



A Fine Balance:^{*}

A Case Study of the Client Value of Health Microinsurance—Uplift I.A.

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*With apologies to Rohinton Mistry





ABOUT THE PROJECT

The Financial Services Assessment project is designed to examine the impact of financial services on the lives of poor people across the developing world. This project is funded by the Bill & Melinda Gates Foundation, which is committed to building a deep base of knowledge in the microfinance field. The IRIS Center at the University of Maryland, College Park, together with its partner Microfinance Opportunities, will assess a diverse range of innovations in financial services. The results of this project will shed light on the design and delivery of appropriate financial products and services for the poor, and on the potential to scale up successful innovations to reach larger numbers of low-income households.

FUNDING

The Financial Services Assessment project is funded by a \$6 million grant from the Bill & Melinda Gates Foundation.

REPORT SERIES

This report is part of a series that will be generated by the Financial Services Assessment project. The reports are disseminated to a broad audience including microfinance institutions and practitioners, donors, commercial and private sector. Additional copies can be downloaded at www.fsassessment.umd.edu.

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ACKNOWLEDGEMENTS

The author thanks Zeenat Nazir, Walter Tounytsky, Joyce Tong and Sunil Bhat who contributed to data collection, analysis and portions of this report. Additional thanks to Cecilia Ames-Saavedra, Jessica Bachay and Amna Kanoun for their support with analysis and report production. Monique Cohen provided invaluable feedback on research design and reporting. Thanks also to Michael McCord and Barbara Magnoni for input to the study design and comments on an early draft of the report. Special thanks are due to local consultants in Pune who assisted with this research, specifically Anuprita Dixit who worked tirelessly to organize the interviews and to Deepa Prabhu and Vandana Apte who served as interpreters. The report was edited, designed, and produced by Anne Folan & Associates. This report would not be possible without the support of Uplift India Association and its microcredit partners, APVS and PSW. We are grateful to F.X. Hay for facilitating the introduction to Uplift and to Shailabh Kumar of Uplift who, along with his colleagues, extended every effort to support the field research in Pune.

ABSTRACT

Microfinance Opportunities (MFO) undertook research in February 2011 to understand the financial value of a health microinsurance product known as the HMF (health mutual fund) offered by Uplift India Association (Uplift). MFO used a mixture of on-site interviews with key stakeholders in Pune, India and an analysis of the program's claims and financial data. The research included a case study which yields interesting insights into the experience and coping strategies of households responding to malaria, a serious but common disease among the local population. Taken together, the findings of the case study and the data analysis suggest that Uplift is providing substantial financial value to policyholders within certain constraints. The case study sample of Insured households had lower out-of-pocket (OOP) costs for malaria care compared to similar Uninsured households. These Uplift households also paid less for debt financing than the Uninsured if they had to borrow to cover their medical costs. The study finds that the HMF program is providing financial protection to Insured families through claims reimbursements and access to lower cost medical care. Uplift's business model is a client-managed, mutual insurance model; ultimate decision-making on claims reimbursements and other substantive matters is made by policyholders themselves. Policyholder participation was found to shape the financial value delivered via claims reimbursements by spreading them across more members with reduced average claims payments. The report also finds that ongoing attention is needed in the area of client education if policyholders are to understand how to use the product to their maximum benefit. Finally, MFO proposes the following expanded definition of financial value for health microinsurance: *"Financial value of health insurance is the degree to which membership in a health microinsurance program lowers the overall financial costs incurred due to ill health."*

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In instances when the report refers to individuals, names and identifying information have been altered.

Exchange rate used throughout is INR 45: USD 1.



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Acronyms

AMMP	Annapurna Mahila Mandal Pune
APL	Above Poverty Line
APVS	Annapurna Parivar Vikas Samvardhan
BPL	Below Poverty Line
FSA	Financial Services Assessment
FSF	Family Security Fund
GP	General Practitioner
HCP	Health Care Provider
HMF	Health Mutual Fund
LMF	Life Mutual Fund
MFI	Microfinance Institution
MFO	Microfinance Opportunities
MIS	Management Information System
MIU	Mutual Insurance Units
NGO	Non-governmental Organization
OOP	Out-of-Pocket
OOPE	Out-of-Pocket Expenditure
OPD	Out-patient Doctor
PMC	Pune Municipal Corporation
PSW	Parvati Swayamrojgar
SE	Service Executive
SLL	Standard of Living Levels

Glossary

Adverse selection	Also called anti-selection, the tendency of persons who present a poorer-than average risk to apply for, or continue, insurance. If not controlled by underwriting, resulting in higher-than-expected loss levels (Churchill, C. F., Liber, D., McCord, M.J., & Roth, J., 2003).
Benefit	The amount payable by the insurer to a claimant or beneficiary upon the occurrence of the insured event. The benefit amount should be consistent with the insurable interest. Allowing coverage above the insurable interest creates fraud and moral hazard risks.
Claim	A request for payment under terms of an insurance contract when an insured event occurs.
Claims processing	The system and procedures that link the occurrence of an insured event with a payout. It is extremely important that micro insurers minimize the time spent in processing claims so that payouts can be made as quickly as possible.
Cover or coverage	The scope of protection provided under an insurance contract.
Credit life	Insurance coverage that repays the outstanding balance of a loan if a borrower dies.
Health insurance	Protection from the costs of illness, accidents, and other health-related risks.
Insurance	A system under which individuals, businesses and other entities, in exchange for monetary payment (a premium), are guaranteed compensation for losses resulting from certain perils under specified conditions.
Insured	The policyholder, the person or entity protected in case of a loss or claim.
Life insurance	Coverage providing for payment of a specified amount on the insured's death, either to the deceased's estate or to a designated beneficiary; or in the case of an endowment policy, to the policyholder at a specified date.
Microinsurance	A subset of insurance that provides financial protection to the poor from certain risks in a way that reflects their cash constraints and coverage requirements.
Moral hazard	A risk that occurs when insurance protection creates incentives for individuals to cause the insured event; or a behavior that increases the likelihood that the event will occur (Churchill et al., 2003).
Policy	The legal document issued by the company to the policyholder that outlines the conditions and terms of the insurance.
Policyholder	A person or entity that pays a premium to an insurance company in exchange for the coverage provided by the insurance policy.
Preexisting condition	A physical and/or mental condition of an insured that first manifested itself prior to the issuance of his/her policy.
Premium	The sum paid by a policy-holder to keep an insurance policy in force.
Protection	Ability of an insurance product to provide compensation for losses incurred. Protection can be full or partial.
Risk	The chance of loss.
Risk management strategies/Financial services	Besides insurance, emergency loans and accessible savings accounts and remittance services can help low-income persons to manage their risks.
Vulnerability	The existence and extent of a threat of poverty and destitution; the danger that a socially unacceptable level of wellbeing may materialize (Dercon, 2005, p.2).



Executive Summary

Is microinsurance a good deal for the poor? Although various pilots have been launched in recent years, the value microinsurance offers the poor is not well understood. There is increasing interest in assessing the client value of microinsurance, even as the concept of client value itself is still under debate (Magnoni & Zimmerman, 2010; Matul, Tatin-Jaleran & Kelly 2011, forthcoming). Similarly, for health microinsurance, the most studied of any microinsurance product, questions remain about the value it provides, including the fundamental one about whether it protects low-income people financially.

This report from Microfinance Opportunities (MFO) contributes to the debate by examining the client value offered by a mutual-based community-managed health insurance model implemented by Uplift India Association. MFO focused on one component of client value, financial value, and examined whether and how Uplift provides financial value to its members. For the purposes of this paper financial value was defined as: *the value that policyholders obtain when claims are made* (Magnoni and Zimmerman, 2010). Uplift's health insurance program (referred to as the health mutual fund, or HMF) provides: coverage for in-patient care on a reimbursement basis and within a large hospital network; access to lower cost out-patient care, medicines and medical tests; as well as health education and health promotion services.

Based in Pune¹, India, the program was started in 2003 by Annapurna Mahila Mandal Pune (AMMP), a microcredit provider, and other stakeholders, to protect borrowers from the economic shocks associated with illness and medical expenses. The participatory and client-led nature of the microcredit program had a strong influence on the character of the health microinsurance program that emerged. Today, Uplift pools risk across more than 100,000 poor and low-income members in Maharashtra state. In this client-led model, clients make decisions about premium rates, network healthcare providers, claims approvals and reimbursement amounts. The health microinsurance program in Pune – the subject of our study - is delivered through integration with two microcredit programs and is mandatory for borrowers.

The key research questions addressed include:

- Does Uplift health microinsurance protect households financially? If so, how?
- Are the out-of-pocket (OOP) costs of healthcare lower for Insured households than for Uninsured households?²
- How does the unique community-managed reimbursement process at Uplift influence the financial protection effect of the insurance?

These key questions are addressed in two ways. The first is through a case study which compares the specific experiences of 15 Insured households and 10 Uninsured households to assess whether Uplift-Insured households are financially protected when faced with a serious case of malaria. This case study yielded interesting insights into the experiences and coping strategies of low-income households faced with a serious, widespread disease, but the sample size was too small to make its findings generalizable to the HMF population as a whole. In addition to the case study, MFO carried out an analysis of Uplift's claims and financial data. We examined key indicators of client value to discover the financial value provided to all members in Pune, in order to put the case study sample into context. As a result, we address the key research questions at the level of individual households and at the institutional level where the experiences of all Uplift claimants are aggregated.

The case study showed us the types and relative magnitudes of costs families incurred when a member becomes seriously ill with malaria. It also highlighted the differences in total and net costs between Insured and Uninsured families. The analysis of key performance indicators at Uplift provided evidence of other aspects of client value including depth and breadth of outreach, as well as levels of social investment and sustainability. These in turn provided insight into the potential for Uplift to sustain itself.

We conclude that Uplift is providing substantial value to the policyholders who use the HMF. This value is obtained through claims reimbursements and for some, through lower costs of hospital care, due to price discounts at private network hospitals. Our specific findings include the following:

¹Formerly known as Poona.

²For the sake of consistency and visual ease, throughout this report, the upper case is used for all instances of both "Insured" and "Uninsured," whether used as a noun or an adjective, when the word refers specifically to the households and individuals who are the subjects of this report. Elsewhere, the report uses the lower case to describe the condition of being insured or uninsured in general contexts, not confined to the case under study.

- In response to a serious case of malaria, the case study sample of Insured households had lower average out-of-pocket or cash costs than the sampled Uninsured households. This was also true before claims reimbursements from Uplift were taken into consideration because the Uninsured patient sample had substantially higher direct hospital costs compared to the Insured. This is significant because it is the largest single cost category related to malaria care. We believe that much of the variation in direct costs is due to price discounts that HMF patients are entitled to at network hospitals. On the other hand, the Insured patients and their households experienced much higher indirect costs primarily due to large amounts of foregone income.
- The Insured households also had higher average transactions costs due to the costs of the HMF annual premium. Importantly, although the Insured were more likely to borrow to cover malaria-related expenses, they paid less for debt financing than the Uninsured because they were able to get credit at lower interest rates. We assume that this is because the market considers Insured households a lower credit risk because lenders know that policyholders will receive a reimbursement.
- According to the Uplift MIS data, *the HMF program reimbursed 53 percent of the hospital expenses claimed by the Insured sample*. The sampled Insured patients also benefitted from price concessions at in-network hospitals equivalent to 4.8% of the total claimed hospital expenses. Clearly, the HMF product is providing some financial protection from the direct hospital costs incurred by the sampled HMF households. However, the HMF claims are not providing value to the extent promised by the policy guidelines. Our case study and the institutional data analysis showed that this is due to the participatory nature of the program in which policyholders collectively decide to hold down claims reimbursement awards at the claims meetings. When we take the policyholders' perspective, based on the case study interviews, we find that the claims reimbursement received was equivalent to less than one-quarter of all the costs the household incurred due to malaria, including lost income. Almost 38% of the total average costs of malaria care for the Insured sample were due to indirect hospital costs and the vast majority of these costs were due to foregone income.
- Unsurprisingly, the case study also showed that in order to optimize the financial value available from HMF, policyholders have to follow the HMF program guidelines. *But misuse and under-use of program services designed to reduce both search and treatment costs for appropriate care (such as the referral system and the 24/7 Helpline) meant that only a minority of sampled, Insured households were in a position to maximize the available HMF benefits.*
- Nevertheless, analysis of the institutional data supported the case study finding that Uplift is providing substantial financial value to the members within the resources available to the program. *From this perspective, the largest component of financial value is provided by the claims reimbursement, but additional financial protection is provided by the*

Does Uplift health microinsurance protect households financially? If so, how?

healthcare provider network discounts. For the year ending December 2010, Uplift returned more financial value through claims payouts to the policyholders than they had set aside as earned premiums during the year. Claims reimbursements reduced policyholder costs by 38% while price concessions reportedly reduced hospital costs for claimants by an additional 26%.

- Analysis of outreach indicators show that while the program is reaching people below the locally defined poverty level, there is considerable scope for expanding outreach as only a small percentage of the low-income population in Pune city is being reached. Currently growth in outreach is constrained on the Uplift side by lack of resources. On the side of Uplift's two microcredit organization partners, growth in outreach is primarily driven by the demand for loans.
- The long term sustainability of the Uplift program, however, is called into question by the high claims ratios and current reliance on donor subsidies. There are two components to sustainability of the HMF program.
 - The first, sustainability of the claims fund, requires that in the long run earned premiums are sufficient to cover the approved claims to the extent allowed. The claims ratios cannot continue at current levels for very long without either eroding the claims reserves or without generating client dissatisfaction with the amounts paid. Currently, earned premiums are not sufficient to cover the approved claims up to the eligible amount. This means that (absent permanent subsidy) either the premium price needs to increase or the benefits provided by the claim feature need to decrease to ensure that the risk pool is sustainable.
 - The second component of sustainability is the self-sufficiency of operations. The expenses on a per-member basis have improved over time suggesting that through economies of scale, HMF might become sustainable. Uplift management believes that they can be sustainable with 300,000 members. Without program growth and associated efficiencies, this analysis suggests that the premium would have to be increased just to cover the operating costs alone. The process of setting the premium requires member input, and so far the price has been constrained by their concerns. Therefore, the best option for attaining HMF program self-sufficiency is to grow the membership.

One of the most interesting findings of this study relates to the client-managed nature of the HMF program. *Not only has membership participation resulted in consistently low premium levels, but it has also shaped the financial value the program delivers.* Policyholder participation in claims decisions was found to spread the benefits of the program. Specifically, policyholders have chosen to limit the average value paid per claim while simultaneously broadening access to the risk pool funds.

In essence, the HMF client members are attempting to strike a fine balance between affordability, value, and sustainability. By awarding smaller claims reimbursements to more members, the policyholders are increasing the number of satisfied customers. Their actions demonstrate, among other things, that members understand risk pooling – and particularly the importance of sustaining the pool – very well.

That said, the trade-offs that members are making each month in pursuit of this fine balance do not come without tensions. Some members are understandably unhappy about receiving less than their allowed reimbursement amount. Our research also showed that member participation is guided and in some cases heavily influenced by NGO staff. Even so, the evidence shows that members are actively participating and impacting the program. The research also supports the idea that a mutual health insurance program with client participation in all major decisions is viable.

Implications for Uplift

Uplift is providing a significant amount of financial value to members within certain constraints. *There are some areas where Uplift could endeavor to provide more financial value now without changing the premium or the benefits.* For example, MFO's analysis of claims settlement suggests that financial value could be easily increased by processing and paying claims more quickly to reduce the policyholders' borrowing costs.

In the future, Uplift may be able to increase the financial value it provides by significantly expanding the client base to a level that can reduce administrative costs as a percent of the premium. By reducing the expense ratio, more value can be delivered to the members for the same premium cost.

Other areas where financial value could be increased would require raising premiums and/or increasing benefits. Our case study research indicates areas where Uplift could provide more value to members by relieving certain pressure points.

Financial value can be bolstered in other ways as well. Despite Uplift's efforts, awareness of the insurance program and how to use it still needs to improve for all policyholders to benefit as much as possible from the program.

Implications of Findings for Consumer Education

The research demonstrates that the active HMF members understand risk pooling very well. This finding belies the conventional wisdom about what low-income people understand about insurance and leads us to conclude that the Uplift program has successfully taught policyholders and frontline staff how to manage a risk pool. Uplift and its microcredit partners have achieved this by using participatory and transparent processes to administer the program. Seeing the risk pool in action and in fact playing an active role in its management makes this rather abstract concept tangible for members.

These findings suggest that *learning by doing* may be the best way to teach risk pooling. Games or simulations that provide hands-on exposure to the concept of risk pooling may thus be a good way to transfer the requisite knowledge and skills to potential policyholders.

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Implications for the definition of the Financial Value of Health Microinsurance

The findings show that Uplift provides value to its members both through discounted costs of medical care and through claims reimbursement. Additionally, there are other non-insurance member services, such as health camps, which provide free medical care to enrolled HMF members. Based on the experience at Uplift, we believe that health microinsurance deserves an expanded and specific definition of financial value. We propose the following definition:

Financial value of health insurance is the degree to which membership in a health microinsurance program lowers the overall financial costs incurred due to ill health.

FSA STUDY BACKGROUND

The Financial Services Assessment (FSA) project, undertaken by the IRIS Center at the University of Maryland and Microfinance Opportunities, is assessing the impact of grants provided by the Bill & Melinda Gates Foundation (the foundation) to microfinance organizations for the design and development of financial services innovations in developing countries. The research will assess the impact of new financial products, services and delivery systems on outreach and ultimately client welfare. The FSA project addresses issues such as access to financial services and the role of the enabling environment. Through the use of baseline and endline quantitative surveys and qualitative studies, the research examines whether and how the financial innovations supported by the foundation affect access to and use of financial services by the poor and impact client welfare. In this way, the research helps reveal the value proposition, that is, the unique added value of the innovations for low-income consumers.

In 2010, the foundation asked the FSA project to assess the client value of microinsurance. The Uplift India Association program was selected as a unique model that had the potential to provide useful insights on client value for the industry. The Health Mutual Fund (HMF) program was started in 2003 to meet the health protection needs of urban microfinance clients in Pune, India. Using a community-managed mutual model, the program offers health insurance and other health related services to over 100,000 members. In this report, we examine whether and how Uplift provides financial value to the policyholders and their families.

The research findings of the FSA project are disseminated through a series of reports that: (i) examine access to and use of financial services provided by the foundation's grantees, and (ii) identify the value proposition of grantees' innovations in terms of welfare improvements. Collectively these studies will allow us to understand the outcomes and impact of financial service interventions. This paper, based on the findings from field research in India, is one of several papers in the series. Other papers prepared in this series to date are listed in Annex 1.



Introduction

Although microinsurance has been growing and evolving in the past ten years or so, its value for the poor is not well understood. Is microinsurance really a good deal for the poor? Or does it take advantage of them? Until recently, the discourse on the client value of microinsurance was narrowly focused on performance measures such as efficiency and claims ratios (Churchill, 2008). Now this institutional focus has begun giving way to an increasing interest in assessing the *client value* of microinsurance, even as the concept of client value itself remains subject to debate (Magnoni & Zimmerman, 2010; Matul, Tatin-Jaleran & Kelly 2011, forthcoming).

Among the different microinsurance experiments underway, health-focused products have arguably received the most attention. But questions remain about the value it provides. Does health microinsurance protect low-income people financially? Does it provide access to quality healthcare? Does it lead to better health outcomes? (Waddington, 2009; ILO, 2008)? It is both timely and appropriate to examine the value for the poor provided by health microinsurance (Christenson, Holtz, and Leatherman, 2010).

This study, by Washington-DC based Microfinance Opportunities (MFO), also comes at a period of renewed interest in integrated health and microfinance programs (Dunford, Leatherman, and Metcalfe, 2011). The MFO paper contributes to the debate by examining the *client value* offered by a mutual-based community-managed health insurance model implemented, by Uplift India Association, which combines health insurance with health education components and, for most of the beneficiaries, with microcredit.

Recent work by the Microinsurance Learning and Knowledge (MILK) project, led by the MicroInsurance Centre, has defined client value as “the added value in comparison to other available risk coping mechanisms of having insurance either when claims are made or as a result of the changed behavior caused by owning a policy and trusting that it will be honored.” (Magnoni and Zimmerman, draft 2010, p. 2). Client value, in this context, has three components:

- *Expected value* – this is the value clients may get from a product through behavioral incentives and peace of mind, even if claims are not made;
- *Financial value* – this is the value clients obtain when claims are made; and
- *Service quality value* – these are the externalities and value created by providing access to services, for example, healthcare services.

Uplift India Association’s *Arogya Nidhi 2* program (hereafter health mutual fund, or HMF) provides coverage for in-patient care on a reimbursement basis within a large hospital network, access to lower cost out-patient care, medicines and medical tests, as well as health education and health promotion services. Based in Pune, India, the program was started in 2003 by Annapurna Mahila Mandal Pune (AMMP), a microcredit provider, and other stakeholders, to protect borrowers from the economic shocks associated with illness and medical expenses. The participatory and client-led nature of the microcredit program had a strong influence on the character of the health microinsurance program that emerged. Today, Uplift pools risk across more than 100,000 poor and low-income members in Maharashtra state. The health insurance is mainly delivered through integration with two microcredit programs.

MFO conducted research at Uplift to assess whether and how the health insurance program provides client value to low-income policyholders. The subject of this paper is the client value (as defined above) provided by the HMF to Uplift members.

The key research questions addressed include:

- Does Uplift health microinsurance protect households financially? If so, how?
- Are the out-of-pocket (OOP) costs of healthcare lower for Insured households than for Uninsured households?
- How does the unique community-managed reimbursement process at Uplift influence the financial protection effect of the insurance?

These key questions are addressed in two ways. The first is through a case study which compares the specific experiences of 15 Insured households and 10 Uninsured households to assess whether Insured households are financially protected when faced with a serious case of malaria. The second is through analysis of Uplift's claims database and its financial and other performance data. We examined key indicators of client value to discover the financial value provided to all members in Pune, in order to put the case study sample in context. As a result, we answer the key research questions at the level of individual households and at the institutional level where the experience of all Uplift claimants are aggregated.

Findings presented here are based on mixed-methods field research undertaken in Pune in February 2011. In-depth individual interviews were conducted to collect data from Insured and Uninsured individuals who had been hospitalized for malaria.³ Key informants at Uplift and their two microcredit partners, Annapurna Parivar Vikas Samvardhan (APVS) and Parvati Swayamrojgar (PSW), as well as healthcare providers were interviewed for background information to provide context for the findings of the case study and data analyses. The data analysis relied on claims, institutional performance and financial data from Uplift and the two NGOs to examine the client value of the program across all HMF Insured members.

The report is organized as follows: Section 2 presents the details of the Uplift HMF program and the client base. Section 3 reviews the conceptual framework for this study. Section 4 presents the research design and methodology. Section 5 provides a description of the research setting. Section 6 begins the presentation of the findings with a description of the sample. Sections 7 and 8 present findings on the financial client value provided by the HMF from an individual perspective. Sections 9 and 10 present the findings on the financial client value provided by HMF from an institutional perspective as well as the future prospects for Uplift based on analysis of institutional indicators of outreach and sustainability. Section 11 presents conclusions and implications.

Findings are based on mixed-methods field research undertaken in Pune. In-depth individual interviews were conducted to collect data from Insured and Uninsured individuals who had been hospitalized for malaria.

³Or their family representatives.



Background

THE UPLIFT HEALTH INSURANCE PROGRAM

Microfinance Opportunities explored whether health microinsurance provides client value to the poor through a study of Uplift India Association's HMF program. This community-managed health microinsurance program pools risk across more than 100,000 members in Maharashtra State, India. This program is a mutual insurance program rather than a private, commercial insurance product.¹

The HMF program involves three main actors: Uplift India Association, a platform that provides all the back-office services and support for the insurance program; multi-purpose nongovernmental organizations (NGOs) that provide the insurance as an integral part of their microcredit programs; and low-income families who purchase, use, and participate in the management of the insurance (i.e., the community). Our research focused on the two largest NGOs in the Uplift network: APVS and PSW², and, within these organizations, we focused on their activities and members in Pune, a large city located in Maharashtra state.

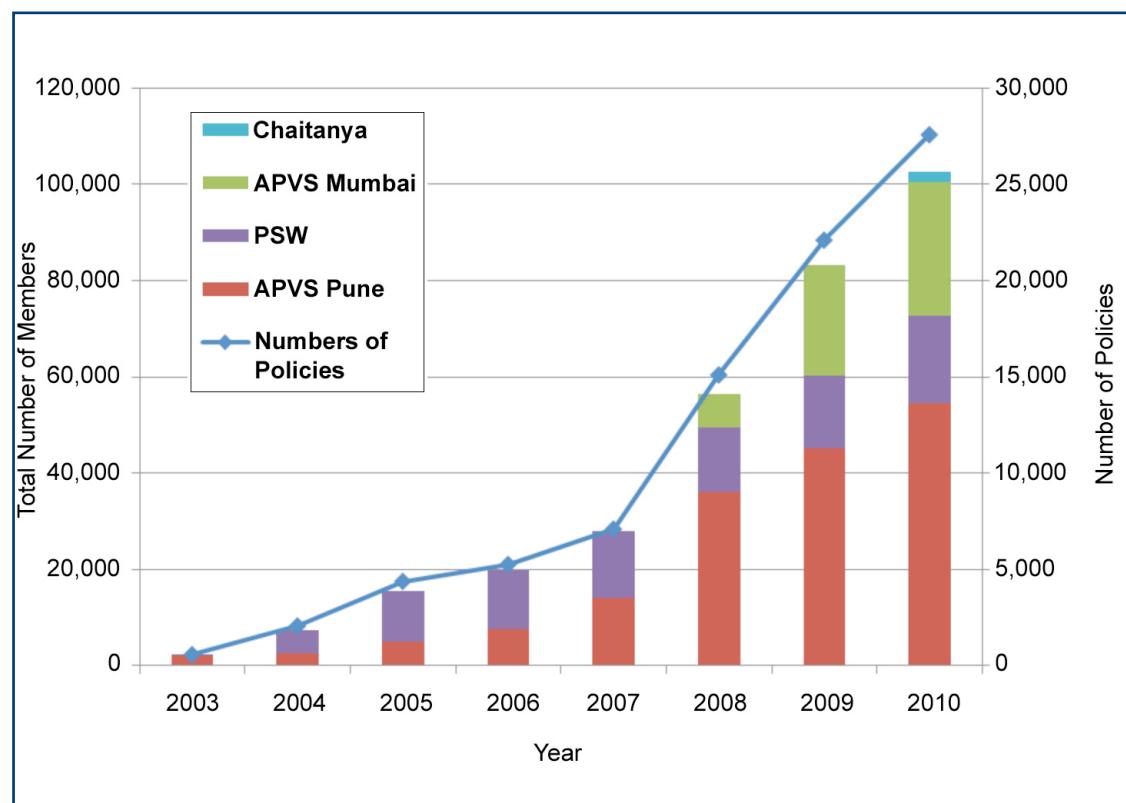
¹For the sake of brevity, we may refer to the product as a microinsurance product in this report.

²See the Annex for a fuller description of the NGO partners.

