HEALTH MARKET RESEARCH WITH *SAVING FOR CHANGE* SAVINGS GROUPS IN MALI

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TABLE OF CONTENTS

Pages

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1. Introduction

This study was performed by Freedom from Hunger in collaboration with two Malian non-governmental organizations (NGOs):

- Conseils et Appui pour l'Éducation à la Base (CAEB) in the Koulikoro region
- Groupe de Recherche d'Actions et d'Assistance pour le Développement Communautaire (GRAADECOM) in the Sikasso region

Overview of *Saving for Change* Savings Groups

In many parts of the world, the very poor and those living in rural communities (especially women) have limited access to financial services. Financial institutions such as banks, credit unions and microfinance institutions (MFIs) typically encounter barriers to providing services (especially savings) to these populations. The cost of reaching dispersed rural populations continues to be high, the loans to the very poor are often too small to be profitable and the legal environment makes it difficult for many MFIs to mobilize savings. As a result, the very poor and those living in rural communities have limited and low-quality options for lending and savings services. They are charged extremely high interest rates by moneylenders, and have few safe ways to save—much less earn a return on their savings. Many of the very poor and those in rural communities not only lack access to financial services, but also lack access to information on managing household finances and their small businesses or protecting their families against preventable illnesses such as malaria or HIV/AIDS.

Saving for Change (SFC) is a highly replicable savings-led microfinance program developed by Freedom from Hunger, Oxfam America and the Strømme Foundation. *Saving for Change* brings basic financial and non-financial services to the very poor and to those living in rural communities (especially women) when organized into self-managed Savings Groups. *Saving for Change* reaches people who typically have no access to formal financial institutions. *Saving for Change* provides an opportunity for community members to save and borrow money to meet their needs and improve their income. Beyond providing financial services, *Saving for Change* builds members' skills for enhancing their lives by discussing and sharing ideas on topics in health, business development and money management. As a result of their participation in *Saving for Change*, savings group members create solidarity to solve relevant family and community issues. Moreover, *Saving for Change* makes it possible for existing Savings Group members to form or "replicate" new Savings Groups in a fast, effective and low-cost manner. The replication of new Savings Groups makes it possible to reach an even greater number of the very poor or rural communities who can benefit from access to financial services and information on health, business and money management.

Ten NGOs are implementing *Saving for Change* in Mali with support from Freedom from Hunger, Oxfam America and the Strømme Foundation. Two of those organizations, CAEB and

GRAADECOM, were selected to participate in this study as a result in their interest in exploring health-protection options for the Savings Groups members that they serve.

In the five study villages in the Koulikoro region served by CAEB, 19 *Saving for Change* groups have been formed with a total of 475 women beneficiaries; 262 members from 11 groups have received Freedom from Hunger's education on malaria. The dialogue-based education, called "Technical Learning Conversations," covers the modes of transmission of malaria, symptoms of malaria, consequences of malaria during pregnancy, treatment of malaria during pregnancy, the best way to protect oneself from malaria, and how to recognize and treat malaria in children. CAEB's mission is to promote the development of community-based participation by strengthening their self-help skills; CAEB's vision is to be a reference institutional structure with regards to organizing and promoting representative self-help, community-based institutions capable of creating a stable socioeconomic environment.

In the five villages of the study in the Sikasso region served by GRAADECOM, 17 *SFC* groups have been formed with a total of 462 women beneficiaries; 179 members from 7 groups have received education on malaria. GRAADECOM has been working in the Sikasso region since 1997. It works in the areas of education, literacy, poverty alleviation, women's empowerment, decentralization, youth employment and developing new partnerships.

Research goals

The overall goal of this market research study was to understand the health needs and healthcare services available to members of the *Saving for Change* Savings Groups.

The market research study had the following specific objectives:

- Identify common health problems in the community
- Define the health behaviors of women and their families
- Evaluate the availability, accessibility and costs of healthcare services
- Evaluate women's specific health knowledge, especially about malaria, diarrhea, malnutrition, family planning and health *mutuelles*

The study also intended to answer the following ten key questions addressed to *Saving for Change* group members:

1. What are the most common health problems?
2. What do you do to **not** get sick with these health problems?
3. What do you do when you or your family get sick? Where do you go for treatment?
4. What services or medicines do you use?
5. Where do you get the money to pay the costs of medicines?
6. What have you heard about protecting against malaria?
7. What have you heard about protecting against diarrhea?
8. What have you heard about protecting against malnutrition?
9. What have you heard about planning when and how many children to have (family planning)?
10. What have you heard about *mutuelles*?

The results of the research will determine the health demands of *Saving for Change* Savings Groups members, which will then be used by Freedom from Hunger, working in partnership with the NGOs, to determine appropriate health-protection options that can be feasibly added to the Savings Groups platform.

2. Methodology

This is a qualitative study based on focus-group discussions with *Saving for Change* Savings Groups members and interviews with health providers in 10 villages of the Koulikoro and Sikasso regions in Mali. In addition, a review of existing national and regional data has provided general information data on the health environment in Mali and on *SFC* groups in the study regions.

Research tools used in Mali

The data-collection process involved focus-group discussions with the *Saving for Change* Savings Groups members and interviews with healthcare providers at community health centers in the study villages. The tools used for this study included the following:

- Focus-Group Discussion Guide for savings group members
- Interview Guide for healthcare providers
- A tally sheet to summarize on a daily basis the collected data from the key research questions
- An analysis matrix that helps the research team to determine trends between the two regions in connection with the key research questions, concerns and implications for a health program with the *Saving for Change* savings groups, and the topics requiring further analysis or clarification.

Fieldwork plan

Two regions (Sikasso and Koulikoro) in which *Saving for Change* is being implemented by CAEB and GRAADECOM were chosen by these organizations to conduct the research. The savings groups in these regions were chosen as per the following criteria:

- The *Saving for Change* savings groups had to be mature groups; that is, groups that have completed at least their first cycle (at least one year old) and therefore are familiar with the *Saving for Change* program, believe the program will help them enhance their lives and are ready to share their needs.
- Another criterion to select groups was their level of accessibility to healthcare services. To achieve this goal, villages were chosen according to the following criteria:
  - *Within Koulikoro*
    - Two of the villages must have a health center located in the village (two focus-group discussions per village and one interview with health agents)
    - Two villages must have the closest health center located within 10km of the villages (two focus-group discussions per village and one interview with health agents at health centers within 10km)

- One village must have the closest health center more than 10km away (one focus-group discussion and one interview with health agents at the Fana health center).

Thus, the surveys in this region took place in five villages (Fana, Warassala, Kerela, Guana and Dinguèkoro); nine focus-group discussions were carried out in these five villages and two interviews were conducted with healthcare providers at the Fana and Kerela Community Health Centers (CSCOM).

- *Within Sikasso*
  - Two of the villages must have a health center located in the village (two focus-group discussions per village and one interview with health agents)
  - Two of the villages must have a health center within 10km of the villages (two focus-group discussions per village and one interview with health agents at health centers within 10km)
  - One village must have the closest health center more than 10km away (one focus-group discussion and one interview with health agents at the health center).

Data were also collected from five villages in the Sikasso region (Kona, Nongonsuala, Siramana, Dembella and Sabenebougou); nine focus-group discussions were carried out in these five villages and four interviews were conducted with healthcare providers from CSCOMs in Blendio, Nongonsuala, Fama and Dembella.

Preparatory activities included the development and finalization of the research tools, the training of interviewers and the testing of the research tools in Bamako from May 24–26, 2010. These activities allowed the research teams to become familiar with the tools. The research took place in the study regions (Sikasso and Koulikoro) from May 27–31, 2010. Two interviewers and one animator, who speak the local language and have field experience, were assigned to carry out the focus-group discussions and the interviews in each region.

A total of 18 focus-group discussions were carried out with 180 women (90 women per region), with an average of 10 women per focus-group discussion.

The teams proceeded to complete the tally sheet after each focus-group discussion and to validate the data collected on a daily basis.

