



# Costs and Benefits of “Health Days” for Microfinance Clients

## *CRECER’s Experience with Mobile Health Providers in Bolivia*

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Focusing on the impact of the MAHP (Microfinance and Health Protection) services on CRECER (Crédito con Educación Rural), this paper explores the hypothesis that MFIs (microfinance institutions) can feasibly offer health-related services that are efficient and inexpensive enough to be offered on a long-term basis while also potentially enhancing the financial sustainability of an MFI. After describing CRECER’s multifaceted health protection package, the paper examines the costs and benefits to CRECER of one component: health days (*“jornadas”*).

Health days entail MFI-brokered and -facilitated visits by healthcare providers to CRECER branches or client communities, where clients may opt to come and pay a reasonable (unsubsidized) fee to public or private providers for quality diagnostic and primary healthcare services. CRECER arranges, promotes and manages the health days but does not collect any direct revenue from the events. Thus this is a non-income-generating product.

*“In the context of regulation and our highly competitive environment, we see health protection services as our competitive advantage.”*

—José Auad, General Director, CRECER

We estimate the costs to CRECER of offering health days to clients in the largely rural and semi-rural areas of El Alto and La Paz regions. We conclude that:

- CRECER spent about US\$13,073 on 697 health days with over 14,800 participants in 2008.<sup>2</sup>
- This amounts to about \$.88 per participant for the year and about \$.51 per client with access to the service (about 58 percent of clients with access actually chose to participate).

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<sup>2</sup> The exchange rate used throughout this paper is 7 Bolivianos to \$1, based on December 2009.

- CRECER spent about \$.40 per client with access to health days in 2009, and the service is projected to continue costing about the same in the coming years.

We then analyze the indirect benefits to CRECER from providing these services and estimate their potential impact on the MFI's financial bottom line. We show that:

- Some evidence points to the creation of more new credit groups (and thus higher client growth) in branches that provide health days, because friends and relatives who participate in or learn of the health days are inspired to join CRECER. Based on 2008 statistics, if health days resulted in even a .43 percent uptick in CRECER clientele, or stated more practically, if just nine new credit groups were formed in that year as a result of health days (in an area covering 25,000 clients and more than 2,000 groups), then the total cost of the health days for that year would be covered by increased revenues from additional clients. If health days lead to client growth that exceeds .43 percent in the coming years, then CRECER's health days could have a net financial benefit for CRECER.
- There may also be enhanced client retention rates in the branches offering the health protection package. A comparatively higher retention rate of 4 percent (as occurred in MAHP areas between 2006 and 2008) would lead to more than \$30,000 in net profit across just two regions in a single year that CRECER might not have earned had health protection products not kept clients loyal—easily covering the costs of providing the service.

## Introduction

### **Purpose**

This paper documents the costs and benefits associated with CRECER's delivery of health-related services developed as part of the Microfinance and Health Protection (MAHP) initiative in partnership with Freedom from Hunger from 2006 through 2009. The MAHP initiative set out to identify and test health-related services that could be practically and sustainably offered by microfinance institutions. Configuration and operation of the services—in this case health education, mobile diagnostic and primary health care (termed: “health days”), and health loans—were honed by CRECER and Freedom from Hunger over the course of the four-year initiative, and research was conducted to determine the impacts of CRECER's microfinance and health protection package on both the clients (in terms of health and financial well-being) and on the microfinance institution itself (in terms of the expenses, revenues and other nonfinancial benefits to CRECER). Although numerous positive client-level social impacts were observed and documented as part of the MAHP initiative, the focus of the current paper is on MFI-level financial impacts. And while we describe CRECER's range of health protection services, this paper analyzes the costs associated with one service in particular: health days.

### **MFI Background**

Created by Freedom from Hunger in 1990, CRECER became an independent Bolivian microfinance institution in 1999. It has grown to become the largest village banking institution in South America and serves poor, primarily rural, women clients. CRECER's flagship product is *Credit with Education*—group-based microfinance and nonformal education delivered by the same field agent at regular meetings in clients' communities. CRECER has achieved high levels of efficiency (each field officer reaches 466 clients) and financial self-sufficiency, while maintaining a high portfolio quality (consistently one of the lowest PAR rates in the crowded Bolivian microfinance market). Although CRECER is prohibited by law from collecting savings, each credit group does so using a group account at a regulated financial institution. With a strong social mission and a business need to differentiate itself from competitors, beginning in 2006 CRECER sought to expand

its health-related offerings by developing a cohesive package of health protection products that would have significant impact on clients while being provided in an efficient, systematized and cost-effective manner.

