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Summary of Results: Prepayment Schemes in the Rwandan Districts of Byumba, Kabgayi, and Kabutare

September 2000

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In cooperation with:

**The Rwandan Ministry of Health
and the United States Agency for
International Development**



Partnerships
for Health
Reform



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Abstract

In July 1999, the 52 health centers and three hospitals of the districts of Byumba, Kabgayi, and Kabutare affiliated with 52 prepayment plans that had been designed and implemented during the preceding four months. By the end of the pilot test year, the 52 mutual health associations had increased in number to 54. They counted more than 88,000 members, who received care based on a defined package of preventive and curative services, in health centers and hospitals.

By implementing prepayment for health care services, the Rwandan Ministry of Health aimed to accomplish four objectives: to expand the population's financial accessibility to care, to improve the quality of care delivered in health facilities, to increase community participation in health, and to improve financial management capacity in health facilities and mutual health associations.

This study analyzes the impact of prepayment on the Ministry's objectives using a quasi-experimental design. Routine data were collected in all participating health facilities and prepayment plans, as well as in the facilities of two control districts (Kibungo and Bugesera). In addition, two stakeholder surveys, one patient exit interview survey, one household, and one provider market survey was conducted.

A final workshop on the one-year pilot test of prepayment in Rwanda took place in Kigali in September 2000. Workshop participants received and discussed the results presented in this summary, and at the end of the workshop agreed to support expanding prepayment for health care services to other districts that request it.

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Acronyms

CAMERWA	<i>Centrale pour l'achat des Médicaments Essentiels pour le Rwanda</i> (Center for the Purchase of Essential Drugs for Rwanda)
DSS	Directorate of Health Care
EU	European Union
FRw	Rwandan francs
HC	Health Center
MSF	<i>Médecins Sans Frontières</i> (Doctors Without Borders)
NC	New Case
ONAPO	<i>Office National de la Population</i> (National Population Office)
PHR	Partnerships for Health Reform Project
PNC	Prenatal Consultation
PPS	Prepayment Scheme
USAID	United States Agency for International Development
WHO	World Health Organization

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Executive Summary

In February 1999, in the context of the planning workshop in the pilot phase for the implementation of prepayment schemes (PPSs), Rwanda's Health Ministry identified four objectives for the contribution of the PPSs to the health system: (a) improving financial access to health care; (b) improving the quality of health care services; (c) strengthening management capabilities; and (d) strengthening community participation. The first two objectives assigned to the prepayment schemes would contribute to the overall goal of improving the people's health. The last two objectives would contribute to the sustainability of local health services, thus providing a framework for lasting improvements in the quality of services.

The preparatory activities for the pilot phase took place from February to July 1999. Beginning in July 1999, the first members of the prepayment systems started to join the PPSs, and by August they began to take advantage of the packages offered by the PPSs at the health centers and district hospitals. Currently, there are 54 decentralized PPSs, each associated with a health center in the pilot districts of Byumba, Kabgayi, and Kabutare. At each district level, a federation of health systems, the district management team, the health region, and a prefectoral committee monitor the development of the prepayment schemes in their respective districts. Hence, as of today, the PPSs are entering their fifteenth month of operation in the three pilot districts.

The results that are summarized below are part of the evaluation plan for the pilot phase of the PPSs. In addition to workshops, the evaluation of the prepayment systems included compiling and analyzing data from the health centers and PPSs, conducting a survey of patients, conducting a survey of stakeholders, and, finally, conducting a survey of households regarding the demand for health care. Results of the routine data are presented first, followed by a summary of the preliminary results of the patient survey, the preliminary results of the provider behavior study, and the preliminary results of the survey of stakeholders.

Routine Data: Summary of Results

Routine data have been collected in the pilot districts of Byumba, Kabgayi, and Kabutare, and the control districts of Bugesera and Kibungo, during the year prior to the start-up implementation of the prepayment schemes (base year: August 1998-July 1999) and the year following the start-up (pilot year: August 1999-July 2000). Data have been gathered based on the availability of resources, the use and delivery of care, the costs generated by the delivery of health care, and the sources of financing for the health centers. Routine data collection at the pilot district level also covers trends in the membership of the prepayment schemes, resource mobilization, and financing for the health centers by the prepayment schemes. The comparative results from the districts are summarized first, followed by the specific results from each pilot district in sequence.

Comparative Results from the Districts

Change in the number of PPS members. A total of 88,303 people (8 percent of the population of the three districts) enrolled in the prepayment schemes during the first year of the pilot experiment in the three health districts of Byumba, Kabgayi, and Kabutare. Nearly half of these members, 48,837 people, live in Byumba district and make up 10.6 percent of the district's population. In the Kabgayi district, 21,903 people joined the PPSs, amounting to 6 percent of the population. The PPSs in Kabutare took more time to get started than in the other two districts. At the end of the first year, the PPSs in Kabutare had 17,563 members, about 6.1 percent of the population.