Upon completing the data collection, the research team conducted a preliminary analysis of the results on June 1, using an analysis matrix designed for that purpose.

3. Summary of the Secondary Study on Health in Mali

General Data on Mali:
Mali is one of poorest and least developed countries in the world and is classified 178th of 182 countries in the United Nations Development Programme Human Development Report 2009. Out of a total population of 14.5 million, 51% lives on less than US$1.25/day, and 68% is under 25 years of age. The country has high rates of child and maternal mortality, the highest rates of illness and malnutrition in most of Sub-Saharan Africa, and an illiteracy rate of 75%.

Demographic Data and Health Statistics:

- Life expectancy at birth: 48–50
- Probability of not reaching 40 years of age: 38.5%
- Fertility rate (births per woman): 6.5
- Fertility rate of teenage women: 161 births per 1,000 women ages 15–19
- Maternal mortality: 970 (adjusted for underreporting) per 100,000 live births
- Lifetime risk of maternal death: 1 out of 15
- Child mortality: 103 per 1,000 live births
- Child mortality (<5years): 195

Major Health Problems:

A USAID report from December 2009 provides the following indicators:

- The infant and child mortality rates are very high, with about 20% of children dying before they reach the age of five, which is well above the Millennium Development Goals of 100 deaths per thousand live births.
- For children under five, 26% of the deaths are neonatal (during the first year of life) linked to causes such as severe infection, asphyxia at birth, premature birth, neonatal tetanus, and other causes such as diarrhea and congenital anomalies.
- The other causes of death in children under five are the following: 24% from pneumonia, 18% from diarrheal diseases, 17% from malaria and 16% from all other causes.

For the overall population, respiratory infections, diarrhea and malaria account for over 80% of mortality (2002), indicating that infectious diseases are the major problem faced by families in Mali. There are also reports on seasonal epidemics of certain other infectious diseases such as meningitis and cholera. HIV prevalence is reported to be 1.5%, although there are significant reports that it might be on the rise. Nutritional indicators are also quite poor, with only about 38% of women exclusively nursing infants during the first six months of life, with the percentage of growth retardation (size/age) at about 38%, and 27% of children underweight for their age. Immunization rates show improvement, which is consistent with government reports on the success of immunization campaigns, although use of tetanus toxoid during pregnancy is low, corroborating the percentage of neonatal deaths from tetanus.

In Mali, 92% of women between the ages of 15 and 49 have undergone female genital cutting (FGC). Most are excised before reaching the age of five. Women who have undergone FGC experience greater complications during childbirth, with risk of maternal and infant mortality as well as fistula. In addition to increasing the potential for complications during birth, the negative health consequences of the practice can include hemorrhaging, HIV infection, infertility and death. Studies in Burkina Faso have indicated a higher prevalence of non-specified vaginal and other genital infections in women who have undergone female genital cutting.

Unmet Needs:

Contraceptive use and family planning: The prevalence of modern contraceptive methods is estimated to be about 6.2%, with a significant unmet need for access to any method, in particular to modern methods. Over 10% of teenage girls have given birth and the median age for the start of sexual activity is 16. In a recent demographic and household survey (2006), 70% of women responded that they were between 15 and 19 when they had their first child.

Prenatal care: About 69% of women receive at least one prenatal visit, but only 35% receive four or more prenatal visits. About one-half of births are assisted by a qualified midwife.

Malaria prevention and treatment: Data from 2006 indicate that approximately 27% of children slept under an insecticide-treated mosquito net. Nevertheless, a government campaign was carried out in December 2007 to distribute mosquito nets (along with measles and polio vaccinations, Vitamin A and de-worming medications) and the Health Ministry later published a report showing that 80% of households with children under five had an insecticide-treated mosquito net in the home. The Ministry also stated that a follow-up survey showed that some 63% of households stated having used bednets the previous night, and that 51% of all children under five included in the survey were reported to have slept under insecticide-treated mosquito nets. Furthermore, USAID efforts and financing are in the process of being directed towards the prevention of malaria and treatment of pregnant women and children.

Access to primary care: According to other data (from UNICEF), about 38% of children under five suffering from pneumonia received care from a healthcare provider and the same percentage is treated with ORS and continued feeding when they have diarrhea. In a recent demographic and household survey (2006), Mali residents reported that they use health facilities just .3 times per year. People who were either unemployed or working in the informal sector cited the following problems in accessing health care (note that these data can also be provided at the regional level, if necessary):

- Knowing where to go for treatment: 20%
- Obtaining permission to go for treatment: 16%–19%
- Obtaining money for treatment: > 50%
- Needing to take transportation: 35%–36%
- Not wanting to go alone: 21%–24%
- Concern there wouldn't be a female healthcare provider: 18%–20%

The Health System in Mali:

The health system in Mali is weak, with very few medical structures and poor treatment. International development organizations and foreign missionary groups provide a large part of the country's health care. One doctor per 12,500 people aggravates the problem. Where resource allocation is concerned, there are strong disparities between rural and urban areas (with most of the healthcare providers located in Bamako) and the access to quality care in very poorly served rural areas.

Mali's healthcare centers became regional and community-based starting in 1991, which means that while national policies and plans are defined at the central level, it is the responsibility of every region to adapt them; therefore, there is less nation-wide intervention, as well as less financial security and resources according to local needs. This also leads to user charges to recover the cost of consultations, drugs and supplies used for treatment. Health costs per inhabitant are on average $60, of which about half comes from public funds and the remainder almost entirely from direct payments.

Primary health care is delivered to the public through primary health centers and other services provided by NGOs and the private sector. The public health centers aim to provide health care to catchment areas covering several villages, to include basic health care, immunization and health education, but most of them are poorly equipped. There are regional hospitals and a district referral system, but for many users, access is difficult and the quality of health care varies. In the urban areas, private health services are available but they are overall expensive. Many rely on traditional healers or treat themselves using drugs purchased in local markets.

There is a very interesting, promising development potential to establishing links between the segment of poor economies and the MFI members, which is a growing interest of the government in a strategy directed towards offering universal access to health care through the health *mutuelles*. The *mutuelle* system provides for a local committee, which supervises the mobilization of health insurance funds; while costs of annual premiums vary from scheme to scheme, individuals generally pay about $2.50–$4.00 to join. When a member of the *mutuelle* visits a health agent, the *mutuelle* covers 75%–80% of the costs, and the patient pays the difference. According to a report, the government last year agreed to subsidize the premiums in the hope that the system would end up encompassing over 70% of the population, with the other 30% covered by employer/employee funds and a separate government fund to cover the poor. Donors have expressed their interest in this initiative and the expectation is that it will begin or has begun this year, with a 2010 national funding budget of 51 *mutuelles* and a goal of eventually financing some 800 throughout the country. More studies are needed to determine where these *mutuelles* are located, how the government intends to promote registration to the poor, and to evaluate the potential value of developing links between the Savings Groups and/or IMFs and *mutuelles*.

4. Fieldwork Findings

Common health problems

The most common health problems in villages in both regions covered by the survey are uncomplicated and severe malaria, diarrhea, digestive tract ulcers, acute respiratory infections, genital infections, high blood pressure, hernias, back pain, abdominal ailments and anemia. Malaria affects every age group and both men and women and was mentioned in all focus-group discussions as the most frequent illness in the community. Malaria is especially severe in the group of pregnant women and babies, where seizures are very frequent.

At the health centers surveyed in the two regions, most of these health problems were mentioned by health agents, in addition to injury cases. At the level of the Kerela CSCOMs, cases of birth defects and snake bites were also mentioned as common illnesses.

Certain health problems mentioned by women, which they attribute to their harsh rural working conditions, such as back and knee pain, were not noted at the health center level; this could mean that they do not often consult the health center for these problems.

For **infants**, acute respiratory infections, malaria, diarrhea and anemia were the most common health problems mentioned; a few cases of neonatal tetanus were also mentioned by the women.