**FIGURE 1: CRECER INSTITUTIONAL DATA AS OF DECEMBER 2009\***

MFI-wide	
Year MFI established	1990
Number of active borrowers	102,212 (95% women)
Outstanding loan portfolio (US\$)	46,067,523
Portfolio-at-risk (PAR-30)	0.9%
Number of active savers	102,212
Operational self-sufficiency	111%
Operational self-sufficiency	144%
Health Protection Products	
Year started <i>Credit with Education</i>	1990
Number of <i>Credit with Education</i> clients	102,212
Number of Health Days (cumulative)	1,237
Number of Health Day participants (cumulative)	23,900
Cumulative number of health loans (cumulative)	256
Outstanding health loan portfolio (\$)	25,161

*\*Data as of December 31, 2009 as provided by CRECER*

## CRECER's Health Protection Services

### **In a Nutshell**

- CRECER offers a package of services that includes health education, health days and health loans. New health education topics focus on increasingly common chronic diseases, their prevention, diagnosis and treatment. Health days provide an accessible way for CRECER clients to act on the health education and—for a fee to them of \$0 to \$9—be tested for diseases such as diabetes, cervical cancer and high blood pressure by trustworthy healthcare providers who have been organized by CRECER to travel to and perform services in the clients' own communities. Finally, CRECER's health loans enable clients who need follow-up care to access the funds they need to pay for it.

### **CRECER's Role**

- Health education: CRECER's credit agents are responsible for conducting biweekly or monthly 30-minute nonformal education sessions with each of their village banking-style credit groups. CRECER trains credit agents on adult education techniques and a rotating series of education modules.
- Health days: CRECER's branch and regional staff contact and forge relationships with public and private healthcare providers. CRECER credit agents poll their clients regarding interest in various healthcare services and then agree with relevant healthcare providers on the dates and services to be provided, the minimum number of participants and the per-client cost. CRECER provides space for the health day and sometimes transports the healthcare providers to the rural branch or community. In some cases (especially *jornadas expansivas*), CRECER provides some refreshments, entertainment for waiting clients and some basic medical supplies (such as gauze).

- Health loans: CRECER promotes health loans to their groups via group credit officers, processes loan applications, typically makes loan payments directly to providers, and handles repayment through group and individual agents.<sup>3</sup>

### Value Proposition

- CRECER’s health days do not create direct financial value for CRECER. Nevertheless, since clients pay the healthcare providers for the care they receive, CRECER’s costs—to organize, manage and promote the health days—are relatively modest. Paying for health days out of the MFI’s own operating funds, CRECER views the health day costs as a low-cost, high-value investment that ultimately pays off in improved client loyalty, satisfaction, and health—which leads in turn to better loan repayment, savings deposits and microenterprises requiring larger loans. It should be noted that the health education in CRECER’s MFI-wide *Credit with Education* model is paid for via the interest earned on the accompanying and integrally related business loans, and the health loan component of CRECER’s MAHP package also generates interest revenue.

*“I am very appreciative of CRECER, which is the only institution that cares about my health.”*

–Ninfa, CRECER client for 10 years and health loan recipient

### Roll-out Timing and Locations

- Health education: CRECER has offered *Credit with Education*, including health education, since its inception in 1990. In 2007, CRECER introduced two new topics specific to health: Health Protection (presenting how to estimate health expenses and plan ahead to face them) and Healthy Habits (presenting prevention, diagnosis and treatment of four major and common chronic diseases). These new topics were implemented in the “MAHP” areas of La Paz and El Alto regions in 2007 and extended more broadly across CRECER’s branches beginning in 2008.
- Health days: Although CRECER had experimented with various mechanisms for clients to receive readier access to healthcare providers for many years, the MFI began in 2006 to establish a more cohesive, standardized and high-quality approach. Health days, or “*jornadas*,” were rolled out beginning in November 2007 in nine branches (or ULOs) in the regions of La Paz and El Alto.
- Health loans: Health loans were also rolled out in the regions of La Paz and El Alto beginning in October 2007.