The HMF program, operating through these two microcredit NGOs, provides access to lower cost in-patient and out-patient healthcare as well as a variety of health management services to low-income, informal sector workers and their families living in Pune's slum areas. Uplift also provides support for the HMF programs at Chaitanya, a rural NGO, and for APVS's operations in Mumbai (See Figure A).⁴

The HMF product was introduced in 2003. Uplift, the institution, was established in 2004, but the idea of a health protection product had first emerged in the 1990s with AMMP, a microcredit program. At first, the program felt unable to pressure seriously ill microcredit borrowers to repay their loans. After the death of a borrower who had been a strong and well-known group leader left her husband destitute from medical expenses and her fellow group borrowers traumatized, the founder of AMMP started to look for an insurance solution. Similarly to the microcredit program, the health insurance product was developed over a lengthy period of time, based on client research, and after much consultation with the microcredit borrowers. After the borrowers examined and rejected the idea of commercial health insurance, the decision was made to establish an in-house risk pooling mechanism to cover hospital costs. When the microcredit borrowers were asked what they wanted from a

FIGURE A
TOTAL HMF MEMBERS BY ORGANIZATION AND TOTAL POLICIES AT UPLIFT (2003-2010)



⁴ It is important to note that the risk pool is tracked at the level of each institution at APVS, that is, the Pune and Mumbai HMF operations of APVS are tracked separately.

health insurance program, they responded that they wanted to know: *What is the right cost? What is the right treatment? And what is the right place to go (for treatment)?* The current program still endeavors to respond to these demands, with program managers believing that information is one of the greatest needs of the members.

The process by which the HMF was developed was instrumental in achieving the client-led model found today. At Uplift, clients make decisions about premium rates, network healthcare providers, claims approval and reimbursement amounts. The HMF program, under Uplift's direction, has a governance system in which the policyholders, led by their own representatives, review and decide on the final disposition of all claims. As we will see later, not only do the structure and features of the HMF respond to community demand, but the client value delivered by the product is shaped by policyholder participation.

HMF Basic Features

The HMF program currently offered was put into place in mid-2008. The health program has two main components: the microinsurance or risk-sharing component (the financial component) and a “member service” component that is best described as health management services.

The financial component or insurance provides cover for in-patient healthcare costs of up to INR 15,000 (\$333.33) for a premium of INR 100 (\$2.22) per family member. The term of the insurance is one year and runs concurrently with yearly loans. The HMF product is mandatory for most microcredit borrowers.⁵ Premium payment also provides access to all the health management services. The exact configuration of the product and associated processes vary slightly between the two different NGOs that are the subjects of our research. The specific features of the Uplift HMF product are described in Table 1.⁶

Purchase of an HMF policy entitles Insured members to low cost or discounted in-patient treatment at network hospitals as well as eligibility for 80 to 100 percent reimbursement of claimable costs at these facilities. The network out-patient doctors, drug stores, and labs provide price discounts ranging from 7 percent to 20 percent for HMF members.

Insured members are encouraged to obtain referrals before seeking hospital care and Uplift has provided a number of ways in which policyholders can do this. The purpose of the referral is to hold down medical costs for the policyholder and to ensure that the patient receives appropriate and quality care. Members can obtain a written referral by contacting their Service Executive (SE) at the NGO branch office, through calling a 24/7 Helpline, or from the Uplift Guidance Doctor, a family practitioner who is available for free consultations two hours per week at each of the 15 NGO branches in Pune.

The Uplift referral feature is particularly important in the Indian context where the medical sector is largely unregulated resulting in vast price differentials for the same treatment at different facilities.

⁵ Before 2008, the HMF program was voluntary and open to all credit borrowers at the implementing NGOs. Enrolment was done on a house-to-house basis making the collection cost high while families were mostly enrolling the sicker members of the family. Uplift realized that the model would never be successful this way and decided to make it compulsory for all borrowers. In addition, Uplift managers believe that members will only understand the program once they have experienced it. (Correspondence with Shailabh Kumar, June 2011.)

⁶ The details of the HMF product described above are a simplified version of the details provided in the Arogya Nidhi 2 Policy Document for 2010. This description represents the status of the HMF product as of February 2011.

TABLE 1
DESCRIPTION OF UPLIFT'S HEALTH MICROINSURANCE PRODUCT

Target Segment	Microcredit clients of implementing partners, generally working poor who reside in slum areas of Pune.	
Compulsory/Voluntary	Compulsory	
Payment Type	Reimbursement	
Eligibility Criteria	There is no age limit for enrollment but the age of policyholder should be above 18 years of age No health checkup for screening is needed For family enrollment, two adults and at least the first two children (under 18 years of age) must enroll (ie, the family is defined as a nuclear family) Adults without children, dependent parents, and siblings are considered as individuals	
Premium Contribution	For individuals: INR 150 (\$USD 3.33) each per year For three members of a family or more: INR 100 (\$USD 2.22) each per year or INR 400 (\$USD 8.88) for a family of four.	
Period of Cover	12 months from the date of issue of policy	
Sum Insured	INR 15,000 (USD \$333.33) per person per year subject to policy exclusions and stipulated sub limits	
Amount of Coverage by Categories of Treatment	Specific same-day procedures General Semi-special Special Super Special	INR 2,500 (\$USD 55.56) INR 5,000 (\$111.11) INR 7,500 (\$166.67) INR 10,000 (\$222.22) INR 15,000 (\$333.33)
Hospitalization Coverage	Lodging, nursing expenses Cost of medicines (including cost of meds after hospitalization) Cost of investigations (ie, pathology reports and diagnosis) Including investigations done prior to hospitalization Guidance for preventive care/health promotion	
Benefits Offered	In-patient hospitalization expenses for treatment in general ward 10 days of pre- and post-hospitalization cover including expenses for one time diagnosis of the ailment and the cost of medicines prescribed during this period	
Coverage Limits According to Health Care Providers	100% reimbursement for treatment at a government hospitals 80% reimbursement for treatment at private network hospitals (including Trust hospitals), (reduced to 50% if the patient has not shown the Nidhi card or a referral letter) 0% reimbursement for treatment at non-network private hospitals (increased to 80% reimbursement in cases of emergency or when there is no network hospital within range of 5km for Pune and 7 km for Mumbai patients).	
Exclusions	The Uplift program has a number of exclusions, with many but not all of them standard such as exclusion of coverage for suicide attempts or self-inflicted injuries and plastic surgeries. Pre-existing conditions are only covered from the 3 rd year of membership on.	
Additional Benefits and Member Services	Referral service Preventive care Guidance Doctor Discounts for outpatient care, drugs and lab services 24x7 Telephone Helpline manned by a doctor Provision of a multi-layered quality healthcare network	

Source: Adapted from Ruchismita, R. and Dr. A. Virani (2010).

Additionally, higher cost medical care does not necessarily guarantee higher quality care. The HMF referral service helps members navigate a complicated and opaque healthcare landscape.

Member Services

Uplift has put into place a number of other activities to promote better preventative health and health seeking behavior among members. These services, which are free to HMF members, include health education talks and access to free screening, diagnostic and health services through health camps, as well as the Guidance Doctor mentioned above.

THE CLIENT COMMUNITY

As described above, the client community was instrumental in shaping the HMF program from the beginning. Today, the clients remain active in both the design and implementation of the program. For example, in early 2011, Uplift reviewed the premium price for the HMF. They obtained actuarial advice about the premium level and then did market research with policyholders to assess the affordability of different premiums.

On an ongoing basis, HMF members are actively engaged in the approval of claims and the amount to be reimbursed. Participation in these processes through claims committee meetings is voluntary for PSW members, but for APVS clients, the activities are integrated into the mandatory microcredit group meetings. In many cases, Claims Committee Representatives are selected by HMF staff based on their commitment to the program and their capabilities. In other cases, HMF members choose client leaders to represent them and lead the claims meetings, alongside Uplift and NGO staff. The Claims Committee Representatives, who are volunteers, are tasked with substantive responsibilities such as signing reimbursement checks. They also can be active in promoting the HMF program and organizing some of the health management services in their community. The active involvement of the members has implications for the financial value of the HMF as will be shown later.

IMPLEMENTING PARTNERS

The implementing partners, APVS and PWS, are responsible for promoting the health microinsurance program, enrolling members, collecting premiums, collecting and performing an initial review of claims documents, and disbursing claims payments. They are also responsible for implementing the health management activities, such as health talks and health camps, and for supporting the Guidance Center by providing space. The SE is the front-line staff person working at the branch level of the NGOs and who is responsible for providing HMF services to the Insured members. Importantly, this position is dedicated to supporting the HMF program only. Below we provide summary information on the HMF partners operating in Pune. See Annex 2 for more details on these partners.

Annapurna Parivar Vikas Samvardhan (APVS)

Annapurna Parivar Vikas Samvardhan (APVS) has 80,000 HMF members across branches in Pune and Mumbai and is growing rapidly.⁷ In Pune, APVS reported 14,668 policyholders and

⁷ APVS is the microinsurance program of Annapurna which is offered alongside the microcredit program, Annapurna Mahila Mandal Pune. For regulatory reasons the programs are housed in separate legal entities. AMMP is a cooperative society to enable the microcredit program to legally collect savings. For simplicity's sake, we refer to the Annapurna insurance and microcredit programs collectively as APVS throughout this report.

54,461 HMF members at the end of 2010. APVS clients (including those in Mumbai) account for about 75 to 80 percent of HMF members.

APVS is one program of several under the Annapurna umbrella that are offered to low-income women. The Uplift health microinsurance is compulsory for all borrowers at APVS and it is only available to active borrowers. The HMF program is closely linked to the microcredit program which uses a group-lending methodology (with loan terms of 12 months and repayment meetings held monthly). Clients are required to purchase credit life insurance (costing INR 50) and funeral and accident insurance (costing INR 50) along with the HMF product when they take a loan.

Parvati Swayamrojgar (PSW)

Parvati Swayamrojgar is a nonprofit NGO that offers microcredit, health microinsurance and financial literacy training to poor and low-income families in Pune. PSW currently has about 4,800 microcredit clients, over 5,000 HMF policyholders and nearly 18,000 HMF members. (For every HMF policyholder, there are about three to four HMF members.) The health insurance is compulsory for all PSW borrowers who do not have existing health insurance. About 80% of the borrowers have HMF; the other borrowers are covered through work or have access to free healthcare. The PSW microcredit program provides individual loans with 12 month terms, monthly repayments and doorstep service with loan repayments collected at the client's home.

Unlike at APVS, non-microcredit clients are eligible to purchase the HMF through PSW. At the end of 2010, 302 HMF policies were held by non-borrowers. The PSW credit program is small and growth is hindered by the available loan fund. As a result, PSW is actively targeting non-borrowers in order to grow the HMF membership.

The vast majority of the PSW client base is women but they also lend to men. These clients on average are poorer than those at APVS due to targeting through loan size and wealth-ranking assessments.

Both PSW and APVS work within the confines of the city of Pune (i.e., the Pune Municipal Corporation). PSW has seven branch offices while APVS has eight.

Members also can be active in promoting the HMF program and organizing some of the health management services—this involvement of the members has implications for the financial value of the HMF as will be shown later.

IMPLEMENTATION OF THE HMF MICROINSURANCE

From the customers' perspective, the process by which they can benefit from the HMF requires several steps. These steps involve all three of the players in the Uplift program: Uplift itself, the NGO partners and the HMF policyholders. Generally, the NGO partners take care of most of the processes that involve interaction with HMF members or members of the public. Uplift takes care of the back-office operations such as third-party administration (including decisions about who will be among the network of providers and negotiating those agreements) and claims assessment, while the HMF members and their representatives make the final decisions about claims approval and claims amounts. One of the most important

functions of Uplift is negotiating the medical rates with the network providers. Uplift has successfully negotiated significant bulk price discounts for its members at private network hospitals.

The processes are designed to be customer-friendly in that they are convenient, proximate, timely and do not require a large input of member time. For PSW and APVS, HMF members are recruited mainly through the microcredit program. In both cases, HMF is compulsory and HMF enrollment is closely tied to the loan process. Claims approval and disbursements within the community are usually carried out in tandem with the loan process at APVS, while special meetings are required at PSW. APVS has tried to alleviate the burden of HMF renewals on members by requiring savings (with interest) that can be drawn down when it is time to pay the annual premium.

The Uplift model is a comprehensive, integrated model in which all program elements are designed to work together to provide access to good quality healthcare at low and affordable rates. The participatory nature of the program creates buy-in and commitment from the members while holding down costs. The services that promote good health-seeking behavior are also intended to promote better financial protection because when people get treated sooner, medical costs are often less expensive. The Uplift program might well be considered a health protection program, rather than a health insurance program.



What is Client Value?

CLIENT VALUE OF HEALTH MICROINSURANCE

We propose that health microinsurance programs will deliver *client value* to the extent that they provide for both *client needs* and *client wants*. That is, in order to provide client value, health insurance programs must provide cover for priority healthcare needs, timely access to the claims or benefits, easy and convenient access to quality healthcare and convenient access to the insurance, including inexpensive processes for enrolling, paying and submitting claims, and all for an affordable premium. Additionally, these programs should address the clients' lack of health awareness and poor knowledge of the healthcare system. At the same time, households should be financially protected by the insurance. When the overlap of client needs and client wants is greatest, clients will obtain the most value.¹

However, in the absence of some mechanism to pool risk across all income groups, health microinsurance will be challenged to provide sufficient cover and services to satisfy all the healthcare needs and wants of its target population of the lower-income segments.

¹ After McCord, M. "Client Value Draft Definitions", November 2010, unpublished.

Comprehensive community-managed health insurance is a promising model because it can manage the intense pressure for more services at less cost by involving the low-income beneficiaries themselves in making the trade-offs. Proponents believe that in this way, community-managed insurance can sustainably serve clients. The question is – does it provide client value?

Looking at microinsurance from the perspectives of both client demand and the current barriers to health-seeking, we propose that health microinsurance provides client value to the extent that it: (Dunford et al., 2011)

- Provides affordable and convenient financial protection services which shield families from financial losses due to poor health and the financial costs of care;
- Provides access to healthcare services that are appropriate, proximate, are of sufficient quality and meet priority healthcare needs, in a convenient and timely manner;
- Results in improved health awareness and knowledge.

Microinsurance demand research worldwide has found that low-income populations want insurance cover that provides adequate protection from the full costs of priority risks, affordable premiums, timely delivery of claims or benefits, and convenient and inexpensive processes for enrolling, paying and submitting claims (Cohen and Sebstad, 2003). Moreover, low-income people want to obtain tangible benefits from insurance within a short period of time -- they do not want to pay something for nothing (Tower, 2010).

Demand for health microinsurance is similar to that for other types of insurance but only up to a point. Demand for health microinsurance is fundamentally a derived demand for good health itself. For poor people, who rely on their physical labor to earn a living each day, good health means the ability to work, which means that they can eat, at least for that day. Health microinsurance is a means to lower the financial hurdle that poor people face when they need medical care. It can often make the difference between whether people seek care or not.

Research has shown that the poor want timely access to good quality and effective healthcare which is proximate to where they live. When it comes to the demand for health microinsurance, they want cover that will give them access to care for a variety of health problems including frequent but short-term common illnesses, chronic health conditions such as diabetes, good quality prescription drugs and to a lesser extent, serious health conditions and accidents which require hospital care. Within this range of need, poor people, who often live in unsanitary or unhealthy settings, tend to prioritize healthcare cover for the less serious but more common illnesses that require frequent visits to the doctor and purchases of both over the counter and prescription medications. They also focus on the need for protection from chronic illnesses such as diabetes.

They worry less about the costs of care required for the most serious medical conditions that might bankrupt them but which are very infrequent. In contrast, insurers have focused on protection from the more catastrophic costs of care. Berman et. al. (2010) found that in India the costs of out-patient healthcare were responsible for more families falling into poverty than the costs of in-patient care. Health microinsurance will create client value when it facilitates access to the healthcare that poor people themselves prioritize.

A lack of money, however, is not the only barrier that keeps people from accessing care. Health-seeking behavior is determined by many factors of which affordability is but one. For example, MFO's research has found that a lack of knowledge and awareness of health status and the nature of disease, reduced demand for healthcare among low-income communities in Uganda (Klincic, 2008). The lack of knowledge of both health issues and the healthcare system increases the search costs for poor people. Research in Bangladesh found that the placement of health microinsurance programs contributes to increased health awareness and use of formal healthcare for members (Hamid, Roberts, Mosley, 2010). Client value of health insurance will be enhanced if it can address the lack of health awareness and healthcare knowledge thereby reducing search costs, increasing access to care and reducing vulnerability.

Evaluations of health microinsurance have tended to focus on whether it protects poor people from falling even deeper into poverty due to medical expenditures. Health insurance is posited to reduce household vulnerability to such impoverishment in two ways: it reduces the household's out-of-pocket medical expenses thereby protecting consumption levels, and it increases access to healthcare which improves health status and ultimately protects household income.⁸ (See for example, Jutting, 2004.) Household consumption is protected when households avoid falling into deep and lasting debt. Household income is protected both when households are able to hold on to productive assets and when working members are in better health. In our framework, the client value of health microinsurance depends on how well it meets needs, ie, how well it protects families financially, in addition to how well it meets client demand.

DOES UPLIFT CREATE CLIENT VALUE?

The purpose of this report is to investigate whether the Uplift health microinsurance program creates financial value for the members, where we assume that financial value is "the value obtained when claims are made."⁹ Our focus will be on the financial protection offered by the HMF program.

Uplift proposes that they create financial value by keeping premiums affordable and by reducing the out-of-pocket (OOP) costs for policyholders and their families. They also claim to create value for members by providing access to health care and by promoting better health awareness and knowledge. (See Box "Proposed Model of Value Creation at Uplift.") Uplift's ability to create client value, particularly financial value, and sustain it is unclear, given the small risk pool of 100,000 people and the reliance on reimbursement of costs. The key questions addressed in this report are:

- Does Uplift health microinsurance protect households financially? If so, how?
- Are the OOP costs of healthcare lower for Insured households than for Uninsured households?

When it comes to the demand for health microinsurance, the poor want access to care for a variety of health problems including frequent but short-term common illnesses, chronic health conditions and good quality prescription drugs.

⁸ Vulnerability is defined as "the existence and extent of a threat of poverty and destitution; the danger that a socially unacceptable level of well-being may materialize" (Dercon, Stefan. "Vulnerability: a microperspective. April 2005. Queen Elizabeth House, University of Oxford in its series QEH working papers.) p. 2.

⁹ Other aspects of client value will be explored in a separate report.

- How does the unique community-managed reimbursement process at Uplift influence the financial protection effect of the insurance?

These questions are addressed by comparing the experiences of a small sample of HMF-Insured households to those of a sample of similar but Uninsured households. We investigate the financial value provided by Uplift at the institutional level by analyzing institutional performance and financial data. In the next section, we review the methodologies we used to investigate these questions.

PROPOSED MODEL OF VALUE CREATION AT UPLIFT

A. Uplift keeps premiums low and affordable by:

- Consulting the policyholders about their capacity to pay.
- Controlling claims costs through member participation in claims decisions.
- Controlling for fraud by providing claims on a reimbursement basis.
- Requiring co-payments for care at private, in-network providers.
- Covering pre-existing conditions only after 2 years of membership.

B. Uplift reduces Out-of-Pocket costs for policyholders and their families by:

- Providing 100 percent reimbursement for costs of using government hospitals.
- Providing 80 percent reimbursement for costs of using private in-network hospitals.
- Negotiating discount rates at private in-network hospitals.
- Providing access to a network of out-patient doctors at discounted prices (no other cover provided).
- Negotiating ad hoc discounts at government hospitals for policyholders.
- Steering policyholders to lower cost providers (such as government or trust hospitals).
- Reducing policyholder search costs through referrals, a 24/7 Helpline, and Guidance Doctor.

C. The Uplift program provides members access to health care that is:

- Better quality. All in-network healthcare providers are required to meet minimum standards.
- Proximate. Uplift has developed the hospital network to ensure that each member has at least one facility within 5 km of their home.
- Appropriate. Uplift refers members to the appropriate type of healthcare for their needs through its referral system, 24/7 Helpline, and Guidance Doctor.
- Timely. The Insured status of members allows them to access care knowing that they can receive at least partial reimbursement after the fact. Those who cannot afford to pay for care on the spot can appeal to Uplift who will send staff to intervene for them at the healthcare provider and negotiate another method for bill payment.
- Complete. Provision of discounted prescription drugs enables members to afford to finish their treatment regime.

D. The Uplift program promotes better health awareness and knowledge for members through:

- Health camps that improve the health awareness and health status of members through free diagnosis and treatment of specific conditions. Free health camps conducted by healthcare providers are held about every two months for Uplift members.
- Health education talks that increase awareness of preventive health behaviors, specific diseases and health status. This leads to seeking care earlier and better health outcomes.
- Access to a Guidance Doctor who provides advice on medical issues, promotes better health seeking behavior, better preventive health behavior and increases members awareness of their health status.
- Access to the 24/7 Helpline that provides medical advice and promotes better health seeking behavior.



Methodology

To explore the question of financial value of the HMF product, we carried out in-depth individual interviews with representatives of families who had a member hospitalized for malaria, with key informants at Uplift and its NGO partners and with key staff at healthcare facilities. Institutional data from Uplift and the NGO partners was analyzed to examine key indicators of client value. The research took place in Pune, India, specifically within the PMC.

THE CASE STUDY SAMPLE

Assessing and comparing the costs of healthcare among different individuals is extremely challenging due to the wide range of types and severity of medical problems, as well as the variability in responses to treatment. To reduce this potential variability in patient experience, we focused our case study on one disease, malaria. Of the range of medical conditions relevant to our sample criteria, malaria came to the forefront because we were informed that 2010 was a particularly bad year for malaria in Pune and because the disease is of particular interest to the foundation.

We sampled HMF-Insured families and Uninsured families that had a member hospitalized with malaria in 2010. The sample was restricted to cases in which hospitalization took place in 2010 in order to get the best possible recall from the respondents.

TABLE 2

SAMPLE FRAME OF INTERVIEWS WITH MALARIA PATIENT REPRESENTATIVES

Individual Interviews	Current Uplift Policyholders	Non-Policyholders	Total
Households with a member who was hospitalized for malaria	15	10	25
Patients represented in sample	16	11	27

TABLE 3

CHARACTERISTICS OF PATIENTS REPRESENTED IN SAMPLE

Sample	Insured	%	Uninsured	%
Number of HMF policies/households	15		10	
Number of patients	16		11	
Number of male patients	12	75%	8	73%
Number of female patients	4	25%	3	27%
Number of adult patients (over 18 y.o.)	14	88%	7	64%
Number of child patients	2	13%	4	36%
Number of patients who had work before becoming sick	13	81%	5	45%
Number of patients who were main breadwinner for family	7	44%	2 or 3	18 or 27%
Average premiums paid per policyholding family	INR 426.7 USD \$9.48		na	

We sampled 15 Insured households (“Insured”) and 10 Uninsured households (“Uninsured”) (see Table 2). However, since some households had multiple cases of malaria, these selected households accounted for 16 Insured patients and 11 Uninsured patients.¹⁰ HMF policyholders were selected from the PSW and APVS-Pune claims databases. The policyholder for each of these cases was contacted and asked to participate in the research. To maximize comparability, we selected those claims – six from PSW and nine from APVS-Pune – involving the fewest health complications. Nevertheless, a few of the claims included complications such as other diseases or health issues in addition to malaria.

Uninsured families were more difficult to identify. After considering different ways of finding the Uninsured, we settled on asking doctors at two small hospitals that serve Uplift clients if they could approach their Uninsured malaria patients and ask them to participate in our research. This strategy we believed would result in the identification of patients from similar socio-economic backgrounds as the HMF-Insured patients since the hospitals are located close to low-income neighborhoods. We found nine Uninsured patients in this way. One other patient was identified from a referral from another Uninsured respondent.

¹⁰ In the case of the Insured, a husband and wife became ill together and in the case of the Uninsured, two young brothers got malaria at the same time. We have controlled for these situations in the data analysis. In some cases, we report indicators as “per patient” and, where appropriate (such as regarding cost data), we report other indicators as “per household.”

Data was collected from the case study sample using in-depth individual interviews and a short questionnaire. The interviews with Insured and Uninsured respondents focused on the malaria patients' health-seeking behavior, the costs of malaria-related care and treatment, and how the patient's household managed the costs of this care. Basic socio-demographic data on each participating household was collected using a short questionnaire. All interviews took place in the family's home to ensure the privacy and comfort of the respondents. The interviews lasted about 45 minutes to one hour, and the research team provided each respondent with a small gift as a token of appreciation for their time.

THE KEY INFORMANT SAMPLE

Key stakeholders interviewed included staff at all levels of Uplift, APVS and PSW, HMF Claims Community Representatives (CCRs), staff of network and non-network hospitals and in-network out-patient doctors (OPDs) (See Table 4).

Interviews at Uplift and the NGOs were designed to document the product and program delivery as well as to gather staff opinions about HMF member use of the program and their cost-coping strategies. Finally, interviews with healthcare providers were designed to gather information about the health status of the community, health-seeking behaviors related to malaria, and the costs and payment strategies for malaria treatment.

INSTITUTIONAL ANALYSIS

The analysis of institutional performance indicators was conducted using actual claims data, monthly institutional performance reports and accounting/financial reports from Uplift, the two NGOs and Swaabimaan (a local NGO representing Uplift's donor, Inter-Aide). The institutional data was analyzed to evaluate client value through key performance indicators such as the incurred claims, rejection and renewal ratios as well as to identify the specific components of financial value provided to HMF members.

TABLE 4
SAMPLE FRAME OF INTERVIEWS WITH STAKEHOLDER KEY INFORMANTS

Stakeholder Institution	Number of Interviews
Uplift	6
APVS	8
PSW	9
Out-patient doctors	2
Hospitals	6
Total	31

VALIDITY AND RELIABILITY OF THE DATA

This study made use of several techniques to enhance the validity and reliability of the data:

- Multiple data collection methods, including interviews, program data analysis (for Uplift and the two NGOs) and secondary sources were used;
- Research questions were cross-referenced across interview guides in order to triangulate findings from different sources;
- A variety of perspectives was solicited in order to gain a comprehensive understanding based on diverse expertise and opinion;
- The data collection tools were documented in English and the local language, Marathi.

LIMITATIONS OF THE STUDY

Our investigation combined case study methodology with programmatic data analysis. Several challenges encountered in the sampling of malaria patients constrained the results of the case study component.

Sample Design

The original sample design called for 30 Insured individuals and 30 Uninsured individuals. However, an initial investigation in the field revealed that identifying and interviewing a sample of this size would prove difficult within the available timeframe. As a result, the sample design was scaled back to target 15 Insured and 15 Uninsured patients. In the end, we sampled 15 Insured and 10 Uninsured households representing 16 and 11 patients respectively. As a result of the small sample size, the comparison of differences in outcomes between the two groups is weaker.

Selection

The HMF sample was selected from the claims databases of PSW and APVS-Pune with assistance from Uplift. An error occurred in that two patients who had actually been treated in 2009 were selected into the sample (on the basis that their claims were not submitted until 2010), but we do not think this has made a material difference to the results in terms of interviewee recall. Sampling and selecting the Uninsured group proved to be challenging. The intention had been to work through local NGOs that are unaffiliated with the HMF program and use a snowball sampling technique to identify people that had suffered a bout of malaria in 2010. This did not work. With the assistance of Uplift, we approached a few private hospitals and asked them to contact their patients who had been hospitalized for malaria in 2010 and ask if they would like to participate in the research. Relying on these doctors to serve as liaisons to Uninsured patients meant that a) we could not access information about the patients' socioeconomic status prior to the interview, and b) we do not have the same detailed information on the Uninsured patients' diagnoses as we do for the Insured. The sample of Uninsured patients was smaller than our target due to these challenges in selecting the sample. Significantly more time would have been needed to obtain an Uninsured sample of equal size. We found that the Uninsured respondent sample had attended a smaller range of hospitals than did those in the Insured sample, and many of them attended the same hospital. As a result, the cost data for the Uninsured is less varied.