For women, these illnesses come from mothers not making prenatal visits or not following prescribed treatments during pregnancy due to mosquitoes and lack of hygiene.

For **children**, malaria, diarrhea, respiratory infections, anemia, abdominal ailments, conjunctivitis and malnutrition were the most common health problems mentioned. While the teams were out in the field, a nationwide polio vaccination campaign was taking place in Mali because two child polio cases had been discovered in the Koulikoro and Sikasso regions.

For **women**, malaria, genital infections and anemia during pregnancy were the most common illnesses mentioned by women. Genital infections are especially frequent in and disturbing to women in the villages surveyed in the Koulikoro area.

For **men**, malaria, back pain and hernias were the most common health problems mentioned. For both men and women, high blood pressure, gastric ulcers and knee ailments were the common illnesses.

Generally, aside from malaria, which women know is transmitted by mosquito bites, and diarrhea, which they often link to lack of hygiene, they do not know the causes of these illnesses. Most women indicated, "We do not know the causes of these illnesses."

The following table presents the most common illnesses in the Koulikoro and Sikasso regions that the women said they and their families face. Illnesses were listed when the participants in a focus-group discussion expressed consensus. There were a total of nine focus-group discussions in each region.

Common Illnesses in the Koulikoro and Sikasso Regions

Most common illnesses faced by women and their families:	**TOTAL in Koulikoro**	**TOTAL in Sikasso**	**TOTAL**
What are the most common illnesses that you and your family face?	**Out of 9**	**Out of 9**	
Uncomplicated and severe malaria (particularly infants and children)	9	9	18
Ulcers and gastric problems (in both men and women)	7	5	12
Diarrhea (particularly in children)	4	8	12
Acute respiratory infections (particularly in infants and children)	6	5	11
Genital infections (particularly in women)	8	2	10
High blood pressure (in both men and women)	5	4	9
Back pain (particularly in men)	7	2	9
Abdominal ailments (particularly in children)	5	4	9
Hernia (particularly in men)	5	4	9
Anemia (particularly in pregnant women and children)	4	4	8
Knee problems (in men and women)	3	3	6
Conjunctivitis (in children)	2	3	5
Malnutrition (particularly in children)	3	1	4
Oral infections (particularly in children)	2	2	4
Hemorrhoids	0	4	4
Onchocerciasis	1	2	3
Impotence in men	0	3	3
Tetanus (particularly in infants)	1	1	2

Common Illnesses in the Koulikoro and Sikasso Regions (continued)

Most common illnesses faced by women and their families:	TOTAL in Koulikoro	TOTAL in Sikasso	TOTAL
What are the most common illnesses that you and your family face?	**Out of 9**	**Out of 9**	
Polio (particularly in newborns)	1	1	2
Yellow fever (particularly in children)	1	1	2
Chickenpox (particularly in children)	1	1	2
Prostate problems (in men)	1	1	2
Panaris (in men and women)	2	0	2
Bilharziosis	1	1	2
Scabies	0	2	2
Diabetes (in men and women)	1	0	1
Nerve problems (in men and women)	1	0	1
Ear infections (in children)	1	0	1
Mumps (in children)	1	0	1

According to the health agents, the frequency of malaria can be explained by lack of drainage, stagnant waters contributing to the proliferation of mosquitoes and the inadequate use of insecticide-treated mosquito nets. Health agents said people do not use mosquito nets for lack of the means to purchase them, but because people find them suffocating to sleep under or out of negligence. Pregnant women receive an insecticide-treated mosquito net at no charge on their first prenatal visit, but they often come late for their first visit (between the eighth and ninth month of pregnancy), so they do not take sulfadoxine-pyrimethamine (SP) prophylaxis for preventing malaria early, or iron for preventing anemia. Pregnant women do not always sleep under mosquito nets. Undernourishment in pregnant women in terms of quantity and quality, especially, explains cases of malnutrition for this segment. The factors likely contributing to genital infections are unprotected sexual relations, lack of knowledge about the causes of genital infections, and polygamy, which is a very frequent practice in these strongly Muslim regions. Women who have experienced genital cutting may also be more likely to experience vaginal and other genital infections.

Malaria is more frequent during the rainy season due to stagnant waters and unhealthy conditions contributing to the proliferation of mosquitoes. Diarrhea cases are also more frequent during the rainy season. The acute respiratory infections are more frequent during the *harmattan* season (December–February). Genital infections occur during all periods. Traffic accidents are more frequent as the rainy season approaches because much of the population is on the move during this period, particularly on motorcycles.

Health knowledge

Malaria

The use of insecticide-treated mosquito nets was the method most often mentioned by the women in all the focus-group discussions as a means of protection against malaria. Hygiene and sanitation were the second most-often mentioned means of protection against malaria. Other methods, such as use of drugs (Nivaquine, Arsucam), plants, anti-mosquito insecticides or

covering the body with clothes, were rarely mentioned by the women. The women noted that physicians advise against the use of Nivaquine to prevent malaria.

Most *Saving for Change* groups have received health education on malaria by CAEB and GRAADECOM animators, which explains why they have good knowledge about protecting themselves from this disease.

Activities carried out by the health agents relating to the prevention of malaria include the promotion of the use of insecticide-treated mosquito nets (children under five and pregnant women, in particular), distribution of Freedom from Hunger insecticide-treated mosquito nets during prenatal visits, and SP prophylaxis for pregnant women. The frequency of educational talks varies (daily, weekly or semimonthly) and topics change; some health agents stated they have made talks on malaria a permanent feature. The Fana CSCOM health agents mentioned collaborating with an animator from the GRRADECOM NGO for consciousness-raising efforts.

Prevention of diarrhea

Measures such as hygiene and sanitation, drinking potable water, covering food, avoiding contact of flies with food, and hand-washing were most often mentioned by the women for preventing diarrhea. Other measures such as treating well water with bleach and avoiding contact with cholera patients were also mentioned. The women noted that there are many diarrhea cases during the rainy season due to ingestion of water from wells lacking rims and polluted by runoff water.

The women have general knowledge about preventing diarrhea. In some villages in the Koulikoro region, the women had been made aware of good hygiene and sanitation practices by the Kafo Jiginew animators and by the CSCOM local healthcare workers. In both the Koulikoro and Sikasso regions, the women received information on diarrhea through consciousness-raising sessions (Information Education Communication, or IEC) at the CSCOM.

The activities performed by health agents in the area of diarrhea prevention are consciousness-raising about hygiene and sanitizing their environments (consciousness-raising about hand-washing, informal sessions on public food hygiene: going by the markets twice a month to ask the women to cover the food and follow hygiene measures, etc.). The Fana CSCOM health agents mentioned the activities of UNICEF in the area of combating diarrhea by giving out free kits for simple diarrhea care.

Prevention of malnutrition

In the majority of the focus-group discussions, the women mentioned as a protective measure against malnutrition, eating a variety of foods rich in nutrients (fruits, vegetables, fish, eggs, milk and peanut butter). Although rarely, they also mentioned breastfeeding their child, giving enriched baby cereal to children, limiting the number of births and spacing births.

In some villages in the Sikasso region, the women received nutrition education sessions led by GRAADECOM animators. In the Koulikoro region, the women had been made aware of

malnutrition and anemia by the NGO Helen Keller International (HKI), which works in some villages. In both the Sikasso and Koulikoro regions, the women received information on malnutrition through IEC sessions at the CSCOMs. Enriched baby cereal is available at the CSCOMs and is provided free-of-charge to malnourished children.

The activities carried out by health agents in the area of malnutrition prevention are consciousness-raising of mothers on the use of local products (sweet potatoes, potatoes, meat, fish, etc.) for good nutrition of malnourished children, raising the consciousness of mothers about feeding children (breastfeeding exclusively for 6 months, then adding enriched baby cereal), nutrition of pregnant women and sick children, and providing enriched baby cereal for children to combat malnutrition. At the Fana CSCOM, the health agents noted contributions by the HKI towards preventing malnutrition and promoting breastfeeding, and the efforts of the NGO BorneFonden to change behaviors in the areas of circumcision and nutrition.