Membership in Byumba was strengthened by the enrollment of the employees who work in the Mulindi tea factory and by the prior experiments that occurred with the Bungwe and Rushaki "mutuelles." In Kabutare, the bishop financed PPS premiums for widows and orphans. Kabgayi enjoyed no such advantage, but nevertheless demonstrated that the PPSs were deeply entrenched at the district level. Membership fell off during the second half of the pilot phase with the beginning of the dry season, during which people in rural areas had no available cash.

Service utilization. The two districts of Byumba and Kabgayi, which had the largest number of PPS members, were also able to maintain their consultation rates in the health centers at the levels of 0.21 and 0.31 consultations per capita per year, respectively. In Kabutare, where the PPSs are even smaller, the consultation rate dropped from 0.5 consultations per capita per year during the year prior to the PPS to a level of 0.37 consultations per capita per year with the PPS. In the three pilot districts, the utilization level of the health centers by PPS members was almost five times higher than the utilization level for nonmembers.

The pilot districts of Byumba and Kabgayi observed a significant increase in the number of deliveries, prenatal consultations (PNCs), and vaccinations in the health centers. In the pilot district of Kabutare, the increase in the number of deliveries, PNCs, and vaccinations at the health center level was much lower than in the two other districts.

In the two control districts without PPSs, Bugesera and Kibungo, service utilization changed in different directions. An increase in curative consultations in Bugesera was accompanied by a decrease in deliveries, PNCs, and vaccinations. Conversely, in Kibungo, the number of deliveries and vaccinations increased slightly, while PNCs and curative consultations declined.

Health center costs. The Kabutare and Kabgayi health centers operate at higher average cost levels than do the centers of Byumba, Bugesera, and Kibungo, with the average costs per center at roughly 4 million FRw per year. In Kabutare, the average costs per center were about 5 million FRw, and in Kabgayi, average costs per center reached 6.5 million FRw. During the test year, average cost per center was slightly higher in Byumba, Kabutare, and Kibungo than during the base year.

Over half of the average costs of the health centers are for personnel costs; however, with more patients, personnel costs per patient tend to decrease. As for drugs, which are the largest component in the variable costs of delivering services, because ill members go to the center earlier than nonmembers during the course of the illness, PPS members need fewer drugs per consultation than nonmembers. Therefore, the increase in the number of patients among PPS members ultimately contributed to a decrease in personnel costs per patient, as well as in the unit costs of drugs.

Sources of financing. Since the year before the PPSs were implemented, financial resources have increased in all five districts. However, the increase was generally greater in those districts with PPSs, particularly in Kabutare. In addition, funding sources have been diversified in the pilot districts. In the special case of Byumba district, increased financial resources are the direct result of additional resources from the PPSs. Furthermore, the contributions from the PPSs to the financing of the district health centers have become just as significant as the grants from the government and donors.

PPS members contribute five times more per capita than nonmembers for their care in the health centers. These results illustrate the potential that PPSs have to mobilize additional financial resources for the health centers while improving access to health services for the people.

Cost recovery. Districts with PPSs have been able to raise the cost recovery rate at the health center level premium to population revenue. In the Kabutare and Byumba districts the increase in the cost recovery rate has been a direct consequence of contributions from PPS members. However, in Kabagayi, the recovery rate rose more for nonmembers than for PPS members. This reflects an increase in the price of services for nonmembers as opposed to an increase in the level of consultations by nonmembers. Hence, the PPSs contribute to increased cost recovery rates for health centers if membership pools are large enough and if health centers operate at cost levels comparable to those of Byumba.

Results of Byumba District

Change in the number of members. After the first year (end of June 2000), the PPSs of Byumba district had 49,000 members, which was more than 10 percent of the population of the health district. The most effective PPSs are those that have partnered with health centers that have previous experience with mutuelles, or that had a higher consultation rate level than the average district rate during the year before the PPS. Four PPSs and health centers have benefited from the enrollment of roughly 7,000 people, which includes employees of the Mulindi tea factory and their families.

Service utilization. During the first year, 10.6 percent of the district population joined the PPSs: 32 percent of the patients in Byumba's health centers were PPS members, and 25 percent of the women who delivered in the health centers were PPS members. In fact, the level of curative consultations (0.21 consultations per capita per year) remained steady in the Byumba district premium to higher service utilization by PPS members (1.16 consultations per capita per year) compared to nonmembers (0.15 consultations per capita per year).

In addition, when compared with the other four health districts, the establishment of PPSs in Byumba has been associated with a larger increase in the number of deliveries (49 percent), prenatal consultations (PCNs) (27 percent), and vaccinations (56 percent). This rise in health service utilization for mothers and children has been influenced by the sensitization of the population and by the fact that health centers were anticipating the implementation of the quality payment stipulated in the reimbursement mechanisms by the PPSs. It may be concluded that the PPSs in Byumba have facilitated access to health care for pregnant women, women in labor, children under five years of age, and ill patients who require curative care.