### Methodology

This report focuses on the health day component in particular. The costing presented here was done using a combination of activity-based and allocation methods. Where direct, tangible costs were incurred, we used CRECER’s financial records and internal expense reports. We emphasized the cost of operating and growing the service, rather than the upfront investment required for its development and launch. Because the health days do not generate any direct revenue for CRECER, we reported only on direct expenses—including an allocation of salaries for those staff who are directly involved in the service—rather than adding general overhead allocations. Due to operational anomalies in 2009 (presented later), we based much of our analysis and discussion on 2008 data.

A true cost-benefit analysis, though, goes beyond financial data and profit to examine indirect nonfinancial costs and benefits that can be quantitatively estimated and rolled into the analysis of financial

<sup>3</sup> For more details on CRECER’s and other MFIs’ experiences with health loans, please see *Health Loans: A Technical Guide*, 2010, Freedom from Hunger.

gain or loss. We adopted the vantage point of the MFI itself and looked in particular for impacts related to the health protection package that might not be captured in the financials but that could ultimately enhance CRECER's business bottom line. These are presented under Additional Benefits.

It is important to note that despite CRECER's relatively strong information management system, the specific data for this analysis were challenging to obtain and reconcile, and some subjective judgment—with CRECER's confirmation or correction—was necessary. We believe that the data presented offer a fair and reasonably accurate picture, but we acknowledge that it is imperfect.

## **ANALYSIS: Health Days (“*Jornadas*”)**

### **Further Product Description**

Because CRECER's health days vary in size and scope, we found it useful to examine two main categories of health days: “*jornadas típicas*” (typical health days) and “*jornadas expansivas*” (expansive health days).

*Jornadas típicas* are organized almost entirely by field staff (credit officers), take an average of two hours from beginning to end and often serve a single credit group or a few credit groups (15–60 people). Clients appreciate that their family members and friends are also welcome to participate for the same price per person, paid directly to the providers, and ranging from \$0 (for public healthcare provider services such as vaccinations) to \$9 (for a comprehensive series of tests and exams by private providers). *Jornadas típicas* often take place in CRECER branches in towns, where providers can easily drop in, but CRECER staff also transport providers to rural communities and use borrowed space or a tent to conduct services. Private or public healthcare providers offer one or more services such as: diabetes testing, high blood pressure tests, dental cleanings, pap smears, gall bladder screening, or vision testing and prescriptions. Given their brevity and simplicity, *jornadas típicas* occur relatively often; in 2008 there were nearly 700 *jornadas típicas* in the two regions, and in 2009 more than 500.

*Jornadas expansivas* are managed largely by CRECER regional staff (manager level), who create and maintain relationships with providers, and who organize periodic (quarterly or bimonthly), multi-day health days to serve many people. During these *jornadas expansivas*—attended by 100–500 people over the course of up to five days—an emphasis is placed on serving the entire community, and music, entertainment and games add to the draw and lighten the wait. Participants again pay \$0 to \$9 directly to providers for their services, which might include several of the *jornadas típicas* services, or higher-level services such as colonoscopy, colposcopy or dental implant. In 2007, across the two regions there were four *jornadas expansivas*, and in 2008 there were five; six are planned for 2010.

Note that due to several unique circumstances at CRECER in 2009, the number of health days offered declined by 25 percent from the previous year. CRECER leadership asserts that this is not a reflection of CRECER's commitment to health days or their intended expansion, nor an indication of difficulties inherent to the service. Reasons for the decline included the extended illness of a key staff person involved, staff turnover and reorganization, and the division of a long-standing region into two regions, which entailed significant administrative and physical upheaval. Perhaps it is worth noting, though, that when such organizational events did arise, health days were among the first services to suffer—even at an MFI as committed as is CRECER to extending such services.

**FIGURE 2: HEALTH DAYS EXECUTED IN TWO REGIONS 2007–2009**

Combined El Alto + La Paz	Total 2007	Total 2008	Total 2009
Total health days	17	697	523
<i>Jornadas típicas</i>	14	693	518
<i>Jornadas expansivas</i>	3	4	5
Number of participants	549	14,837	8,514
Participants/health day	32	21	16
Health days offered per day	0.05	1.91	1.43
Clients with access to health days	2,500*	25,600	26,287
Participation rate	37%	58%	32%

*\*In the first (partial) year of the pilot, health days were offered only in limited areas; we assume about 10 percent of the region had realistic access.*