Family planning

In the villages of both the Sikasso and Koulikoro regions, the women are familiar with the most common family planning methods, which they mentioned in the majority of focus-group discussions (condoms, injections, pills and birth control beads); Norplant, IUDs and abstinence were rarely mentioned. They also frequently mentioned a traditional family planning method consisting of the use of a belt called *Tafo* in the local language.

The women appreciate family planning for the many advantages: good health for the woman, allowing her to get rest, children remain healthy, lower family expenses; family planning arrived a little late for some of those who have completed their motherhood cycle. It was the view of some of the women that their husbands had become aware of the advantages of spacing births and limiting the number of children, for the health of the woman and children as well as lowering family expenses. On the other hand, other men do not want to hear about family planning because they see children as access to labor.

In both regions, the CSCOM agents raise women's awareness about family planning after childbirth. In the Koulikoro region, some women have requested education on topics such as the menstrual cycle for young girls and young mothers to help them avoid unwanted pregnancies; women would also like to see CAEB animator health training skills enhanced so that they can receive education from them in turn.

The health agents' family planning activities involve raising consciousness of women about the significance of family planning and the availability of contraceptives (the pill, injections, birth control beads, condoms, Norplant). In the villages, the local health workers talk to the women and men about family planning. The matrons raise women's consciousness after childbirth by talking to them about family planning and contraceptive methods.

At the Nongonsuala CSCOM, the health agents have received the support of the USAID-funded Keneya Ciwara program, which provides training to local healthcare workers, ensuring their skills are current. At the Fana CSCOM, the NGO Marie Stopes International–Mali works in the area of family planning by making contraceptive methods available at a unit price of 300 CFA..

Mutuelles (community-based health insurance schemes)

In general, in both the Koulikoro and Sikasso regions, very few women have heard of *mutuelles*. In the Koulikoro region, among the five villages of the study, attempts have been made in Fana to establish a *mutuelle*, but it did not work due to a leadership issue over managing the *mutuelle* that arose between the elected community representatives and the members of the CSCOM management committee; in the other villages, the women had not heard of *mutuelles*.

In the Sikasso region, among the five villages of the study, only Nongonsuala has a local *mutuelle*. Membership is voluntary, but is per family or at least per household. Requirements: 2,000F per member per year, coverage of 50% of medical consultation fees and drugs when visiting the CSCOM or hospital approved by the *mutuelle.* In case of referrals, patients are reimbursed upon their return (ambulance charges are not covered by the *mutuelle*). In some CSCOMs, patients use membership cards, which allow them to pay half the costs for an office visit and full rate for other services.

Although the majority of the women have not heard about *mutuelles*, they appreciated the idea and might join if it existed in their village.

Prevention of health problems

To avoid health problems, the women most often mentioned sleeping under mosquito nets to prevent malaria, hygiene and environmental sanitation (drinking potable water, covering food; washing hands before meals and after using the toilet to prevent diarrhea; and avoiding stagnant water to fight the proliferation of mosquitoes). The women have received training about malaria by CAEB and GRAADECOM animators; women have good knowledge about the transmission and the prevention of malaria. However, they have not made the link between infant seizures and severe malaria.

Although genital infections are common and disturbing to women in the villages surveyed in the Koulikoro area, preventive, effective measures for fighting infections that may be sexually transmitted, such as the use of condoms and treatment of partners, were not mentioned by the respondents.

Other significant prevention measures against these diseases, such as child immunization and prenatal visits for pregnant women, were very rarely mentioned in either region.

Some women mentioned that when they are healthy, they do not think about prevention, so they do nothing to prevent these health problems.

It was often difficult for the health agents to state exactly what the people currently know about the prevention of common illnesses, but they stated that the IEC sessions take place at the health center on the following topics: prevention of malaria (appropriate use of insecticide-treated mosquito nets and SP for prophylaxis against malaria in pregnant women, mosquito net treatment); prenatal visits; breastfeeding; prenatal care; immunizations; prevention of acute

respiratory infections; prevention of genital infections and STI/HIV/AIDS; the importance of family planning; the causes of their illnesses; transmission, prevention and treatment; hygiene and sanitation (hand-washing before meals, treating well water with bleach, etc.); nutrition; nutrition for pregnant women; cooking demonstrations; preventing the consequences of traffic accidents.

"We advise mothers to protect their children from chills by dressing them warmly during the harmattan season."

"We advise fidelity, or otherwise the use of condoms."

"We advise them to wear a helmet."

—sample comments from Health Agents

The health agents believe that the people are poorly informed about malaria (transmission, symptoms, management); the importance of prenatal visits and childbirth at the health center; the usefulness and importance of immunizations for pregnant women and their children; acute respiratory infections; causes of conjunctivitis; tuberculosis. Some health agents even think that the people are poorly informed about the modes of transmission of all diseases mentioned.

"We note a lot of cases of seizures in babies due to delayed medical visits and care; people first consult traditional healers, then ambulatory practitioners and come to the health center late."

—Health Agent

According to health agents, this poor information is the result of lack of information and misinformation, and the fact that the local healthcare workers do not raise community awareness enough (unable to fulfill their role due to lack of funds). Other cited factors are people's reluctance, insufficient consciousness-raising activities, non-use of health centers, and shame in consulting about genital infections.

"Those who come to the Community Health Centers are somewhat informed; however, those who do not come at all know nothing."

"Sometimes, there are problems obtaining care for genital infections where polygamous couples are concerned. There is refusal by some husbands to seek care for themselves or their wives, and some of them are ashamed to present themselves at the health center for genital infections."

—sample comments from Health Agents

Health behaviors

In general, the women stated that they used traditional treatment first (using plants or seeing a traditional healer). If this does not work or their health worsens, they go to the health center. In every focus-group discussion, women mentioned going to the health center. The health centers mostly used are CSCOMs, medical offices, the Reference Center (Centre de Santé de Référence or CSRF) and the hospital.

According to the health agents interviewed, people first see the traditional healers, getting two to three days of treatments of herbal teas and medicinal plants; they also self-medicate using black market drugs. If there is no improvement, they then go to ambulatory practitioners (informal private nurses based in the villages) where they sometimes receive inappropriate treatment (inadequate dosages) for about 10 days. If this treatment does not work, they next go to the CSCOMs, about two or three weeks after the onset of the illness, which often results in complications.

The behaviors that usually harm patients' health as observed by the health agents include self-medicating; taking antibiotics when running a fever, which can conceal the actual medical status; using black market drugs; delaying their visit to the CSCOMs, believing that certain illnesses (anemia, yellow fever, certain psychiatric illnesses, etc.) cannot be cured at the CSCOMs; and/or taking traditional drugs leading to the development of other pathologies.

According to the health agents, the positive behaviors and knowledge mostly needed include quickly consulting the health center in case of illness (from the onset of the illness); pregnant women correctly following prenatal visits and immunizations; pregnant women coming to the health center to give birth; avoiding black market drugs; following health agent instructions; knowing the pitfalls of self-medicating and using plants; knowing that many treatments are free to pregnant women and children (since lack of funds is often why people do not come to the center); and getting information about hygiene and sanitation.

What the women appreciate about the health center services is having access to a checkup, treatment and information on how to take the drugs, how to feed a sick person, nutrition facts, being warmly welcomed and helped, and having access to quality drugs.

> *"At the Community Health Centers, the nurse checks you and gives you the appropriate drugs. And they also identify your illness and give you specific drugs that cure you."*
>
> *"At the Community Health Centers, you can be at ease with the staff. And for some illnesses, you need to go to the Community Health Centers for a faster recovery."*
>
> *—sample comments from women*

Some of the women appreciate the health agents' work and acknowledge the effort they make.

"We like everything they do at the Community Health Centers. The agents are always working hard and do not even take a break. But only God can decide if this will ever change."