Costs and financing of health centers. Since the church-owned centers have a larger workload, their total costs are higher. Operating costs in these centers have been financed primarily by population revenue. During the PPS year, service utilization of these centers by nonmembers dropped. Therefore, in order to maintain the same income level, the centers have tended to raise what they charge for services. Those centers that have partnered with the largest PPSs were able to offset the drop in income with additional sources from the PPSs.

The cost recovery rate in Byumba was up for the entire district from 68 percent to 75 percent. Generally, the recovery rate is higher for members than for nonmembers. Thus, the PPSs were able to facilitate access to care for the people who needed care, while simultaneously improving the health centers' financial situation.

Results of Kabgayi District

Change in the number of members. In the first year, nearly 22,000 people joined PPSs in Kabgayi district. This amounts to a participation rate of 6 percent of the district's population. Five PPSs have pools of over 1,500 members, namely Kabgayi, Kivumu, Ruhango, Musambira, and Buramba. As in Byumba district, the PPSs that reported the strongest performance have partnered with church-owned centers, or with centers that had rather high utilization levels during the year preceding the PPSs.

In Kabgayi district, the PPSs have not benefited from prior experience with health *mutuelles*, or from large businesses that enrolled their employees (and their families), such as occurred in Byumba. PPSs succeeded later in Kabgayi than they did in the other districts. However, the change in PPS participation since December 1999 in the health district suggests that the rise in the number of members may continue over the short to medium term.

Service utilization. In the first year, 6 percent of the population joined PPSs: 16 percent of patients at the centers were members, and at least 8 percent of the women who delivered in the centers were PPS members. The consultation level for curative care (0.31 consultations per capita per year) remained steady in the district premium to higher service utilization by PPS members (1.51 consultations per capita per year), compared to nonmembers (0.27 consultations per capita per year).

The centers in Kabgayi have observed a major increase in the number of deliveries (43 percent), PNCs (24 percent), and vaccinations (46 percent). Moreover, in Kabgayi district, 115 women who are PPS members were referred to the district hospital and had Caesarian deliveries—a service covered by the PPSs. It may be concluded that the PPSs in both Kabgayi and Byumba have facilitated mother and child access to health care in general and access to curative care for PPS members in particular.

Costs and financing of health centers. The Kabgayi health centers show a significant variation in their total expenses. At one extreme, four health centers have total expenses in excess of 11 million FRw; at the other extreme, the six centers with the lowest total expenses have total costs that vary from 2 million to 4 million FRw. The church-owned centers, with a larger workload, have higher total costs. Income from the people has been the primary source of financing operating costs. The predominance of population revenue as a financial source for health centers means that providers have the tendency to compensate for decreasing revenue by increasing their service prices.

The cost recovery rate in the centers in Kabgayi has risen for the entire district, from 61 percent to 70 percent. The centers operate at a much higher cost level than the comparable centers in Byumba (e.g., Bungwe). This rate increase indicates that, to arrive at this level, some of the centers in Kabgayi district are increasing their cost recovery rates by charging higher prices for services. A price increase will make it more difficult for nonmember patients who pay cash to access treatment. This limit is not imposed on PPS members, who continued to frequent the centers at a higher level than the nonmember population.

Results of Kabutare District

Change in the number of members. Compared with Byumba and Kabgayi, Kabutare had fewer PPS members in absolute terms in its population. During the first year, 17,600 people joined PPSs in Kabutare district, accounting for 6.1 percent of the district's population. Four PPSs have member pools greater than 1,500 people: Karama, Save, Kabilizi, and Mbazi.

The PPSs in this district have not benefited from prior experience with *mutuelles* or from enrollment from a big business as in Byumba. The two PPSs of Karama and Kabilizi obtained a grant from the church, which financed premiums for widows and orphans. Thus, in Kabutare, the PPSs became a mechanism for targeting subsidies to the most vulnerable populations.

Service utilization. In the first year of the PPSs, 6.1 percent of the population of Kabutare joined: 15 percent of the patients in the centers were members, and at least 8 percent of the women who delivered in the centers were PPS members. The consultation level for curative care fell off from 0.5 to 0.37 per capita in the district, despite greater use of the services by PPS members (1.56 consultations per capita per year) than nonmembers (0.3 consultations per capita per year).

The Kabutare health centers reported an increase in the number of deliveries (14 percent), PNCs (5 percent), and vaccinations (15 percent). It can be concluded that the PPSs in Kabutare have facilitated access to health care for pregnant women and children under five years of age. This opportunity should become accessible to a larger portion of the population in the medium term if the PPS penetration rate for the population increases.

Costs and financing of health centers. The centers' operating costs were financed primarily by population revenue. During the PPS year, service utilization by nonmembers decreased. Consequently, income from patients decreased except when the centers increased their prices for services. Those centers that partnered with the largest PPSs were able to offset the drop in income from paying patients and from donors with additional sources.