### The Bottom Line

The expense statement below (see Figure 3)—based on actual and estimated expenses for CRECER health days—shows CRECER’s experience with offering this service from 2007 through 2009. We estimate that CRECER spends an average of approximately \$17 on each *jornada típica*, or—assuming 20 participants—about \$.85 per participant. We estimate that CRECER spends an average of \$330 on each *jornada expansiva*, or—assuming 300 participants—about \$1.10 per participant. Based on these per-health day estimates and the number of health days offered in 2007–2009, CRECER spent a total of approximately \$1,229 in direct costs for 17 health days in 2007, \$13,073 for 697 health days in 2008, and \$10,436 for 523 health days in 2009. The approximate per-participant cost during these years respectively was \$2.24 (the year when intensive investment in design and systems was not offset by scale), \$.88 and \$1.23.<sup>4,5</sup>

With a projected 50 percent participation rate (down from 58 percent in 2008 but up from 32 percent in what we consider an anomalous year 2009), CRECER’s cost per participant for health days is estimated to remain under \$1 per year in the coming years. We show the cost per CRECER client with access to the

*Of those members across CRECER who were in default, 46 percent cited illness (of themselves or a family member) as the reason.*

health days (meaning all clients residing in the catchment area where health days are offered, eligible to attend and informed of the health days) settle at about \$.40 per year in 2009 and remain at that level in coming years. This means that, according to current plans and projections, CRECER will likely spend about \$.40 per client

annually to bring health days to the communities, as long as about 50 percent of clients choose to avail of the service.

<sup>4</sup> Note again that the number of health days and the number of participants per health day declined in 2009 due largely to exogenous circumstances.

<sup>5</sup> Note that participants are not necessarily unique and may be double-counted if they attended more than one health day. An informal survey indicated that as many as 40 percent of participants may have attended more than one in a year. In addition, at some health day participants who received more than one service may have been double-counted. On the other hand, members’ friends and relatives—who are also permitted to participate in health days—also have gone uncounted in some cases.

It also shows that if CRECER were willing to add a small administrative fee to the health provider fee paid by clients at health days, the collection of between \$.50 and \$1 per participant per health day could potentially cover CRECER's cost of providing this service. An informal survey (n = 40) indicated that about 60 percent of participants attended only one health day during the year, while 25 percent attended two, and 15 percent three or four. Given clients' appreciation of and satisfaction with this service, participation might not be negatively impacted by an additional charge. A comparative study of take-up in areas where an additional fee is charged and in areas where one is not, might provide CRECER with useful data. For the time being, though, CRECER views this as an investment in both its social mission and client growth and loyalty, and uses general funds to defray this relatively low-cost service. Under Additional Benefits below, we present some indirect benefits that may well more than offset CRECER's investment.

**FIGURE 3: INCOME STATEMENT FOR HEALTH DAYS, 2007–2012**

Expenses	Average Per Jornada	Actual Estimates			Projections		
		2007	2008	2009	2010	2011	2012
<b>Jornadas Tipicas</b>							
Credit officer time	7.50						
Manager and assistant time	5.76						
Transportation (vehicle, fuel)	2.00						
Materials	1.70						
Total cost jornadas tipicas	16.96	237	11,751	8,784	10,513	13,142	15,261
Approximate cost to CRECER per participant	0.85	(assumes 20 participants)					
<b>Jornadas Expansivas</b>							
Credit officer time	48.75						
Manager and assistant time	252.31						
Transportation (vehicle, fuel)	27.63						
Materials	1.70						
Total cost jornadas expansivas	330.39	991	1,322	1,652	1,982	2,643	3,634
Approximate cost to CRECER per participant	1.10	(assumes 300 participants)					
<b>Total annual jornada cost</b>		<b>1,229</b>	<b>13,073</b>	<b>10,436</b>	<b>12,496</b>	<b>15,785</b>	<b>18,896</b>
<b>Cost per participant per year</b>		<b>2.24</b>	<b>0.88</b>	<b>1.23</b>	<b>0.83</b>	<b>0.79</b>	<b>0.79</b>
<b>Cost per client with access to jornadas</b>		<b>0.49</b>	<b>0.51</b>	<b>0.40</b>	<b>0.42</b>	<b>0.39</b>	<b>0.39</b>
<b>Net income/(loss) – Direct expenses only</b>		<b>(1,229)</b>	<b>(13,073)</b>	<b>(10,436)</b>	<b>(12,496)</b>	<b>(15,785)</b>	<b>(18,896)</b>
<b>Data/Assumptions</b>		<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>
Total number of jornadas		17	697	523	626	783	911
Number of jornadas tipicas		14	693	518	620	775	900
Number of jornadas expansivas		3	4	5	6	8	11
Number of jornada participants		549	14,837	8,514	15,000	20,000	24,000
Average participants per jornada		32	21	16	24	26	26
Total clients with access to jornadas		2,500	25,600	26,287	30,000	40,000	48,000
Actual participation rate in jornadas		22%	58%	32%	50%	50%	50%

\*All figures in U.S. dollars

\*\*CRECER receives no direct revenues from its provision of health days.