—comment from one woman

Out of 180 women participating in the focus-group discussions in the study villages in both regions, 110 (61.1% of the women) said they visited a health center last year; this ratio is identical in the two regions (55/90). Women visited the CSCOMs on average once or twice for malaria, prenatal visits, childbirth, genital infections, ulcers, respiratory infections, high blood pressure, abdominal ailments and diarrhea.

The interviews with the healthcare providers revealed that the health centers receive 12 patients per day on average during the dry season (October to June) but this number doubles (24 patients or more per day) during the rainy season. The most frequently visited health centers are the CSCOMs in Fana and Fama, which receive an average of 22 patients per day during the dry season and 35 during the rainy season. The Kerela, Blendio and Nongonsouala CSCOMs receive at most 5 patients per day during the dry season (10 patients per day for the Dembella CSCOM) but this figure may reach 20 patients per day during the rainy season.

Some women stated that they go to a traditional healer because they lack resources.

"Some women prefer to go to a traditional healer just because it costs less than the Community Health Centers, but actually there isn't any illness that can't be cured at the hospital that the traditional healer can cure."

—comment from one woman

What the women like about the traditional healers is that they are friendly; also, they can cure their children inexpensively (sometimes 250 to 500 FCFA as a gift after the cure, or in-kind with a chicken or loincloths for an amount equivalent to 1,500 to 4,000 FCFA).

"We are warmly welcomed by the traditional healer and it costs less. He gives you drugs that can cure your illness."

—comment from one woman

What the women do not like about the health center visit is the high cost of prescriptions, particularly when they do not manage to cure their illness*;* unfriendly staff; carelessness; long wait times; unavailability of drugs; delays in referrals; and not being able to get treatment because of lack of funds (risking death).

"If the Community Health Centers don't cure you, you go to the CSRF or the hospital. What we don't like is that sometimes the patient doesn't get well in spite of all that."

"You don't have a choice when you're sick. You have to spend money. If you don't have enough money, the sick person dies. In fact, you buy drugs depending on your means. When the sick person dies, you are not happy!"

—sample comments from women

What the women do not like about going to a traditional healer is when the traditional healer cannot cure the illness, cannot do analyses, when he is in a bad mood or when he gives drugs that make the illness worse.

> *"If the traditional healer can't cure your illness, you are not happy, and then you go from traditional healer to traditional healer."*
>
> *"Sometimes, the traditional healer may be in a bad mood; sometimes, he may also give drugs that make the illness worse."*
>
> *—sample comments from women*

Use of health services and products

Services and drugs used; health service availability, accessibility and costs

The most used services in the two regions are consultations, treatments and pharmacy. Other services, such as examinations (lab and X-ray), prenatal visits, childbirth, cesareans, hospitalization, surgery and blood transfusions were mentioned in every focus-group discussion in the Sikasso region but rarely or not at all in the Koulikoro region.

Quite often the women do not know the names of the drugs being used, but they sometimes mentioned some drugs by name such as the antimalarials Quinimax, sulfadoxine-pyrimethamine, Nivaquine, and Efféralgan (analgesic). Other medicines mentioned were iron, serums, ointments, syrups, antimalarial drugs, antibiotics, anti-inflammatory drugs, pain relievers and de-worming medications. Essential generic drugs are available at the CSCOMs and the CSRFs for a small charge.

Costs of health services in the health centers in the areas were reported as follows:

Type of Service	Kouliloro	Sikasso
Consultations	300–1,000 FCFA	500–750 FCFA
Prenatal Visits	750–1,000 FCFA	750–1,250 FCFA
Injection	200 FCFA	100 FCFA
Delivery: Routine	7,500–10,000 FCFA	1,250–4,000 FCFA
Delivery: Complicated	35,000 FCFA (delivery and care)	
Minor Surgery		1,500 FCFA
Major Surgery		10,000–35,000 FCFA
IV Treatment		300–400 FCFA
Lab		750–1,500 FCFA
Medicines (per unit)		5–80 FCFA (Antibiotics: 150–250 FCFA; Injectables: 100–1,100FCFA)
Ambulance		25,000 FCFA

Costs in the local health centers are less than in the reference centers. Some services are available for free, such as some injections, some drug IV treatments, malnutrition care, quick malaria screening and bandaging. In the Koulikoro region, the women do not know the unitary cost of the drugs; they can point out the total cost of the prescription. The majority of the women stated they had visited the health center last year; the cost of the services received varied between 3,500 and 50,000 FCFA, depending on the illness. For example, a woman with her three children who fell sick at the same time had expenses of 50,000 FCFA and another one reported spending the entire year to get treatment for abdominal ailments. One woman even reportedly spent 80,000 FCFA to treat her child who had been bitten by a snake.

In the Sikasso region, women generally do not know the cost of services. According to the health agents, people pay on average 2,000 FCFA when they need care from a health center, and costs can range from 300 to 25,000 FCFA. The illnesses that lead to the highest treatment costs are severe malaria (10,000 FCFA or more) because of the IVs; typhoid fever (15,000 FCFA); snake bites (30,000 FCFA or more) because of the high cost of the anti-venom; severe anemia, sometimes requiring evacuation (7,500 to 50,000 FCFA); hernias (40,000 to 55,000 FCFA), hydroceles and lipomas (15,000 to 20,000 FCFA), which require surgery; large wounds (10,000 FCFA or above); and treatment of pelvic infections (6,000 FCFA).
Distances to CSCOMs range from 0 to 28 km,[1] according to the standards of the Ministry of Health of Mali. A CSCOM's covered area is 15 km for a population of 10,000 to 15,000 inhabitants. Distances to the CSRF range from 5 to 27 km, but the hospital may sometimes be as far away as 100 km.

People get to health centers by foot, bicycle, motorcycle/mototaxis, or ambulance (evacuation). The cost of motorcycle/mototaxi transportation ranges from 250 to 2,000 FCFA and by ambulance from 10,000 to 15,000 FCFA and may be as high as 25,000 FCFA in the Sikasso region.

CSCOM staff generally includes nurses, nurse's aides, matrons, a pharmacy manager, warehouseman/guard, cleaning personnel, and midwives from the village. In some CSCOMs, there are also physicians, laboratory personnel and female obstetricians.

The health centers are open every day of the week with both day and night service; there is always someone on duty. At the CSCOMs visited, there generally was a satisfactory number of personnel to ensure service; the average number of agents per CSCOM was eight. At one CSCOM, the doctor noted a lack of quality in the personnel. At the health center, the patients are usually seen in the order in which they arrived and wait time usually does not exceed 30 minutes. For emergencies, patients are seen as soon as they arrive. On the other hand, at one CSCOM, wait times as long as two to three hours were mentioned for prenatal visits and four hours for medical visits.

Traditional healers are generally found in the village or its vicinity but sometimes some of them are 20 to 30, or even 100 km from the village and people reach them by foot, bicycle or motorcycle. Travel costs range from 500 to 4,000 FCFA for the purchase of fuel for a

[1] 1 km = .621 miles

motorcycle. Traditional healer services cost 200 to 500FCFA or in-kind (three loincloths are equivalent to 4,000FCFA, and a chicken is equivalent to 1,500FCFA).

Health financing

Where do the women get the money to pay for health expenses?

There is no health insurance, assistance or loan system at the health centers. Health *mutuelle*s are not really present or known in this area; the patient must then pay everything out of pocket. If the patient cannot pay, sometimes the CSCOM will give him or her the products on credit; some people pay half, some of them return and pay, others never return; sometimes the CSCOM offers care (particularly the first treatment) while awaiting the arrival of the parents, or while waiting for the patient to be able to pay; some health agents have stated they have sometimes paid for patients' care from their own pocket when patients could not pay.

