



## **Health Financing: A New Role for Microfinance Institutions? Freedom from Hunger Research Paper No. 16**

*Sheila Leatherman and Kimberley Geissler, Department of Health Policy and Management, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA,  
Bobbi Gray and Megan Gash, Freedom from Hunger, Davis, CA, USA*

### **Abstract:**

An innovative and scalable approach, health financing by microfinance institutions can expand existing health-financing options for the poor. We examined healthcare-seeking behavior, health costs and health-financing methods among microfinance clients in Bolivia, Benin and Burkina Faso. Health costs and lost productivity were substantial. Clients benefit from assistance, including health savings, health loans and health micro-insurance. Microfinance institutions offer advantages in developing health-financing options: global reach, expertise in loans and savings, and their mission to facilitate household financial stability. Health-financing products hold considerable potential but require careful design to optimize value and minimize risk to clients.

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## **Executive Summary**

### ***Poor health is a result of and a cause of poverty***

Poor health and the inability to access health care are key factors both leading to and resulting from poverty. Facilitating access to health-related services is important for the poor for a number of reasons: the disproportionate burden of disease among the poor; the burden of health costs with associated risk of further impoverishment; and the effect of poor health on productivity and progress towards economic empowerment.

### ***Freedom from Hunger's microfinance and health program***

To address the burden of health costs among the poor, Freedom from Hunger, a U.S.-based international development organization, partnered with microfinance institutions (MFIs) to offer integrated financial and health-related services in a four-year demonstration in five countries, known as the Microfinance and Health Protection (MAHP) initiative, funded by the Bill & Melinda Gates Foundation. Each MFI developed a portfolio of services that included combinations of health education, linkages to health providers, community health workers and the sale of health products (e.g. bednets and oral rehydration solution), health savings, health loans and health micro-insurance. The initiative tested whether the integration of health financing for microfinance clients in the form of health savings and health loans could deliver positive health, social and financial impacts for clients and be financially sustainable for MFIs.

### ***Direct and indirect health costs are significant among the poor***

We examined healthcare-seeking behavior, health costs and health-financing methods among microfinance clients in Bolivia, Benin and Burkina Faso. We found very significant spending on direct health costs as a percentage of income, ranging from 22% in Bolivia to 67% in Burkina Faso. In fact, 46% of households in Benin, 17% of households in Bolivia and 65% of households in Burkina Faso experienced catastrophic levels of spending on health costs. Additionally, the majority of health costs in all three countries were for medications. Clients lost significant amounts of productive time to illness and care-giving, averaging a loss of three to four days per household in Burkina Faso and Benin; in Bolivia, 26% of households interviewed lost six days of work or more.

### ***Microfinance institutions can play an important role in health care***

An innovative and scalable approach, health financing by microfinance institutions can expand existing health-financing options for the poor. There are more than 3,500 MFIs around the world providing credit and other financial services to more than 200 million households—collectively about half-a-billion people—in support of income-generation and consumption. MFIs may provide a crucial link for households, allowing them to save and borrow specifically for health costs. This may eliminate some of the barriers to treatment-seeking and help modulate a “health shock,” a crisis presented by a healthcare need that jeopardizes the already fragile economic status of the poor.

MFIs offer advantages in developing health-financing options such as health savings, health loans and health micro-insurance: global reach, expertise in loans and savings, and their mission to facilitate household financial stability. Health-financing products hold considerable potential but require careful design to optimize value and minimize risk to clients.

## Introduction

Poor health and the inability to access health care are key factors both leading to and resulting from poverty (Narayan & Patesch, 2000). Facilitating access to health-related services is important due to the disproportionate burden of disease among the poor (Mathers et al., 2008); the burden of health costs and associated risk of further impoverishment (McIntyre et al., 2006; Russell, 2004); and the effect of poor health on productivity and progress towards economic empowerment (McIntyre et al., 2006; Russell, 2004).

There is a clear need to expand health-financing options for the poor in developing countries, as affordability represents a major barrier to access. Existing microfinance institutions (MFIs) are beginning to offer new types of financial products to address this critical need. Among innovative and scalable approaches to health financing for the poor, MFIs represent a unique opportunity. More than 3,500 MFIs globally provide credit and other financial services to more than 155 million households—collectively about half-a-billion people—in support of income-generation and microenterprise. Estimates show at least 34 million of these households are very poor (Leatherman & Dunford, 2010). MFIs can provide a crucial role, allowing households to save and borrow specifically for health costs. Health financing can eliminate some barriers to treatment-seeking and help modulate health crises and their associated costs (Leatherman et al., 2010).