## Expenses

The costs associated with health days fall into three categories: Staff time, Transportation and Materials. Some staff time and materials costs are in fact spread across both *jornadas tipicas* and *jornadas expansivas* and were difficult to isolate; therefore, a direct cost-comparison of these two types of health days should be considered only approximate. Moreover, since some *jornadas tipicas* are repeated in the same day or proximate time period, it is likely that economies of scale are often achieved wherein the preparation for one results in multiple health days and many more clients reached. We acknowledge too that CRECER's operational structure—offering group-based *Credit with Education* services—enables a level of promotion and complementary support to clients that is not enumerated in these costs. Given CRECER's strong institutional return on equity (over 20 percent in 2008 and similar in prior and subsequent years), we consider the costs associated with *Credit with Education* to be more than covered.

“We are with CRECER because we can reach rural communities through them. CRECER's clients are poorer than our typical patients and therefore we are appreciative to be able to access this population. This alliance will help prevent reproductive health-related illnesses.”

—Doctor, Marie Stopes International, Bolivia

### Staff Time

Staff who are directly involved in health days are: credit officers, a regional manager (Coordinator for Social Development) and a regional assistant (Social Development Assistant).

In general, CRECER credit officers spend the majority of their time forming and training village banks and traveling to and conducting weekly village bank meetings (which include credit, savings and nonformal education services). *Jornadas tipicas* also call on credit officers to informally assess client demand and need during regular meetings, contact local health providers to arrange health days, inform and encourage their clients to attend, attend health days to sign in clients and be on hand for questions, and follow up informally with clients after the health day. Credit officers estimate that they spend about an hour and a half preparing for an average *jornada tipica*, two hours attending and assisting at the health day, and half an hour following up. *Jornadas expansivas* receive significant regional-level support. Thus credit officers estimate that they spend about one hour on preparation and another hour on follow-up. One credit officer must be present to assist during the health day. With an average *jornada expansiva* of three days in length, credit officers typically trade off (and can often accomplish other work while they monitor) and spend a combined total of 24 hours to help manage the health day itself.

In the region of El Alto, where CRECER's MAHP services have been especially vibrant, a regional manager also plays an important role in health days. She provides general oversight and support to the program, so although her direct involvement in *jornadas tipicas* is minimal, we estimate her time spent on those to be about 45 minutes per *jornada tipica*. The manager plays a much more active role in *jornadas expansivas*, where she estimates her time to be: three days (24 hours) of preparation, three days (24 hours) of on-site management and one day (8 hours) of follow-up. In all, the manager spends approximately 25 percent of her time on health days. The regional manager is supported by an assistant who likewise spends about 25 percent of his time on health days. These roles were in flux in the La Paz region during the period, where numbers of health days were correspondingly low; in the future, all regions will have both a regional manager and assistant spending about 25 percent of their time on health days.

Both the La Paz region and the El Alto region rely on unpaid interns to assist with administrative work related to health days, among other things. CRECER has had marked and consistent success with

university-educated interns in many areas of the MFI's work, and they expect to be able to continue to rely on this source of labor.

In total, we estimate \$13 in staff costs for each *jornada típica* and \$300 for each *jornada expansiva* (see Figure 3).

### Transportation

CRECER sometimes transports healthcare providers from cities out to branches and group meetings in rural areas. Such transport often involves “giving a ride” to a provider in a vehicle that would be going anyway, but sometimes it is specially arranged. In the case of *jornadas típicas*, there are very rarely any additional transportation costs, since providers either transport themselves or accompany the field agent on his/her motorcycle, and CRECER management rides in a CRECER vehicle going to the branch or uses public transportation at very low cost; nevertheless we have conservatively assumed an average of \$2 for transportation per *jornada típica*. For *jornadas expansivas*, we assume that CRECER sends a 4x4 vehicle with CRECER management and/or healthcare providers an average roundtrip distance of 300 km. Using an average fuel cost of \$.05/km,<sup>6</sup> and an estimated vehicle cost of \$5,000 depreciated over five years, we estimate transportation cost to be about \$28 per *jornada expansiva*.

