confessionel de Somaso (a Bla Central)
	888 Autres prives a Bla
	666 Autre en dehors de Bla

		DERNIER ENFANT (LE PLUS JEUNE)	AVANT-DERNIER ENFANT
FIL A	ENQUETEUR VERIFIER SE LES ENFANTS SONT BENEFICIAIRES D'UNE MUTUELLE (VOIR M110 – QUESTIONNAIRE MENAGE)	OUI 1 — NON 2 ? E125 — PASSER A	OUI 1 — NON 2 ? E125 — PASSER A
E123	Avez-vous bénéficié de la prise en charge de la mutuelle de santé pour cette consultation, même partiellement?	OUI 1 — NON 2 ? E125 — PASSER A	OUI 1 — NON 2 ? E125 — PASSER A
E124	Combien la mutuelle de santé a payé pour la consultation reçue chez ce prestataire?	MONTANT [ ][ ][ ][ ][ ] NSP……..99998 POURCENTAGE [ ][ ] NSP ….98	MONTANT [ ][ ][ ][ ][ ] NSP……..99998 POURCENTAGE [ ][ ] NSP ….98
E125	Avez-vous payé pour la consultation reçue auprès de ce prestataire?	OUI 1 ? E127 — NON 2 — PASSER A	OUI 1 ? E127 — NON 2 — PASSER A
E126	Pourquoi vous n'avez pas payé pour la consultation reçue chez ce prestataire?	PAS D'ARGENT 1 ? E130 — PRIS EN CHARGE TOTALEMENT PAR LA MUTUELLE 2 ? E130 — AUTRES (A PRECISER) : 3 ? E130 — PASSER A	PAS D'ARGENT 1 ? E130 — PRIS EN CHARGE TOTALEMENT PAR LA MUTUELLE 2 ? E130 — AUTRES (A PRECISER) : 3 ? E130 — PASSER A
E127	Combien avez-vous payé pour la consultation reçue chez ce prestataire?	MONTANT [ ][ ][ ][ ][ ] NSP ….99998	MONTANT [ ][ ][ ][ ][ ] NSP … 99998
E128	Avez-vous eu des difficultés pour payer pour cette consultation?	OUI 1 — NON 2 — PASSER A	OUI 1 — NON 2 — PASSER A
E129	D'ou provient l'argent utilisé pour payer directement pour cette consultation ?	ENQUETEE ELLE-MEME 1 — CONJOINT/ PARTENAIRE 2 — AUTRE MEMBRE DU MENAGE 3 — PARENT HORS MENAGE 4 — FONDS DE SOLIDARITE 5 — AUTRES (PRESICER) : 8	ENQUETEE ELLE-MEME 1 — CONJOINT/ PARTENAIRE 2 — AUTRE MEMBRE DU MENAGE 3 — PARENT HORS MENAGE 4 — FONDS DE SOLIDARITE 5 — AUTRES (PRESICER): 8
E130	A-t-on prescrits des médicaments pour traiter ce diarrhée chez (NOM de L'ENFANT)?	OUI 1 — NON 2 ? l'enfant suivant — PASSER A	OUI 1 — NON 2 FIN — PASSER A