The financial and time costs of illness and treatment are a large burden, representing a simultaneous assault of high treatment costs and reduced income due to reduction of productive labor (McIntyre et al., 2006; Russell, 2004). The size and frequency of these costs have important impacts on financing health expenditures; health costs often come in peaks of intense cost burdens over a few days or weeks instead of being evenly distributed over time (Russell, 2004). Households' ability to cope is influenced by the type, severity and duration of illness (Russell, 2004). Generally, households pay the costs of illness by using current income and savings, by reducing consumption, by borrowing money or by selling assets (McIntyre et al., 2006; Russell, 2004; Whitehead et al., 2001). Borrowing money and selling assets result in additional costs, such as very high interest rates or the devaluation of large assets (e.g., sale of livestock at low prices) accompanied by the sacrifice of future income streams (Kruk et al., 2009; Leive & Xu, 2008). These financing and coping mechanisms may have lasting effects on the ability of households to withstand future shocks, creating a cycle of economic vulnerability and poverty (Leive & Xu, 2008; Whitehead et al., 2001).

To address the burden of health costs among the poor, Freedom from Hunger, a U.S.-based international development organization, partnered with MFIs to offer integrated financial and health-related services in a four-year demonstration in five countries, known as the Microfinance and Health Protection (MAHP) initiative, funded by the Bill & Melinda Gates Foundation. The portfolio of services included health education, community health workers, health savings, health loans, health micro-insurance, linkages to health providers and the sale of health products (e.g., bednets and oral rehydration solution). The initiative tested whether the integration of health financing for microfinance clients in the form of health savings and health loans could deliver positive health, social and financial impacts for clients and be financially sustainable for MFIs.

In this paper, we present data from household-level surveys and qualitative interviews. We find high health costs for MFI clients in Benin, Bolivia and Burkina Faso, describe issues and barriers in treatment-seeking behavior and examine the potential for health-financing products offered by MFIs to help facilitate access to necessary medical care.

## **Methods**

In Burkina Faso and Bolivia, extensive household surveys were conducted with randomly selected microfinance clients of Le Réseau des Caisses Populaires du Burkina (RCPB, n=192 households) and Crédito con Educación (CRECER, n=266 households), respectively. In Benin, surveys were conducted with randomly selected female community members (n=3,623 households) in villages served by the MFI Promotion et l'Appui au Développement de Micro-Entreprises (PADME). The household surveys analyzed in Burkina Faso (October–December 2009) and Benin (February and November 2009) were collected post-intervention. The data from Bolivia (January–February 2007) derive from the baseline survey because full data from the endline survey were not available. For each of the three countries, we combined data from treatment and comparison areas to focus on understanding health and health-financing needs of these populations and to increase our sample size for estimates of health costs, which were not significantly different after the intervention. For the analysis of health-financing products, we limit the analyses to a subset of clients that were eligible for the intervention in the treatment areas only.

The surveys included questions about socioeconomic status; incidence of illness episodes; costs of seeking treatment; financing methods for health costs; and time spent incapacitated by poor health. Additionally, we collected data regarding the impact of poor health on households and information regarding preferences for health-financing options.

Health costs were collected for anyone reporting that she or a family member was sick and sought treatment in the 30 days prior to the survey. To determine the impact of illness on productivity, days of work missed were recorded for a household member's own illness or for the time spent in care-giving for another household member. In Benin, questions about food and lodging costs, travel time and costs (including drugs and labs), and number of days sick were only asked for children in the household; therefore, reported values of these measures are likely to underestimate costs and time for the entire household. Some of the questions regarding health costs were asked for all household members; from this, we know that a small proportion of adults were sick relative to children.