The cost recovery rate in the centers in Kabutare rose for the entire district from 61 percent to 67 percent. The cost recovery rate was higher for members (81 percent) than for nonmembers (65 percent). Therefore, the PPSs in Kabutare were able to improve access to care for patients and simultaneously increase financial resources in the health centers.

Summary of Results of the Patient Survey

The National Population Office (*Office National de la Population*, ONAPO) conducted a patient survey in July to August 2000. The sample size was 800 patients from the health centers in the districts of Byumba, Kabgayi, Kabutare, Bugesera, and Kibungo. The patient survey was based on the exit interview method. The results summarized below are from preliminary analyses of data from the survey that are still being processed. Although the household survey will provide more detailed information about the characteristics of member and nonmember households of PPSs in the three pilot districts, the patient survey has already provided information about the characteristics of households and individual PPS members. Moreover, in addition to the information from the routine data on the utilization levels of the health centers by PPS members and nonmembers, the patient survey provides information on the changes that occurred in the demand for care in general and on illness-related spending by health center patients in particular.

Characteristics of PPS Member Households

Male- and female-headed households enrolled in the PPSs in equal numbers. In Kabutaré district, the data from the patient survey suggest that female-headed households account for a larger share of PPS member households than the general population.

Members from relatively poor households as well as households with a relatively high socioeconomic status have joined the prepayment schemes in equal numbers. Except for Kabgayi district, where PPS members generally have higher socioeconomic levels than nonmembers, the PPSs in the pilot districts basically cover rural households that have a relatively poor socioeconomic status. More than 50 percent of PPS member patients come from households that have no cows or goats.

Households that reside in the vicinity as well as those that reside far away from health centers have joined the PPSs. Between 40 percent and 50 percent of PPS member patients live at least 90 minutes away from the Byumba and Kabgayi health centers. However, in Kabutare district, more PPS member patients come from the vicinity of the health centers (less than 45 minutes away) than nonmember patients.

Individual Characteristics of PPS Members

Equal numbers of men and women joined the prepayment schemes. Moreover, patient breakdown based on age suggests that individuals of all ages are covered by the PPSs. These characteristics permit better risk sharing among the most vulnerable populations (i.e., women, children, and the elderly) and other less vulnerable population categories. This result was obtained by promoting family membership in the PPSs.

Patient breakdown according to education level is comparable among the pilot districts and the control district of Kibungo. Generally, the education level seems lower in Bugesera district. In Byumba and Kabutare, education levels are comparable between patients who are PPS members and patients who are not. In Kabgayi, PPS members seem to have a relatively higher education level than nonmembers.

Use of Other Sources of Care

In all pilot and control districts, a frequent practice when a person becomes ill is to initially use other sources of care, including traditional healers and relatives, before visiting a health center. However, it is notable that PPS members used other sources of care relatively less frequently than did nonmembers in Kabutare district. These results suggest that the prepayment scheme may curb the use of other sources of care whose quality is difficult to judge.

The use of other care before visiting a health center includes not only the use of drugs for treatment, but plants as well. The frequency of plant use varies considerably from one health district to another. The practice of using plants seems to occur more frequently in the districts of Bugesera and Byumba; however, in the pilot districts, plant use is less frequent among PPS members than among those who are not PPS members. This variation has been observed in Byumba district, but the variation was more marked in Kabutare district, where plant use barely exists among PPS members.

Sources of Partial Exclusion¹ at Health Center Levels

Because of the relatively low cost of lab tests, payment for this procedure is seldom a source of exclusion from care. In fact, when a lab test was prescribed, most patients did undergo the tests. This is true in the five pilot and control districts.

In the control districts of Bugesera and Kibungo, nearly 20 percent of the patients who received prescriptions for drugs were unable to acquire those prescribed drugs. This is also true in 10 percent of the cases among nonmember patients of PPSs in Kabgayi and Kabutare. Thus, direct payment for acquiring drugs continues to be a source of partial exclusion from care. Consequently, this is an obstacle to the financial accessibility of quality care. This obstacle has been lifted for patients covered by prepayment schemes.

Illness-related Spending by PPS Member and Nonmember Patients

In both the pilot and control districts patients who are not PPS members spent an average of 1,500 FRw to 2,000 FRw. In Kabutare district, the average spending by nonmember patients rose to levels as high as 2,600 FRw per patient.

In all three pilot districts, member patients spent from 1,000 FRw to 1,500 FRw less to treat illness than did nonmember patients in their respective districts. Thus, the prepayment scheme dramatically lowers payments to treat illnesses, but does not eliminate them.

Through the pilot and control districts, the structure of patient spending during the current visit suggests that spending on drug purchases is the greatest expense for patients. This is no longer the case for patients who have joined PPSs. Based on spending by patients during the current visit, nonmember patients spent nearly four times more than PPS members in Byumba, six times more than members in Kabutare, and nearly 12 times more in Kabgayi.