In the villages surveyed in the Sikasso and Koulikoro regions, the sources of funds for health expenses can be the women's husbands (sale of livestock, agricultural products, handcrafted products, loans from civil servants, *tontines*), *Saving for Change* group funds in the form of loans; children (civil servants, businesses, craftsmen, out-migration); or third-party loans (neighbor, parent). The women use the *Saving for Change* group funds they have borrowed for their income generating activities (IGAs) to cover their health care or borrow money from the group cashbox as a health loan so that they can obtain care. These health loans are reimbursed in the same way as other loans: the interest rate is usually between 5% and 10% per month (except in two groups surveyed where there was no interest rate on health loans), with late penalties of 100 FCFA at 5% of the amount borrowed per month. The amount of these health loans ranges from 2,500 to 50,000FCFA (depending on the liquidity available in the cashbox) and the term of reimbursement, from two to four months.

In the villages of the Sikasso area, where husbands handle all health expenses, some women help them by taking out loans from the *SFC* cash box.

In Koulikoro area villages, on the other hand, it is the women who are most often in charge of health expenditures; the husbands only intervene if the costs are high. Sources of income for these women are small trade, *tontines*, and the sale of grain, poultry and livestock. At the two health centers surveyed in this region (the CSCOMs of Fana and Kerela), the people sometimes receive care on credit and pay it back later. In some villages in the Koulikoro region, the NGO BorneFonden provides full coverage of the health expenses of the children it sponsors, as well as 60% of the health expenses of their parents.

The women would like to have support to grow profitable IGAs (sale of grain, livestock fattening, etc.). This would help them cover their health expenses. They would also like support for developing other strategies to save more and be able to cover their health expenses.

Analysis of results and areas for further study

According to the analysis matrix results, the trends, difficulties and implications for a health program with *Saving for Change* savings groups as well as topics requiring further analysis or clarification are as follows:

The most common health problems

Uncomplicated and severe malaria, diarrhea, acute respiratory infections, ulcers, genital infections, hypertension, hernias, back pain, abdominal ailments and anemia are the most common illnesses in the study villages in both regions.

The major problems or factors favoring these illnesses

Lack of information or misinformation about the causes of the illnesses and how to manage these illnesses at an early stage are major constraints. For example, seizures are very frequent in infants but the women mention them as an illness unto itself (they do not link them to severe malaria). The women visit the health center infrequently, and do so late, on average one to two weeks after the onset of the illness (when the illness is severe); they are ashamed to consult caregivers; they experience problems dealing with their partners in polygamous relationships; they have inadequate hygiene; and they self-medicate (using medicinal plants and black market drugs).

More in-depth analysis is needed to gain a better understanding of the causes of genital infections, diagnosis and treatment options. More information is also needed to better understand health center activities on diarrhea and malnutrition (which activities are carried out, their frequency, interviews, target, scope, reporting system, tools used) and become better acquainted with the partners working on combating diarrhea and malnutrition at the health center level.

Measures taken to prevent illness and challenges

To avoid illness, the women stated they use mosquito nets, hygiene/sanitation (drinking potable water; cleaning the yard; covering food; treating drinking water with bleach; washing hands before meals; eating healthy, nutrient-rich food; etc.), plants, prenatal visits; and child immunization. Some women say they do not do anything.

Nevertheless, problems persist with the non-use/poor use of mosquito nets, failure to apply appropriate hygiene measures, the lack of access to products (bleach) for treating drinking water and mosquito nets, infrequent to nonexistent prenatal visits (cultural problem, pregnancy should not be revealed) and the belief that illness is inevitable.

Problems with food security and improper nutrition are the result of women's insufficient earnings and lack of information about how to prevent malnutrition, including the use of local, nutrient-rich products and use of enriched baby cereals.

Patterns of care for illness and challenges

Generally, when the women or their families get sick, they use plants and black market drugs; they next go to a traditional healer, then to informal practitioners. When none of that works (some one to three weeks after the onset of the illness and/or when the illness has worsened) they then go to the CSCOM, the CSRF or the hospital.

The services used at the CSCOM include consultations, health care, pre- and post-natal visits, childbirth, immunizations, family planning and minor surgeries. At the CSRF and hospital levels, services include cesareans, blood transfusions, procedures (lab, X-ray), surgery and hospitalization.

Drugs used (pills, syrup, injections, ointments) mainly include anti-malarials, antibiotics, pain relievers, anti-inflammatory drugs, de-worming medications, medicines to reduce fever, folic acid and iron, and contraceptives.

The major problems around access to care include: delays in visiting the health center; the lack of financial means to access health services; weak decision-making power of women; largely disregarding/neglecting symptoms of illnesses; women do not know that some products/services are available for free at the health centers; distance from the health centers and limited means of transportation; and preferences for use of traditional care combined with the belief that some illnesses cannot be cured at the health center or that some health center products may aggravate the illness.

There were also reports of interruptions in stocks of drugs at the health centers, deficiencies and obsolescence of medical/technical material at the health centers (blood pressure meters, thermometers, childbirth kits and minor surgery), insufficient management and supervision, and problems with the availability and reliability of local healthcare workers. These factors could work to reduce trust and perceptions of reliability of these local services.

More in-depth analysis is needed to learn more about the profile of the local healthcare workers, gain a better understanding of how they operate (what they do, topics covered, objectives, frequency of activities, interviews, scope, reporting system, tools used) and learn more about partners working with the health centers and their areas of intervention.

Other health behaviors: family planning

The family planning methods mentioned by the women are the modern methods (the pill, injections, birth control beads, condoms, Norplant, IUD), the traditional method (amulet or *Tafo*), the breastfeeding method (MAMA) and abstinence or the daughter returns to her mother until the baby is walking. The women are aware of the effectiveness and benefits of family planning: the mother is able to rest and to be healthy, children remain healthy, lower family expenses, etc.

The major problems encountered include the fact that some husbands do not agree with family planning; religious beliefs; and secondary effects of contraceptives.

More in-depth analysis is needed to better understand the family planning activities of the health centers (activities carried out, frequency of activities, interviews, target, scope, reporting system, tools used) and become better acquainted with the partners working at the health-center level on family planning.

Sources of women's healthcare financing and difficulties

The major sources of funds for women's health expenses are husbands (sale of agricultural and hand-crafted products, wages and *tontine*), women's IGA earnings, the *Saving for Change* box, third-party loans, children and sale of livestock, grain or poultry.

The difficulties they face include the low earning from women's IGA, fear of not being able to reimburse the *Saving for Change* group, diverting the purpose of the women's IGA loans to health care, receiving care on credit at the health center due to lack of means, and impoverishment of the women due to the sale of their assets.

There are *mutuelles* in very few Sikasso villages. Most of the women have never heard of *mutuelles* but find the concept interesting. More in-depth analysis is need to better understand how the *mutuelles* work in Mali and about any *mutuelles* that may be operating or forming in these areas.

Implications for program planning

These findings have a number of implications for consideration in planning an effective health program for *Saving for Change* groups. These are summarized below:

Health education

More education is needed on the most common health problems, and training for animators on the use of these modules are needed to strengthen the women's knowledge about common illnesses, raising the consciousness of women about when to consult the health center and making them aware of the hazards of self-medication and use of black market drugs. Women also need information and skills to strengthen their knowledge and capacity to plan ahead for illness, for family planning, to assure use of insecticide-treated mosquito nets, improve hygiene, improve prenatal care, improve care and feeding of young children to prevent malnutrition, and implement encouragement and information about how to use the health centers to prevent and manage illness. Specific objectives of new education should be to improve health behaviors around prenatal care; prevention and treatment of diarrhea; care and feeding of young children; use of the health center; effective use of insecticide-treated bednets—including how and where to obtain nets; and reducing self-medication and use of black market drugs.

Creative approaches may be required to help assure that new knowledge is translated into behavior change. For example, with malaria, *Saving for Change* groups could be engaged to help improve net use. Or with family planning, women who have completed their motherhood cycle could be encouraged to talk about family planning with young people (sons, daughters,

daughters-in-law) and to help raise the consciousness of husbands about the benefits and advantages of family planning.