The seasonality of illness is important in analyzing health costs and financing. The survey in Bolivia was conducted in January and February, reported as low-frequency months for illnesses during market research previously conducted there (Alcon et al., 2006). Thus, our data may underestimate the frequency and annual cost of seeking treatment. In Burkina Faso, market research found the period October to December, when the survey was conducted, to be after high season for malaria; however, stomach pains and other illnesses are common during these months. Other periods, particularly during the rainy season, were mentioned as times with high healthcare expenditures, indicating our annualized estimate is likely an average period of health expenditures (Traore et al., 2006). The survey in Benin was conducted in two waves, before and after the rainy season, meaning

seasonality issues exist within the data set. However, roughly equal numbers of villages reported health costs before and after the rainy season. Thus, if differences exist between periods, they likely average out within the data set (Gray & Ekoue-Kouvahey, 2010). To account for the fact that health costs may vary significantly throughout the year depending on season, illness types and availability of funds for treatment, we calculated a range of annualized health costs based on monthly health costs gathered in the survey.

Additional details about sampling, survey implementation, qualitative data collection and household income calculations can be found in the Technical Appendix.

## Results

Important findings emerge regarding self-report of illness, exposure to high direct health costs, experience of large losses of productive time, and threats to household resources for health expenditures. These data provide a useful foundation for examining health-financing needs, challenges and impact.

### Participation

Descriptive statistics for respondents are given in Table 1. As shown by the comparison between estimated GNI per household<sup>i</sup> and reported annual household income, our respondents were poorer than average households in each country (OANDA, 2010; The World Bank, 2010).

### Reports of Illness and Treatment-Seeking Behavior

Wide variation occurred in the percentages of households that reported a household member was sick in the previous 30 days, ranging from 58% of respondents in Burkina Faso to just 17%–18% in Benin and Bolivia (Table 2).

The variability is likely due in part to the seasonality of data collection. The non-use of care for those reporting illness ranged from 7% in Bolivia to 40% in Benin.

Similar estimates based on national surveys report non-use of care from 20%–86% (Xu et al., 2007). A previous study in Burkina Faso found non-use of care from 36%–66% depending on the season (Sauerborn et al., 1996).

	<b>Burkina Faso</b>	<b>Bolivia</b>	<b>Benin</b>
GNI per capita (2008 USD)*	\$480	\$1,460	\$700
HH Size = Total Fertility Rate (2010 est) + 2	8	5	7
Estimated GNI per household (2008 USD)	\$3,941	\$7,402	\$5,180
<b>Respondent Characteristics</b>			
Number of respondents	192	266	3,623
Female (% of respondents)	44%	100%	100%
Number of respondents for age	188	266	3,579
Average age (in years)	39	40	31
	(10)	(13)	(7)
Number of respondents for income	141	265	2,293
Reported Annual Income (USD)†	\$2,315	\$3,415	\$2,932
	(\$4,914)	(\$2,834)	(\$5,089)
Notes: Standard errors in parentheses.			
* Downloaded from the World Bank data collection, indicator is for GNI per capita, Atlas method (current USD). Total fertility rate is from CIA <i>World Factbook</i> .			
† The exchange rate information is from OANDA online. The surveys collected information in the currency of the country. For Benin and Burkina Faso, the currency is converted from CFA francs to USD as of December 1, 2009 at a rate of 428 CFA francs to 1 USD. For Bolivia, the currency is converted from Bolivianos to USD as of January 1, 2007 at an exchange rate of 8 Bolivianos to 1 USD. For comparisons, all costs and income throughout the article are given in USD. No accommodation is made for inflation.			

### Direct Health Costs

<sup>i</sup> Calculated as the [total fertility rate nationwide (2010) + 2 (heads of household)]\* per capita GNI (2008).