The structure of total spending during the illness based on type of expense also suggests that drugs continue to be the principal component of spending to treat illnesses. Even patients who are members of PPSs continue to pay for their drugs. These may either be drugs that are not on the list of essential drugs at their preferred health center, or drugs they acquire outside the health structures. However, members' spending on drugs is still much lower than nonmembers' spending.

Summary of the Results from the Survey of Stakeholders

The qualitative survey of stakeholders was conducted for the following reasons:

- > to compile information on the perspectives of stakeholders regarding the procedures for implementing prepayment schemes;

¹ *Partial exclusion* is an indicator of the financial accessibility of treatment, such as *seasonal exclusion* premium to the seasonal fluctuation of household monetary income, as well as *temporary exclusion* premium to the fact that patients wait to seek treatment when needed because of financial constraints. Partial exclusion is the inability of an ill individual whose need for a product or service has been identified by a prescriber to acquire the prescribed product or service to treat the illness.

- > to collect information on the advantages and disadvantages of prepayment scheme organization; and
- > to identify the factors that helped or hindered the implementation of prepayment schemes in the pilot districts.

The qualitative survey was conducted with 24 focus groups, including members of PPSs, nonmembers of PPSs, members of prepayment scheme management committees, and health care providers in the three districts of Byumba, Kabgayi, and Kabutare. The summaries of the perspectives of the different focus groups are presented below.

Perspectives of Nonmembers

Almost all the participants have already realized the financial benefits of the *mutuelle*. It is less expensive than what one usually pays for care and offers security for the family in terms of health. Some members even did the calculations and found that each person per family is paying 44 FRw per month.

Given this finding, participants have two different attitudes regarding PPS membership. One part of the group, apparently the larger part, would like to have the money available to join the *mutuelle* immediately, but it is faced with the problem of paying the 2,500 FRw all at once. That is why many people have requested payment by installment or individual payment. One proposal would allow the poor to have the money to join and would give loans to people who form an association; through their participation in public works, their premiums would be paid as a reward. In extreme cases, they could even put up their land as collateral security until they pay off their debt to the *mutuelle* (if the desire to pay in installments has been accepted).

Another part of the group hesitated to join the *mutuelle* for different reasons. The first category of reasons pertains to rumors about the services offered to members at the health centers, thereby discouraging the population from joining. The main reasons are poor reception, the perception that ineffective and less costly drugs are distributed, and the perception that PPS members are taken care of last, after those who pay directly for their care. The second category of reasons has to do with objections to the membership categories and PPS organization. These objections include the fact that PPS members are unable to provide care for the entire family, or at least for all children who are not yet old enough to marry, and the fact that they are unable to receive care in all health centers. Complaints about service include the following: PPS members, with the exception of pregnant women, must personally pay for health care in the district hospital (except for ambulances and hospital beds); the body of a patient who dies is not brought back to the house by ambulance; and periodic trips from home to the district hospital to bring food for patients are a hardship.

Perspectives of PPS Members

Members of the PPS have the following perspectives regarding the system:

- > In general they like the idea of the PPS and are prepared to renew their membership as long as they can raise the money. This is especially true for those who received aid to join (Karama), or those who were unable to raise the money all at once and would take advantage of the opportunity to pay in installments.

- > They criticize the services that are offered by health center providers: the quantity and quality (e.g., competency, impolite talk regarding patients) of service, the staff in the less effective health centers, quantitative and qualitative insufficiency of drugs, and lack of their own means (ambulance) to transport transferred patients in certain health centers. Some members find that the health care staff neglects them in comparison to patients who pay immediately. In other words, members do not receive their drugs promptly nor are they given a sufficient amounts of drugs.
- > They dislike the limit of seven members per family on the system. Some households have more than seven family members or are responsible for other persons who are unable to pay their premiums on their own. They suggest increasing premiums as needed to avoid “dividing” the family.
- > They consider that premiums for single people and students are very high and should be adjusted downward.
- > They want to be able to obtain treatment in all the health facilities in the district.
- > They dislike the fact that the authorities have not joined the mutuelle (PPS).
- > They support co-management and the possibility of drawing PPS management closer to the population (cell, sector).
- > Some people want to have a special status at the health center intake (a row set aside for them).
- > They ask others to find income-generating projects for them so that they can pay their premiums.
- > They would like to see a fund established that would give them a loan that they would repay in order to pay the mutuelle (PPS).

Perspectives of PPS Executive Committee Members

Health care expenditures are not as high for members as for non-members, however, there are certain reasons why people do not enroll in prepayment schemes:

- > High illiteracy rates prevent many people from being informed about prepayment schemes.
- > The political, administrative, and religious authorities do not help with PPS sensitization, yet they are the opinion leaders.
- > The poverty of the population makes it difficult for them to raise the money.
- > They disapprove of the limitation on the number of members per family based on age and number of children.
- > The quality of services in certain health centers is poor.