Capacity and tools to pay for healthcare services

Establishing an effective health program for *Saving for Change* groups implies exploring the possibilities for helping women to develop their IGAs with business management modules, to systematize health loans within *Saving for Change* groups and to support women to establish/ strengthen the solidarity funds. Additional information is needed about the availability and affordability of local *mutuelles* to assess the appropriateness and potential value of this community-based insurance for the *Saving for Change* group members.

Access to affordable healthcare services and products
To use information and skills for improved health protection, women and their families also need to be able to access affordable, quality healthcare services and products.

This suggests a need to collect more information about the services and activities of local health centers and other NGO healthcare providers so that this information can be shared with *Saving for Change* groups. The establishment of ongoing relationships between the health centers, other health providers, and sources for health products such as bed nets, ORS and water treatment products, can help assure a two-way flow of information about needs and available services and to explore various strategies and linkages with potential benefit for both *Saving for Change* members and the healthcare providers.

5. Conclusion

Summary of results

The most common health problems in the villages of the study regions are uncomplicated and severe malaria, diarrhea, acute respiratory infections, ulcers, genital infections, hypertension, hernias, back pain, abdominal ailments and anemia. Malaria affects every age group, both men and women, and was mentioned in all focus-group discussions as the most frequent illness in the community.

Generally, aside from malaria, which women know is transmitted by mosquito bites, and diarrhea, which they often link to a lack of hygiene, they do not know the causes of these illnesses. Most of the groups received training about malaria by CAEB or GRAADECOM animators. They also had a general knowledge about preventing diarrhea and malnutrition from other NGOs, organizations or GRAADECOM animators in the Sikasso region.

Generally, when the women or their families get sick, they use plants and black market drugs; they next go to a traditional healer, then to informal practitioners. When none of that works (some one to three weeks after the onset of the illness and/or when the illness has worsened), they then go to the CSCOM, to the CSRF or the hospital.

What the women appreciate about the health center services is having access to a checkup, treatment and information on how to take the drugs and how to feed a sick person as well as nutrition facts; being warmly welcomed and helped; and having access to quality drugs.

Some factors may, however, negatively influence use of the health centers. What the women do not like about the health center visit is the high cost of prescriptions; when they do not manage to cure their illness*;* unfriendly staff; carelessness; long wait times; unavailability of drugs; delays in referrals; and when the patient dies for lack of funds.

The major problems or factors favoring these illnesses are women's misinformation about the causes of the illnesses; seizures are very frequent in infants but the women mention them as an illness unto itself (they do not link them to severe malaria); the women visit the health center infrequently, and do so late, on average one to two weeks after the onset of the illness (when the illness is severe); the shame of consulting a caregiver; problems dealing with partners in polygamous couples; inadequate hygiene for genital infections in shared toilets, and self-medication (abusive use of medicinal plants and black market drugs); non-use/poor use of mosquito nets; failure to apply appropriate hygiene measures; infrequent to nonexistent prenatal visits (cultural problem, pregnancy should not be revealed), popular belief (illness is inevitable, some illnesses cannot be cured at the health center, some health center products may aggravate the illness); delays in visiting the health center; lack of financial means; weak decision-making powers of the woman—largely disregarding/neglecting symptoms of illnesses; women do not know that some products/services are available for free at the health centers; informal practitioners; cost of services and evacuations; distance from the health centers; and limited means of transportation.

At CSCOMs, a package of primary services is provided (medical visits, health care, pre- and postnatal visits, childbirth deliveries, immunizations, family planning and minor surgery). At the reference center level (CSRF and hospital), a complementary package of services is available (cesareans, blood transfusions, tests [lab, X-ray], surgery and hospitalization). Essential generic drugs are available at both the CSCOMs and CSRFs. The health centers are open every day of the week with both day and night service; there is always someone on duty. At the CSCOMs visited, there generally was a satisfactory number of personnel to ensure service; the average number of agents per CSCOM was eight. Wait times generally do not to exceed 30 minutes at the CSCOMs; for emergencies, patients were seen as soon as they arrived. On the other hand, at one CSCOM, wait times as long as two to three hours were mentioned for prenatal visits and four hours for medical visits.

The major problems encountered at the health center level are interruptions in stocks of drugs, deficiencies and obsolescence of basic medical/technical material (blood pressure meters, thermometers, childbirth kits and minor surgery items), insufficient travel resources for strategic management and supervisory purposes, non-recycling of the roles and responsibilities of local healthcare workers, their lack of motivation (financial or material) and lack of IEC support for local healthcare workers.

The most used services in the two regions are consultations, health care and pharmacy. Other services, such as examinations (lab and X-ray), prenatal visits, childbirth, cesareans,

hospitalization, surgery and blood transfusions were mentioned by every focus group in the Sikasso region, but very little or not at all in the Koulikoro region.

The costs of services vary from one CSCOM to the next. The illnesses that lead to the highest treatment costs are severe malaria; typhoid fever; snake bites; severe anemia sometimes requiring evacuation; hernias; and hydroceles and lipomas, which require surgery; large wounds; and treatment of pelvic infections (costs range from 6,000 to 80,000 FCFA).

There is no health insurance, assistance or loan system at the health centers. In general, in both the Koulikoro and Sikasso regions, the health *mutuelles* are rare to nonexistent. The patient must then "pay everything out of pocket." The major sources of funds for women's health expenses are husbands (sale of agricultural and handcrafted products, wages and *tontine*), women's IGA earnings, the *Saving for Change* group, third-party loans, children and sale of livestock, grain or poultry. The difficulties they face include low earning from women's IGA, fear of not being able to reimburse the *Saving for Change* group, diverting the purpose of the women's IGA loans to health care, receiving care on credit at the health center due to lack of means, and impoverishment of the women due to the sale of their assets.

Distances to CSCOMs range from 0 to 28 km,[2] according to the standards of the Ministry of Health of Mali. A CSCOM's covered area is 15 km for a population of 10,000 to 15,000 inhabitants. Distances to the CSRF range from 5 to 27 km, but the hospital may sometimes be as far away as 100 km. People get to health centers by foot, bicycle, motorcycle/mototaxi or ambulance (evacuation). The cost of motorcycle/mototaxi transportation ranges from 250 to 2,000 FCFA and by ambulance from 10,000 to 25,000 FCFA.

In the villages of the Sikasso and Koulikoro regions, the women are familiar with the most common family planning methods, which they mentioned in the majority of focus-group discussions (condoms, injections, pills and birth control beads); Norplant, IUDs and abstinence were rarely mentioned. They also frequently mentioned a traditional family planning method using a belt called *Tafo* in the local language.

The women appreciate family planning for the many advantages: good health for the woman, allowing her to get rest, children remain healthy, and lower family expenses. Family planning arrived a little late for some who have completed their motherhood cycle. It was the view of some of the women that their husbands had become aware of the advantages of spacing births and limiting the number of children, for the health of the woman and children, as well as lowering family expenses; on the other hand, other men do not want to hear about family planning because they want more labor. At the Nongonsuala CSCOM, the health agents have received the support of the USAID-funded Keneya Ciwara program which provides training to local healthcare workers ensuring their skills are current. At the Fana CSCOM, the NGO Marie Stopes International–Mali works in the area of family planning by making contraceptive methods available at a unit price of 300FCFA.

[2] 1 km = 1.6 miles

Recommendations/Suggestions

In view of the results of the study, we have formulated the following possible interventions to consider for integration into the *Saving for Change* groups:

- Improve use of insecticide-treated mosquito nets. Reinforce education messages, help the women determine where and how to obtain insecticide-treated mosquito nets, and address other barriers that limit effective use of mosquito nets by *Saving for Change* members.

- Add education topics. Provide modules that address most common health problems. Some modules developed by Freedom from Hunger could be adapted to serve this purpose: Malaria, Illnesses that Attack Our Children, Family Planning, Women's Sexual and Reproductive Health, Diarrhea, Breastfeeding and HIV/ AIDS. Establishing a family planning strategy for *Saving for Change* groups should take into account raising consciousness of women who have completed their motherhood cycle about talking about family planning with young people (sons, daughters, daughters-in-law), and raising the consciousness of husbands about the benefits and advantages of family planning.