Availability of Respondents

Interviews with the Insured and Uninsured patients or their family members took place during working hours, as local members of the research team felt it would be unsafe to enter the slum areas at night. As a result, the majority of our malaria sample respondents were women (because during the daytime, most of the men were working outside the home). This pattern is more relevant to the Insured sample, as the policyholders for the HMF tend to be the woman of the house. Very rarely was the head of the household available to participate in the research. We believe that for a few of the households, we would have obtained more complete information particularly regarding expenses and loan amounts, had we been able to interview the husband as well as the wife. But we do not believe that this lack of information impacts our overall findings because the magnitudes of the missing values are probably marginal.



The Setting

STUDY LOCATION

Pune

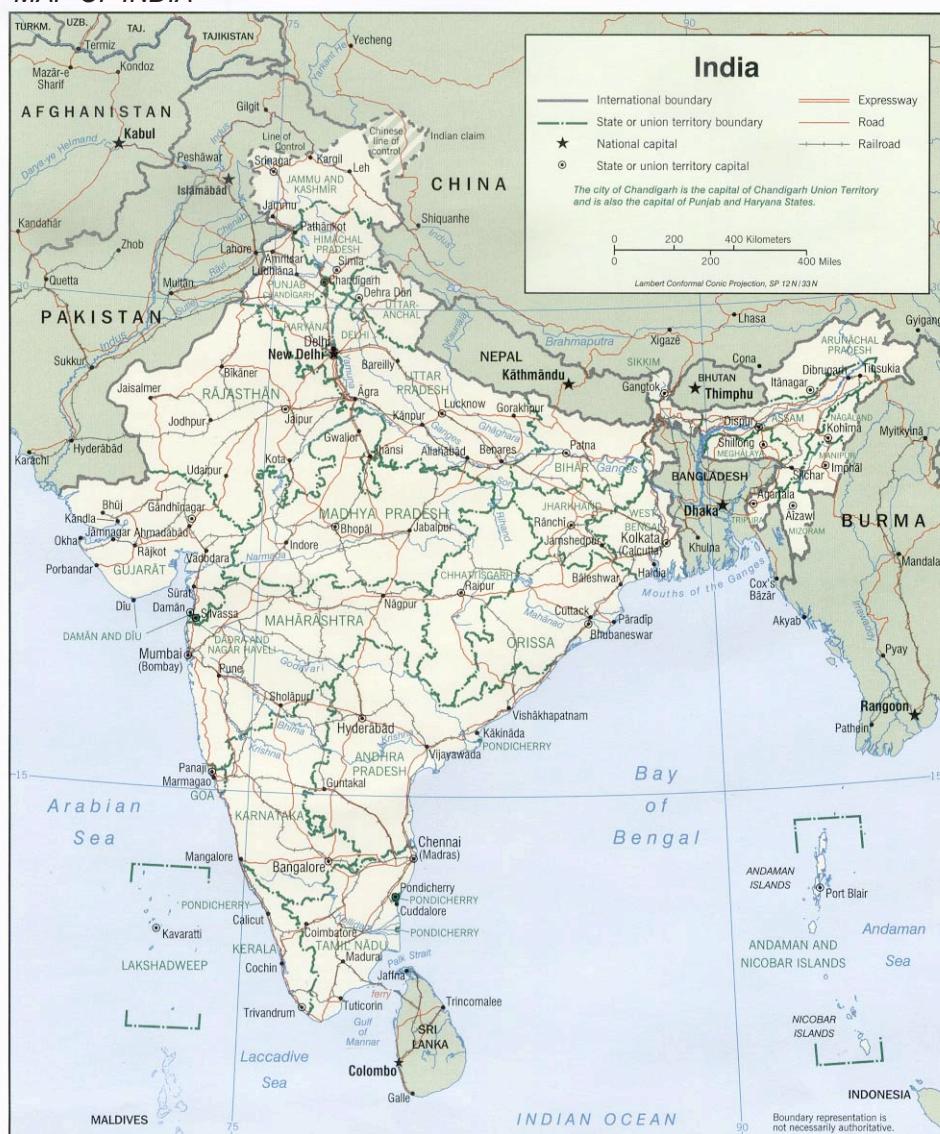
The study took place in Pune, India, the eighth-largest city in India and the headquarters for Uplift. The population of Pune city is estimated at 4.1 million for 2011 (Pune Municipal Corporation, PMC, 2007-08), and the city and surrounding areas have been growing rapidly. The per capita income of Pune is INR 46,000 (\$1,022), which is the second-highest in India and about 50 percent higher than the figure for the country as a whole (Pune Municipal Corporation, PMC, 2007-08).

Despite rapid economic growth and above-average indicators, poverty persists in Pune. As of 2010, PMC records indicate that there are about 10,081 families living below the locally defined poverty line (BPL) in Pune city (Pune Mirror, 2011).¹ However, these figures are likely to be highly understated. In India as a whole, the share of the population at or under the *national* poverty line was 27.5% in 2004/05 (this is the most recent data available).

¹PMC uses the following criteria for identifying BPL families: i) their monthly per capita income should be below Rs 419.98 or approximately \$9.5; ii) should not own a pucca house (built from sturdy materials) and; iii) should not own a refrigerator, telephone or a motorized vehicle.

About 455 million Indians are currently believed to live on less than \$1.25 per day (www.nytimes.com, 05/19/11). In India as a whole, the burden of health expenditures falls hard on the poor as 76.1% of total health expenditures in the country are paid out-of-pocket (Berman, 2010). Our case study sample as well as the HMF client base in general reside in slum areas. The population living in slums in Pune has been increasing rapidly along with the economy.¹¹ According to official and unofficial estimates, 32 to 40 percent of the total population of Pune city live in 477 to 503 slum pockets (Times of India, 2011) of which an estimated 340 were declared slums and 132 were undeclared (Pune Municipal Corporation, PMC, 2007-08). Some PMC estimates suggest that about 27 percent of the city's population is packed into the declared slums, which occupy only 4 percent of the total city area.

FIGURE B
MAP OF INDIA



Source: <http://www.un.org/Depts/Cartographic/map/profile/seasia.pdf>

¹¹ Slums are defined as urban housing where people by encroachment or invasion occupy any available open space.

Both PWS and APVS serve clients in the urban declared slums of Pune. These areas are recognized by the government and receive a basic municipal services, as opposed to undeclared slums which do not receive any municipal services. Declared slums are characterized by sub-standard housing and poor drainage, with households having access to only communal water taps and toilets. The living conditions in combination with high population density have implications for the health status of slum residents as well as for the poverty outreach for Uplift, as we will see later in this report. Indeed, because microcredit programs do not operate within the undeclared slums due to fears of higher loan defaults, Uplift in turn is not able to serve this population.

BACKGROUND ON HEALTH STATUS OF POPULATION¹²

The population of India exhibits poor health statistics on many fronts. While the birth rate is estimated to be more than 20 births per 1,000 population, the death rate stands at around 7.5 (CIA World Factbook, July 2011). Life expectancy at birth for the population as a whole is 66.8 years. The infant mortality rate (death rate of children below 1 year of age) stands at 47.6 per 1000 live births (ibid). Pune city exhibits, on average, better health statistics when compared to India as a whole.¹³

Top Health Problems

The most common infections officially reported in Pune city over the past few years include malaria, dengue, swine flu, chikungunya (an insect-borne virus), gastroenteritis, cholera, jaundice and typhoid. In terms of relative prevalence of diseases, the number of people suffering from sexually transmitted and mosquito-borne diseases is lower than those with communicable, skin or water-borne diseases (Pune Municipal Corporation, PMC, 2007-08). The healthcare providers we interviewed provided their perspective on the health status of the patients that they see (See Table 5).

Low-income populations living in slums are more likely to suffer from certain medical conditions than other groups due to the location of their residence, often along rivers or canals, poor hygienic conditions (e.g., crowded housing, common taps and toilets, etc) and, by some accounts, a general lack of awareness or of attention to hygiene. As a result, they are more likely to suffer from upper respiratory tract infections, malaria, typhoid fever, water-borne diseases such as gastroenteritis and, according to some health providers, malnutrition (in girls and nursing mothers).

Low-income populations living in slums are more likely to suffer from certain medical conditions than other groups due to the location of their residence (often along rivers) and to poor hygienic conditions.

¹² Zeenat Nazir, MFO consultant, contributed to this section.

¹³ For Pune district, the infant mortality rate was 22, maternal mortality rate was 0.4 and death rate was 5.16 according to the 2001 Census, the most recent year for which statistics are available (Central Integrated Pest Management Center). For Pune city, the infant mortality rate was as high as 32 while the death rate was 8.8, as of 2005. According to city officials, the death rate is on the higher side compared to Pune district and the national average because people from different parts of the state come to Pune for treatment and their deaths are registered in the city (The Indian Express, 2005).

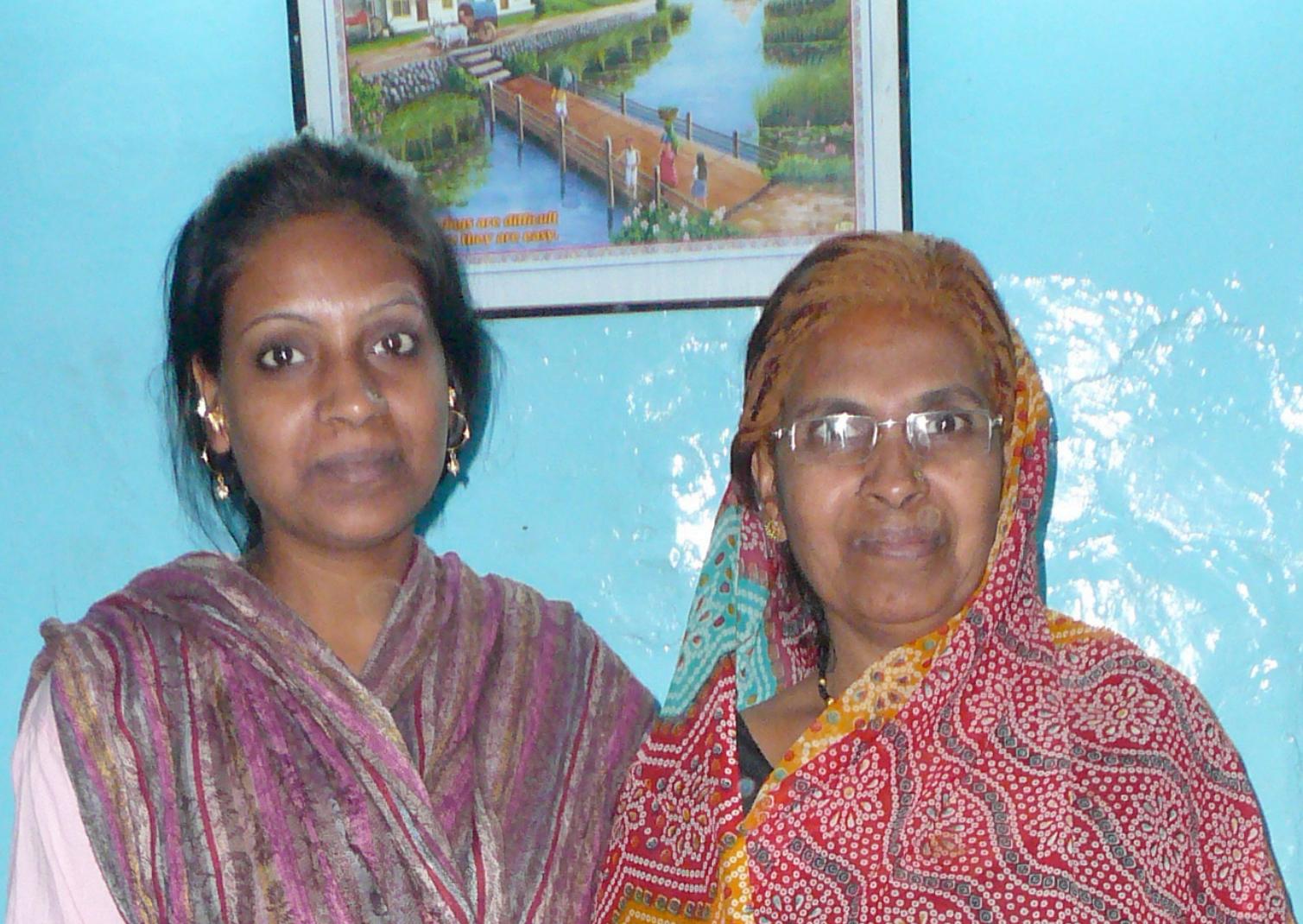
TABLE 5
**COMMON HEALTH COMPLAINTS OF THE POPULATION BY
 SEGMENT AND SEASON**

Men	Women
Hypertension and cardiac problems, diabetes, piles, viral fevers, acid peptic disorders, diarrhea, accidents and addictions to alcohol or tobacco.	Anemia, gynecological troubles, low weight, dysfunctional uterine bleeding, abdominal and back pain, fever of unknown origin, acid peptic disorders and bladder problems.
Children	Elderly
Cough, cold and fever, diarrhea, respiratory tract infections and fever. Less frequent problems include abdominal pain, vomiting, appendicitis, worms, general weakness, bronchitis and asthma.	Anemia, arthritis, diabetes, hypertension, cataracts, high blood pressure.
Monsoon Rainy Season	Winter Season
Mosquito-borne diseases such as malaria, dengue fever and chikungunya are rampant. Gastroenteritis and other water-borne diseases are also common.	Rheumatoid complaints, respiratory infections, anemia, fever and worms.

In addition to being more susceptible to certain conditions, the health-seeking behavior (or lack thereof) of the poor may aggravate their illness:

“People of lower classes tend to ignore these problems and only come to us in extreme cases. Often they come to us with headaches . . . and then we diagnose bigger problems such as diabetes. . . Very often, even after we have diagnosed these problems, the patients don’t undergo treatment immediately because of financial problems.”

—Doctor at Private Hospital in Pune



Findings

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE

Respondent Sample

The respondent sample was selected purposively. For the Insured sample, the policyholder was the main point of contact and often was the interviewee whether or not they were the patient. For the Uninsured sample, the patient (if an adult) or the mother (if the patient was a child) was the main point of contact. As a result, the Uninsured respondent sample had a higher share of men than the Insured sample. Since some of the Uninsured patients were young men, the Uninsured sample also had a higher proportion of unmarried individuals, all of whom except one still lived at home with their parents and siblings. Analysis of basic socio-demographic indicators shows some differences and some similarities between the Insured and Uninsured groups.

Respondents' Household Characteristics

The data for the sampled households suggests that based on the color of their ration cards the majority of both the Insured and Uninsured samples are “middle-class” in the context of their neighborhoods. The color of the households ration card is an indicator of family income. That system is reported to be subject to politics to such an extent as to affect reliability. Nevertheless it is the best indicator we have for the socio-economic standing of the interviewed households.

RATION CARDS

Maharashtra State issues three types of ration cards: yellow for Below Poverty Level (BPL) households, saffron or orange for “middle class” households and white for the well-to-do. Yellow cards are for households earning less than INR 15,000 (\$333.33) per year. These BPL households are entitled to subsidized rice, wheat and sugar. Saffron cards are for Above Poverty Level (APL) households earning INR 15,001 to INR 100,000 (\$333.33 to \$2,222.22) per year only. These families can obtain wheat and rice at higher yet still subsidized prices. White ration cards are for families making more than INR 100,000 (\$2,222.22). No subsidies are provided for these households.

Source: <http://www.maharashtra.gov.in/>

Both groups were predominantly low-income with 73 percent of the Insured and 60 percent of the Uninsured reporting that they held orange ration cards. The Insured were slightly more likely to be living below the poverty line, 20 percent versus 10 percent for the Uninsured. While the Uninsured were more likely to be well-to-do: 30 percent versus just under 7 percent for the Insured.

This finding is similar to what key informants told us about the community and about HMF clients generally. Staff at Uplift and one NGO reported that about

20 percent of APVS-Pune clients have yellow cards. Community members described HMF families in general as “not having enough to eat even though their housing was good.” Within the context of the slum neighborhoods, HMF families generally would be considered middle-class or lower-class people. This suggests that our sample is in line with the APVS-Pune client base.

Key informants at Uplift and the NGOs further reported that HMF families have income levels ranging from below the poverty level to middle class (within their context). They estimated the monthly income levels of HMF families to range from INR 3,000 to INR 5,000 (\$66.67¹⁴ to \$111.11) at the lower end up to about INR 5000 to INR 10,000 (\$111.11 to \$222.22) at the upper end. The maximum HMF families might earn would be INR 15,000 (\$333.33) per month but this would be unusual.

When we look at the sample characteristics, we find that the average Uninsured household was larger than the average Insured household (4.9 people vs. 4.2) (See Table 6). More importantly, the Uninsured had a much higher share of adults in the family than the Insured on average. This is significant because it indicates the potential for a lower dependency ratio. Surprisingly, the Insured had slightly more economically active people in their households on average.

¹⁴ All dollar figures are exchange rate dollars calculated at INR 45: USD 1.

TABLE 6
SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS AND THEIR HOUSEHOLDS

Respondent	Insured		Uninsured	
	Number	%	Number	%
Number of respondents	15		10	
Gender of Respondent				
Female	13	87%	4	40%
Male	2	13%	6	60%
Marital Status of Respondent				
Married	14	93%	4	40%
Single	1	7%	4	40%
Widowed			2	20%
Household Information				
Average number of adults in household (>18)	3.1		4.9	
Average number of children in household	1.1		1.3	
Average household size	4.2		4.9	
Average age of respondent	38.3		37.7	
Average number of economically active adults per household	2.5		2.1	
Households with white ration cards	1	7%	3	30%
Households with orange ration cards (low-income)	11	73%	6	60%
Households with yellow ration cards (Below Poverty Line)	3	20%	1	10%
Female respondent literacy rate	8	62%	2	50%
Male respondent literacy rate	2	100%	6	100%

The common occupations of the Insured and Uninsured respondents and their spouses did not differ greatly. Heads of households in both cohorts reportedly work as auto-rickshaw drivers, laborers, office workers, carpenters or salesmen in shops. Their wives work as cooks, housemaids or seamstresses. Some women worked solely as homemakers. Only a few of both sample groups were reported to be unemployed. The two groups differed in that three of the Uninsured households owned their own business.

Key informants emphasized that HMF-Insured family members generally work as daily wage earners and reported similar occupations to those listed above. These types of workers have no employer-provided health insurance or other benefits. In comparison, others in the community who work in offices or work for companies will earn more. Again, this suggests that the sample appears representative of the HMF client base in Pune.

Comparisons of certain household demographic characteristics are difficult because the households interviewed are in different stages of their life cycle. Notable differences can be seen in the data between the generations in terms of education level, literacy and even occupation. This was confirmed by key informant interviews. Nevertheless we report the average education and literacy levels here for the respondents and their spouses (where available) to provide an indication of the education level of the decision-makers in the families interviewed. The median Insured male respondent and female respondent both completed primary school. The median Uninsured female respondent had no schooling while the median Uninsured male respondent completed middle school.

TABLE 7
AVERAGE EDUCATION LEVELS FOR INSURED AND UNINSURED RESPONDENTS

Education Level	Insured				Uninsured			
	Female		Male		Female		Male	
	n	%	n	%	n	%	n	%
No schooling or never completed primary school	5	39%	0		2	50%	1	17%
Primary school completed	3	23%	1	50%	1	25%	1	17%
Middle school completed	3	23%	1	50%	1	25%	2	33%
Secondary school completed	1	7%	0		0		2	33%
Completed high secondary	1	7%	0		0		0	
Some college					0		0	
Finished college					0		0	
Total	13		2		4		6	

TABLE 8
STATUS OF INSURED HOUSEHOLDS' ACTIVITIES WITH THEIR MICROCREDIT NGO

	Insured			
	#	%	INR	USD
Number of respondents with active loan from APVS or PWS	7	47%		
Average loan amount currently borrowed			13,143	\$292.06
Average number of years borrowing from APVS or PWS	4			
Average amount saved at APVS or PSW			3,244	\$72.10

The sampled HMF members were experienced microcredit borrowers with an average membership duration of four years. Seven of the Insured households had an active loan outstanding with their NGO. The average amount borrowed was INR 13,143 (\$292.06). HMF members had also accumulated average savings of INR 3,244 (\$72.10), however, these mandatory savings are not accessible at times of emergency.

The majority of Insured and Uninsured households had used some type of formal financial institution in the last year (93% vs 70% respectively). 47% of the HMF households had loans from sources other than their NGO. Only 30 percent of the Uninsured had borrowed; but most loans were from informal sources.

The Uninsured were more likely to report having savings, and on average they had more savings on deposit. The Insured were more likely to report that someone in the household had an insurance policy in addition to the HMF. The types of policies owned by the respondents or their family members included: life, “moneyback” (i.e., endowment policies), and accident. The fact that there are some differences between the Insured and Uninsured sample is perhaps not so surprising since the samples were selected purposively based on the type of malaria treatment received. Based on ration card data, it appears that the Uninsured group may be slightly better off on average than the Insured. However, based on occupations the groups were similar. The Insured sample was similar to HMF clients generally, based on ration card status and occupation.

TABLE 9

FINANCIAL BEHAVIORS OF INSURED AND UNINSURED SAMPLED RESPONDENTS' HOUSEHOLDS

Financial Behaviors	Insured			Uninsured		
	Number	%	INR	Number	%	INR
Number of households that used a formal financial institution in the last year	13	93%		7	70%	
Respondents with other loans	7	47%		3	30%	
Average other loan amounts			20,364			101,667
Source of other loans:	12			7		
Formal	2	17%		1	14%	
Informal	8	67%		3	43%	
Moneylender	2	17%		3	43%	
Respondent with savings	8	47%		5	50%	
Savings Institution:						
Formal	6	75%		4	67%	
Informal				2	33%	
Average savings amount*			2,175			6,467
Number of households who own Other Insurance	7	47%		4	40%	
Type of other insurance						
Life Insurance	6	86%	5,218	2	50%	7,933
Accident Insurance	1	14%	650			
Moneyback**				2	50%	15,000
Covered household member:						
Husband	5					
Female family member	1			4		
Average premium paid			4,565			10,289
Respondents who own a mobile phone		67%			70%	
Respondents without access to a mobile phone		0%			30%	

* One respondent reported savings, but did not provide the amount. One Uninsured respondent reported 300,000 Rupees saved. This has been excluded so the average is not skewed.

** Average premium is based on one respondent.



FINANCIAL VALUE OF HMF FOR INDIVIDUALS

INTRODUCTION

In order to assess the *financial value* of HMF to the Insured malaria patients, we examined how well the insurance protected families from the financial impact of that disease.

Households face two main areas of financial impact: the costs of medical care and the foregone income when patients and other family members cannot work. Using primarily in-depth individual interviews with a sample of Insured families and similar Uninsured families, we collected data on the total costs that households sustained when a family member was hospitalized due to malaria. This section reports the cost data as well as our estimate of the financial protection offered by Uplift through the claims process.

We find that Insured and Uninsured households incur roughly similar total costs (including foregone income) in response to a bout of malaria. But Insured households have substantially lower net out-of-pocket (OOP) costs than the Uninsured due, at least in part, to price concessions received at in-network hospitals before the fact and claims reimbursements afterwards.

We begin this section by setting the stage with a review of some basic facts on malaria, a general account of how patients respond to it, and then an outline of our approach to categorizing the costs and losses patients face when sick with this disease.

BACKGROUND ON MALARIA

Malaria is a major health problem in the tropical and sub-tropical regions of the world, including India. It is caused by a protozoal parasite which is introduced into the body through a mosquito bite. The symptoms of malaria, high fever, chills, flu-like symptoms and anemia, appear within 10 days to a month after exposure. Proper malaria diagnosis requires a peripheral smear study of the patient's blood under a microscope.¹⁵

There are several types of malaria caused by different parasites. *P. vivax* is most commonly found and is seldom fatal. *P. falciparum* is less common but much more serious and can be fatal. Both *vivax* and *falciparum* malaria were reported among the MFO sample.

Malaria treatment should begin within 24 hours of the first symptoms and appropriate treatment is required to insure that the illness does not recur.¹⁶ Malaria can usually be cured through administration of different types of medications. For *p. vivax* a 14-day course of drugs is required, while for simple cases of *falciparum*, a 7-day course is needed to ensure successful treatment. For severe cases, IV fluids, other drugs and respiratory support may be required. Complications due to malaria include destruction of blood cells, liver failure, anemia, rupture of the spleen and even meningitis.¹⁷ Left untreated, malaria can lead to death.

RESPONSE OF SAMPLE TO MALARIA EPISODE

Most malaria patients represented in the sample followed the same general pattern of health-seeking behavior when they first experienced malaria symptoms. After suffering for two to three days with fever and chills, the patient went to the local general practitioner (GP) or family doctor (referred to here as OPD, or out-patient doctor). The doctor usually prescribed some fever-reducing medication and the patient returned home. After a few days when the fever did not subside, the patient returned to the family doctor, who then might have referred them to the hospital, or the patient directly sought care at a nearby hospital. Once at the hospital, the patient usually underwent a blood test. If the result was positive for malaria, the patient was admitted and treatment began. Often treatment with saline IV drip began even before test results were received.

Almost all study respondents mentioned that the patient underwent blood tests. One or two reported that the patient had an x-ray as well during the diagnostic stage. (Since we do not have the complete diagnosis for these patients it is unclear what the reasons for the x-ray were.) In all cases respondents mentioned that treatment included medications, injections and saline IV. A few patients reported receiving blood transfusions.

In the MFO sample, treatment ranged from two to 24 days for the Insured and three to 8.5 days for the Uninsured. This range in treatment times reflects to some extent variations in the patients' conditions.

¹⁵ <http://www.malariaosite.com/malaria/DiagnosisOfMalaria.htm> 3/30/2011.

¹⁶ http://www.who.int/malaria/diagnosis_treatment/treatment/en/index.html 3/30/2011.

¹⁷ <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMHoo01646/> 03/20/2011.

At least two of the Insured had *malaria falciparum*, which requires a different treatment regime than *malaria vivax* the more common variety found among the Insured. This may be part of the reason that the treatment times varied from patient to patient. The average number of days spent in hospital were 7.6 days for the Insured and 5.8 days for the Uninsured.¹⁸

After treatment, assuming further blood tests came back normal, the patient will be discharged. Patients were sometimes asked to come for a follow-up visit after a few days or two weeks. Respondents did not always mention follow-up visits after discharge from the hospital, perhaps because the cost of these visits is usually covered in the hospital bill at discharge.

A number of exceptions were found to this general pattern. A few patients mentioned that they had taken medication, sometimes with a pharmacist's advice, for some days before seeking treatment. At one extreme, we found a patient who waited nine days before seeking treatment from any outside source other than a pharmacist. At the other end of the spectrum, we found some patients who went directly to a hospital. And in the middle, we found a few patients who sought treatment at a second OPD after they failed to feel relief from the first doctor's visit. We also observed patients who visited more than one hospital for treatment due to the severity of their case, as well as, patients who had to be readmitted when their illness recurred.

In addition to these ranges within health-seeking behavior, patient families showed other signs of divergence. In one family, the policyholder and her spouse became ill with malaria at the same time and went through identical treatment. In another, two brothers became ill at the same time. In some families members became ill sequentially sometimes with malaria, sometimes with other mosquito-borne diseases. In all cases, this had of course a significant effect on the costs incurred for the family. For the sake of keeping our research focused, we did not consider the impact of subsequent illnesses if they involved diseases other than malaria or other members of the family.