### Materials

CRECER does have some additional expenses related to the health days: refreshments; medical supplies; space rental, tent and/or generator; promotion and entertainment. The bulk of these expenses occur during *jornadas expansivas* when a festive atmosphere with music, games and prizes is established to draw the community and keep people entertained while they wait for service. Since *jornadas expansivas* often involve public providers with limited resources, CRECER sometimes purchases medical supplies to complement their stocks and provides them with refreshments, snacks or lunches. (Sometimes CRECER members also provide lunch to healthcare providers at health days.) Although such costs are often incurred for *jornadas expansivas*, leftovers may be used for *jornadas típicas*. We examined regional expense records over a six-month period to determine average costs incurred for health days and found the equivalent of about \$1.70 on average per health day during the second half of 2009—whether *típica*, *expansiva* or somewhere in between.

### **Additional Benefits**

One of the catalysts of CRECER's development of a health protection package was the connection that MFI leadership saw between clients' ill health and their ability to overcome poverty, avoid loan default and stay with CRECER. Our impact research revealed that of those members across CRECER who were in default, 46 percent cited illness (of themselves or a family member) as the reason.<sup>7</sup> Our comparative analysis of measures such as PAR and loan size in MAHP and non-MAHP areas did not reveal any meaningful trends. There is some evidence, though, to suggest that health days do in fact have a positive impact on client growth and loyalty, which may in turn lead to increased financial earnings and savings for CRECER.

### Client Growth

Numerous CRECER staff have reported anecdotally that health days inspire non-clients to form new village banks and become members of CRECER. We spoke by chance with members of one group who stated that they had formed of their own accord shortly after being invited by friends to participate in a health day; asked about this, CRECER staff said that it is a common occurrence. Unfortunately, due to rapid scale-up and aforementioned operational issues, we were unable to obtain a significant sample of reliable data from branches receiving health days on the one hand and “control” branches without health days on the other.

<sup>6</sup> This is based on 2009 average fuel cost of 3 Bolivianos per liter and the average fuel efficiency of a 4x4 SUV, with slight rounding up to account for older vehicles and rough roads.

<sup>7</sup> N=82. Estudio de lealtad y satisfacción de clientes de CRECER: Entrevista individual a clientas con créditos en mora. CRECER and Freedom from Hunger, 2009.

Nevertheless, we sought to estimate just how much client growth would be needed theoretically to cover the cost of health days. We based our estimates on 2008 average loan sizes and interest income in each loan cycle (the majority of CRECER’s microenterprise loans are made for eight-month terms called “cycles”), the probability that a client will complete each successive cycle, an effective interest rate assumed to be 36 percent annually,<sup>8</sup> portfolio-at-risk rate of 1 percent (CRECER’s PAR-30 has been under 1 percent for the past four years), and an assumed inflation rate of 3 percent annually. We determined the “lifetime value” of a client (the total revenues that CRECER can expect to earn from each incoming client) to be about \$478.<sup>9</sup> Applying a profit margin of 25 percent (as reported for CRECER in 2008, the last available data on the MIX Market), we find an expected net profit per average client of \$119.

Given this and the overall cost of health days in 2008 of about \$13,000, 27 new clients would be needed to cover the costs of the health days over the course of their tenure in terms of gross revenues. Considering the value of new (or retained) clients in purely net-profit terms, 109 new or retained clients would be needed to completely offset health day costs. A growth of 109 clients as compared to the 26,000 clients in these two regions represents an increase of about .43 percent. With the average credit group at CRECER counting around 12 members, about nine new groups would be needed to offset the cost of the health days (see Figure 4). Given the anecdotal evidence described further below, the creation of nine new groups per year across these two regions as a result of health days seems feasible. Were that to occur (and were it to be attributable to health days), CRECER could in fact consider the service to be financially neutral or better.