- > There is insufficient sensitization in general, but more particularly in the area served by the health center in Nyabikenke. Management committee members in Nyabikenke and Musenyi have even reported that the authorities are destroying the PPS.

To highlight the insufficient involvement of the authorities in sensitization, the authors report the following quotation from people interviewed at the Kabgayi Health Center: *“It is impossible to govern a country in which you do not reside. Authorities who are not members of the mutuelle (PPS) can be of no use to it.”*

Perspectives of Service Providers in Health Centers

Service providers have reported the following perspectives regarding the system:

- > Much of the population has not yet been informed of the PPS.
- > PPS members criticize the system because the amount of premiums is high and most of the people are poor and cannot pay. The population did express the desire to be able to pay premiums in installments.
- > Vulnerable people would like to have their premiums lowered so that they could access the scheme.
- > The population in general complains of the one-month waiting period after paying premiums, although some people do acknowledge that it takes time to get things going. However, even they should have their waiting period shortened to a few weeks.
- > Members and nonmembers alike are against the limit of seven people per family. They insist that all family members should receive care with one card.
- > Children who are heads of households want their households to be considered as regular family units and want all the members of their household to be treated by the PPS.
- > Youths over 18 years old would like to find a way to be considered as individuals, because they do not like the idea of forming groups.
- > The population has nothing against the 100 FRw copayment, but they do complain about how the health care employees treat them.
- > Most health formations have no skilled laborers and have insufficient equipment.
- > Members feel uncomfortable having to be treated only at the contact center. Even if the population that has not yet joined finds this unacceptable, they want to be treated in all the health facilities as long as they are PPS members.
- > The stakeholders interviewed are not clearly informed of the illnesses that are included in the PPS package. Until now, malaria and Caesarian deliveries have been handled. They want all illnesses to be treated.

- > Generally, the population has not been sufficiently sensitized to the PPS. Even the members are not well informed of PPS procedures. All they know is that they have to pay 2,500 or 2,600 FRw before they will be treated. They understand nothing about membership, payment of services provided by the health centers, or how the meetings are held.
- > Local and religious authorities, health care personnel, health leaders, and PPS members must be involved in PPS sensitization. The different means of communication should be enlisted in order to sensitize the people to the PPSs.
- > The authorities and different leaders are not members of the PPS, yet its success is largely based on their joining (setting an example).
- > PPS members appreciate the concept of electing their representatives to manage the PPS and co-managing it with the health care employees.
- > In most health centers that have an ambulance, the vehicle is used solely to transfer women who want to deliver in a hospital.
- > Patients who are transferred to the hospital must pay for their own medical care in the hospital to which they have been transferred. People wonder why the PPS does not pay these expenses.
- > Strategies must be devised to help people set up associations or projects that generate income so that they are able to pay the mutuelle (PPS).

Early Recommendations from the Stakeholders' Survey

- > Quality of care is a major factor in attracting people to the PPS. Reception, in other words, observing order without neglecting to take care of serious cases on a priority basis, and proper language concerning patients must be particularly emphasized. The availability of drugs in quantity and number is important. The availability of labs and ambulances was again underscored as one of the conditions that fosters PPS membership. It is important to honor all promises made to mutuelle (PPS) members.
- > The role of the authorities, especially administrative (mayors, sector councilors, cell officers), has long been seen as being essential for promoting the PPS. This role must be played both to sensitize the population and to set a good example by joining the PPS. A method should be found to identify authorities who are not PPS members and who thus fail to set the example for the people they govern. In order to get them to join, opinion leaders in general should behave in an exemplary manner with the aim of successfully sensitizing the people. In addition to the authorities, the entire society should be involved in sensitization because many people seem to be wasting money, mainly on alcoholic beverages. When they become ill, they seek out medicinal plants or traditional healers and spend much more money than they would on modern medicine, and the results are less effective.
- > Issues that arose constantly were the number and the category of people listed on the membership card. These include grandchildren living with grandparents, orphans or other dependent children in families that have joined the PPS, children of women who are not legally married, youths over 18 years of age still dependent on their parents. New calculations, made with the people's input, should be proposed. Someone should explain to

the people how the amounts of 2,500 or 2,600 FRw were calculated. Someone should explain that the premiums cover only major illnesses that handicap the people, and that chronic diseases cannot be included in the type of solidarity found in the current PPS.

- > The month-long waiting period after paying premiums is an annoyance to nearly everyone the authors interviewed, except for the members of the management committee, who understood the importance of this waiting period. Therefore, the reason for the wait should be explained properly, especially since those interviewed told us that they noted that this issue pertains specifically to those who join for opportunistic reasons. Two examples of this are joining because they know that someone in the family is about to become ill or that a woman is about to deliver a baby.
- > A study should be conducted on how to facilitate access to care in the different health facilities in the district, without complicating the work of the most sought-after health facilities.
- > It is urgent to train the trainers at every level to ensure greater PPS sensitization.
- > It is important to emphasize and, during sensitization, discuss the details of intergeneration solidarity so that today's youth, even though they do not become ill often and believe they do not need to join PPS, will join in large numbers and support their elders who have many more dependents.