APPROACH TO ASSESSING COSTS OF MALARIA RESPONSE

For analysis purposes, costs related to the treatment of malaria were categorized into three types:

The **direct costs** of healthcare include doctor's fees, hospital fees, lab fees, drug and supplies costs and any other treatment-related expenses.

The **indirect costs** of healthcare are those costs or losses incurred by the household as a result of the illness but which are not directly related to medical treatment. Beyond the cost of treatment, indirect costs refer to the costs incurred by the caregiver who accompanies the patient and to the value of time lost from work for both the patient and the caregiver or other family members (i.e., foregone or lost income). These costs also include the food expenses for the patient or caregiver that the family would not otherwise incur if the patient were not ill, transportation costs to obtain care or to care for the patient, and the value of time spent navigating the healthcare system. The Uplift HMF, like many other health insurance products, does not cover indirect costs even though these can present barriers to accessing medical care.

¹⁸ The median number of days spent in hospital was 6.5 for Insured patients and 5.0 for Uninsured patients.

Transactions costs are narrowly defined here as the costs related to financing healthcare. For Insured patients transactions costs include the opportunity cost of time and cash costs related to enrolling in, purchasing, and using insurance, submitting claims, and obtaining reimbursement. Factors such as the convenience and ease of use of the insurance contribute to the value of transaction costs for the Insured. For both the Insured and Uninsured, transactions costs include financing costs such as the interest paid on loans taken to cover health charges and the opportunity cost of time to identify funding sources.

Since Uplift provides reimbursement for in-patient treatment only (where in-patient is defined as a hospital admission lasting at least 24 hours) we also categorized costs according to whether they were for *out-patient* or *in-patient* treatment.

Finally, we distinguish between cash costs expended and financial losses. For example, out-of-pocket (OOP) costs are defined as the total of all cash outlays related to direct, indirect and transaction costs for in-patient and out-patient care where HMF premium costs are included in transaction costs. The primary distinction between OOP costs and total costs is that foregone income is only included in total costs.

In order for the Uplift program to provide financial protection for policyholder families it would need to result in lower malaria-related expenditures than would have resulted if families did not belong to HMF. In other words, the cost of health insurance (i.e., the premium cost) plus the total direct, indirect and transactions costs of obtaining health care should be lower than the total costs of obtaining the same or equivalent care without the insurance.

COSTS OF CARE FOR MALARIA TREATMENT

Total Costs Related to Malaria Episode

In response to a case of malaria sufficiently serious to require hospitalization, Insured and Uninsured *households* reported incurring similar average total costs, with the Insured reporting INR 21,006 (\$466.80) compared to INR 21,956 (\$487.91) for the Uninsured. (See Table 10). Average total costs *per patient* were similarly close, INR 19,693 vs. INR 19,761 (\$437.62 v. \$439.13). (We make a distinction between per patient and per household because one household in each sample had two patients undergoing treatment at the same time.) (See Table 11 below.)

TABLE 10
AVERAGE TOTAL COSTS FOR MALARIA CARE PER HOUSEHOLD

	Insured INR	Insured USD	Uninsured INR	Uninsured USD
Average total cost of malaria episode per household	21,006	\$466.79	21,956	\$487.91
Average total hospital-related costs per household	20,012	\$444.71	21,479	\$477.32
Average total out-patient costs per household	1,146	\$25.47	627	\$13.93

TABLE 11
TOTAL COSTS RELATED TO MALARIA CARE—AVERAGE PER PATIENT

	Insured INR	Insured USD	Uninsured INR	Uninsured USD
Average total costs related to malaria cases per patient				
Average total cost of malaria episode	19,693	\$437.62	19,761	\$439.13
Average total hospital-related costs	18,761	\$416.91	19,331	\$429.58
Average total out-patient costs	1,146	\$25.47	565	\$12.56
Average hospital costs per patient by component				
Average direct hospital costs	10,789	\$239.76	17,200	\$382.22
Average indirect hospital costs	7,455	\$165.68	1,896	\$42.13
Average transactions costs	517	\$11.49	294	\$6.53
Average out-patient costs per patient by component				
Average direct OPD costs	961	\$21.35	565	\$12.56
Average indirect OPD costs	186	\$4.12	0	\$0.00
Average transactions costs for OPD	0	\$0.00	0	\$0.00
Average out-of-pocket costs per patient				
Average total out-of-pocket costs per patient	12,250	\$272.22	19,006	\$422.36
Average claim reimbursement received per patient	4,038	\$89.74	0	\$0.00
Average net reimbursement per patient	3,638	\$80.85	0	\$0.00
Average net out-of-pocket costs per patient	8,212	\$182.48	19,006	\$422.36
Average premium paid per patient	400	\$8.89	0	\$0.00

Out-of Pocket Costs Related to Malaria Episode

The Uplift members experienced a lower financial shock than Uninsured households in terms of the *cash costs* of malaria care. Total OOP costs were lower for Insured patients than for Uninsured patients. Uninsured patients paid about 1.5 times as much as HMF members, or an average of INR 19,006 versus INR 12,250 (\$422.36 vs. \$272.22).¹⁹ With claims reimbursements taken into consideration, the Uninsured patients paid more than twice the amount that the Insured paid: INR 19,006 (\$422.36) versus net costs of INR 8,212 (\$182.49). Receiving the claims disbursement lowered OOP costs for HMF members by 32%.^{20 21}

¹⁹The median total OOP cost for Uplift members was INR 9,675 (\$215.00).

²⁰The average net OOP costs are defined as the average total OOP minus the average claims reimbursement per patient.

²¹The median net OOP costs for Insured patients was INR 5,637 (\$125.27) while it remained at INR 19,006 (\$422.36) for the Uninsured.

The largest single component of total costs per patient was direct hospital expenditures, comprising 55% of all costs for the Insured and 87% for the Uninsured. Unsurprisingly, outpatient costs were minor compared to the costs of hospital care.

Out-patient Costs: Most patients visited their family doctor soon after experiencing malaria symptoms (88% of Insured and 82% of Uninsured). Usually the patient visited a doctor close to their home so that no transportation was required to get there. Costs for OPD care were low for all patients but on average Insured patients paid 70 percent more than the Uninsured for direct OPD costs: INR 961 (\$21.35) for the Insured vs. INR 565 (\$12.56) for the Uninsured.

Hospital Costs: The costs related to hospital care for malaria were significantly higher than OPD costs but were, on average, similar for the Insured and Uninsured patients. Total hospital related costs reported by Uplift members averaged INR 18,761 (\$416.91) per patient compared to INR 19,331 (\$429.58) for Uninsured patients.

Comparison of Hospital Costs for Insured and Uninsured Patients by Component

Direct Costs of Hospital Care

Although total hospital costs were similar for both groups, the evidence suggests that the Uninsured patient households have substantially higher average direct costs of hospital care when compared to the Uplift members. The Insured HMF members had average direct costs of INR 10,789 (\$239.76) while the Uninsured incurred INR 17,200 (\$382.22) on average, 59% more than the Insured.

The Uninsured had higher direct costs for every hospital visit although the Insured members on average were admitted to more hospitals than the Uninsured. One possible explanation for these higher costs is that the Uninsured spent more time in the hospital than the Insured. However, our data show that, in fact, it is the Insured who are spending more time in the hospital, with an average stay of 7.6 days, while the Uninsured were admitted for only 5.8 days. On a daily basis, the Insured had average direct costs of INR 1,421 (\$31.57) versus INR 2,981 (\$66.24) for the Uninsured. In other words, the Uninsured patients are paying more than twice as much per day as Insured patients for hospital fees, drugs, and tests (see Table 12).

It is customary at private hospitals in Pune to require patients to make an initial payment upon admission to the hospital. This is to reduce the chances of losses from patients

TABLE 12
AVERAGE HOSPITAL COSTS PER PATIENT PER DAY BY COMPONENT

	Insured (INR)	Insured (USD)	Uninsured (INR)	Uninsured (USD)
Average direct hospital costs per day	1,421	\$31.57	2,981	\$66.24
Average indirect hospital costs per day	64	\$1.43	329	\$7.30
Average transactions costs per day	4	\$0.10	51	\$1.13
Average number of days in hospital per patient	7.6		5.7	

absconding without paying the bill. The Uninsured were more likely to be asked to make an advance payment upon hospital admission than the Insured were. Five of the Uninsured (46 percent) and six of the Insured (38 percent) were asked to pay a deposit. Only 25 percent of the Insured and 40 percent of the Uninsured actually paid a deposit. (Coincidentally, the average deposit paid was the same for each group INR 3,000 [\$66.67].) Having HMF-Insured status should allow patients to have the deposit requirement waived. But this requires policyholders to inform the hospital about their Insured status, and as we will see, this did not always happen.

Indirect Costs of Hospital Care

When we examined the total indirect costs of hospital care, a different pattern emerged. The Insured experienced substantially higher average indirect costs than the Uninsured, INR 7,455 vs. INR 1,896 (\$165.67 vs. \$42.13). This result can be explained by differences in foregone income for patients and caregivers between the Insured and Uninsured sample groups.

These results were surprising for several reasons. It is assumed that access to appropriate health care enables patients to recover faster and more thoroughly presumably leading to fewer missed work days. Therefore, we would expect patients to have lower indirect costs through faster recovery and thus lower missed earnings. What we found instead was that the amount of work missed by family members was higher than we expected. The hospitalization of a family member had a domino effect throughout the household. Not only did caregivers take time off to care for the patient, but other family members also missed work to help pick up the slack on the home front created by the absence of both the patient and the caregiver. Total lost income for families was quite significant. Transportation costs, on the other hand, which can be a barrier to accessing care in some contexts, were minor in this setting.

Foregone Income

For the Insured households, 95.6% of total indirect hospital costs were due to forgone income of either the patient or the caregiver. For the Uninsured households, foregone income represents only 39.8% of indirect costs. In absolute terms, the Insured households lost wages worth an average of INR 7,443 (\$165.40) per patient, while the Uninsured lost income worth only INR 755 (\$16.78), or only 10.14% that of the Insured.

This finding, however, is somewhat misleading. The indirect cost results are skewed due to important differences in the sample groups that impact the value of lost income. The Insured sample varied substantially from the Uninsured in terms of the work and income-earning status of the patients. Thirty-six percent of the Uninsured patient sample were children under the age of 18 years old, while only 13% of Insured patients were children. Only 45 percent of the Uninsured patients were employed when they fell sick and 36 percent lost some income as a result of the illness. In comparison, 81 percent of the Insured patients were working when they caught malaria and 75 percent of them reported having lost income. Insured households, in addition to this, were more likely to report that family caregivers missed work due to the patient's hospitalization.

When we look at foregone patient income, we find some interesting differences in the two groups. The Insured respondents reported missed wages for patients worth INR 6,179 (\$137.31). Foregone income for Uninsured patients was statistically zero -- all but one of the Uninsured households reported no lost wages. Even though they missed work, four patients did not lose any earnings because their employers paid them anyway. Usually this was because they had worked for the same employer for a very long time or because they worked for their family business. We were unable to accurately estimate lost income for one female patient who has been unable to return to work as a casual laborer due to weakness from the malaria episode.

All estimated lost income for Uninsured households was due to caregivers or other healthy family members missing work and not being paid. On average, the Uninsured lost INR 755 (\$16.78) of family income per patient in comparison to Insured households which lost INR 1,263 (\$28.07) per patient. Eight of the 10 Uninsured households reported that family members had acted as caregivers to the patient. Only three of these households reported that the caregivers lost earnings as a result of taking off work. Some did not work before the illness, while others did not suffer any lost wages even though they missed work. There is some underestimation of foregone income since not all respondents knew the income levels of family members who were not present during the interview. However, given the number of these instances, it is unlikely that having the correct data would change the overall conclusion that the Insured have higher income losses than the Uninsured.

The overall result though surprising is probably an anomaly due to the difference in the number of patients of working age between the two samples. While it is plausible that families carefully manage who acts as caregivers in order to reduce income losses, it is not possible for families to do the same with patients.

Transportation and Food Costs

Transportation and food costs were relatively low for both sample groups. Forty-five percent of Uninsured patients and fifty percent of Insured were reported to have required a special diet. The average expense per Uninsured patient was INR 491 (\$10.91) while that for the Insured was INR 694 (\$15.42). Although food costs were relatively low compared to other costs, they were still an added burden on poorer households, particularly when patients needed to stay on special diets after they returned home.

Only two of the Uninsured respondents reported any transportation costs, on average INR 569 (\$12.64), while five Insured respondents reported transportation expenses (average cost INR 420 (\$9.33) per patient). A few other Insured households incurred what were reported as minimal travel costs.

The hospitalization of a family member had a domino effect throughout the household. Not only did caregivers take time off to care for the patient, but other family members also missed work to help on the home front.

Caregivers

Most of the families interviewed prioritized seeking care at hospitals close to their home. The reasons for this become clear when one takes into consideration the role of the family in caring for a hospitalized patient. This information sheds new light on the demand for proximate healthcare services. The desire to save the patient's relatives' time and taxi fare is an important factor behind the preference for doctors and hospitals close to home.

Many hospitals require that families provide a caregiver to the patient. This is because nurses are not always available and when they are, they provide few services to the patients. The caregiver provides many of the services that a patient care or nursing assistant provides in US hospitals. She or he makes sure that the patient's needs are met. They change the bed pans, call the doctor if the patient needs attention, and feed, dress and clean the patient.

Additionally, the family usually provides all the food for the patient. In only one case in our study did a hospital provide any food for a patient and that was only for lunch. In many of the hospitals, caregivers can sleep on the floor by the bed of the patient. In one large hospital, a room with bunk beds has been provided for caregivers. With the need to have someone with the patient at all times and the need to provide meals to the patient three times per day, families must make a few trips to the hospital every day that the patient is admitted. Respondents described how their families approached caregiving:

His mother stayed with him while he was in the hospital during the day and night. In between, she would go back home and his father or sister would stay with him. His father would buy the injections at a medical store near the hospital. It was compulsory for him to have special food. For 3 to 4 days, he could not eat much so he was on fruits and coconut water which the family had to buy for him. They also gave him spinach and beet root soups because it helps build up the blood cells. In the evening, his family would bring him soups from home.

—Reported by a young, Uninsured male patient

One daughter-in-law stayed with her during the day. One of her sons stayed with her at night. The (elder) daughter-in-law who lives in Karve Nagar stayed with her during the day. The 2nd daughter-in-law went to Karve Nagar to manage that household. She would cook the food and bring it to the hospital by "share rickshaw" which cost about 50 to 100 Rs per day to travel to the hospital.

—Reported by an older, female Uninsured patient

My mother went. I couldn't go because I have young children and a job. She was there the whole day at the hospital. My husband used to take tiffin (food from home). They gave lunch in the hospital. We sent food in the morning and in the evening. My mother took care of the saline line to make sure that my mother-in-law did not move her hand.

—A young Insured woman reporting how her mother was the caregiver when the young woman's mother-in-law was in the hospital.

Transactions Costs of Hospital Care

Neither the Insured nor the Uninsured reported significant costs related to healthcare financing. Nevertheless, MFO calculates that the Insured had higher average transactions costs than the Uninsured (INR 517 vs INR 294 [or \$11.49 vs. \$6.53]) primarily because our calculations include the annual HMF premiums in the estimations of transactions costs.

In this analysis, we included the entire premium paid by the Insured member's family for the year. This is a conservative, but more accurate, approach to assessing financial value because the borrowers/policyholders are highly encouraged to enroll at least four family members (including themselves) in the HMF. As a result, the cost of access to the insurance is more accurately reflected in the full family premium. That said, each family member is entitled to up to INR 15,000 (\$333.33) of benefits or INR 60,000 (\$1,333.33) for a family of four. Since we did not explore the Insured families' total experience with HMF during 2010, we do not know what other financial value they may have obtained in addition to the claims reimbursement related to the malaria case.

Interviews with malaria respondents suggest that the costs of getting and using the insurance were relatively insignificant except for the premium payment. Therefore, only the premium payment is included as an insurance-related transaction cost. Average HMF premiums were INR 427 (\$9.49) on a per-household basis, while on a per-patient basis these were INR 400 (\$8.89).

Without the premium costs, HMF member transactions costs are INR 117 (\$2.60) as compared to INR 294 (\$6.53) for the Uninsured. This is due to higher debt financing costs paid by the Uninsured. This suggests that the Insured have substituted the cost of insurance for the cost of debt to a certain extent. To explore why debt financing costs were higher for the Uninsured than the Insured we examined the coping strategies used by patient households.

COPING STRATEGIES AND IMPACT ON FINANCING COSTS

In this section, we explore respondents' coping strategies in order to get a deeper understanding of the financial protection value of the HMF. One of the most significant indications of the financial protection offered by Uplift HMF is the coping strategy employed by patients to pay their medical expenses and to cover the gap in income caused by lost earnings. The financing strategies used by patient households to pay their healthcare bills can have long-lasting impacts. Certain strategies, such as the sale of productive assets can hinder the ability of households to earn future income. Other strategies, such as borrowing at high interest rates can place strains on future income and thus reduce household consumption or investment in business activities. The question of coping strategies employed is particularly interesting in the Uplift case because they use a claims reimbursement system rather than a cashless system.

Approach to Understanding Coping Strategies

Following Cohen and Sebstad (2001), coping strategies are categorized into three broad groups: low stress, medium stress and high stress. A low-stress coping strategy is one in which households modify their consumption in small ways -- calling in small informal debts, tightening the household budget, or drawing on informal group-based or other insurance. A medium-stress coping strategy is one in which households use savings, borrow from formal

or informal sources, diversify their income (e.g., take a second job), seek help from friends or migrate to find work. A high-stress coping strategy is one in which patients sell household or productive assets, take children out of school, or drastically reduce consumption.

In this study, a distinction is made between borrowing at interest versus borrowing with no interest. While both types of borrowing make demands on future income, and are considered medium stress in their impact, borrowing with interest can have a substantially worse impact on the future finances of the household.

Coping Strategies Used by Respondent Households

Overall, we found that there was a difference in the coping mechanisms available to and used by Insured versus Uninsured households. The Insured were more likely to need to borrow than the Uninsured, but they had lower debt-financing costs. Our research also showed sharp differences in the resources available to different households living within the same communities. The range of coping strategies used was more diverse across the Uninsured group.

A review of the strategies that households employ to obtain the cash for medical bills reveals several patterns. The first is that the coping strategies for out-patient care differ strongly from those used for hospital care. Yet, surprisingly some families still require medium-stress coping strategies for out-patient care, as they are unable to pay these costs from cash on hand.

The second pattern is that many families rely on more than one strategy to cope with hospital care. That is, they need to patch together finances from multiple sources. The range of coping strategies used in order to cover expenses was relatively narrow compared to the full spectrum of possibilities. Households tended to use cash on hand, savings, advances or loans from employers, gifts or loans from family, loans from formal or informal sources, and revenue from sales of assets such as gold jewelry.

The third pattern found is that financial strategies are sequenced or change over time. Certain strategies are used immediately in urgent situations (e.g., borrowing from a moneylender) and are then replaced with less expensive strategies (e.g., borrowing from a chit fund) once families have had time to shop around. But the sequence of financial strategies can change in the other direction, too, often becoming more stressful if the illness persists or the patient is required to move to a better equipped hospital.

Coping with the Costs of Out-patient Care

We observed strong differences in coping strategies used by the Insured and the Uninsured even for out-patient care costs. Only Insured respondents (three out of the 15) reported that they used credit in order to pay for out-patient care. In all cases, loans were taken interest free. The remainder of the Insured - and all of the Uninsured - used cash on hand or savings.

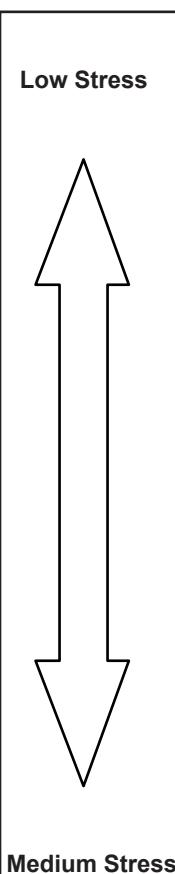
Coping with the Costs of Hospital Care

We were surprised to find that the Uninsured households were more likely to cope with hospitalization costs exclusively through low-stress strategies than the Insured households were. Many households that were able to cope with OPD costs by using cash-on-hand had to resort to other means to pay their hospital bills.

TABLE 13
**COPING STRATEGIES USED TO PAY FOR MALARIA
 RELATED EXPENSES**

	Insured	Uninsured	
Cash (own or family's)	3	4	
Gift—family		1	
Savings	5		
Advance from work	2		
Borrowed at 0% interest from			
Family	8	2	
Friends	1	1	
Employer	1 (3 different employers) and 1		
Other	1	1 (business associate)	
Against jewelry	1		
Borrowed at Interest from:			
PSW	1		
Chit Fund	1		
Moneylender	1	2	
Against jewelry	1	1	
Unknown		1 (3 times)	

Note: numbers don't add up to total number of households because households used multiple coping methods.



Although by definition all Uplift members use a low-stress coping strategy (i.e., the HMF), this insurance does not begin to provide financial relief until the patient has been discharged from the hospital and the policyholder receives the claims reimbursement. As a result, the Insured households are in the same starting position as the Uninsured in that they need to pay the treatment costs at the time of patient discharge and then await reimbursement (and also pay the initial deposit if they neglect, as sometimes happened, to inform the hospital at the time of admission about their Insured status). In fact, all of the Insured households (100 percent)

sampled had to resort to medium-stress strategies to obtain the cash they needed to pay the hospital. In comparison, only 50 percent of the Uninsured households needed to use medium-stress strategies; the rest were able to use low stress strategies such as cash on hand.

How did half of the Uninsured manage to avoid costly financing methods for hospital care? Three of these households had their own small businesses, including in one case, a moneylending service. In our sample, households with their own business seem better able to cope than those who work for others. The fourth patient had all his costs paid by his employer who has a commitment savings/self-insurance program.²² The fifth household may be better off than the average household in the Uplift program. The head of this household has a salaried job with the railway company and used his own funds.

Yet the remainder of the Uninsured (five households) had a very different experience. These families used a combination of medium- and low-stress coping methods as part of their portfolio of strategies. All five borrowed, with four of them paying interest at rates varying

²²The employer deducts INR 200 from each employee's paycheck each month and holds it to pay for medical care and for trips to their home villages.

from 2.5% to 20 percent per month. The lower rate was for borrowing against gold jewelry; the higher one the result of borrowing from a moneylender. In sum, 50 percent of the Uninsured households resorted to taking at least one loan to pay the hospital bill, with a few taking multiple loans.

All of the Insured households used at least one coping strategy that could be described as medium stress to pay the hospital costs. Of these, one household used savings alone to pay for hospital care, while 13 (86%) families had to borrow money. Only 27 percent of the Insured households needed to pay interest on loans in contrast to the Uninsured sample in which 40 percent had to pay interest in order to borrow.

Additionally, the interest rates that Insured households reported paying were on average lower than those paid by the Uninsured. The Insured were more likely to be able to borrow at zero interest. Monthly rates paid by the Insured ranged from minimal (used to describe the interest on a PSW loan [1.25%] to 5 percent).

Despite the lower interest rates paid by the Insured, the average per patient amount paid in financing costs by the Insured, INR 723.3 (\$16.07), was just slightly lower than that paid by the Uninsured, INR 783.3 (\$17.41).²³ However, the data for both the Insured and Uninsured is incomplete for two reasons. The first is that in some cases, the respondent did not know the exact amount borrowed or how much had been repaid because someone else in the family had been the one to take the loan. The second and more important reason is that the financing costs reported here are not the end of the story.

Indefinite Debt

Since some of the respondents had outstanding loans related to the malaria episode, at the time of the research, we are unable to fully estimate the total costs for Insured and Uninsured families stemming from the malaria treatment. However, the transaction costs were minor compared to the direct hospital costs. At the time of the research, three of the Uninsured and two of the Insured households reported that they were still repaying the loans that they had taken months earlier to pay for the hospital treatment. For example:

It was very hard to manage the expenses at home during my father's treatment because all of us had to miss work. We used up the entire advance of Rs 20,000 that my mother got from work. We still have to repay Rs 10,000 of that loan.

—Son of a Policyholder

Several of the respondents who borrowed had gone to moneylenders. In this area, moneylenders require that the principal amount be paid back in a lump sum and the interest be paid monthly. Due to the difficulty that poor families have in accumulating the lump sum principal payment, the borrower may end up paying interest for many months before they can repay the entire loan. This makes private loans extremely expensive. At least one of the Uninsured families will be in debt for a very long time, as they are unable to pay even the monthly interest payments on a regular basis. Here is the description of this family's situation:

²³ Average calculated based on the number who paid interest.

Her husband had to borrow 15,000 Rs at 20 percent (interest per month) the day she was admitted (in September 2010) because he knew they would need money every day for her medications. She also had to borrow 50,000 Rs at 10 percent when her grandson got sick a month after she did. She is only paying interest now when she can afford to (i.e. not regularly) and has not paid off any principal. There is hardly enough money for food. There is no income in her family now as a result of her becoming ill with malaria.

—Uninsured middle-aged woman

Our research suggests that not only the size of loans and interest rates but also loan terms impact the costs of financing medical treatment. The more vulnerable families, who are least able to repay these types of loans, are therefore hit hardest in terms of financing costs.

EXPERIENCE WITH REIMBURSEMENT

In this section, we review the net costs experienced by Insured households and compare the bottom line burden for the Insured versus the Uninsured.

Uplift chose to use a reimbursement model for HMF because it keeps costs down and reduces fraud. It also enables Uplift to have simpler agreements with the hospitals in their network. From an institutional perspective the reimbursement model makes a lot of sense. From the perspective of the client, it makes the program less convenient and reduces client value. Below, we examine the financial value that respondents obtained through claims reimbursement. Before we get to that, it is useful to review the benefits of the HMF product and the processes by which Insured members can access these benefits.

HMF Benefits

The Uplift HMF product provides cover for hospital care costs. The categories of costs covered correspond to direct costs, as defined above. That is, reimbursable expenses include doctor and nurses fees, bed fees, and medication and diagnostic tests expenses. The product also covers diagnostic costs that occur up to 15 days prior to hospital admission and drug costs for 15 days after hospital discharge. Simple cases of malaria are covered up to a limit of INR 5,000 (\$111). Complicated cases, which may involve multiple diagnoses or admission to an ICU, are subject to limits of INR 7,500 (\$167) or INR 10,000 (\$222) depending on the case.

Uplift has organized a network of 173 hospitals, 82 out-patient providers, 9 specialty clinics, 47 pharmacies and 30 diagnostic centers.

Uplift has organized a network of 173 hospitals, 82 out-patient providers, 9 specialty clinics, 47 pharmacies and 30 diagnostic centers. The hospital network includes government, private trust (i.e., charity) and private for-profit providers ranging in size from six beds to several hundred.²⁴ The network was selected based on several criteria: member preference, proximity to members and ability to meet Uplift's quality standards. HMF patients who use network hospitals are eligible for 80 percent reimbursement of claimable costs at private and trust

²⁴ The network hospitals include 88 government hospitals, 28 trust hospitals and 57 private hospitals.

hospitals and 100 percent of costs government hospitals. No reimbursement is allowed for costs incurred at non-network hospitals except in cases of emergency or when a member requires admission in hospital while traveling outside of the Pune area.