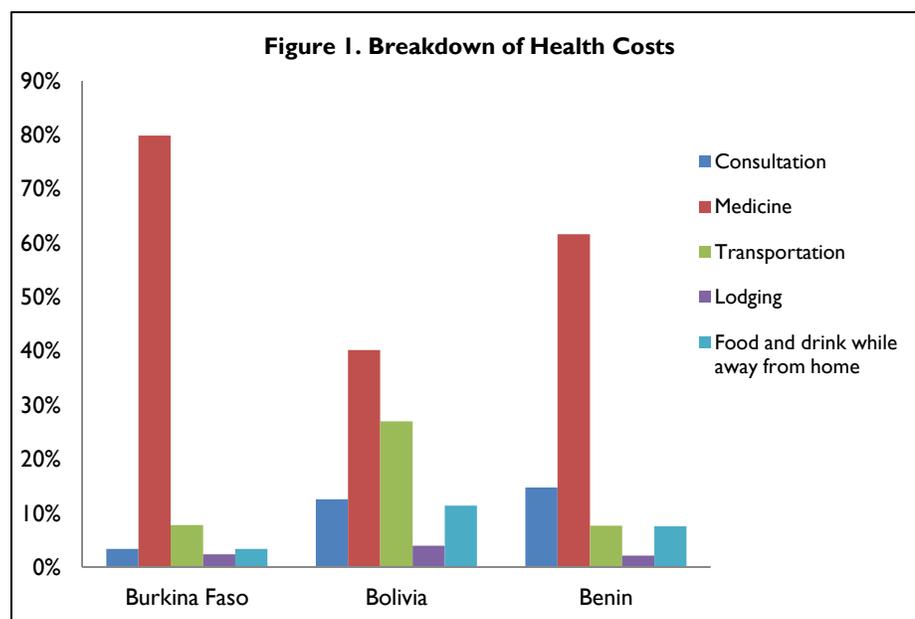
Direct health costs are significant, particularly relative to household income (Table 2). Direct costs include medical consultations, medications, and travel (transportation, lodging and food) when household members were away from home. The definition of catastrophic health spending in the literature ranges from 10% of annual income or expenditure (McIntyre et al., 2006; Russell, 2004) to 40% of annual income after accounting for subsistence needs (Xu et al., 2003). When using annualized health costs (calculated as health costs over last 30 days  $\times$  12) and annual income, we found very significant spending on direct health costs as a percentage of income, ranging from 22% in Bolivia to 67% in Burkina Faso. In fact, 46% of households in Benin, 17% of households in Bolivia, and 65% of households in Burkina Faso experienced catastrophic levels of spending on health costs. We define catastrophic spending as having direct annual health costs (30-day costs for 12 months) greater than 10% of annual household income. The high level of variability in direct costs is likely due in part to differences in health services available for treatment in each region.

To account for the fact that health costs vary throughout the year due to seasonality, we conducted a simulation to calculate a range of annualized health costs. If health costs as reported for this 30-day period-plus ranged from 25%–75% of this period for 11 other months of the year, then direct health costs as a percentage of annual income would range from 10%–25% in Benin, 7%–17% in Bolivia and 21%–52% in Burkina Faso. These percentages are considerably higher than direct costs as a percentage of income found in systematic literature reviews of health costs; in these studies, the

<b>Table 2: Direct Health Costs</b>			
	<b>Burkina Faso</b>	<b>Bolivia</b>	<b>Benin</b>
<b>Health and Health Costs Information</b>			
In the last 30 days, respondent or other member of household has had a health problem (percentage of households)	58%	17%	18%
Number of respondents for seeking treatment	111	44	640
Sought treatment outside of home for illness (percentage of households)*	86%	93%	60%
<i>Health Costs for those seeking treatment</i>			
Consultation (USD)	\$1.44 (\$3.63)	\$1.01 (\$1.36)	\$3.22 (\$13.69)
Medicine (USD)	\$71.84 (\$228.06)	\$37.30 (\$122.21)	\$14.05 (\$26.09)
Transportation (USD)	\$3.22 (\$12.58)	\$2.32 (\$6.57)	\$1.37 (\$2.80)
Lodging (USD)	\$3.86 (\$24.87)	\$3.98 (\$16.87)	\$1.17 (\$5.62)
Food and drink while away from home (USD)	\$2.24 (\$8.33)	\$1.70 (\$6.37)	\$1.90 (\$5.44)
Total Health Costs (USD)	\$82.60 (\$244.35)	\$46.31 (\$131.78)	\$21.71 (\$37.42)
Number of households with Health Costs information	95	41	385
Number of households with Health Costs and income information†	74	41	260
Total Health Costs as a percentage of income‡	67%	22%	32%
Notes: Standard deviations in parentheses			
* If anyone in the household sought treatment outside of home for illness, then she is included in this percentage. For example, if two household members were sick and only one sought treatment, this is given a value of "Yes" for whether the household sought treatment outside of the home.			
† Three outliers have been removed from the calculation for Burkina Faso. These three households reported health costs for incidents in the last 30 days that were larger than their reported annual household income. Two of these had somewhat high expenses (slightly higher than average) but low incomes, while the third had very high expenses. These outliers have not been removed from the health costs or income averages. With these outliers included, there are 77 respondents in Burkina Faso with health costs and income information, average total health costs as a percentage of income [(30-day cost $\times$ 12)/income] is 190%, and average total health costs as a percentage of income [30-day cost/income] is 16%. (The simulation for the range of costs noted in the paper also excludes these three observations.)			
‡ Calculated as [(30-day cost $\times$ 12)/annual income]			

average yearly costs as a percentage of annual household income ranged from 2.5%–16% (McIntyre et al., 2006; Russell, 2004).<sup>ii</sup>