Survey of Market Understanding and Behavior Adjustment of Contracting Health Centers

A survey of health centers was conducted three times using the same questionnaire in the pilot districts of Byumba, Kabgayi and Kabutare. The first time, the head nurses of the health centers answered the questionnaire early in the PPS process in July 1999. The second survey was conducted in January 2000, and the third was at the end of the pilot phase in June 2000. The purpose of the survey was to assess health center understanding and reaction if their market had changed. These changes include implementing and contracting with the prepayment scheme and a changeover of payment of centers from "fee-for-service" to payment "based on capitation," as is the case for those centers that have signed a contract with a PPS. The initial results of this survey are summarized below.

Adjusting to the Financial Risk

Generally, the health centers' understanding and reaction to financial risk is limited. For example, the centers understand that if there are fewer patients who pay cash, they have to raise price levels in order to maintain the same level of income for the center. The centers have not yet understood that they could improve their financial risk by raising their productivity by following the Health Ministry's standardized treatment protocols and by incorporating them into their care delivery processes. The centers do not yet see a positive relationship between the standardized protocols and their financial situation. However, a few centers in Kabutare have realized that they are the ones who bear the financial risk with payment by "capitation." Consequently, they have recognized the importance of the standardized protocols, but they have not yet reached the point where they evaluate their working methods according to these protocols.

The centers have not yet understood that they can improve their financial situation by contracting with a neighboring center for certain services. Until now, they have absorbed the financial risk by offering underutilized services, which yields a low productivity level. Health services are added to a center's services package because the employees have been trained, for example, in the laboratory.

Understanding the Health Center's Market

Most centers understand that their "market" extends beyond their catchment area, but they do not know how to estimate the market's volume outside their area. Also, the centers do not take into consideration the level of competition from the other centers in their health region. In reality, the centers do not have a competitive strategic behavior; rather, they behave as "polite neighbors."

In their input market, fewer centers purchase drugs from the Center for the Purchase of Essential Drugs for Rwanda; more centers go to the district pharmacy for their supply of drugs. The centers almost never purchase drugs in the private pharmacies. One of the articles in the contract between PPS and health centers limits the drugs covered by the PPS to drugs that are on the Ministry's list of essential drugs. However, only 40 percent of the centers questioned were aware that there is a list of essential drugs.

Head Nurses' Understanding of the Criteria Patients Use to Select a Health Center

Before the centers signed a contract with the PPSs, they considered that their patients chose a given center because of the quality of care, the equipment in the center, and the employees' behavior. Since the centers have partnered with the PPSs, they think that the following criteria are important if the patients are to choose their center: quality of care, patients' waiting time (members do not wait as long as nonmembers), and the existence of a contract with a PPS. Once a contract is signed with a PPS, the following criteria become more important for the health centers: quality of care, inclusion of services, and employee reputations. Having a contract with a PPS was important at first, but it has become less important since all the centers in the district have partnered with a PPS. Finally, with more members among their patients, the centers consider price levels as a less important selection criterion for the patients. This is one impact of the capitation payment paid by PPS to the centers where the price for service is no longer of any importance to patients who are PPS members.

Understanding of Sources and Mechanisms for Financing the Center

At first, the centers did not recognize government and donor subsidies as a source of financing, but over time, they came to realize that these are resources for them. This effect may be attributed to financial data collection in the centers in the pilot phase and to the training that accompanied the data collection and implementation of PPS. Although they receive considerable resources from internal or external institutional sources, the public and church-owned centers have no financial supervisors or financial auditors. This institutional gap partially explains the lack of understanding the health centers have of their sources of funding and mechanisms used to allocate the resources.

Preliminary Conclusions

Participation in the pilot phase of implementing the prepayment schemes has created management capabilities among the health center head nurses who are also vice chairpersons of the PPSs. This participation has generated a better understanding of changes in the market. The centers have recognized the PPSs as a tool for improving their level of service use and self-financing. Therefore, the centers are beginning to alter behavior so that interested persons identify them as preferred centers and enroll in the

partner PPS. Compared with the introduction of the standardized protocols to which there is no direct monetary incentive link, it can be concluded that the centers adjust their behavior faster if there is a financial change in the market that imposes a financial risk on them.

1. Introduction

In an effort to make better health care accessible to more people, in early 1999, the Rwandan Ministry of Health (MOH) decided to change the way health care is financed: Rather than require people to pay user fees when they are ill or injured and need health care—but may not have funds to pay the user fees—the MOH offered the population the opportunity to enroll in prepayment schemes (PPS). The schemes both ensure financing of the health care system, and allow people to pay for enrollment when they have funds available. The Rwandan authorities, in close collaboration with local communities and with the technical and financial assistance from the Partnerships for Health Reform (PHR) project designed and implemented PPSs in three of the country's 40 health districts, namely in Byumba, Kabgayi, and Kabutare.