For convenience purposes, Uplift provides different options for members to obtain referrals when seeking hospital care. The purpose of the referral is to hold down healthcare costs for the policyholder and to ensure that they receive appropriate and quality care. Members can obtain a written referral through contacting their SE, through calling the 24/7 Helpline, or from the Guidance Doctor. When the member seeks the referral, they will be informed about the estimated costs and location of the most appropriate hospitals for their needs. Uplift advises members to go to lower cost facilities whenever possible. Insured members are highly encouraged to obtain a referral and to remember to show the Nidhi (ID) card at time of admission to the hospital. If the Insured member does not show the Nidhi card or obtain a referral letter and as a result does not receive a concession from the private or trust hospitals (discussed in more detail below), their claims reimbursement percentage can be significantly reduced, anywhere from 50 to 80 percent.

HMF Claims Reimbursement Process

The claims reimbursement process at Uplift is rather unique. Uplift staff analyze and then “validate” (Uplift’s term for recommending claims approval) (or invalidate) claims based on medical and technical adherence to the insurance policy. These claims validation decisions are passed along to the NGOs. At this point the process starts to vary for the APVS and PSW policyholders.

At APVS, claims reimbursements are decided at the central level. The CCRs meet monthly with APVS staff to review Uplift’s validated claims and to make the final decisions about claims approval and payout amounts. Later in the month, the claims decisions are announced and disbursements are made (by check) at the group borrower meetings. Claimants can appeal if they do not agree with the decision or the amount approved.

At PSW, monthly claims meetings are held at the branch level with the SE, members who have claims pending, and the branch CCRs. At this meeting, the claimant is invited to tell their story *“what happened to them, where did they go to seek treatment, what treatment they received, and what expenses they had”* (PSW Branch Manager). The SE announces the claims status and reimbursement amount validated by Uplift and the members attending the meeting decide for themselves whether to approve the claim and how much to award as a payout.

In both organizations, approved awards can be reduced while rejected claims can be overturned and reimbursed. The difference in the processes has one important effect on the claims amounts awarded. At both NGOs, the decisions about payout amounts take into consideration how much premium was earned during the month. At PSW, this means that the decision-makers are looking at how much premium was earned at their branch while at APVS, they are looking at the total premiums earned at APVS-Pune (or APVS-Mumbai). During the reimbursement process, the CCRs and the policyholders reduce payout amounts to balance them with the amount of premium earned in order to protect the claims fund. Technically, they can dip into reserves to award claims that exceed the earned premium amount. However, it seems that the members and some NGO staff are reluctant to do this, especially at PSW.

Claims Reimbursement Experience Based on Member Interviews

The data presented below comes from two sources: interviews with malaria patients and their families, and the Uplift database. All Uplift households in our sample reported submitting claims for the hospital costs related to malaria. Respondents relied on recall when describing the amounts to the researchers. Uplift requires detailed information on claims applications, which it compiles in its member Management Information System (MIS). This enabled MFO to compare the data provided by the HMF respondents to the official records at Uplift.

Based on self-reported information from Insured households, the claims reimbursement from Uplift covered less than one-quarter of the total costs (including lost income) incurred due to the malaria illness and treatment. The total value of claims applications reported by the Insured sample was INR 115,110 (\$2,558.00). This was lower than the total reported direct hospital costs of INR 172,625 (\$3,836.11). Even when we controlled for one respondent who could not recall her claim amount, the total submitted was lower than the total direct hospital costs reported by the respondents. The reported average claim submitted per patient was INR 7,674 (\$170.53).

A comparison of the total direct hospital costs to amount claimed as reported by the respondents showed that six of the respondents reported claims amounts that were identical to their direct hospital costs. One respondent had reported direct hospital costs that were lower than the claims amount. On average, reported direct costs were INR 2,534 (\$56.31) higher than average claims submitted. This discrepancy was mainly attributable to patients who went to more than one hospital. The rules about allowable claims related to multiple hospital admissions are not well understood by policyholders and perhaps not by some of the SEs. It is possible that, believing that the costs of the second and third hospitalizations were not eligible, the policyholders did not submit claims for subsequent hospitalizations.

Based on the information reported by the HMF member sample, an average of INR 4,038 (\$89.74) was reimbursed per patient. This represents 53 percent of the amount of claims submitted and only 37 percent of the direct hospital costs reported. The amount reimbursed was equal to only 23 percent of the total reported costs associated with the malaria hospitalization (including lost income and other indirect costs). In Table 14, we present the data that respondents reported to us and indicators we calculated based on these data.

TABLE 14
HMF MEMBERS' CLAIMS STATUS AS REPORTED BY MEMBERS THEMSELVES

Indicator	Total Amount (INR)	Total Amount (USD)	Average Amount (INR)	Average Amount (USD)
Direct hospital costs reported	172,625	\$ 3,836.11	10,789	\$ 239.76
Total claims amounts submitted (n=14, 1 didn't remember)	115,110	\$ 2,558.00	7,674	\$ 170.53
Total claims amounts reimbursed (n=15, 1 claim was rejected)	64,610	\$ 1,435.78	4,038	\$ 89.73

Claims Reimbursement Experience Based on Uplift Data²⁵

We analyzed the Uplift MIS data separately to determine what share of claims submitted by our Insured sample was reimbursed. This also gave us an opportunity to examine the accuracy of the data reported by respondents. During the field research, we were concerned about the accuracy of recall data from the respondents. We compared the sample's reported claims submission amounts to the "total expenses" amount (which represents the total amount submitted on the claim) in the MIS. The differences between the respondents' amounts and the official Uplift amounts ranged from minus INR 152 to INR 5,742 (\$-3.38 to \$127.60). Our comparison revealed that for 10 patients the reported values differed from the official record in amounts that could be attributed to respondent rounding. For the other five patients, their reported claim amount was overestimated by an average of INR 3,612 (\$80.27). (One respondent could not remember her claims amount and was excluded from the analysis.) This implies that respondent recall was an issue for about one-third of the sample.

When we analyzed the Uplift data for the Insured sample we found that of the INR 109,829 (\$2,440.64) that policyholders had claimed, Uplift validated INR 88,577 (\$1,968.38) of claims, and the Claims Committees approved and paid out INR 52,888 (\$1,175.29). (One claim was not validated by Uplift on the grounds that the patient had gone for care at a non-network hospital.) On a per patient basis, the average claim submitted was INR 6,864 (\$152.53), of which Uplift approved a reimbursement of INR 5,536 (\$123.02), and the claims committee disbursed INR 3,306 (\$73.47). (See Table 15.) Policyholders are clearly receiving net value from the HMF. The average net amount received across all HMF respondents in the sample was INR 2,906 (\$64.58) (after premiums are deducted). But this amount represents only a fraction of their total costs. The members only received back 48.2% of the total amount claimed. Uplift validated approval of 80.6% of the total claimed amount, while the Claims Committees approved only 59 percent of the validated amount.

TABLE 15
HMF MEMBERS' CLAIMS STATUS AS REPORTED BY UPLIFT

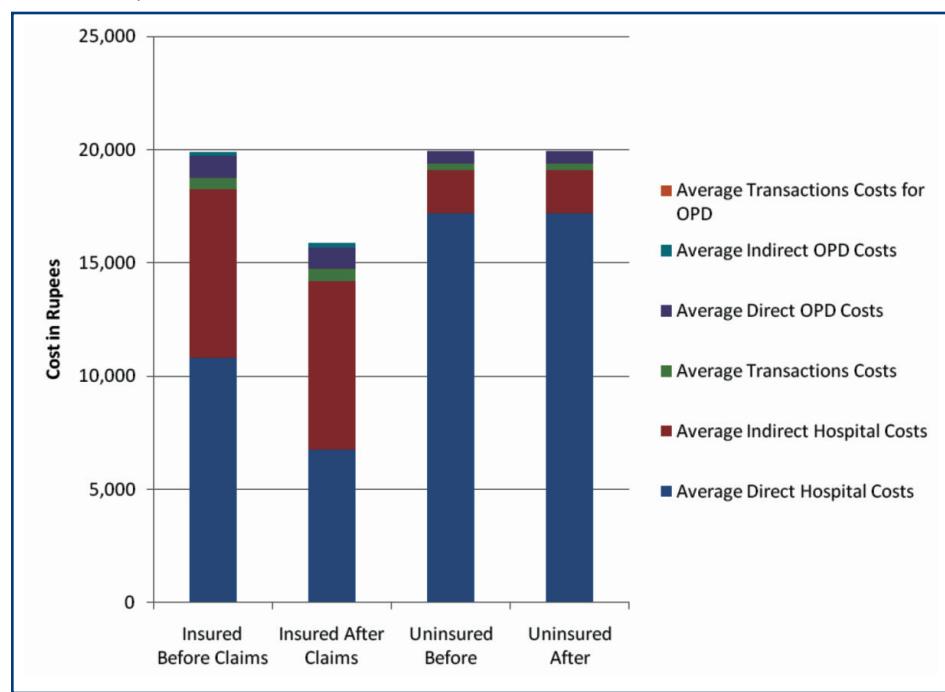
Indicator	Total (INR)	Total (USD)	Percent	Average (INR)	Total USD	Percent
Claims amounts submitted ("Total Expenses")	109,829	\$2,440.64	100.0%	6,864	\$152.53	100%
Claims amount validated by Uplift	88,577	\$1,968.38	80.6%	5,536	\$123.02	80.6%
Claims amounts reimbursed	52,888	\$1,175.29	48.2%	3,306	\$73.47	48.2%

²⁵ We assume in this case study that any bias in or difficulty with recalling financial data will be similar across both samples. Thus we believe that the comparison of Insured and Uninsured self-reported data is valid. Further, we also believe that reference to the Uplift data for the Insured is useful first, for validating the self-reported data to the extent that it does and second, for obtaining the actual comparisons of claim requests to claim payouts.

Leaving out the rejected claim, the average amount received by successful policyholders was 64 percent of the claimed amount on average. Sixty-four percent is well below the 100 percent allowed for public hospitals and even the 80 percent allowed for network private and trust hospitals. The data shows that ten patients were admitted to private network hospitals, three to public hospitals, one to a trust network hospital, and one to a private, non-network hospital. These data, blended, mean that the average reimbursement amounts should have been slightly above 80 percent of claimable expenses.

The evidence shows that although HMF policyholders are receiving net financial value through the claims reimbursements, they are receiving less than the amount stipulated in the program's stated reimbursement rates. It is also clear that the Claims Committees are reducing the value received by policyholders when compared to Uplift's recommendations (see Figure C).

FIGURE C
AVERAGE TOTAL COSTS REPORTED BY INSURED AND UNINSURED PATIENTS, BEFORE AND AFTER CLAIMS



HMF Network Hospital Concessions

It is clear from the analysis and the graph above that the primary area in which Uplift is delivering financial value to its members is the direct costs of hospital care. The share of costs reimbursed, however, is less than the amount that the patients seem to have saved at the hospital in comparison to the Uninsured. This suggests that, for these sampled households, the concession received from network hospitals is providing them the largest share of financial value.

HMF members can receive low cost or discounted in-patient treatment at network hospitals as well as be eligible for 80 percent (for private and trust) to 100 percent (at government) reimbursement of claimable costs at these facilities. The network out-patient doctors, drug stores, and labs provide price discounts ranging from 7 percent to 20 percent for HMF members.

Concessions or discounts are applied to hospital costs such as bed fees and doctors' fees. (Drug costs can be discounted also if they are purchased at specific in-network drug stores.) Six policyholders we interviewed reported receiving discounts on hospital or drug bills during the malaria treatment. The percentage of discounts reported varied from 10 percent to 30 percent of costs at network private hospitals. (Absolute amounts were always not provided.) In all these cases, the policyholder reported following the referral system. That is, they had shown their Nidhi card, presented a referral letter from their SE or called the 24/7 Helpline usually before the patient was admitted at a network hospital.

A COSTLY MISTAKE

Mrs. S. learned the importance of following protocol the hard way when her son came down with fever. She took him to the family doctor, but after eight days his condition had not improved. On the advice of her neighbors, she went to a particular hospital. After her son was discharged, she went to PSW and told them about the hospitalization. At that point, she learned that the hospital was out of network. She submitted a claim anyway but did not receive any reimbursement. Mrs. S. reported that she spent a total of INR 19,050 (\$423) when her son was ill and that her rejected claim to the HMF had been worth INR 15,795 (\$351).

According to Uplift data, members saved a total of INR 5,387 (\$119.71) through price discounts, with an average savings per member of INR 385 (\$8.55). The tracking of concessions that members receive may not be complete in the Uplift database. The system showed that seven of the 16 patients had received concessions on hospital bills. However, not all the households that reported price discounts in their interviews had concessions indicated in their database record. Therefore, we believe that the Uplift database may underestimate the value of concessions received by members.

Additionally, it may also be the case that the Insured households benefitted from using lower-cost healthcare providers. Uplift takes care to include lower cost providers in its network and to refer patients to the lowest cost, appropriate provider. They also track, for each claim, an estimate of the "amount saved" by using the referred hospitals. This amount is also called "market savings" by Uplift and is calculated as the difference between the average list price for a specific treatment in a defined geographic market and the cost of the same treatment (before concessions) at the healthcare provider used by the HMF patient. The value of the amount saved for the Insured sample reported by Uplift was INR 37,450 (\$832.22) or INR 2341 (\$52.01) per claim, however, we are not confident about the reliability of the amount saved data.²⁶

Policyholder Experience of the Claims Process

To obtain the full financial value available from the HMF product, the members must understand and follow the rules and processes of the system. The importance of this is illustrated in Box: "A Costly Mistake."

²⁶ The method for calculating "amount saved" can vary depending on the case and can be somewhat subjective. We are not confident about the consistency of recording this data, which is the responsibility of the SEs, or in the estimation of the amounts.

That said, as we saw earlier, even when members follow the rules, they may not obtain the maximum value allowed under the HMF policies. We asked policyholders to tell us about the claims process and their opinion of it. Not every respondent expressed an opinion on this subject, but among those who did, reactions were mixed.

Two of the respondents were happy with the process and/or their reimbursement:

The patient felt very happy about her reimbursement amount. She thinks the healthcare benefit is the most useful component of the program. She wants to take a new loan but isn't able to take one because the five members of her group aren't all ready to take a loan yet, and she doesn't know who else in her community might be interested.

—Policyholder and wife of malaria patient, APVS

She was very happy about her reimbursement. She thinks the healthcare reimbursement and timely loan facility are the most beneficial components of Annapurna.

—APVS policyholder and wife of malaria patient

Some respondents were not very happy about the amount that they received but were persuaded by the HMF program staff and understood the rationale behind the reimbursement approach.

At first, I was not happy about the reimbursement. But then when I considered it, I thought it was good that I got at least some benefit. Who else helps us like Annapurna does?

She said that the most valuable service for her family is the hospitalization benefit and the health camps. She plans to renew her membership next year.

—APVS policyholder who along with her husband was a malaria patient

Many people got operated and they had big bills like 80,000 Rs, 40,000 Rs like that. So they got 10,000 Rs and I got 1,800Rs. I felt it was very less. But everyone needs some.

—PSW client self-described as “not so happy” with her reimbursement.

A few policyholders had some difficulties with the claims process, but they were in the minority.

I gave the SE the papers and then she came to my house one evening and told me that the itemized bill from the hospital was missing from the package. The hospital only gave us the discharge card, and they didn't give us an itemized bill. She asked me to go get it. When I had time, two days later, I went to the hospital. The person in charge was not there. I had to go back the second day. The person looked in the files and gave it to me.... I made a Xerox of everything and gave them [Uplift] copies. All the bills were submitted: the 3,900 Rs at the hospital and the 275 Rs for medicine. (She did not submit a claim for the costs of visiting the family doctor.)

—Female policyholder of PSW

We like the Annapurna program, but it was very problematic to get the claim reimbursed because all the women can't attend claim meetings together.

This patient's experience suggests that there may be more opportunity costs involved in obtaining claims than we were able to measure. This respondent, however, was still satisfied with the program overall.

The most valuable aspect of the Annapurna program is the reimbursement we got at Deenanath Hospital and the treatment we got there.

—Son of APVS policyholder discussing their experience getting reimbursed for his father's malaria treatment.

One of the respondents had part of her claim rejected, and she did not appear to understand precisely why it was rejected.

A female policyholder at APVS paid INR 3,000 the second time she was discharged (from hospital for malaria), but did not receive any reimbursement for this instance.

The Service Executive had come (to my) home to collect the documents for my 2nd hospitalization, but I was told that I couldn't be reimbursed for it because the same patient cannot receive compensation for hospitalization twice.

—Female client of APVS

This last example, although relevant to only one household out of fifteen respondents, demonstrates that awareness of the insurance program and how to use it still needs to improve. Policyholders must remember what to do when in need of hospital care if they are to obtain the full value to which they are entitled. Nevertheless, policyholders who had difficulties with the claims process were in the minority, and their difficulties did not appear to affect their opinion of the HMF program.

SUMMARY

This section presented our findings on the costs incurred by Insured and Uninsured households when a member became sick with malaria. We found that in response to a serious case of malaria, the sampled Insured households experienced lower OOP or cash costs than the Uninsured both before as well as after claims reimbursements are taken into consideration. This may in part be the result of Uninsured patients having substantially higher direct hospital costs –the largest single cost category related to malaria-care – compared to the Insured. We believe that some of the Insured sample benefitted from price discounts at in-network hospitals helping to reduce their average direct hospital costs.

The Insured household sample however experienced much higher indirect costs primarily due to large amounts of foregone income. The Insured households also had higher average transactions costs due to the costs of the HMF annual premium. Importantly, the research showed that although the Insured were more likely to borrow to cover malaria-related expenses, they paid less for debt financing than the Uninsured because they were able to get credit at lower interest rates. We assume that this is because the market considers Insured households a lower credit risk because lenders know that policyholders will receive a

reimbursement. Overall, we found that in response to a serious case of malaria, Insured and Uninsured household samples incurred similar average total costs.

The HMF product provides cover for the direct costs of hospital care. Allowed hospital-related expenses are reimbursed at a rate of 100 percent for public hospitals and 80 percent for other hospitals, up to limits ranging from INR 5,000 to 15,000. According to Uplift's data, the HMF program reimbursed only 48 percent of the average amount claimed per patient even though Uplift had validated 81 percent of the amount of claims submitted. The sampled households also benefitted from price concessions at in-network hospitals. Based on Uplift data, the concessions received were equivalent to 4.8% of the total claimed hospital expenses. Clearly, the HMF product is providing some financial protection from the direct hospital costs incurred by the HMF households.

When we take the policyholders' perspective, however, we find that they received back only 37 percent of their total direct hospital costs and less than one-quarter of all costs incurred due to malaria, including lost income. Almost 38% of the total average costs of malaria care for the Insured sample were due to indirect hospital care costs and the vast majority of these costs were due to foregone income. This suggests that Uplift should look into providing protection against lost wages for their members.

Our findings further suggested that it will require more research to identify all the variables that determine which households will suffer from lost wages and which have some degree of informal protection of their income.

This case study also showed that in order to optimize the financial value available from HMF, policyholders have to follow the HMF program guidelines. Awareness of the insurance program and how to use it still needs to improve for all policyholders to benefit as much as possible from the program.

The Insured household sample experienced much higher indirect costs primarily due to large amounts of foregone income. Insured households also had higher average transaction costs.



Health-Seeking Behavior of Respondents

The Uplift program seeks to improve the health awareness and health-seeking behavior of its members through health talks, the Guidance Doctor, health camps and the 24/7 Helpline (see Box “Member Services”). Uplift emphasizes improving member health-seeking behaviors because it expects that catching medical problems early – before complications arise – will reduce the costs of care. In this way, better health-seeking behavior effectively provides financial protection to members. To assess whether the health-seeking behavior of the HMF members in our sample was noticeably different or improved in comparison to the non-HMF respondents we asked all interviewees about the amount of time patients waited before seeking treatment, spent in the hospital and spent convalescing. In addition, we asked them whether and how they obtained advice about where to seek treatment (in order to assess whether Uplift had saved them time in obtaining appropriate treatment).

DELAYS IN SEEKING TREATMENT

MFO's data do not support the proposition that the HMF is improving the health-seeking behavior of the Insured sample as measured by prompt seeking of treatment. We found that Insured patients waited 2.1 days on average before seeking treatment from a family doctor or outpatient doctor. This compares to 1.7 days for Uninsured patients, meaning that the Insured waited longer than Uninsured. Some patients went directly to a hospital for care. Several hospitals provide outpatient care, and, in some cases, the patient went to a hospital to seek care only to learn that he/she needed to be admitted. Two of the Insured and two of the Uninsured patients proceeded directly to inpatient care in this manner, or 13 percent and 18 percent, respectively.

Between the step of seeking outpatient care and seeking hospital care, the Insured patients waited an average of 4.1 days, or twice as long compared to the 2.1 days that the Uninsured waited. From the onset of symptoms to the time they went to the hospital, the Insured waited an average 6.1 days, 77 percent longer than the 3.91 days for the Uninsured.

TREATMENT IN THE HOSPITAL

One would expect that better health-seeking behavior would lead to quicker recovery time. We examined the total time spent in the hospital (including multiple hospitals) as an indicator of recovery time. Insured patients spent 7.3 days in hospital compared to 5.8 days for the Uninsured. This is 25% higher than for the Uninsured.

However, we found some extenuating circumstances for the Uninsured. One woman asked to be released early from the hospital as there was no one at home to look after her son. Overall, for a sample of this size, the length of time spent in the hospital may not be a good indicator of the effect of health education and awareness efforts. There are too many variables that influence length of hospital stay, such as overall seriousness of the condition, initial health condition before illness and even the poverty level of the patient – there is some indication that doctors may release patients who cannot afford the hospital fees and let them continue treatment on an OPD basis.

MEMBER SERVICES

The Guidance Doctor: A family practitioner who is available for free consultations 2 hours per week at each of the 15 NGO branches in Pune. The doctor provides advice on preventive care, performs check-ups, provides referrals and updates members on the HMF benefits.

Health Camps: Hospitals provide free check-ups and/or healthcare services through health camps which are organized in the communities, for policyholders. Examples of camps previously held: eye testing, cataract diagnosis, gynecological conditions, dental care and bone density testing.

Health Talks: These are presented by SEs to the members at community meetings. Designed by medical staff at Uplift, the talks provide information on a variety of topics but emphasize priority medical problems in the communities, such as malaria, typhoid, appendicitis, anemia, and the need for better hygiene and nutrition. The objective is to raise members' awareness of these diseases so that members seek care earlier and keep medical costs down.

POST-HOSPITAL TREATMENT AND FOLLOW-UP

We had some expectations that the Insured would be more likely to go for follow up appointments based on observations by a doctor at a city government hospital that HMF Insured patients are more likely to comply with treatment regimes, including coming for follow-up visits. However, not many patients or respondents – neither Insured nor Uninsured – mentioned the need to continue medications or present themselves for a follow-up visit after hospitalization.

SEARCH COSTS

One of the purported benefits of the Uplift program is its referral service. The purpose of the referral is to guide members to appropriate, low-cost treatment that meets Uplift's quality standards. Referrals can be made in a number of ways. The policyholder can inform the SE in person or by telephone of the problem. The SE can provide a referral form for the patient and/or call the hospital in advance of the patient's arrival. Alternatively, the patient can call the 24/7 Helpline to be referred to a hospital that is suitable for his/her medical condition, location and wallet.

Ideally, a referral system such as this would reduce the delays and search costs associated with obtaining proper treatment. To see whether this was so, we first examined the evidence about the number of hospitals that patients attended before becoming cured. Then we explored the evidence of use of the referral system.

Contrary to what we would have expected, Insured patients on average attended more hospitals than the Uninsured. Two Insured patients were admitted into three hospitals before they were successfully treated, while one was admitted to two hospitals. Again, there were extenuating circumstances in these cases. In two, the patients had gotten sick away from home and were admitted to hospitals outside of Pune. In the other case, the patient's illness was so severe that it required care in a larger facility. Only one Uninsured patient visited a second hospital specifically in order to access better treatment facilities.

In terms of visiting OPDs and going to the hospital, the number of steps that patients took until they were cured was virtually the same for the Insured and Uninsured: the Insured patients on average took 2.19 steps, and the Uninsured 2.18 steps before being successfully discharged.

USE OF REFERRAL SYSTEM

As mentioned earlier, obtaining the maximum value from the HMF insurance requires using the referral system. In this way, patients can be guided to the best healthcare option for them depending on price, distance from home and relevance to their medical condition. If they select a private hospital, they can then benefit from provider discounts and can have the advance deposit reduced or even waived. We looked at how the Insured used the referral system including calling the 24/7 Helpline, or obtaining a referral note from the SE or the Guidance Doctor. Although not a referral, Policyholders can identify network hospitals close to home from a list on their Nidhi card.

Six Insured members either took their Nidhi card to the hospital or called the SE or 24/7 Helpline in advance. Three of the Insured informed the Uplift program about the hospital admission a day later. Others (6) contacted Uplift well after the patient was admitted, if at all. As a result, only six of the 15 households (40 percent) were in a position to obtain the

maximum benefit possible. Three others (20 percent) would still be able to benefit but may have already selected a less than optimal hospital or paid a deposit. Although the other 40 percent could have forfeited all benefits, only one policyholder had her claim wholly rejected (6.7% of patients). Although Uplift and the staff of the MFIs spend time and resources informing members of the process for using the HMF insurance, there is clearly more work to be done in this respect. This speaks to the difficulty of getting messages to stick with this market.

In summary, we did not observe any evidence that the HMF is leading to better health-seeking behavior in terms of shorter delays in seeking treatment, shorter treatment times, or lower search costs as measured by the number of providers visited before being cured for the 16 patients we studied. We also found that only a minority (40 percent) of the Insured sample had used the referral system exactly as they were supposed to, while about 20 percent did not use it at all. In other words, the financial value obtained was lower than it could have been.

HEALTH AWARENESS – KNOWLEDGE OF MALARIA

To assess whether the program had been successful in raising members' awareness and understanding of health issues, we asked Insured and Uninsured respondents in this study specifically about their knowledge of malaria. We examined their knowledge of the cause of malaria, the symptoms, the treatment and methods of prevention of malaria. To analyze the results, we scored each response one point if there was at least one correct response for each of these four questions.

The Insured appeared to have a greater knowledge of malaria than the Uninsured, more often correctly identifying the cause and symptoms of the disease than the Uninsured. They were somewhat less likely to be able to identify methods for prevention. Overall, both groups had little knowledge of the treatment of malaria even though they or their family member had recently undergone malaria treatment. While knowledge of treatment and prevention appears low, there also seems to be some misinformation about prevention of malaria. This suggests

TABLE 16 SHARE OF RESPONDENTS PROVIDING AT LEAST ONE CORRECT RESPONSE TO QUESTIONS ABOUT MALARIA

Malaria:	Cause	Symptoms	Prevention	Treatment
Insured	87%	93%	47%	13%
Uninsured	70%	40%	50%	10%

a need for more education on this subject, at least for the Uplift members (See Table 16).

USE OF OTHER UPLIFT SERVICES

To better understand these results, we looked at which Uplift services the members had used (other than the claims) and how often they used them. The results as reported by the Insured sample are described in Table 17.