- Add education modules to improve knowledge and skills to plan, prepare for illness and better manage the impact of illness. Education should be directed at specific health behaviors for improvement, including: improved use of prenatal care; more frequent and earlier use of health center services to prevent and manage illness; and reduced reliance on self-medication, including the use of black market drugs. The modules Plan for Better Health and Using Health Care Services developed by Freedom from Hunger could be adapted and put to use to improve knowledge and skills around preparing for illness and more effective use of local services.

- Establish an ongoing relationship with local healthcare centers and other key providers of healthcare services to support. Efficient communication and coordination with the healthcare centers and other partners working on health issues in the villages to support the development of a better understanding of health center activities and available services that can be shared within the *Saving for Change* groups would be highly beneficial, as would exploration of potential linkages with the health centers to improve access, quality, and affordability of health services to *Saving for Change* members.

- Explore options for assisting the women to determine where and how to obtain products for safe water treatment, use of local food products to improve nutrition, and other essential health products to help prevent and manage most common diseases.

- Establish strategies to help the women develop their IGAs by training them on microbusiness development. Systematizing health loans within *Saving for Change* groups, supporting the women in establishing/building solidarity funds and finding new ideas for using their group's funds more efficiently, may help the women improve their living standards, fight poverty and strengthen their ability to handle their health expenses. The module Plan for Better Health could be adapted and used to build the women's skills in managing their family health expenses.

- Develop a more in-depth analysis to better understand how the *mutuelles* operate in Mali to create linkages between *Saving for Change* groups and the health *mutuelles* in the communities offering this possibility.

Appendices

Appendix 1

Focus-Group Discussion Guide for Savings Group Members

Purpose
To understand the health needs and health services available to savings group members.

Procedure
Preparations
The exercise is best done in a closed area with 8–10 members of a savings group.

Steps
1. Introduce yourself and welcome participants.

2. Explain the market research objectives.

3. Review logistics with participants:
   - Group discussions will take 1–2 hours.
   - All information received will be confidential.

4. Ask the following questions:

Common health problems
- What are the most common health problems you and your family face?
  - What are the common health problems babies face? Why?
  - What are the common health problems children face? Why?
  - What are the common health problems women face? Why?
  - What are the common health problems men face? Why?
- What time during the year do you face these health problems most? Why?
- What do you do to **not** get sick with these health problems?

Health behaviors, services and costs
- What do you do when you or your family gets sick?
- Where do you go for treatment? (traditional healer, health lady in village, pharmacy, health center)
  - What do you like about going there for treatment?
  - What do you dislike about going there for treatment?
  - How far away is it (km or minutes)?
  - How do you get there? (If use bus, how much is a roundtrip bus ticket?)
  - What services or medicines do you use?
  - How much does each service or medicine cost?
  - Where do you get the money to pay these costs? (If husband, where does he get the money?)
  - Where do you prefer to get the money to pay for these costs?
- What are other places people go when they get sick? Why?

    - How far away are these places?
    - How do they get there? (If use bus, how much is a roundtrip bus ticket?)
    - What services or medicines do they use?
    - How much does each service or medicine cost?
    - Where do they get the money to pay these costs? (If husband, where does he get the money?)
- Raise your hand if you have been to a health center in the last year.
    - Where?
    - What for?
    - How many times?
    - How much did it cost?

Specific health knowledge

- What have you heard about protecting against malaria?
- What have you heard about protecting against diarrhea?
- What have you heard about protecting against malnutrition?
- What have you heard about planning when and how many children to have (family planning)? What do you think about this?
- What have you heard about *mutuelles*?

Other

- What could you do to improve your health and your family's health?
- What are some ways you think the NGO can help you improve your and your family's health?
- What else do you want to share with us that we have not discussed already?

5. Summarize the key points and clarify any points of confusion.

6. Conclude the discussion
    - Ask participants for questions they might have about the research.
    - Explain that the information will be utilized to determine how the NGO may be able to help them protect their health. But ensure that no promises are made.

Thank participants for participating.

Appendix 2

Interview Guide
Health Providers

Purpose
To understand the health needs and health services available to savings group members.

Procedure
Preparations
The interview should be conducted with key staff of a health center who have knowledge about the patterns of member health needs and available health services.

Steps
1. Introduce yourself.

2. Explain *Saving for Change* and the market research objectives.

3. Review logistics with person being interviewed:
   - Interview will take 60–90 minutes.
   - All information received will be confidential.

4. Ask the following questions:

Common illnesses
- What are the most frequent health problems this health center treats?
  - Who is affected the most by them? (babies, children, women, men)
  - Why are these people affected the most?
  - What might be some reasons for the frequency of these illnesses?
  - What time during the year do people face these illnesses most?

Note: *If available, ask the provider for statistics on the most frequent diseases and profile of affected patients (age, gender, socioeconomic background, etc.).*

Health knowledge
- What do members currently know about preventing common illnesses?
- What, if any, are some of the health issues about which members might be misinformed?
  - What might be some of the reasons for this misinformation?
- What type of health-related information can members get from this health center?

Health behaviors and patterns of health service utilization
- How do members treat illness prior to coming to this health center?
- How long do members wait to seek treatment at the health center?
- What typical behaviors do you observe among patients that are harmful to their health?
- What positive behaviors and knowledge are most needed by patients?

Availability and accessibility to quality health care and health products

- How many staff work at this health center?
- What types of staff work at this health center? (doctors, nurses, midwives, others)
- How many patients does the center typically take care of during a day or week?
- What days and hours is the health center open to people seeking care?
- How far do people travel (in km and minutes) to come to this health center? (If they come by bus, how much does a roundtrip bus ticket cost?)
- What are the services and medicines provided by this health center? (routine, preventative, curative and emergency care)
- What are the waiting times for the different services and medicines?
- What are the main challenges to providing quality and timely care to patients that this health center has?

Costs of illness, treatment and financing of health services

- What are the most common services and medicines people get at this health center?
- How much does each common service and medicine cost?
- How do people pay for these services?
- Which illnesses have the highest treatment costs? Why?
- How much do people pay (on average) for services when they come to the health center?
- What do you do when a patient cannot pay?
- Do you offer subsidies or loans for health services? If yes, how does it work?
- Do you accept insurance? If yes, how does it work?
- Do you work with *mutuelles*?
  - If yes, how does it work?
  - If no, why not?

Specific health knowledge

- Are you or other organizations delivering education on health topics? What topics? When? How? (delivery channels)
- What do you or other organizations do in the areas of prevention of malaria, diarrhea and malnutrition?
- What do you or other organizations do in the area of family planning?
- What do you think needs to be done in the areas of malaria, diarrhea, malnutrition and family planning?

Other

- What are some ways in which NGOs can help protect the health of members and their families?
- What else do you want to share with us that we have not already discussed?

5. Summarize the key points and ask for clarification on any points of confusion.

6. Conclude the discussion
   - Ask whether interviewee has questions about the research.

- Explain that the information will be utilized to determine how the NGO might be able to help savings group members protect their health.
- Thank interviewee for participating.

Appendix 3

Health Market Research with *Saving for Change* savings groups in Mali—Analysis Matrix

Key questions	Trends	Difficulties	Implications for a health program with *Saving for Change* Savings Groups	Topics needing further exploration
Q1. What are the most common health problems?				
Q2. What do you do to **not** get sick with these health problems?				
Q3. What do you do when you or your family get sick? Where do you go for treatment?				
Q4. What services or medicines do you use?				
Q5. Where do you get money to pay for health costs?				
Q6. What have you heard about protecting against malaria?				
Q7. What have you heard about protecting against diarrhea?				
Q8. What have you heard about protecting against malnutrition?				
Q9. What have you heard about planning when and how many children to have? What do you think about this?				
Q10. What have you heard about *mutuelles*?				