The majority of health costs incurred by microfinance members and their families in each country were for medication (Figure 1). Qualitative interviews showed that self-treatment was often the first line of defense against illness and often involves purchase and use of medications. This corresponds with previous studies finding pharmaceuticals account



for 30%–50% of total healthcare expenditures in developing countries (Whitehead et al., 2001). The consultation fees play only a small part in total direct treatment costs in all three countries, despite differences in their health systems and in healthcare sources (Table 3). Use of hospitals is most common in Bolivia, while the majority of households seek care from an ambulatory health center in Benin and from a dispensary in Burkina Faso.

### Productivity Losses

In addition to information requested regarding direct health costs, all respondents who said someone in the household was ill were also asked to report the number of days a household member was sick in the last 30 days, the number of days missed from work due to illness or caring for a

	Burkina Faso	Bolivia	Benin
Source of treatment (% of respondents)*			
Hospital	29%	49%	27%
Health Center	20%	34%	65%
Dispensary	33%	0%	4%
Mobile/Outreach Clinic	0%	2%	2%
Private Hospital, Health Center, or Clinic	1%	5%	3%
Traditional Healer	—	—	4%
Traditional Birth Attendant	0%	—	3%
Religious Healer	0%	—	1%
Quack	0%	—	2%
Pharmacy or Western Drug Seller	0%	0%	7%
Traditional Drug Seller	1%	2%	7%
Relative or Friend (outside the household)	1%	0%	0%
Other Provider	20%	7%	1%
Number reporting information on where sought treatment	95	41	383
* If anyone in the household reported using this source, she is included. Therefore, percentages may add to greater than 100%.			

<sup>ii</sup> Terminal HIV/AIDS cases cost considerably more, particularly when taking into account funeral expenses, which are often as large or larger than costs of illness.

sick household member, and the time spent seeking treatment (Table 4). In general, time seeking treatment was a small but substantive part of overall time lost to illness. The total time spent between leaving and returning home from seeking treatment ranged from a low of 2.55 hours in Benin to a high of 14 hours in Burkina Faso.

Most striking was the number of days reported for people in the household being sick. The average number of days sick for households reporting a member was ill during the period ranged from 6.9 days in Benin to 10.8 days in Bolivia. This includes all household members (e.g., either one person sick for nine days or three people

sick for three days each results in nine days of sick time for the household). This speaks to the high burden of illness in developing countries, which suffer the dual burden of high rates of both communicable and chronic diseases (Anderson, 2009).

Although the time household members were sick is substantial, perhaps more damaging to household finances were the large number of days of work missed while ill or care-giving. Households with a sick household member in Burkina Faso missed almost four days of work in the prior month; in Bolivia, 26% of households missed six days or more of work due to illness. Although we were not able to calculate financial costs of lost productivity, this second onus of lost earnings at a time when treatment costs are also high represents a significant financial threat to households.

### **Design and Use of Financing Products for Health Costs**

As part of the MAHP initiative, RCPB and CRECER offered three innovative health-financing products: health loans, health savings and health loans linked to savings. They offered these products in addition to implementing other health-related activities such as health education, community health workers and linkages to providers. Market research with MFI clients strongly influenced the design of these products. PADME did not offer health financing, concentrating instead on initiating health education while maintaining group-based microenterprise loans.

	<b>Burkina Faso</b>	<b>Bolivia</b>	<b>Benin</b>
<i>Time for Health Services</i>			
Number of respondents for number of days sick*	111	44	599
Mean number of days people in HH were sick in the past 30 days	10.1 (14.2)	10.8 (10.6)	6.9 (7.0)
Number in household reporting missed work days *	111	44	640
Number of days of work missed due to illness	4.0		3.3
Categorical responses	(9.3)		(5.9)
0 days		59%	
1-3 days		16%	
4-5 days		0%	
6 days or more		25%	
Number reporting times relating to treatment	95	41	385
Time to arrive to health provider (in minutes)	35 (44)	35 (48)	24 (27)
Time getting drugs or lab tests (in minutes)	50 (89)	59 (107)	10 (30)
Time spent between leaving home and getting back after consultation (in hours)	14 (40)	4.02 (8)	2.55 (8)
Notes: Standard deviations are in parentheses.			
* In Benin, the number of days people in household were sick in the past 30 days was only asked for children under 10. The number of days of work missed due to illness or care-giving was asked of adults and children.			