As shown in Figure 4 as well, we also examined the number of new clients and groups that would be required to cover the cost of the health days in just a single cycle. With average first-cycle net profit at about \$14 per client, CRECER would need 939 new clients (under 4 percent growth), or about 78 new credit groups to cover its 2008 health day costs within just eight months. While this level of growth due to health days is probably unrealistic, the calculation provides a sense of the upper limit of what would be required to cover the costs using the most conservative measures (net profit basis, brand new clients with correspondingly lower loan sizes, and only a single cycle timeframe).

**FIGURE 4: HEALTH DAY-INSPIRED CLIENT GROWTH COULD OFFSET HEALTH DAY COSTS**

New clients needed to cover Health Day costs over the course of their tenure with CRECER						
	2007	2008	2009	2010	2011	2012
“Lifetime value” (in expected gross revenues) of average CRECER client	\$478	\$478	\$478	\$478	\$478	\$478
New clients needed	3	27	22	26	33	40
New credit groups needed	0	2	2	2	3	3
Percentage of current clients	0.10%	0.11%	0.08%	0.09%	0.08%	0.08%
“Lifetime value” (in expected net profit*) of average CRECER client	\$119	\$119	\$119	\$119	\$119	\$119
New clients needed	10	109	87	105	132	158
New credit groups needed	1	9	7	9	11	13
Percentage of current clients	0.41%	0.43%	0.33%	0.35%	0.33%	0.33%

<sup>8</sup> In 2009, CRECER’s effective annual interest rate was 41 percent. In 2010, it is expected to be 36 percent.  
<sup>9</sup> Our lifetime value calculation draws on 2009 CRECER data to derive a weighted average accounting for the probability that any given client will make it to each successive cycle and the net present value of the interest earned on the average loan size among clients in each cycle (e.g., 100% of clients make it to the first cycle with an average loan of 1,640 Bs; 71% of clients make it to the second cycle with an average loan of 2,572 Bs; .14% make it to the 41st cycle with an average loan of 4,250 Bs).

New clients needed to cover Health Day costs over their first 8-month cycle						
	2007	2008	2009	2010	2011	2012
First cycle value (in expected gross revenues) of average CRECER client	\$56	\$56	\$56	\$56	\$56	\$56
New clients needed	22	235	187	224	284	339
New credit groups needed	2	20	16	19	24	28
Percentage of current clients	0.88%	0.92%	0.71%	0.75%	0.71%	0.71%
First cycle value (in expected net profit) of average CRECER client	\$14	\$14	\$14	\$14	\$14	\$14
New clients needed	88	939	750	898	1,134	1,358
New credit groups needed	7	78	63	75	95	114
Percentage of current clients	3.53%	3.67%	2.85%	2.99%	2.84%	2.83%

\*Assumes 24% profit margin, as reported on the MIX Market for CRECER in 2008.

### Client Loyalty

Client loyalty—as measured through retention—has also been cited by CRECER staff as an apparent outcome of the health protection package. While we believe that there may have been considerable contamination between the “MAHP” areas (those branches offering the new health education, health days and health loans) and “non-MAHP” areas” (those offering only CRECER’s usual *Credit with Education* services) during the period, and a better controlled follow-up study would certainly be needed to draw concrete conclusions, the following findings are worth sharing as possible evidence of the impact of the health days on client loyalty.

We applied two measures of retention:

- The industry standard retention rate as developed by Chuck Waterfield and defined as: [total number of clients at the end of the period / (total number of clients at the beginning of the period + new clients)].
- A second measure we call “Clients Who Could and Did Renew” that considers clients who “rested” for up to four months before taking out another loan to be “retained”.

According to the Waterfield retention rate, the MAHP areas saw a .08 percent increase in retention from one year to the next; when comparing the change from 2006 to 2008, the MAHP areas saw a 4.81 percent improvement compared to the non-MAHP areas. Using the Clients Who Could and Did Renew measurement, the MAHP areas achieved a 3.82 percent improvement between 2006 and 2008 (see Figure 5).

Since the average CRECER client<sup>10</sup> pays CRECER about \$128 in interest per cycle, and considering that the MAHP pilot area (the two regions of El Alto and La Paz) counted around 25,000 members during the period, a theoretical retention rate of 3.82 percent higher in the MAHP areas would translate to more than \$122,000 in additional gross revenues, or (applying CRECER’s 2008 profit margin of 25 percent) about \$30,000 in net profits for the MFI because more members stayed to take out another loan. This gain in client retention would therefore significantly exceed the cost of providing health days in the region over the course of the year.