The *Health Talks* were the most commonly used benefit of Uplift – aside from the claims. Almost two-thirds of the respondents reported attending a health talk which was lower than the 100 percent participation we would have expected. However, participation may be underreported because some of the respondents in the sample were not the policyholder themselves but the husband or son of the policyholder, and they may not have been aware of

KNOWLEDGE AND AWARENESS OF HEALTH INSURANCE

We asked the Uninsured about their knowledge and awareness of health insurance. Out of 10 respondents, two had heard of health insurance (20 percent) and two (20 percent) had heard of other types of formal insurance but not health insurance. The other respondents were unaware of insurance altogether. Of the two who knew about it, one knew that health insurance could help during health emergencies and that it covers hospital costs. He also knew that there are different types of packages available but was not sure which one was best for him and so had not purchased any insurance. (This was a joint family [adult siblings and their respective spouses and children all living communally] so the selection of a package would indeed be complicated if they wanted to cover all family members living under the same roof.) The second respondent reported that he had wanted to buy health insurance directly from a hospital where his two sons were treated for malaria, however, he had not completely paid the premium, and so his policy did not go through. Thus, he was unable to use it when his wife became sick a few months after his sons.

the policyholder's activities. Some of the PSW respondents believed they were required to attend three Health Talks per year although managers of the HMF program stated that this was not correct. The APVS members attend Health Talks presented at their monthly loan meetings. Since these Talks are held during the day, they are not convenient for people who work full-time, as do most men.

Respondents mentioned attending health talks on diabetes, women's diseases and eyes. One mentioned that they had discussed how to use the hospital insurance at one meeting. Several respondents mentioned they had been present at talks but could not remember the subject. Again, this demonstrates room for improvement in the Uplift program and also points to the challenges faced by programs that want to raise the health awareness of microfinance clients.

Health camps. Provided by hospitals, these are opportunities for members to get free diagnostic or treatment services. Four of the eight members who participated in this kind of activity had attended an eye camp where free eye testing is carried out and where members who need it can be selected for free cataract operations. Other health camps attended by the respondents or their family members featured dental check-ups, check-ups for women's cancers, anemia, and swine flu. Some respondents mentioned that they could not attend health camps because they are held during work hours.

SATISFACTION WITH UPLIFT

When we asked the Uplift members about their opinion of the reimbursement process, we also obtained general opinions about the HMF and microcredit programs. Overall, impressions were positive though there were some aspects of the program that people were not happy about.

We definitely find the AP program beneficial. We give a little bit of time to their meetings, but we get cheap loans and healthcare benefits in return.

—Husband of APVS policyholder

TABLE 17
USE OF UPLIFT NON-CLAIMS SERVICES BY MEMBERS

Service	Number reporting that their family used service at least once in past year (n=15)	Percent of HMF respondents
Health talk	9	60%
Health camps	8	53%
Guidance Doctor	3	20%
24/7 Helpline	2	13%
Discount OPD	2	13%
Discount drug store	2	13%

She is happy with the AP scheme - she likes the fact that members get help when they are sick and that they get advice on general well-being, for example, how to utilize their loans productively in business, how to save water, how to take care of their health. For her, the most valuable/beneficial service is the medical reimbursement and the savings accumulated while she takes a loan. She wants to take a new loan of Rs 20,000 soon.

—APVS Policyholder

The patient was very happy about her reimbursement. She thinks the healthcare reimbursement and timely loan facility are the most beneficial components of Annapurna.

—APVS Policyholder

Some members appreciate the HMF so much that they continued with it when they no longer needed a loan.

She has not taken a loan since 2005, but has kept the insurance going because of the benefit on hospitalization and medicines. She thinks the insurance is beneficial and that people get at least half of their claim amount, which is very useful.

—PSW Policyholder

One member confused the HMF with the microcredit program.

I did not like the fact that after the older SE of our area quit the job, no one else was asked to follow up with us on our loan and savings requirements. Nobody came to our house (after the old SE quit) to collect the monthly savings.

—Son of APVS policyholder

This demonstrates one of the challenges facing health microinsurance such as Uplift's HMF which are linked to microcredit programs. Client satisfaction or dissatisfaction with the credit services can overshadow or color the client's perceptions of the health insurance product.

SUMMARY

The series of analysis in this section showed that there was no relative benefit in terms of financial protection from better health-seeking behaviors, for the Insured sample. The analyses also showed that misuse and under-use of program services designed to reduce both search and treatment costs for appropriate care (such as the referral system, the 24/7 Helpline) meant that only a minority of the Insured households sampled were in a position to maximize the available benefits. Although the health talks were the most frequently used of the member services, attendance at these talks was lower than expected. Nevertheless, the Insured respondents demonstrated a better knowledge of malaria than the Uninsured telling us that the health talks may have had some positive effects. Collectively our analyses reveal some room for improvement within the Uplift program to increase effective use of the HMF product through improving members' health awareness and their health-seeking behavior.



Overall Financial Value of HMF Program

Our case study of the malaria patients has given us a worm's eye view of the financial value provided by the HMF. We demonstrated that the HMF lowered the direct costs of hospital care for the sample of Insured households, thereby financially protecting them to a limited degree. This financial protection came from two sources: the reimbursement of claims and the cost concessions provided by the Uplift network providers. The malaria patients are only a small sample, and their experience cannot be generalized to that of the HMF client base. This raises the question of how their experience compares to that of the HMF membership as a whole. In this section, we examine key client value indicators to determine the financial value provided to Uplift members in Pune in 2010.

Our focus here is on the experience of PSW and APVS-Pune, the two programs from which the malaria sample was drawn. We also present indicators for Uplift members as "a whole." In these cases, we include APVS-Mumbai data. (We leave out the Chaitanya program data because the program started in mid-2010 and was still small by the end of the year, with little claims activity.)

There are several key performance indicators that measure the financial value provided to the Insured. These are the incurred claims ratio (i.e., how much of the premium was returned to policyholders as claims), the claims frequency ratio (i.e., what share of policyholders submit claims), the claims rejection ratio (i.e., what proportion of claims are turned down), the promptness of claims settlement (i.e., how soon policyholders get their reimbursement), and the renewal ratio (i.e., how many policyholders purchase the insurance again). The ratios are calculated at the level of the NGO implementing partner, as each organization has a separate health fund (See Table 20 on page 82 for summary).

UPLIFT'S CLAIMS RATIO

Uplift usually reports their claims ratio on the basis of the portion of "earned contribution" (they use the term "contribution" in lieu of "premium") that has been set aside for the HMF claims fund rather than the entire amount collected. This amount is INR 60 (\$1.33) out of every INR 100 (\$2.22) premium paid. The remaining INR 40 (\$.89) is set aside to cover administrative costs with INR 20 (\$.44) going to Uplift and INR 20 (\$.44) going to the respective NGO.

Uplift's method for calculating the claims ratio is not according to the industry guidelines (see for example, Wipf and Garand, 2010, or the Performance Indicators Working Group, 2010). So in this analysis, MFO calculated the incurred claims ratio in line with best practices. That is, we assumed that all INR 100 (\$2.22) is assigned to earned premiums. (Using Uplift's method, the claims ratio at APVS after adjusting for pending claims would have been 116% and the ratio at PSW would have been 125% in 2010.)

This section will show that the HMF members are obtaining good value for their premiums. In fact, they may be receiving too much value. At the time of this research, Uplift was reviewing actuarial data and trends in claims submitted. Based on their analysis and consultations with the members, the premium was raised to INR 120 (\$2.67), with the HMF benefits remaining unchanged for APVS-Pune members as of April 1, 2011. At the

time of writing, the increase in the premium for PSW members was still pending. The analysis presented below was carried out by MFO staff and an MFO consultant using actual claims data, institutional performance reports and accounting/financial reports from Uplift, the two NGOs and Swaabimaan (the local program of Uplift's donor, Inter-Aide).²⁷

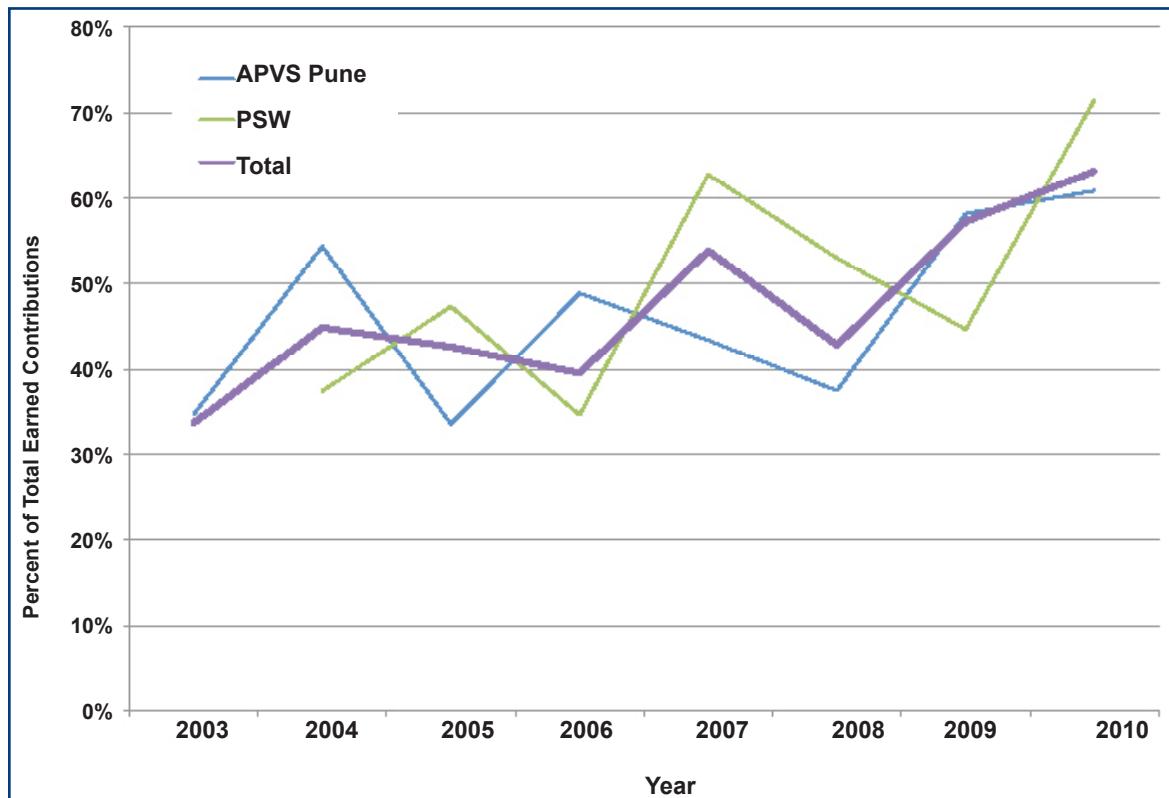
INCURRED CLAIMS RATIO

This ratio measures how much financial value is returned to the Insured members. It is defined as the share of the earned premiums that are returned to policyholders as claims reimbursements during a particular period. For Uplift as a whole, this ratio was 63 percent in 2010 (based on settled claims). At PSW, the claims ratio was 72 percent, up from 45 percent in 2009. The estimated final ratio is expected to be no higher than 75 percent. For APVS-Pune members, the claims ratio at the end of 2010 was 61 percent, up from 58 percent in 2009. The estimated final claims ratio is expected to be as high as 75 percent once all the claims

²⁷Joyce Tong, formerly an ILO fellow at Uplift, conducted much of this analysis. More importantly, she designed some of the specific analytical approaches that were adapted here, while working at Uplift. The specific reports used in the analysis included the 2010 Technical Reports for both APVS Pune and PSW (dated as of February 2011), claims databases for APVS Pune and PSW (including data from 2007 through early 2011), Uplift's monthly Profit and Loss Statement for 2008, actual-to-budget expense report for Swabhimaan for 2008, actual-to-budget expense report for Uplift 2009 and 2010, HMF accounts reports for both NGOs, 2008, 2009, 2010 and internal monthly monitoring reports for both NGOs.

FIGURE D

INCURRED CLAIMS RATIOS: UPLIFT, APVS-PUNE AND PSW (2003-2010)



submitted in 2010 are settled.²⁸ (This is likely to be an overestimate as we assumed that all outstanding claims will be approved.) See Figure D for the trend in the claims ratios, at Uplift, APVS and PSW since 2004.

A higher claims ratio is believed to lead to better client satisfaction and renewal rates. However, for 2010, the HMF claims ratios were higher than desirable for Uplift. From the HMF's perspective, any claims ratio that is higher than 60 percent is not sustainable in the long term. The increasing claims ratio plus the knowledge of an imminent across-the-board increase in costs at government hospitals prompted Uplift to conduct a review of the premium in early 2011. A higher premium price ideally will decrease the claims ratio while ensuring continued viability.

Trend in Claims Ratio

At APVS-Pune the claims ratio has been rising since mid-2008, when the existing version of the HMF product was introduced. The claims ratio increased sharply in the second half of 2010, due to higher average claim size. It is also worth noting that the claims frequency has increased each year, although this was not a driver of the claims experience in the last six months of 2010.

²⁸ At the time of analysis, not all claims submitted in 2010 had been settled. We have calculated the ratio for the claims that have been settled and we also estimated what the final ratio might be based on assumptions about the average claim amount that will be awarded.

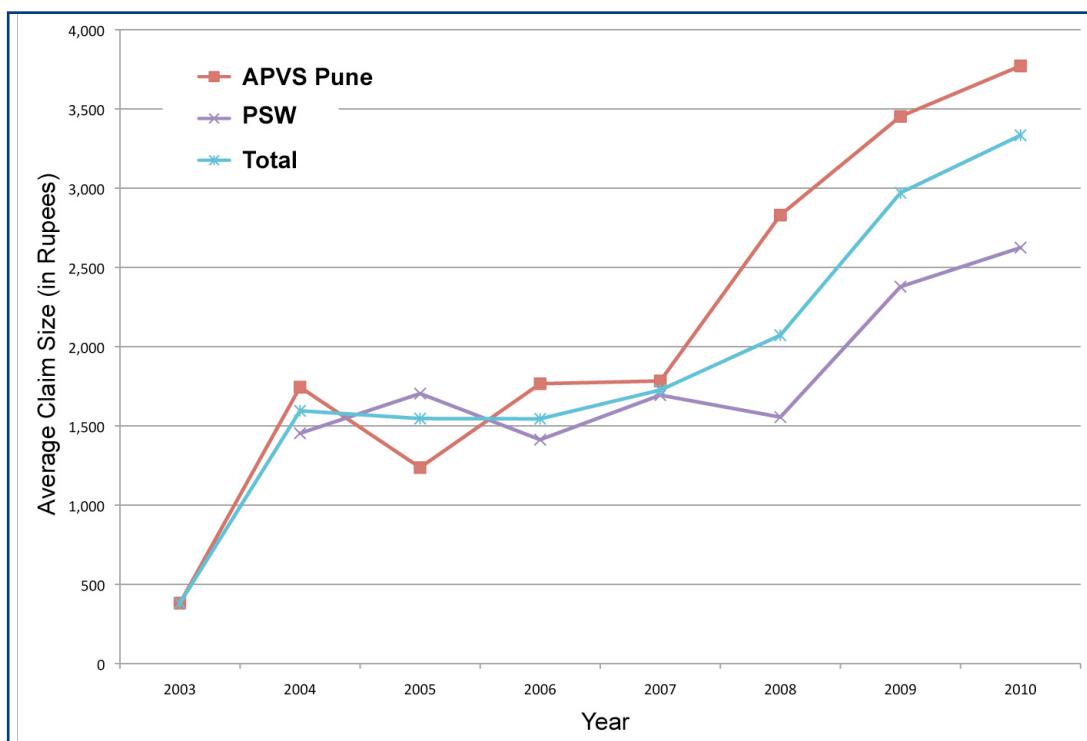
At PSW, the claims ratio has been increasing since mid-2009, driven by an accelerating claims frequency (i.e., the share of members submitting claims) in this NGO. Particularly after the introduction of the new product in 2008, PSW's SEs have been active in educating members about HMF and raising the levels of claim reports. The number of open claims in October and November 2010 reached the highest levels in the history of PSW. Average claim size has increased over this time, but not at the same rate as the claim frequency, and is not a major factor in the overall growth of claims.

PSW's claims ratio grew sharply in the latter part of 2010, despite the NGO's habit of reducing reimbursement amounts. This situation raises questions about the origins of the higher and increasing claims frequency. Is the voluntary aspect of the PSW program allowing adverse selection to creep in? Or are better-informed Insured members able to make more effective use of the service?

Average Claims Size

The claims amount and the number of claims approved are the two variables that members can control in order to keep the claims ratio within a viable range. From the clients' perspective, the amount that they receive as a claim reimbursement is of top importance. For Uplift, the average claims amount paid out in 2010 was INR 3,377 (\$75.04) (Figure E). At PSW, the average claim amount reimbursed in 2010 was INR 2,624 (\$58.31) up 10 percent over the average amount in 2009. At APVS-Pune, the average claim amount reimbursed for 2010 was INR 3,771 (\$83.80) up 9 percent over prior year. The average claim returned at

FIGURE E
AVERAGE CLAIMS SIZE: UPLIFT, APVS-PUNE AND PSW (2003-2010)



APVS-Pune was thus 43 percent larger than that paid out at PSW. This is largely due to PSW staff and members limiting the value of claims awarded to the amount of earned contribution per branch each month as noted in earlier in this report. In addition, the APVS program is growing rapidly which means that the earned premium and thus the claim fund, are also increasing each month. The trend in average claim size is shown in Figure E. Note that the average claims size is not an industry *key performance indicator*.

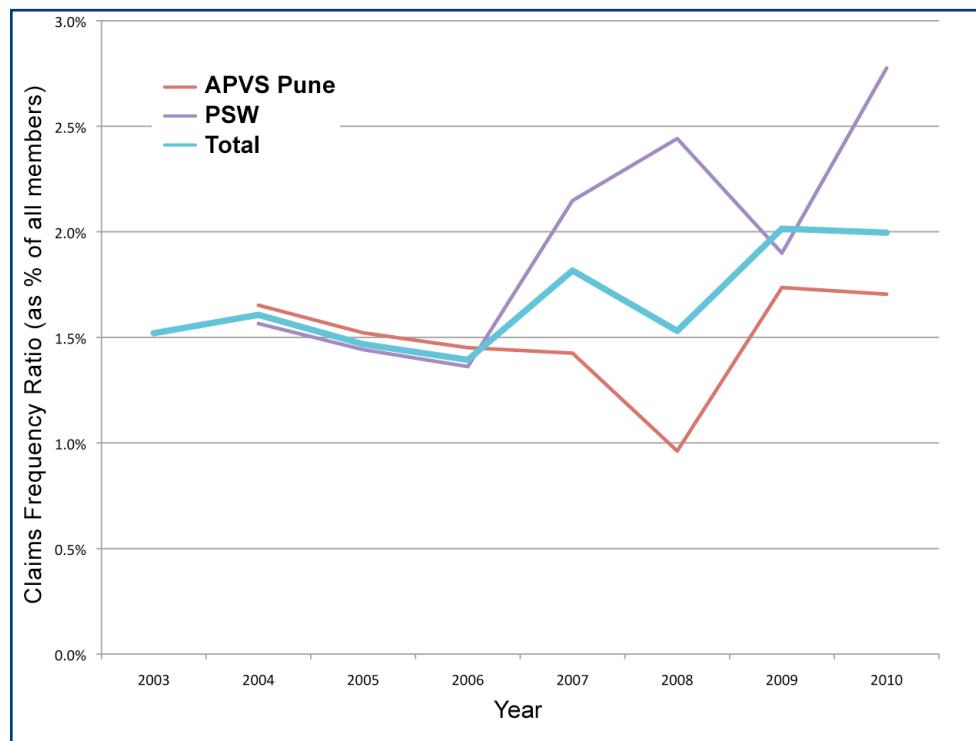
Claims Frequency Ratio

The claims frequency ratio indicates the share of clients applying for claims reimbursement. Tracked monthly by Uplift, this figure represents the ratio of claims opened to the total number of members. Uplift estimates that the claims frequency should be around 2 percent based on actuarial evidence and experience elsewhere. The ratio for Uplift in 2010 was exactly 2.0%.

In 2010, the claims frequency at PSW was 2.8%. The trend in the claims frequency is mixed. At APVS-Pune, the claims frequency was 1.68%, barely changed from 2009.

Based on a claims frequency standard of 2 percent, APVS is running below the guideline, raising questions about whether the members understand the program and how to use it or whether their health awareness is high enough. Conversely, at PSW the claims frequency is running much higher than the guideline, raising the question of whether there is some adverse selection at work (Figure F). (The claims frequency ratio is an Uplift indicator rather than an industry *key performance indicator*.)

FIGURE F
CLAIMS FREQUENCY RATIOS: UPLIFT, APVS-PUNE AND PSW (2003-2010)

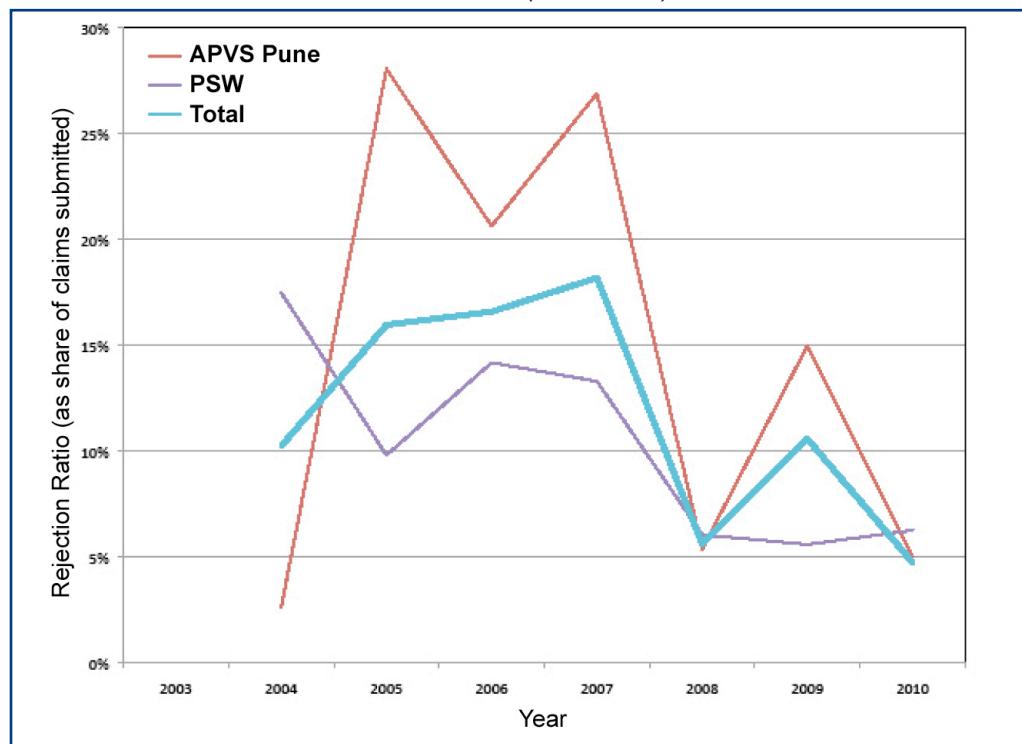


CLAIMS REJECTION RATIO

This ratio represents the proportion of claims that have been disallowed for any reason. It measures what share of claims for genuine losses are paid out, indicating whether the insurance provides good value for the premium. Among other things, this ratio can reflect how well the members understand the program. For example, when claims are rejected because the patient did not use a network hospital or because they had a pre-existing condition, it shows that they did not have a sufficient knowledge of the HMF rules. In 2010, the claims rejection ratio for Uplift was 4.6%. This ratio was 3.3% at PSW and 5.0% at APVS-Pune. (These figures are based on settled claims. At the time of our analysis, 3.3% of claims at PSW and 3.2% at APVS were still unsettled.) The graph below shows the trend in the rejection ratio since the beginning (Figure G). Later in this section, we will discuss how member participation impacts this ratio.

While the rejection ratios were low, analysis of the reasons for rejection indicate some areas for improvement in the program. At PSW, of those claims initially rejected by Uplift, about 30 percent were disallowed for use of a non-network private healthcare provider. Pre-existing conditions represented another of the top reasons for rejection. Uplift's rules stipulate that treatment costs for pre-existing conditions are allowable the third year of membership but not before. Of the claims rejected at APVS-Pune, 56 percent were disallowed for technical reasons, 42 percent for medical reasons and the remainder for both. A review of the exact reasons for rejection revealed that 30 percent of all rejections were for use of a non-network private hospital. A good share of the remaining rejected claims was disallowed for pre-existing conditions. Again, these findings suggest that there is room for improvement in member awareness of how to use the HMF program effectively at both NGOs.

FIGURE G
CLAIMS REJECTION RATIO FOR UPLIFT (2004-2010)



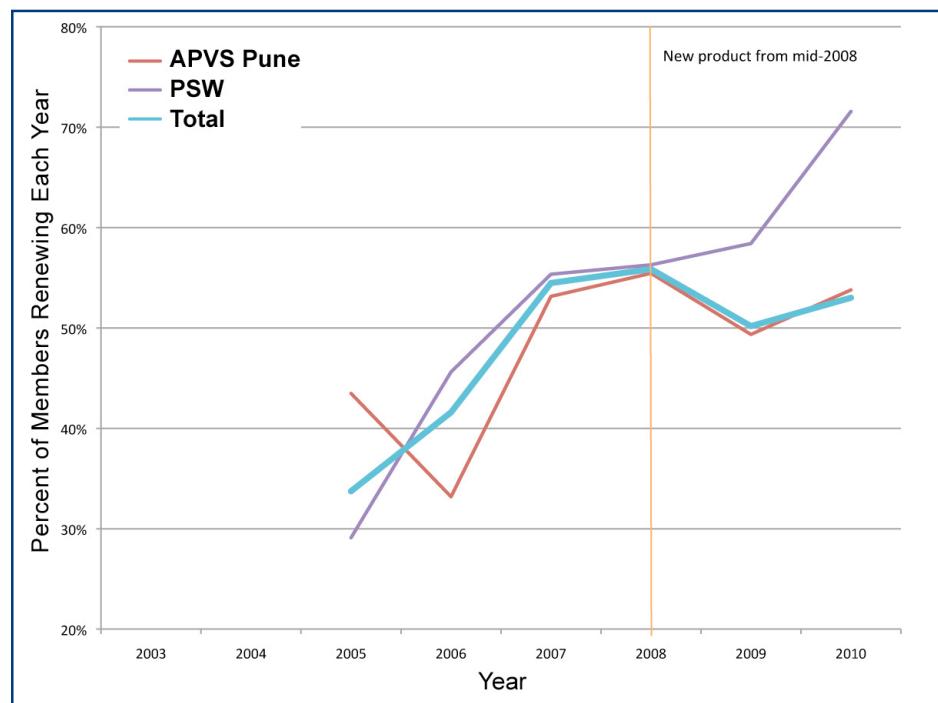
Best practice suggests that insurers explain to policyholders why their claim was rejected in order to improve their understanding of the product. In this regard, Uplift takes care to inform not just the policyholder but also their peers about the reasons for rejection. They do this by discussing or announcing all claims results at community or borrower meetings attended monthly by the HMF members. At APVS-Pune, the meetings coincide with the loan repayment meetings while at PSW, the meetings are not mandatory unless a policyholder has a claim under consideration. Non-members are also invited to the PSW meetings for promotional purposes.

RENEWAL RATIO

The renewal ratio measures the percentage of members who stay in the HMF program after their one-year policy expires. This ratio is calculated as the average of monthly renewal ratios and normally serves as an indicator of consumer satisfaction with the insurance product and a sign of its value to them. The HMF program is mandatory for borrowers at APVS-Pune and for the majority of borrowers at PSW. Therefore, the renewal ratio in this case is a proxy for the demand for loans from both these NGOs. Nevertheless, it does broadly indicate how many members are returning year after year. There may in fact be some undercounting of renewals since “resters” (borrowers who pause between loans and allow their insurance to lapse for even a short period) are counted as new policyholders. Returning policyholders are valuable for Uplift since they pay premiums and are likely to be better informed about the program.