CRECER offered a health loan, designed for large health expenses with a lower interest rate than microenterprise loans, which could be accessed with proof of health expenses. About one-third of clients interviewed after taking the loan said the health loan fully covered their medical expenses; 80% said the unmet costs were for medicines. Clients described several ways in which the expenses not financed by the health loan were covered, which included borrowing from family members or using business earnings or savings held at home by them or other family members. In Burkina Faso, the health savings product was a voluntary savings account in which clients deposited a set minimum amount (at least \$1) each month in an account dedicated to use for health expenses. During the first six months, the client could not access the funds; after this waiting period, clients could withdraw savings with proof of health expenses. An active account entitles clients to apply for a health loan in cases of health costs exceeding their savings. These health loans have a lower interest rate and more flexible repayment terms than business loans (Reinsch & Ruaz, 2010).

Sufficient data to understand the take-up rate for health financing are not readily available from the study findings or from the published literature. As shown in Table 5, there are rather small numbers of clients who used health loans to finance health

	<b>Burkina Faso</b>	<b>Bolivia</b>	<b>Benin</b>
<i>Ability to Pay for Health Services</i>			
Number reporting information on ability to pay	95	40	357
Able to pay for all expenses of treatment outside the home (percentage of respondents)*	93%	93%	83%
<i>Health Financing</i>			
Source of funds for treatment (percentage of respondents) †			
Business loan	6%	0%	5%
Personal savings	53%	11%	1%
Health savings or Loan	3%	3%	0%
Earnings	24%	55%	91%
Other ‡	9%	21%	1%
Informal loan (or loan from other MFI)	0%	11%	0%
Family and friends	9%	0%	2%
Number reporting information on sources of funds	94	38	363
Notes:			
* This is given a value of "Yes" if the household answered that it was able to pay for all expenses of treatment for all household members who were reported ill during the period.			
† If anyone in the household reported using this source, she is included. Therefore, percentages may add to greater than 100%.			
‡ In Bolivia, three households said their health costs were covered by "SUMI", the national health insurance program for poor pregnant women and children under 5; two households mentioned that the costs were covered by a form of old-age pension.			

expenses during the survey period. In Bolivia, low usage may be due to two reasons: the lack of availability of health loans at the time of the baseline survey in 2007 and anecdotal evidence that a second type of loan made available by CRECER, outside the scope of MAHP, may have been used for health expenses. However, by December 2009, about 1% of eligible clients had received a health loan to access health care; back-of-the-envelope calculations using the treatment-seeking baseline data observed, we find take-up rates of approximately 6% of households with health costs. This percentage is obtained from 26,000 eligible clients, of which 17% reported illness in their household. As 93% of those households reporting illness sought treatment, we estimate that approximately 4,111 households with an eligible client member had health costs in which 256 health loans were used, resulting in a 6% take-up rate for households with health costs.

In Burkina Faso, the take-up on these financing products was very low for the first two years, but grew rapidly in the third year of the MAHP initiative due to geographic expansion of the program, intensive staff training regarding promotion and use, and the temporary use of marketers earning a fee when an account was opened. The take-up of health savings accounts was higher among individual clients in urban areas than it was with village banking (i.e., group lending model) clients in rural areas (Reinsch & Ruaz, 2010). This was due in part to two factors: individual health savings and loan accounts required a form of personal identification, which many village banking clients do not have, and village banks normally manage group savings and loans—requiring significant product adaptations to make individual products available. The 12,099 households with health savings accounts by December 2009 made up 3% of eligible RCPB clients (Reinsch & Ruaz, 2010). Since a health savings account had to be active for a client to qualify for a loan, there is no way to separate households that desired to save for future health expenses from households that opened an account as a form of insurance to be eligible for the loan if the need arose. The take-up on loan products was very low (<0.1% of eligible clients) but this may be because clients had earmarked savings that prevented them from needing a loan. These issues underscore the complexity of developing and implementing new financial products for health.