		DERNIER ENFANT (LE PLUS JEUNE)	AVANT-DERNIER ENFANT
E131	Avez-vous acheté les médicaments prescrits pour traiter cette diarrhée ?	OUI 1 — PASSER A ? E133 NON 2	OUI 1 — PASSER A ? E133 NON 2
E132	Pourquoi vous n'avez pas acheté les médicaments prescrits?	PAS D'ARGENT 1 — PASSER A ?l'enfant suivant PRIS EN CHARGE TOTALEMENT PAR LA MUTUELLE 2 — ? E134 AUTRES (A PRECISER) : 3 — ?l'enfant suivant	PAS D'ARGENT 1 — PASSER A FIN PRIS EN CHARGE TOTALEMENT PAR LA MUTUELLE 2 — ? E134 AUTRES (A PRECISER) : 3 — FIN
FIL B	ENQUETEUR VERIFIER SI LES ENFANTS SONT BENEFICIAIRES D'UNE MUTUELLE (VOIR M110 – QUESTIONNAIRE MENAGE)	OUI 1 NON 2 — PASSER A ? E135	OUI 1 NON 2 — PASSER A ? E135
E133	Avez-vous bénéficié de la prise en charge de la mutuelle de santé pour ces medicaments?	OUI 1 NON 2 — PASSER A ? E135	OUI 1 NON 2 — PASSER A ? E135
E134	Combien la mutuelle de santé a payé pour les médicaments prescrits pour traiter cette diarrhée ?	MONTANT [ ][ ][ ][ ][ ] NSP ….99998 POURCENTAGE [ ][ ] NSP……98	MONTANT [ ][ ][ ][ ][ ] NSP … 99998 POURCENTAGE [ ][ ] NSP……98
E135	Combien avez-vous payé pour les médicaments pour traiter cette diarrhée ?	MONTANT [ ][ ][ ][ ][ ] NSP ….99998	MONTANT [ ][ ][ ][ ][ ] NSP … 99998
E136	Avez-vous eu des difficultés pour payer pour les médicaments pour traiter cette diarrhée ?	OUI 1 NON 2 — PASSER A	OUI 1 NON 2 — PASSER A
E137	D'où provient l'argent utilisé pour payer pour les médicaments pour traiter cette diarrhée ? NOTE: LIRE LES MODALITES. PLUSIEURS MODALITES SONT PERMISES.	ENQUETEE ELLE-MEME 1 CONJOINT/ PARTENAIRE 2 AUTRE MEMBRE DU MENAGE 3 PARENT HORS MENAGE 4 FONDS DE SOLIDARITE 5 AUTRES (PRESICER) : 8	ENQUETEE ELLE-MEME 1 CONJOINT/ PARTENAIRE 2 AUTRE MEMBRE DU MENAGE 3 PARENT HORS MENAGE 4 FONDS DE SOLIDARITE 5 AUTRES (PRESICER) : 8

Je vous remercie pour votre participation dans 'enquête de PHRplus.
Vos réponses vont contribuer à la réussite de notre travail.

Fin de l'Interview

Indiquez l'heure de la fin de l'enquête	*Heure_____*					
Indiquez la durée de l'enquête	*Durée*					

Annex D: Results of TOBIT Regressions on Household Health Expenditures

Table D-1: TOBIT Regressions on Household Health Expenditures

	Household expenditures on health (N=2,164)		Household health expenditures as a percentage of total consumption (N = 2,139)	
R = reference group	**Coef.**	**P-value**	**Coef.**	**P-value**
Household Characteristics				
Active MHO member (R = no)				
Active	0.410		-1.116	
Number with self reported health status (R = good to excellent health)				
Average to bad health	-0.084		0.141	
Number chronically ill (R = no)				
1 or more chronically ill	-0.235		-1.247	
Number handicapped (R = no)				
1 or more handicapped	0.836		0.773	
Household size	-0.104		0.617	
Number children <5 (R = 0-1 child)				
2+ children <5 in household	0.379		0.606	
Number women 15-49 (R = 0-1 woman)				
2+ women 15-49 in household	0.006		-0.139	
Number elders in HH (R = 0-1 person 50+)				
2+ elders in household	-0.050		1.013	
Gender of HH head (R = male)				
Female	-0.755		-0.519	
Ethnic group of HH head (R = Bambara)				
Senofo	-0.533		-0.789	
Other	0.381		0.504	
Education of HH Head (R = no education)				
Primary	1.544	***	1.550	**
Secondary +	2.469	***	2.662	***
Occupation of HH Head (R = none)				
Agriculture	0.704		1.893	
Commerce/Administration	0.652		0.424	

Other	0.071		-0.122	
Socioeconomic Status of HH (R = poor)				
Middle-poor	0.037		0.951	
Middle	0.854	*	2.265	***
Middle-rich	1.804	***	3.216	***
Rich	4.300	***	7.207	***
Community Characteristics				
Access to health facility (R= <=1 km)				
2-5 kms	-0.050		-1.401	
6-10 kms	-0.521		-1.222	
11+ kms	-0.235		0.573	
Urban/Rural residence (R = rural)				
Large urban	-1.785	***	-5.361	***
Small urban	-1.056	*	-5.013	***
Constant	0.250		-0.598	

Annex E: References

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