<sup>10</sup> This data is based on clients who were somewhere between their second and seventh cycles with CRECER as of March 2009; over 70 percent of clients make it to the second cycle, and nearly 20% make it to the seventh. Average loan size for clients in this segment is \$533.

Taking the analysis further, if we assumed that those clients could otherwise have been replaced by new ones, who would have brought in about \$13,000 in net profits for CRECER (based on average net profits on the first cycle as presented in Figure 3 above multiplied by the 3.82 percent of 25,000 clients who may have “stayed” for the health protection products), and not even accounting for the additional expense entailed in bringing in new clients (which would lower the net profit on new clients and thereby increase the difference), we show that CRECER still would still have realized a gain of about \$17,000 (the difference between \$30,000 in net profits from existing clients and the \$13,000 that new, “replacement” clients could have brought in). This difference still exceeds the overall cost of the health days in 2008 of \$13,000.

We want to emphasize that the data are inconclusive, and we cannot identify the degree of contamination let alone attribute any causal relationship between health days and client retention at CRECER. But this example illustrates the potential financial gain to the MFI, if in fact such services were shown to enhance client retention.

***A Final Potential “Benefit”: Tie-in with Health Loans***

Although health loans were not examined in the scope of this paper (owing primarily to significant changes and challenges with the health loans at CRECER which rendered their costs and results too unreliable), the fact that interest-bearing health loans are available to clients to address major health expenses creates a potential source of revenue to help offset the non-revenue-generating health days. An example of the link can be observed with regard to one of the diagnostic services frequently offered at health days: colposcopies. Between January and March 2010, of the 449 colposcopies performed at health days, six led to new CRECER health loans for follow-up treatment, representing a 1.3 percent rate of health loan “take-up” directly resulting from a health day. The average health loan for this purpose was about \$64, and thus the average interest earned by CRECER per colposcopy performed was around \$.25.

The fact that health days and health loans enable clients, their friends and relatives to identify and address potentially serious health problems early on is an ethical and real benefit for poor people—and, assuming the health loan portfolio continues to show dramatic improvement in PAR, if CRECER can contribute to its own sustainability while providing these services, then everyone is well served in the long run.

**FIGURE 5: COMPARISON OF CLIENT RETENTION RATES IN MAHP AND NON-MAHP AREAS**

	2006*		2007		2008	
	MAHP	Non-MAHP	MAHP	Non-MAHP	MAHP	Non-MAHP
Waterfield Retention Rate	76%	71%	71%	71%	73%	64%
Difference (MAHP – Non-MAHP)	4.84%		0.11%		9.65%	
Change in difference from 2006 to 2008	▲————— 4.81% —————▲					
Clients Who Could and Did Renew	92%	89%	94%	87%	87%	80%
Difference (MAHP – Non-MAHP)	2.92%		6.08%		6.74%	
Change in difference from 2006 to 2008	▲————— 3.82% —————▲					

*\*Recall that the MAHP package was not offered until late 2007, so that 2006 represents pre-MAHP; 2007 still mostly “pre-MAHP”, and 2008 is the first full year of the services. Data were not available for 2009.*

## Conclusion

CRECER has been happily surprised by what they view as the low cost of the health day service. The MFI intends to continue systematically refining and scaling up its health protection package in order to extend the new health education, health days and health loans to clients in all regions of the country by 2011. In April 2010, CRECER General Director Jose Auad stated emphatically that, “In the context of regulation and our highly competitive environment, we see health protection services as our competitive advantage.”

Although the data are imperfect and some of the analysis still hypothetical, Freedom from Hunger and CRECER are encouraged by the apparent affordability and—when counting indirect benefits—even potential profitability of health days at CRECER. A health protection service that has important social impacts and that can be offered on a sustainable basis by a self-sufficient MFI for around \$.40 per year per potential beneficiary is notable. And when the MFI manages to enhance its financial viability in doing so, this shows remarkable potential for scale-up and long-term development impact around the world.

We hope that this data—however context- and case-specific—will be useful to and inspire other MFIs not only to explore practical, cost-effective ways to enhance their social mission, but also to examine more closely and document for others the direct and indirect costs and benefits that their services entail.

For more information on the process involved in setting up healthcare provider linkages such as health days, please see Freedom from Hunger’s *Developing Linkages with Health Providers: A Technical Guide for MFIs*. For more information on health loans and related considerations and challenges, please see *Health Loans: A Technical Guide for MFIs*.