We found no evidence upon which to judge the take-up rates compared to other health-financing options or compared to an “optimal rate.” Although take-up rates may appear low, interview data clearly indicated that clients find health savings or loan products appealing. Many clients in Burkina Faso and Bolivia stated they would rather have a health savings account or a health loan than borrow from friends or family because these social networks may not have the resources to help, and they preferred the privacy afforded them by being able to borrow from the MFI rather than from peers. RCPB clients also said the health savings product gives a sense of security and reduces the temptation to spend this earmarked money on things other than health costs. Many indicated a health savings account allowed them to use their business loans and other savings more effectively. Having health-financing options available also enabled clients to access care they would have foregone or otherwise delayed. Clients with a health loan indicated that without access to health loans they would have resorted to multiple sources for funding. This corresponds with the literature, which suggests the poor in developing countries “patch together” funds from different sources to pay for large expenses (Collins et al., 2009).

### **Analysis**

This study focuses on the health risks and costs that affect the poor worldwide. Although the findings from Benin, Bolivia and Burkina Faso are similar to existing literature in showing substantial direct health costs compromising access to necessary health care, the possible solutions are different. Microfinance clients are already in an ongoing relationship with an MFI and are therefore easier to reach with new health-financing options. MFIs are a potentially important source of health financing due to several qualities: an existing client base, expertise in the administration of loans and savings, and a desire to improve clients’ financial stability. MFIs may have a major advantage in scale-up of health financing, as they already reach hundreds of millions of the poor worldwide. Our results regarding health-financing products demonstrate these products are sought

and used by clients, although effective implementation and use of these products is admittedly challenging.

Sinha and Batjiji (2010) described the benefits of microfinance for financing health care for currently excluded populations, classifying strengths and weaknesses of methods, including microcredit, microsavings and health micro-insurance. Categorizing healthcare needs according to cost and likelihood of occurrence helps determine which financial tool(s) provided by MFIs are optimal for each type of health event—credit and savings may be favorable for lower-cost frequent needs such as prevention and acute illness while micro-insurance provides potentially greater protection against losses for higher-cost events. However, micro-insurance presents considerable complexity for MFIs to design and implement (Sinha & Batjiji, 2010); therefore, understanding the role of easier-to-implement health-financing products such as loans and savings is important.

Careful market research, product design and impact evaluation is necessary to ensure financing options correspond well with client health needs; for example, loans covering only consultation costs are unlikely to have high demand or usage rates. Many existing health micro-insurance (HMI) schemes provide coverage primarily for hospitalizations (Leatherman et al., 2010); our data show definitively that medications are a large part of health expenditures and should be considered for all health-financing products.<sup>iii</sup> Aside from customer demand, one business rationale for HMI programs moving beyond hospital coverage is that better adherence to prescribed treatments and earlier access to care can result in economic benefits for the insurer—namely, reduction in the use of more expensive health services required after an illness is exacerbated due to non-treatment (Sabate, 2003; Whitehead et al., 2001). HMI benefits design and coverage continues to be an important area for future product testing and development.

The motivation or incentive for MFIs to expand their traditional financing products to include health may rely on either their social mission or business self-interest in improving clients' financial stability. One of the most frequently cited reasons for client default and dropout is health—the illness of an MFI client herself or a family member (Reinsch et al., 2010). Microenterprise loans are already being used for the “non-productive” (i.e., non-income-generating) use of healthcare expenses; MAHP research found 11%–48% of clients used a portion of their microenterprise loans for health expenses (Reinsch et al., 2010). Health financing may work best when accompanied by a cohesive package of health services influencing health knowledge and behaviors and providing greater access to preventive and primary services. For example, CRECER facilitated visits by healthcare providers to outlying client communities; at these “health day” events, clients could access diagnostic and primary healthcare services for a small fee. Nearly one-quarter (24%) of “health day” participants had never been seen by a doctor before.

MFIs are rarely mentioned as potential actors in improving access to healthcare globally; however, evidence is emerging that they can play an important role in reducing financial barriers to medical treatment. Microfinance has been successful in providing opportunities to the poor where

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<sup>iii</sup> Our data cannot distinguish between medication costs incurred during hospital use (which might be covered by health micro-insurance) and medication costs incurred outside of the hospital.

conventional financing has not been available and can potentially address an unmet need for health financing for the poor (Sinha & Batjiji, 2010). However, offering health-financing products is not restricted to MFIs; other types of development and commercial organizations may be motivated to offer health financing and can learn from the MFI community.

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