During 2010, the annual renewal ratio at Uplift as a whole was 53 percent (Figure H). This ratio was 61 percent at APVS and 72 percent at PSW. The renewal ratio for HMF members overall increased quickly between 2005 and 2008 reflecting the transition of the HMF from a voluntary to a mandatory program at PSW and APVS respectively in 2006 and 2008.

FIGURE H
RENEWAL RATIOS FOR UPLIFT (2005-2010)



PROMPTNESS OF CLAIMS SETTLEMENT

In programs in which policyholders are reimbursed for their hospital costs rather than receive cashless benefits, the time it takes to receive claimed amounts is critically important. As we saw earlier in this paper, HMF members resorted to loans, some at interest, in order to pay their hospital costs. The faster the claim settlement, the lower the costs of interest on borrowed funds, and the higher the financial value of the insurance for the member.

The promptness-of-claims-settlement indicator measures the amount of time it takes from the day the claim is submitted to the NGO to the date that the member receives payment. Uplift has set a standard of 50 days from submission to payment. This indicator is a measure of the efficiency of the processes at Uplift and the partner NGOs, as well as of client value. We examined the claims settlement times for all claims submitted and settled in 2010.

At PSW, over 78 percent of the 400 claims settled in 2010 were settled within the 50-day period. This is surprising, as we will see below, because PSW policyholders were much less likely to submit claims to their NGO on time. (See Table 18.) At APVS-Pune, claims settlement was less prompt. Only 35 percent of the 670 claims settled in 2010 were settled within 50 days of submission. In fact, 40 percent of claims were not settled until two to four months after submission. Uplift staff reports that delays are partly due to the requirement that all members of the policyholder's group be in attendance for the claim to be disbursed. These delays represent an obvious hardship for those policyholders who have borrowed money at interest to pay for hospital care (Table 18).

TABLE 18
PROMPTNESS OF CLAIMS SETTLEMENT: TIME FROM CLAIMS SUBMISSION TO CLAIMS PAYMENT FOR APVS-PUNE AND PSW (2010)

	Number of Submitted Claims, Paid		Percent of Total Claims Paid in 2010		Cumulative Percent	
Interval	APVS-Pune	PSW	APVS-Pune	PSW	APVS-Pune	PSW
0-50 calendar days	235	311	35.1%	77.8%	35.1%	77.8%
51- 120 calendar days	402	85	60.0%	21.3%	95.1%	99.0%
Over 120 calendar days	31	4	4.6%	1.0%	99.7%	100.0%
Total settled 2010*	670	400	100.0%	100.0%		
Not settled or rejected	124	23	14.2%			
Valid claims cases for 2010	794	462				
Settled in 2011	80	39				
Total submitted	874	462				

We also examined the amount of time it took from the date the patient was discharged until the claim was submitted. The Uplift rule is that claims should be submitted within two weeks of discharge from the hospital. The amount of time it takes a policyholder to submit his/her claim can indicate the ease and convenience of the process as well as how well the policyholder understands how to use the Uplift program, which, in turn, can reflect the effectiveness of client education efforts.

As mentioned earlier, the SE helps expedite the claims submission process by assisting the policyholder with filling the claims form. Through the support of the SE, incomplete or erroneous applications can be detected right away and corrected sooner. Although this level of support no doubt shortens the claim settlement process, there is still some room for improvement.

Despite this support, less than 30 percent of claims at PSW were submitted on time, while just over 50 percent were submitted within four weeks. Over 20 percent of claimants took more than three *months* to hand in their claim. This raises the question of whether the PSW members have a sufficient understanding of how the Uplift claims process works. It is also possible that PSW staff spend more time working with the policyholders at the front end of the process to ensure accuracy so that the time lost on the claims submission phase is made up via shorter claims processing time. At APVS-Pune, only 48 percent of all claims were submitted within the two-week timeframe. Close to 80 percent were submitted within four weeks. (See Table 19.)

Together with the time from submission to payment shown above, these indicators demonstrate the actual length of time that the policyholder would be without the cash and possibly owing creditors. At PSW, about half the members would be without cash for over 58 days while at APVS-Pune, the length of time would be over 64 days.

TABLE 19
PROMPTNESS OF CLAIMS DECLARATION: TIME FROM HOSPITAL RELEASE TO CLAIMS SUBMISSION AT APVS-PUNE AND PSW (2010)

Interval Between Discharge Date and Claims Submission Date	Number of Claims Submitted by Interval		Percent of Total Claims Submitted (valid cases)		Cumulative Percent	
	APVS-Pune	PSW	APVS-Pune	PSW	APVS-Pune	PSW
Up to 2 weeks	415	135	48.3%	22.9%	48.3%	29.2%
15 days to 1 month	285	122	33.1%	26.4%	81.4%	55.6%
2 to 3 months	135	137	15.7%	29.7%	97.1%	85.3%
Over 3 months	25	62	2.9%	13.4%	100.0%	98.7%
Total valid claims cases	860	462	100.0%	100.0%		100.0%
Invalid cases*	14					
Total claims submitted**	874	462				

*Invalid means insufficient data available for analysis.

**6 claims had insufficient data to be analyzed.

TABLE 20
KEY PERFORMANCE INDICATORS

Indicator	Uplift	APVS-Pune	PSW
Incurred claims ratio	63.0%	61.0%	72.0%
Claims frequency ratio	2.0%	1.7%	2.8%
Claims rejection ratio	4.6%	5.0%	3.3%
Renewal ratio	53.0%	61.0%	72.0%
Percentage of claims settled within 50 days of submission		35.1%	77.8%
Percentage of claims submitted within two weeks of leaving hospital		48.3%	22.9%

HOW MEMBERS SHAPE THE CLAIMS EXPERIENCE AT APVS-PUNE AND PSW

According to Uplift staff, a unique feature of the HMF program is that final claims decisions are made by the community, even though the original claims recommendations are made by Uplift. Members have some control over the approval of claims as well as the actual amounts reimbursed. Uplift has outlined six criteria for claims approval to try to eliminate any bias from entering the process through community involvement. The claims are evaluated based on the following criteria. Is the claim:

- In network or not?
- Pre-existing or not?
- Is there fraud?
- An emergency or not?
- Was a referral used (because this impacts the costs)?
- Is there sufficient amount in the claim fund from earned premium?

When we drill down deeper into the claims experience, we find some interesting implications of member participation, two of which are particularly noteworthy. The first is that most of the claims paid out to members are less than the amount allowed by HMF policy and less than that validated by Uplift. The second is that a small portion of claims rejected on technical or medical grounds are awarded to the members anyway. The net effect of these actions is to spread the claim fund across more members, but more thinly.

ACCEPTED CLAIMS VS. PAID CLAIMS

At both PSW and APVS-Pune, the data show that most claims are paid out at less than the amount validated by Uplift and less than the policy allows. At PSW, only 4.9% of claims were paid out in the validated amounts, and these were worth an average of INR 1,720 (\$38.22). The bulk of claims, or 89.5% of the total, were paid out at less than validated levels, with an average value of INR 3,048 (\$67.73).

Again, the less valuable claims were paid as validated while the more expensive ones were reduced at claims meetings. This is probably partially if not fully due to the fact that government hospitals are significantly less expensive than private hospitals and the costs are reimbursable up to 100 percent. However, the majority of claims value, about 93 percent, was from claims that were paid out at less than the validated amounts.

At APVS-Pune, we find a similar pattern. Only 6.6% of all claims were paid out in the validated amount. The average amount of these claims was INR 1,700 (\$37.78). Claims that were originally accepted (i.e. approved) and paid out at a lower amount than validated accounted for 73.4% of the volume of claims and 95.3% of claims value. The average amount of these claims was INR 4,499 (\$99.98). Again, this suggests that the smaller claims are being paid as validated and the larger claims are being reduced through decisions made at the claims meetings.

When we examine how much was actually paid out versus the validated amount at PSW, we find that only 43 percent of the validated amount was paid out. The total validated value of accepted claims that were settled at the time of our research was INR 2,445,901 (\$54,353.36). The same analysis for the APVS-Pune members finds that the validated value of accepted and settled claims was INR 5,330,950 (\$118,465.55). The amount actually paid was INR 2,967,300 (\$65,940) or 55.7% of the validated amounts.

As we saw earlier, the incurred claims ratio at both of these programs was higher than 100 percent at the end of 2010. This analysis calls into question whether the Uplift program -- as currently designed -- can ever be sustainable.

At APVS-Pune, we found another interesting effect of member participation. Three claims that were approved by Uplift were disapproved by the members. While this accounts for a small proportion of all claims, we do not know the exact reasons for these being denied. We do know that medical expenses for conditions that could be considered the claimant's fault can be denied. Sometimes the community will know that a member's illness was a pre-existing condition and will deny the claim. Member participation was also found to impact the share of claims rejected. The community can override Uplift's recommendations and award disbursements against rejected claim applications. Below are two tables summarizing the experience at each NGO with overturned rejections in 2010. (See Tables 21 and 22). The data suggest that the community may have reduced the rejection ratio from 14.5% to 6.3% at PSW and from 9.1% to 5.0% at APVS-Pune. These represent significant reductions. However, at the time of research, some claims remained unsettled, and, as a result, the rejection ratio may change.

This trend is stronger at PSW. When we look at the amounts involved we find that an additional INR 48,777 (\$1,083.93) or INR 2,121 (\$47.13) per member was awarded at PSW. This was 4.1% of the total claims paid out. At APVS, INR 44,339 (\$985.31) was paid out or INR 4,434 (\$98.53) per member. This was equivalent to 1.5% of paid claims.

TABLE 21

STATUS OF REJECTED CLAIMS AT PSW (BASED ON CLAIMS SUBMITTED IN 2010)

Indicator	Total Claims	Percent of Total Claims
Originally rejected*	67	14.5%
Originally rejected & approved by committee	23	5.0%
Originally rejected & rejected (as of 01/31/11)	29	6.3%
Originally rejected & unsettled (as of 01/31/11)	15	3.3%
Total claims submitted	459	

*Rejected means not validated by Uplift.

TABLE 22

STATUS OF REJECTED CLAIMS AT APVS-PUNE (BASED ON CLAIMS SUBMITTED IN 2010)

Indicator	Total Claims*	Percent of Total Claims
Originally rejected*	79	9.1%
Originally rejected & approved by committee	10	1.1%
Rejected (as of 01/31/11)	41	4.7%
Originally rejected & undecided by committee (as of 01/31/11)	28	3.2%
Originally approved & rejected by committee	3	0.3%
Total rejected	44	5.0%
Total claims submitted	872	

*Rejected means not validated by Uplift.

Includes all claims with valid data to perform this analysis.

NETWORK CONCESSIONS AS A COMPONENT OF FINANCIAL VALUE

In this section of the report, we examine the financial value provided by the healthcare provider network. Uplift contends that the network provides value via lower-than-average cost treatment and member discounts. Based on its ability to aggregate demand for health care providers, Uplift negotiates discounts with private hospitals, as well as with out-patient doctors, drug stores and medical laboratories. The cost concessions that members receive when paying their hospital bills at in-network providers are recorded in the HMF claims database, but only if they have been noted on the hospital bill or included in the claims application. We analyzed the settled claims data for PSW and APVS-Pune to determine the value of concessions provided.

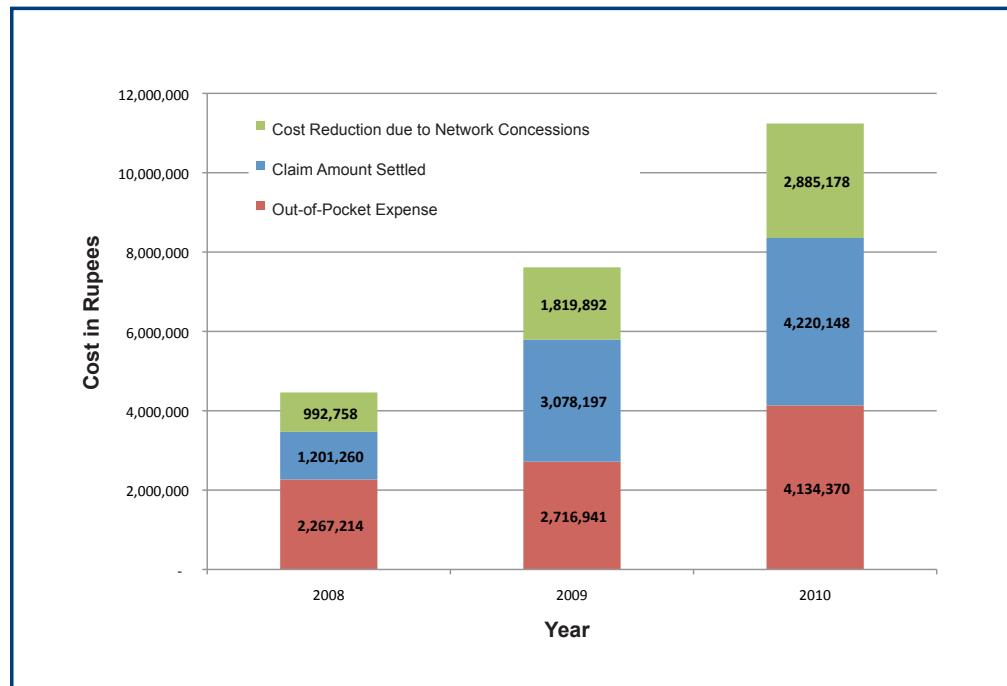
The analysis shows that the provider network is beneficial for members. It resulted in concessions worth INR 278,091 (\$6,179.80) for PSW members and INR 285,237 (\$6,338.60) for APVS-Pune members in 2010²⁹. Figure I below shows the value of concessions received annually since 2008 (See Figure I). It presents the concessions amount in the context of total claims disbursed and total out of pocket expenditures (OOPE) for members.³⁰

²⁹ Based on 706 settled claims at APVS-Pune.

³⁰ Note that OOPE is calculated by Uplift based on the costs included in the policyholders' claims application. This figure does not necessarily represent the total amount that a policyholder has paid to cope with an episode of illness. Because policyholders are likely to include only costs that they believe to be claimable in their claims application, the OOPE expense estimate will underestimate actual costs to the member household.

FIGURE I

VALUE OF NETWORK CONCESSIONS IN THE CONTEXT OF POLICYHOLDER OOPE AND CLAIMS REIMBURSEMENTS, APVS-PUNE AND PSW (2008-2010)



The network concession helps the members in two ways. They have lower OOP costs when they go to pay their hospital bill, and the claims reimbursement is lower, thus protecting the claims fund. If a discount on treatment costs was not available for Uplift members, the OOPE for members (as measured by Uplift) would have been 38 percent higher in 2010, while the claims paid would have had to increase by 31 percent across both programs. Another way to look at this is that 44 percent of total concessions would accrue to claims, leaving less claims fund to be distributed among the members, while 55 percent would have accrued to increased member costs.

The concessions received comprise about 6 to 7 percent of the total value represented. The concessions received have declined as a percentage of claims since 2008, as the claims paid out increased after the introduction of the new product. In 2010, total concessions received were equivalent to about 13 percent of the total claims paid across both partners.

On an institutional basis, concessions are more important for PSW members. In 2010, the recorded concessions received were equivalent to 23 percent of the total claims paid out, representing a significant price break for poor households. This proportion has held steady since 2008. At APVS-Pune, the recorded concessions comprised only 9 percent of the amount paid in claims, and the proportion of value provided through concessions has steadily declined at APVS-Pune since 2008, when it stood at 18 percent.

SUMMARY

The HMF program is providing financial value to members. According to institutional data, the largest component of financial value is provided by the claims reimbursement, but additional financial protection is provided by the healthcare provider (HCP) network discounts. As we found with the analysis of costs of malaria treatment, network concessions are only obtained if the policyholder informs the healthcare provider that they are members of HMF. We observed that not every policyholder does this, which means that the members are not maximizing the financial value obtainable through concessions.

The high claims ratios at both microcredit institutions are evidence that the program is providing substantial financial value to members, even within the limited resources of the program. The average claim award at APVS-Pune is 43 percent higher than that at PSW, suggesting that APVS-Pune provides higher financial value per claimant. The lower awards at PSW are the result of members holding down claims awards. This difference in claims ratios between the two NGOs may also be attributable to the lower claims frequency at APVS-Pune, which results in less demand on the available claims fund and to the faster growth of the APVS-Pune program which results in a faster growing claims fund.

At PSW, the claims ratio went past sustainable levels, even while the rejection ratio was held down by the membership. In the past, this NGO and its members have been too conservative, preferring to build up their reserves rather than pay out the full allowable claims reimbursements. This NGO also suffers from low numbers, stemming from the poor performance of the microcredit program. It is aggressively pursuing non-borrowing HMF members. In order to attract members, PSW may be trying to award more claims to more members, but doing so comes at the cost of holding the average claims disbursement amount down. The aggressive promotion of the program – through targets for new members each month – may prove counterproductive if adverse selection occurs, bringing with it a higher claims frequency.

At APVS-Pune, we estimate that the claims ratio is also above sustainable levels. To a lesser degree than PSW, the APVS-Pune program is reducing the claims rejection ratio by overturning some of Uplift's rejection decisions.

In summary, we observe a dual pattern of members reducing claims payments in order to conserve the claim fund and ensure the sustainability of the program but also occasionally overturning rejection decisions in order to pay more members. This behavior seeks to increase the impact and outreach of the program by increasing the number of beneficiary households. It also aims to increase member satisfaction in order to improve renewal rates and ensure the sustainability of the program. The HMF members and the NGO staff that serve them are attempting to strike a fine balance between outreach, sustainability and impact. In the next section, we explore key institutional indicators that speak to these three aspects of microinsurance programs and their collective link to value.



FUTURE PROSPECTS FOR THE FINANCIAL VALUE OF HMF

To better understand to what extent the financial value delivered by the HMF program can be improved, we examine key institutional indicators of outreach, sustainability and impact. These indicators provide insight into the future prospects of the program and its capacity to deliver more client value. We begin by looking at who is currently being reached and obtaining financial value.

OUTREACH

Coverage Ratio

The coverage ratio is an outreach ratio that measures how well Uplift is serving the target market. This ratio can also provide insight into how easily the market can access the HMF product. For 2010, the HMF coverage ratio in Pune was 6.6%, demonstrating that Uplift is providing value to only a small share of the market (Table 23). The coverage ratio was estimated as the number of Insured members at the end of 2010 as a share of the target market.

TABLE 23
COVERAGE RATIO FOR HMF PROGRAM IN PUNE (2010)

Number of Active Insured	Population	Coverage Ratio as percent of Uplift's Target Market
APVS-Pune	54,461	4.9%
PSW	18,300	1.7%
Total in Pune	72,761	6.6%

the areas where the microcredit programs operate. While this will generate an overestimate of the potential market in those specific areas because some families – such as those who work for the public sector - will have health insurance through their employer, it underestimates the potential market of the working poor in Pune, by excluding the residents of undeclared slums. Clearly, Uplift has a large potential target market and the opportunities for expanding outreach are significant.

Poverty Outreach Ratio

One of the striking features of the Uplift program is its ability to reach poor families. According to its records, in 2010, almost one of every five members in Pune was from a household living below the poverty level. Uplift has managed to reach poor people through intentional targeting and a client-managed model that actively involves members in setting and maintaining an affordable premium price. In 2010, the poverty outreach ratio for PSW and APVS-Pune was 19.3%. The ratio was calculated as the percent of the average number of HMF members during 2010 that came from households classified as SLL 1, 2 or 3. (SLL refers to Standard of Living Level.)

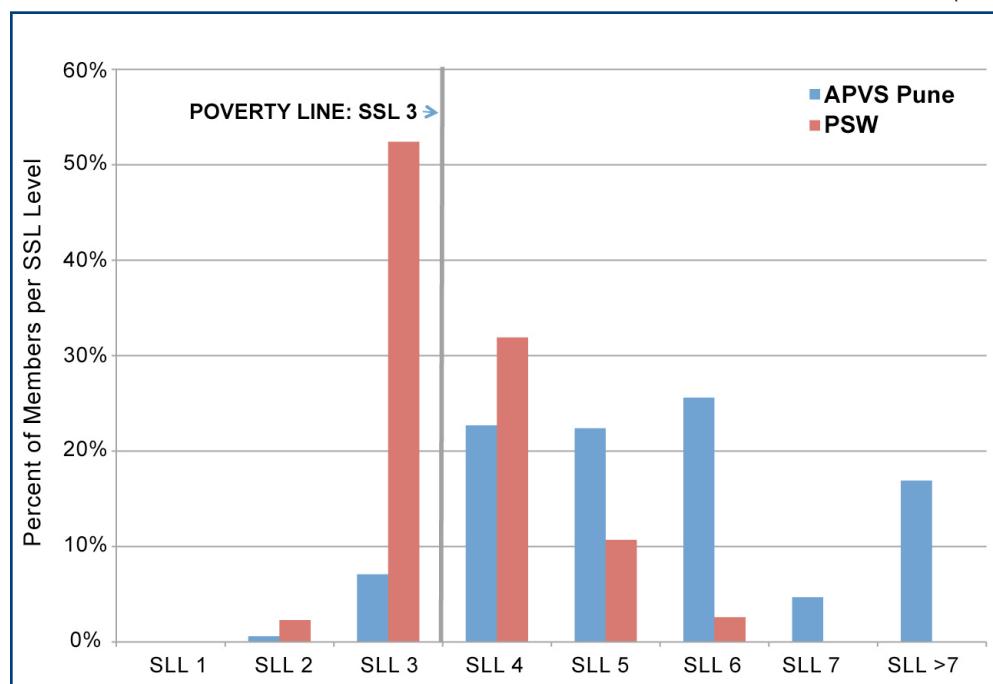
Uplift and the microcredit partners have been tracking the socio-economic status of HMF members for a number of years. At PSW, an impact form measuring seven standard-of-living indicators is filled out for new members. The purpose of this evaluation is to identify those households living on incomes below the national poverty level. Such families are eligible for a subsidized HMF premium. Standard of Living Levels 1 to 3 are below the poverty level. Levels 4 to 7 are above the poverty level but still low-income. APVS and PSW target households in the levels 3 to 7. As shown in Figure J, PSW has a much larger proportion of members who are below the poverty level. In 2010, 14 percent of PSW members received a subsidy on their premium. PSW offers a smaller initial loan to reduce barriers to accessing their microcredit program for poorer clients.

SUSTAINABILITY

The HMF program is not yet sustainable. It continues to be subsidized at both the Uplift and NGO levels. In order to assess the degree to which premium income can cover expenses, representing the first step toward financial sustainability, we calculated the incurred expense ratio. Sustainability was also assessed on the basis of how well premiums covered the cost per member.

We based the ratio on the outreach of the two programs that are the subject of our research: PSW and APVS-Pune. We took the target market to be the total population of the “declared” slums in Pune since these are

FIGURE J
STANDARD OF LIVING LEVELS OF APVS-PUNE AND PSW HMF MEMBERS (2010)



Incurred expense ratio

The incurred expense ratio is the key indicator of program efficiency. This ratio measures the share of the premium that is being used for operating expenses. The industry standard has been set at 20 percent or lower although it has been recognized that the ratio is often higher for health microinsurance than for other microinsurance programs (Garand & Wipf, 2010). The lower the ratio, the more value can be provided to the policyholder. A high indicator suggests that the program needs to be more efficient.

The incurred expense ratio for Uplift in 2010 was 31 percent. The funds available for HMF program expenses (i.e., operating and administrative expenses) have been set at INR 40 (\$.89) per every INR 100 (\$2.22) earned premium. Half of this amount, INR 20 (\$.44), accrues to the NGO, the other half goes to Uplift. Donor funding is used to cover any remaining expenses at either Uplift or the NGOs. The incurred expense ratio for Uplift implies

that the institution is not yet sustainable and that donors are funding 11 percent of their operating costs. The ratio is calculated by dividing total incurred expenses by the earned premium in the year.³¹

TABLE 24
INCURRED EXPENSE RATIOS: UPLIFT, APVS-PUNE AND PSW (2008-2010)

	2008	2009	2010
APVS Pune	129%	77%	68%
PSW	147%	119%	103%
Uplift	82%	41%	31%

The incurred expense ratios at PSW and APVS-Pune are very high but moving in the right direction (Table 24).

³¹The earned premium from the APVS-Mumbai operations are included in the analysis of the incurred expense ratio for Uplift. The Chaitanya earned premium was not included.

In 2010, the incurred expense ratio at PSW was 103 percent, but down from 119 percent in 2009. At APVS-Pune, the ratio was 68 percent in 2010, down from the 77 percent ratio that prevailed in 2009.

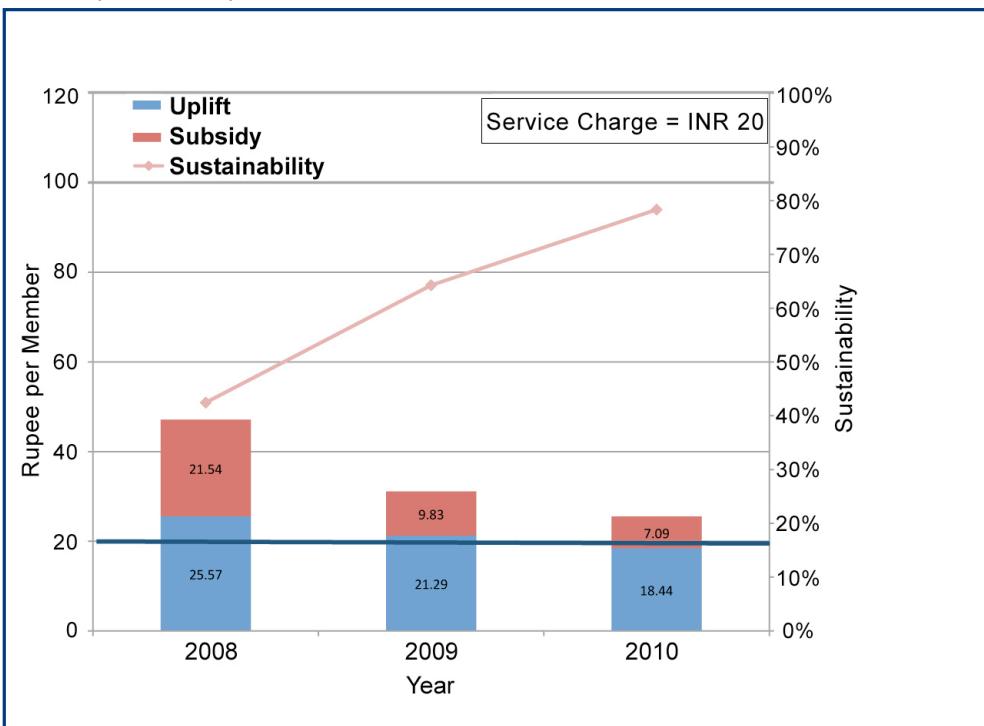
Operating Expense per Member³²

Based on operational costs per member, which were INR 29 (\$.63) in 2010, the HMF program was 78 percent operationally sustainable. Donor funding covered the remaining expenses. This analysis suggests that Uplift and the HMF program could be operationally self-sufficient if the premium accruing to Uplift were increased by INR 7 (\$.01) per person (Figure K).³³

At APVS-Pune, the HMF program was 72 percent sustainable at the end of 2010 with per member costs of INR 55 (\$1.22). (This analysis includes the share of the premium paid to Uplift.) Therefore, the premium would have to increase by INR 15 (\$.33) to allow APVS-Pune to cover all HMF operational costs (Figure L). At PSW, which is a smaller program, the sustainability ratios are lower. The program covered only 40 percent of costs (Figure M). This is partly due to the fact that donors subsidize 40 percent of premiums for policyholders living below the poverty level. On a per-member basis, expenses are INR 100 (rounded) (\$2.22), indicating that the premium would need to increase by INR 60 (\$1.33) in order for the program to be self-sufficient given its current size.

FIGURE K

UPLIFT'S OPERATING EXPENSE PER MEMBER AND SUSTAINABILITY RATIO (2008-2010)



³² The APVS operations in Mumbai are included in the analysis of expenses on a per member basis. The start up of a new partner Chaitanya, in mid-2010, increased expenses at Uplift above normal operating levels therefore, we did not include Chaitanya expenses in the estimation of costs per member.

³³ The apparent differences in the sustainability of Uplift based on these two different ratios, are due to the complexity of the Uplift programs and what is included or not included in the expense per member indicator. Note that Figure K represents the expenses per member at Uplift. It includes all members including from APVS-Mumbai and Chaitanya. The subsidy refers to expenses that are paid by Inter-Aide. Sustainability is calculated as Per Member Expense / INR 20 (share of premium accruing to Uplift).

FIGURE L
APVS-PUNE'S OPERATING EXPENSE PER MEMBER AND SUSTAINABILITY RATIO (2008-2010)

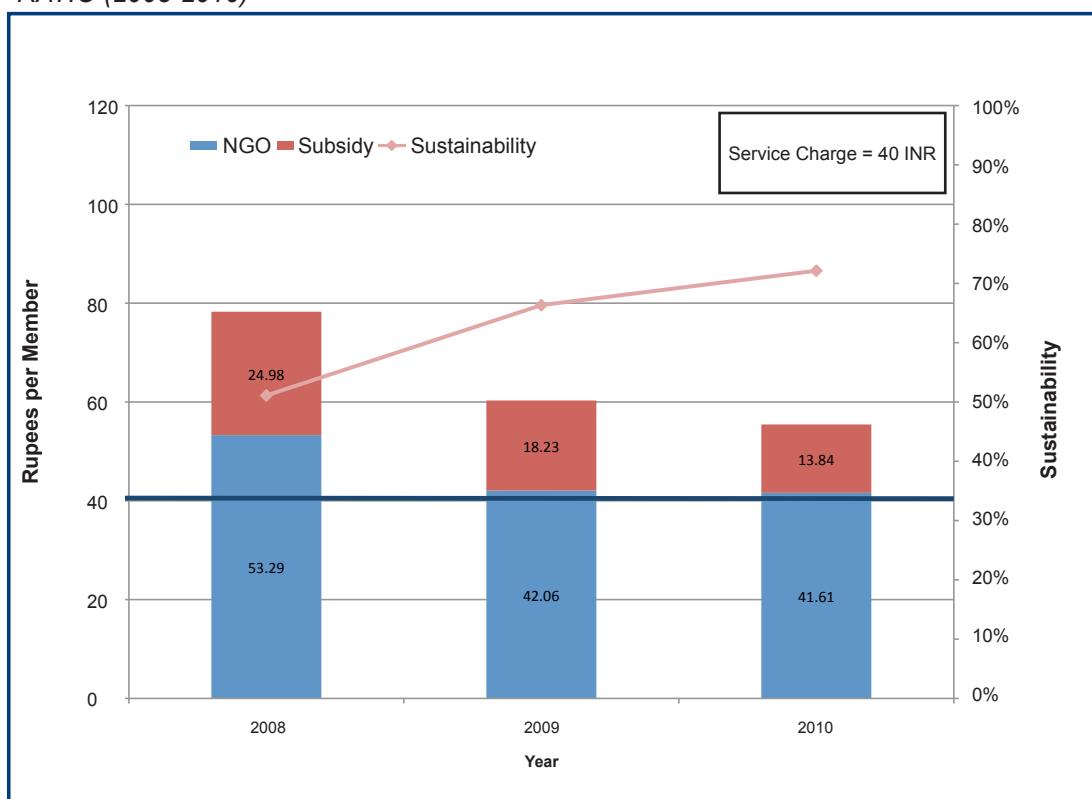
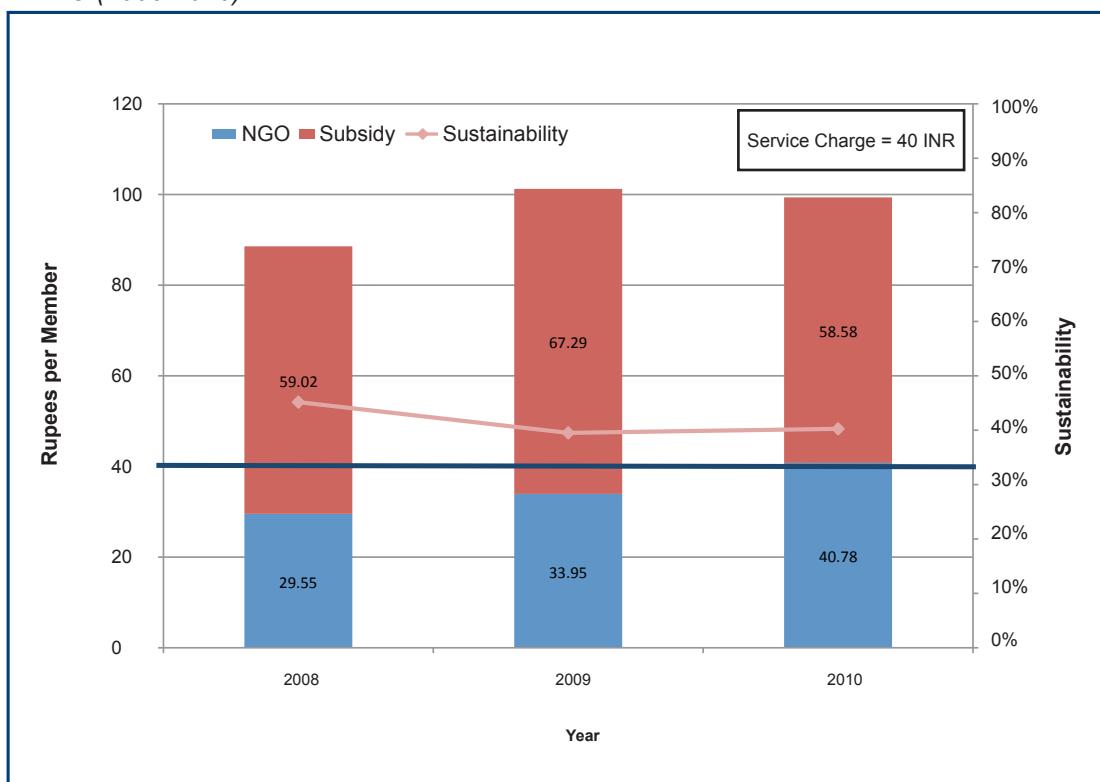


FIGURE M
PSW'S OPERATING EXPENSE PER MEMBER AND SUSTAINABILITY RATIO (2008-2010)



The increase in the premium to INR 120 (\$2.67) at APVS-Pune in 2011 will no doubt improve the sustainability of that program, but it will most likely prove insufficient to bring the NGO to 100 percent financial sustainability.

IMPACT

Social Investment Ratio

Uplift provides more than an insurance service to members. Health talks, health camps, and free access to Uplift's Guidance Doctor are also included in member benefits. The social investment ratio is a useful measure for assessing the share of resources that Uplift is investing in raising awareness of healthcare issues and promoting preventative healthcare behaviors. For 2010, the Social Investment Ratio for Uplift was 13.9%, for PSW it was 2.4%, and for APVS-Pune it was 2.6% (Table 25). The social performance ratio is generally estimated by calculating the total expenses devoted to information, education, and health prevention activities as a share of total expenses for the HMF program. Since these activities and expenses are spread across the three partners, the ratio was calculated for each institution. We assumed that health camps, the Guidance Doctor, the health talks and client education activities are "social" activities. The 24/7 Helpline in addition to the referrals and guidance provided by SEs were assumed to be primarily related to the insurance feature of Uplift and, therefore, were excluded from the analysis. However, some of these services could be considered as informational, depending on how they are used. The ratios we present here, therefore, are conservative estimates of the actual social investment at Uplift, PSW and APVS-Pune.

The trend in the social investment ratio is mixed. From 2009 to 2010, the ratio increased at Uplift (from 10% to 13.9%) and to a lesser extent at PSW (from 1.9% to 2.4%) but decreased at APVS (from 3.0% to 2.6%). The trend in the ratio, however, is difficult to interpret, as the education, information and preventative health services at Uplift are quite dynamic.

On a per-member basis, social investment accounts for 16 percent of operational costs at Uplift, 5 percent at APVS-Pune, and 9 percent at PSW. Figure N shows the operational costs per member for all three institutions categorized into: Overhead and Administration costs; the costs of activities that support the financial value provided by HMF (i.e., Other Expenses); and costs of the non-insurance member services activities (i.e., Social Expenses).

TABLE 25
*SOCIAL INVESTMENT RATIO: UPLIFT,
APVS-PUNE AND PSW (2009-2010)*

	2009	2010
APVS-Pune	3.0%	2.6%
PSW	1.9%	2.4%
Uplift	10%	13.9%

FIGURE N

EXPENSES PER MEMBER BY CATEGORY: UPLIFT, APVS-PUNE AND PSW (2010)



SUMMARY

Based on the ratios presented in this section, it is clear that there is significant opportunity to increase the breadth of outreach of the Uplift program in Pune alone. There may also be room to deepen the outreach of the program, especially at APVS. PSW is reaching a sizeable share of members who are living below the poverty line. The level of investment required to fund the social aspects of the Uplift program appears to be relatively modest. The overall cost, however, leads us to be optimistic that these features could be offered sustainably as the other aspects of HMF become sustainable. The expenses on a per member basis have improved over time demonstrating that the growth in membership is outpacing the growth in expenses. This suggests that through economies of scale, HMF could become sustainable.

There are two components to sustainability of the HMF program. The sustainability of the claims fund requires that in the long run earned premiums be sufficient to cover the approved claims to the extent allowed. The claims ratios cannot continue at current levels for very long without eroding the claims reserves or resulting in client dissatisfaction with the amount paid. Earned premiums are not sufficient to cover the approved claims up to the eligible amount currently. This means that either the premium price needs to increase or the benefits provided by the claim feature need to be decreased to ensure that the risk pool is self-sufficient.

The second component of sustainability is the self-sufficiency of operations. It is possible that sustainability could be achieved through economies of scale. Uplift management believes that they can be sustainable with 300,000 members. This would entail 200 percent growth over 2010 levels. Without program growth and associated efficiencies, this analysis suggests that the premium would have to be increased by INR 26 (\$.58) at APVS-Pune and INR 69 (\$1.53) at PSW just to cover the operating costs alone. The process of setting the premium requires member input, and so far, although they have accepted some increase in the premium, members have not agreed to the level recommended by actuaries. Therefore, the only options for the HMF program are to grow both through the expansion of existing partners, PSW and APVS, as well as through the acquisition of new partners.



Conclusions and Implications

This study examined whether and how Uplift India Association provides financial value to its members. Two methods were used to explore this component of client value: First, we conducted a small case study involving individual interviews with Insured and Uninsured families who had had a relative hospitalized for malaria within the recent past. Second, we analyzed the institutional performance and financial data of Uplift and its NGO microcredit partners, APVS-Pune and PSW.

The case study showed us the types and relative magnitudes of costs families incurred when a member becomes seriously ill with malaria. It also highlighted the differences in total and net costs between Insured and Uninsured families. Although it provided interesting insights into the experiences of these families, the case study relied on a small sample and cannot be generalized to the overall Uplift member base. So in order to obtain insight into the total financial value provided to all HMF policyholders in Pune, we analyzed the key performance indicators at Uplift.

This analysis provided evidence of other aspects of client value including depth and breadth of outreach and social investment. Finally, the institutional analysis underlined the extent of Uplift's self-sufficiency and provided insight into the potential for Uplift to sustain itself.

We conclude that Uplift is providing substantial value to the policyholders who use the HMF. This value is obtained through claims reimbursements and also for some, through lower costs of hospital care due to price discounts at private network hospitals.

To recap the major findings:

- In response to a serious case of malaria, the case study sample of Insured households had lower average out-of-pocket or total cash costs than the sampled Uninsured households. This was also true before claims reimbursements from Uplift are taken into consideration. This is because the Uninsured patient sample had substantially higher direct hospital costs compared to the Insured. This is significant because it is the largest single cost category related to malaria-care. Cost categories also included indirect costs and transactions costs. We believe that much of the variation in direct costs is due to price discounts that HMF patients are entitled to at network hospitals. On the other hand, the Insured patients and households experienced much higher indirect costs primarily due to large amounts of foregone income.
- The Insured households also had higher average transactions costs due to the costs of the HMF annual premium. Importantly, although the Insured were more likely to borrow to cover malaria-related expenses, they paid less for debt financing than the Uninsured because they were able to get credit at lower interest rates. We assume that this is because the market considers Insured households a lower credit risk because lenders know that policyholders will receive a reimbursement.
- The HMF product is clearly providing some financial protection from the direct hospital costs incurred by the HMF households. According to the MIS data, *the HMF program reimbursed 53 percent of the hospital expenses claimed by the Insured sample policyholders*. They also benefitted from price concessions at in-network hospitals equivalent to 4.8% of the total claimed hospital expenses.
- When we take all the policyholders' costs into account, based on the case study interviews, we find that on average the claims reimbursement received was equivalent to less than one-quarter of the total costs the household incurred due to malaria, including lost income. Almost 38 percent of the total average costs of malaria care for the Insured sample were due to indirect hospital costs and the vast majority of these costs were due to foregone income.
- The case study also showed that in order to optimize the financial value available from HMF, policyholders have to follow the HMF program guidelines. *Misuse and under-use of program services designed to reduce both search and treatment costs for appropriate care (such as the referral system and the 24/7 Helpline) meant that only a minority of sampled, Insured households were in a position to maximize the available HMF benefits.* Awareness of the insurance program and how to use it still needs to improve for all policyholders to benefit as much as possible from the program.

- Claims reimbursements and the financial value for the Insured sample were also reduced below the levels allowed in the policy by HMF members themselves through the claims committee meetings.
- *Analysis of the MIS data for all Pune-based HMF members showed that the largest component of financial value is provided by the claims reimbursement, but additional financial protection is provided by the healthcare provider network discounts.* Claims reimbursements reduced policyholder costs by 38 percent while price concessions reportedly reduced hospital costs for claimants by an additional 26 percent.
- The long term sustainability of the Uplift program, however, is called into question by the high claims ratios and current reliance on donor subsidies. There are two components to sustainability of the HMF program.
 - The first, sustainability of the claims fund, requires that in the long run earned premiums be sufficient to cover the approved claims to the extent allowed. The claims ratios cannot continue at current levels for very long without eroding the claims reserves or resulting in client dissatisfaction with the amount paid. Since earned premiums currently are not sufficient to cover the approved claims up to the eligible amount either the premium price needs to increase or the benefits provided by the claim feature need to be decreased to ensure that the risk pool is sustainable.
 - The second component of sustainability is the self-sufficiency of operations. The expenses on a per member basis have improved over time suggesting that through economies of scale, HMF might become sustainable. Without program growth and associated efficiencies, the premium would have to be increased just to cover the operating costs alone. The process of setting the premium requires member input, and to date, premium hikes have been met with resistance. Therefore, the best option for attaining HMF program self-sufficiency is to grow the membership.
- One of the most interesting findings of this study relates to the client-managed nature of the HMF program. The HMF client members are attempting to strike a fine balance between affordability, value, outreach and sustainability. *Not only has membership participation resulted in consistently low premium levels, but it has also shaped the financial value the program delivers.* Policyholder participation in claims decisions was found to spread the benefits of the program. Specifically, policyholders have chosen to limit the average value paid per claim while simultaneously broadening access to the risk pool funds. By awarding claims payouts to more members, the policyholders are increasing the number of satisfied customers. The policyholders' actions demonstrate, among other things, that members understand risk pooling – and particularly the importance of sustaining the pool – very well.

By holding down the claims award amounts, members are also protecting the claims fund in an effort to ensure the sustainability of the program. That said, limiting claims amounts lowers the value provided to members below what the program promises. To meet the commitment of 80 to 100 percent reimbursement for allowable hospitalization costs would require an increase in the HMF premium cost to which members would have to agree.

This balancing act that members are pursuing is not without tensions. Some members are not totally satisfied with receiving less than their allowed reimbursement amount. Our research also showed that member participation is guided and in some cases heavily influenced by NGO staff. Even so, the evidence shows that members are actively participating and impacting the program. The research also supports the idea that a mutual health insurance program with client participation in all major decisions is viable. Additionally, the HMF program demonstrates that a health microinsurance product with a very low premium can still provide financial value to members.

IMPLICATIONS FOR THE DEFINITION OF THE FINANCIAL VALUE OF HEALTH MICROINSURANCE

The findings show that Uplift provides value to its members both through discounted costs of medical care and through claims reimbursement. Additionally, we know that the other non-insurance member services, such as health camps, provide free medical care to enrolled HMF members. At the beginning of this report, we provided a working definition of financial value: *the value clients obtain when claims are made*. Based on the experience at Uplift, we believe that health microinsurance deserves a specific and expanded definition of financial value. We propose the following:

Financial value of health insurance is the degree to which membership in a health microinsurance program lowers the overall financial costs incurred due to ill health.

We believe this broader definition would take into consideration programs, which like Uplift provide policyholders access to lower cost medical services through linkages to healthcare provider networks, access to free health screenings and other diagnostic services, as well as elements of free care. This expanded view also allows for situations in which members do not submit claims or have their claims rejected but are still able to benefit from lower cost care because of their Insured status. This definition would include supplemental insurance programs that provide cover for foregone income or other indirect costs. Replacement of lost income for patients and caregivers is a benefit that would provide a significant amount of protection for low-income workers, particularly those in the informal sector. This broader definition would also raise our expectations of the financial value that health microinsurance should deliver.

IMPLICATIONS FOR UPLIFT

Uplift is providing a significant amount of financial value to members within certain constraints. The case study research and the institutional indicator analysis suggests that Uplift could be providing more value to the members.

Currently, claims are not being reimbursed at the full allowable rates even though the claims ratio was over the maximum rate (based on earned premiums) in 2010. This suggests that there is a mis-match between the premium cost and the benefits of the program. It means that premiums need to increase just to support the current allowed benefit amounts. This would in turn increase the financial value obtained by claimants but at a higher cost for all policyholders.

There are some areas where Uplift could endeavor to provide more financial value now without changing the premium or the benefits. For example, the promptness of claims settlement suggests that financial value could be easily increased by processing and paying claims more quickly to reduce the policyholders' borrowing costs.

In the future, Uplift may be able to increase the financial value it provides by expanding the client base to a level that can reduce administrative costs as a percent of the premium. By reducing the expense ratio, more value can be delivered to the members for the same premium cost.

Other areas where financial value could be increased would require raising premiums and/or increasing benefits. The case study indicated areas where Uplift could provide more value by relieving certain pressure points for the clients.

There is an opportunity to provide more financial value by covering some of the indirect costs of hospital care such as foregone income. Further research would be necessary to determine whether there is sufficient demand for this benefit and whether it could be delivered sustainably at a price that policyholders could afford. It is not easily apparent which households have access to informal income protection mechanisms though it is clear that some do. As the benefit would require an increase in the premium cost Uplift might consider offering it as a supplemental insurance rider for those households who need it and can afford it.

Another pressure point for HMF members is the need to pay a deposit at private hospitals. Although these advance payments can sometimes be waived for members, Uplift and the NGOs should think about how they can help advance funds in cases where waivers are not possible. Advances against savings or claims reimbursements, and health emergency loans are a few of the mechanisms that could be used. Savings or loan based mechanisms are particularly attractive since they can also be used to cover the costs of drugs and other supplies that policyholders must pay on an almost daily basis during hospital care.

HMF client members' participation has resulted in consistently low premium levels as well as shaped the financial value the program delivers.

The annual benefit limit of INR 15,000 (\$333.33) for HMF members is another pressure point for some. Four out of 16 Insured malaria patients in the case study had incurred total direct hospital costs above the annual benefit limit. Although Uplift has reported that it is looking for a reinsurance product to cover the more catastrophic medical problems that afflict policyholders and their families, it is evident that even non-catastrophic illnesses such as malaria can push people over the limit. This suggests a need to provide higher levels of cover for non-catastrophic health events.

Financial value can be bolstered in other ways as well. Awareness of the insurance program and how to use it still needs to improve for all policyholders to benefit as much as possible from the program. This highlights the importance of finding frequent opportunities to inform policyholders of the benefits of the program and the ways in which they can obtain these benefits. Although Uplift is already doing this, it is clear that more needs to be done to make

information stick with the clients. There also appears to be room to increase the effective use of the HMF product through improving members' health awareness and their health-seeking behavior.

IMPLICATIONS OF FINDINGS FOR CONSUMER EDUCATION

The analysis of institutional indicators and claims reimbursement experience of the individual HMF policyholders demonstrates that the active HMF members understand risk pooling very well. This finding belies the conventional wisdom about what low-income people understand about insurance and leads us to conclude that the Uplift program has successfully taught policyholders and frontline staff how to manage a risk pool.

The HMF and its microcredit partners have achieved this by adopting a transparent management model that gives members "ownership" of the risk pool and continuously reinforces messages about how to manage it. Members are informed each month of the total value of premiums collected and claims submitted. They then decide how much to approve in reimbursements, basing their decisions on a desire to protect the health mutual fund (as the risk pools are known) by not dipping into the reserves. (The evidence indicates that management of the health mutual funds may be a little on the conservative side, but this is a separate issue that we leave for other researchers.)

The Uplift members believe that risk is pooled at the level of their microfinance branch - even though it is pooled at the level of the entire microfinance organization. We believe that this perception reinforces their sense that the pool belongs to them and their fellow members, who are likely to also be friends and neighbors. Therefore this creates the feeling for the individual that even if they do not benefit from the insurance, their fellow member or neighbor will benefit from it. They can see this in action each month at the claims committee meeting. Seeing the risk pool in action and actively managing it, makes the rather abstract concept of a mutual fund tangible for members.

These findings suggest that *learning by doing* may be the best way to teach risk pooling. Since learning on the job can be time consuming, and mistakes are expensive, games or simulations that provide hands-on exposure to the concept of risk pooling may be the second best way to transfer the requisite knowledge and skills to potential policyholders.

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Annex 2

IMPLEMENTING PARTNERS

Uplift's implementing partners are responsible for promoting the health microinsurance program, enrolling members, collecting premiums, collecting and performing an initial review of claims documents, and disbursing claims payments. They are also responsible for implementing the health management activities, such as health talks and health camps, and for supporting the Guidance Center by providing space. The Service Executive (SE) is the front-line staff person working at the branch level of the implementing partners and who is responsible for providing these services to the insured members. Importantly, this position is dedicated to serving the HMF members regarding the HMF program only. The SE has no microcredit administrative responsibilities or other programmatic role.

ANNAPURNA PARIVAR VIKAS SAMVARDHAN (APVS)

Annapurna Parivar Vikas Samvardhan (APVS) has 80,000 HMF members across branches in Pune and Mumbai and is growing rapidly. In Pune, APVS reported 14,668 policyholders and 54,461 HMF members at the end of 2010. APVS clients (including those in Mumbai) account for about 75 to 80% of HMF members.

APVS is one program in a family of programs offered to low-income women under the Annapurna umbrella. The other programs include day care centers for children, microfinance, job placement services, child sponsorship and scholarships, a working women's hostel (Mumbai only) and a research center (Pune only). The microinsurance program is registered as a Section 25 Non-profit Company, while the microcredit program is registered as a credit society (i.e., a cooperative).

The Uplift health microinsurance is compulsory for all borrowers at APVS and it is only available to active borrowers. The number of insured members at APVS is growing due to the fast growth of the microfinance program. The microcredit program uses a group lending methodology with repayment meetings held monthly in the community.

MICROCREDIT PROGRAM AT APVS

The Annapurna microcredit program lends to married women between the ages of 18 and 60. The average client is about 35 to 40 years old. Loans start at INR 7,000 (USD \$155.56) for those below-the-poverty-line (BPL), (about 25% of new clients) or at INR 10,000 (USD \$222.22) for others (75% of new clients), and can reach a maximum of INR 100,000 (USD \$2,222.22), with terms of 12 months. For the first two loan cycles, the annual interest rate is 18% flat; for subsequent cycles it is 12% flat. Mandatory savings of 10% are collected upfront before loans are disbursed and further savings are collected with each loan installment. Unlike some other microcredit programs, APVS pays interest on savings in the range of 7 to 8% per year. They are able to do this since the microcredit program is registered as a cooperative.

In addition to the HMF product, APVS also requires members to purchase a credit life product that covers the borrower. The premium for the Life Mutual Fund (LMF), which is also a mutual

product, is INR 50 (USD \$1.11). The insurance pays off the loan balance in the event of the borrower's death and also pays the family a fixed benefit of INR 15,000 (USD \$333.33).

Additionally, APVS requires purchase of a combined funeral and accident cover called "Immediate Help" or FSF. This product covers the death of the policyholder's spouse or one of her first two children as well as asset losses. The sum insured is INR 1,000 (USD \$22.22), and it is paid out within eight days of the death of the insured borrower to help with funeral expenses. The annual premium is INR 50 (USD \$1.11). This product is administered by Uplift while the LMF is not.

PARVATI SWAYAMROJGAR (PSW)

Parvati Swayamrojgar is a non-profit NGO that offers microcredit, health microinsurance and financial literacy training, to poor and low-income families in Pune. PSW currently has about 4,800 microcredit clients, over 5,000 HMF policyholders and nearly 18,000 HMF members. (For every HMF policyholder, there are about three to four HMF members.) The health insurance is compulsory for all PSW borrowers who do not have existing health insurance. About 80% of the borrowers have HMF; the other borrowers are covered through work or have access to free healthcare. The PSW microcredit program provides individual loans with doorstep service. That is, loan repayments are collected monthly by loan officers at the client's home.

Unlike at APVS, non-microcredit clients are eligible to purchase the HMF through PSW. At the end of 2010, 302 HMF policies were held by non-borrowers. The PSW credit program is small and growth is hindered by the available loan fund. As a result, PSW is actively targeting non-borrowers for the HMF program to grow the HMF membership. PSW is headquartered in Pune and has seven branches within the limits of the Pune Municipal Corporation (PMC).

The vast majority of the PSW client base is women but they also lend to men. These clients on average are poorer than those at APVS due to targeting by means of smaller loan sizes and assessment of applicant's wealth through home visits.

Both PSW and APVS work within the confines of the city of Pune (i.e., Pune Municipal Corporation) and

not the greater Pune metropolitan area. PSW has seven branch offices while APVS has eight, bringing the total number of branches offering HMF in Pune to 15. These branch offices are sometimes referred to as mutual insurance units (MIUs) by Uplift.

MICROCREDIT PROGRAM AT PSW

PSW offers a starting loan of as little as INR 1,000 (USD \$22.22) and up to INR 7,000 (USD \$155.56). The maximum loan size is INR 15,000 (USD \$333.33) (intentionally kept low due to capital constraints). The interest rate is 15% flat per year and loan terms are 8 to 22 months with most loans having a 12-month term.

PSW does not collect savings but requires a 10% security deposit at the time of loan disbursement along with a 5% processing fee. Most first loans are in the INR 2000 (USD \$44.44) to 5000 (USD \$111.11) range, and the most common uses are small business, education of children or home repairs.