The MOH set four main objectives to measure the impact of PPSs on the performance of the district health services. These four objectives were the following:

- > Expanded financial accessibility to health care,
- > Improved quality of care,
- > Increased community participation, and
- > Strengthened financial management in health facilities and prepayment funds.

A quasi-experimental design was selected to evaluate the extent to which prepayment contributes to the MOH objectives, and two districts, Kibungo and Bugesera, were chosen as control districts against which the schemes' impact in the pilot districts would be compared. Monthly routine data were collected in all health facilities in pilot and control districts. They documented service utilization, and cost and finances in the year prior to and the year since the introduction of prepayment; in addition, each prepayment bureau submitted monthly membership, cost, and finance data during the pilot year. Additional information was collected in two focus group surveys; one patient-exit interview survey; one provider market survey; and one household survey that documented households' and individuals socio-demographic and economic characteristics, their prepayment participation pattern, and their demand for curative and preventive care services.

This first year of prepayment experience has been described in a number of PHR reports (see bibliography). This report summarizes results that were presented and discussed during a "final" PPS workshop that concluded the year-long pilot demonstration as well as PHR participation in the activity. (The PHR/Rwanda office closed in September 2000 in anticipation of the end of the project in March 2001.) The three-day workshop, held in Kigali in September 2000, was attended by more than 60 participants who represented communities, health districts, and government and international organizations working in Rwanda's health sector. Based on the data presented at the workshop, the MOH deemed prepayment a success worth replicating and agreed to seek financial and technical assistance for, other health districts that are interested in adopting prepayment as a way to finance health care.

The rest of this report contains five chapters: The next chapter compares results in pilot and control districts based on routine data collected in health facilities and PPSs on membership, utilization, and cost and finances for the year prior to and since the introduction of schemes. Chapter 3 compares health center

performance on their member and non-member business in the three PPS pilot districts. Chapter 4 presents key findings from the patient exit interview survey conducted in pilot and control districts in August 2000. Chapter 5 summarizes the results of the second focus group survey, and chapter 6 presents the key findings of the market survey conducted with health center managers in the three pilot districts. The final chapter presents the prepayment legal documents, including by-laws for mutual health associations and the contract that regulates the schemes' relationship with the health care providers in the three pilot districts. More detailed information on these results can be obtained in the corresponding PHR technical reports.

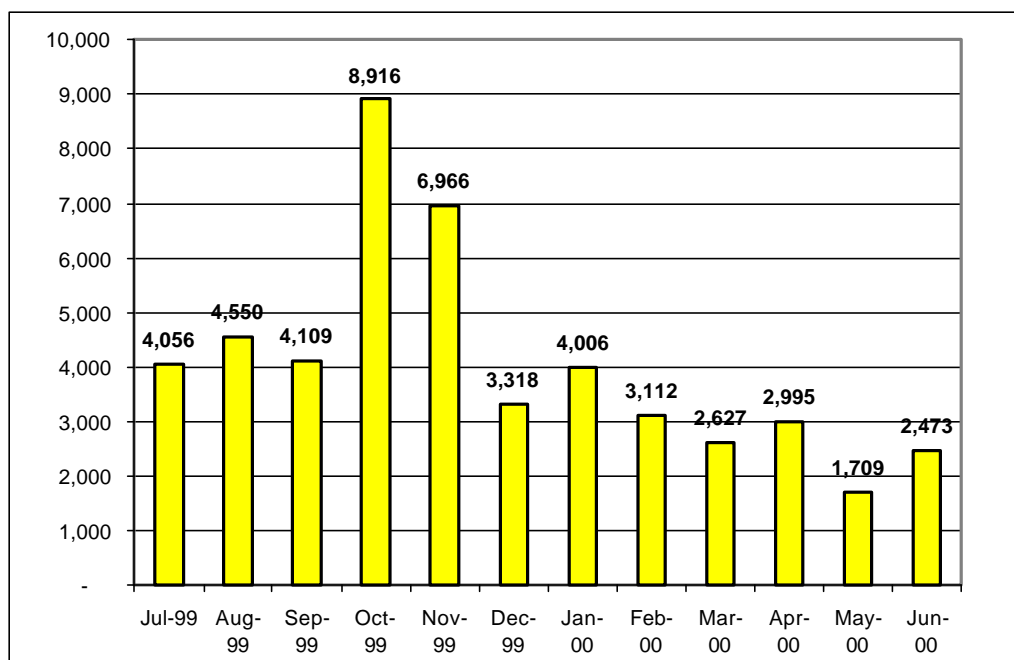
2. Comparisons and Results

2.1 Membership in Prepayment Schemes – Pilot Districts

2.1.1 Monthly Changes in the Number of New Members per District

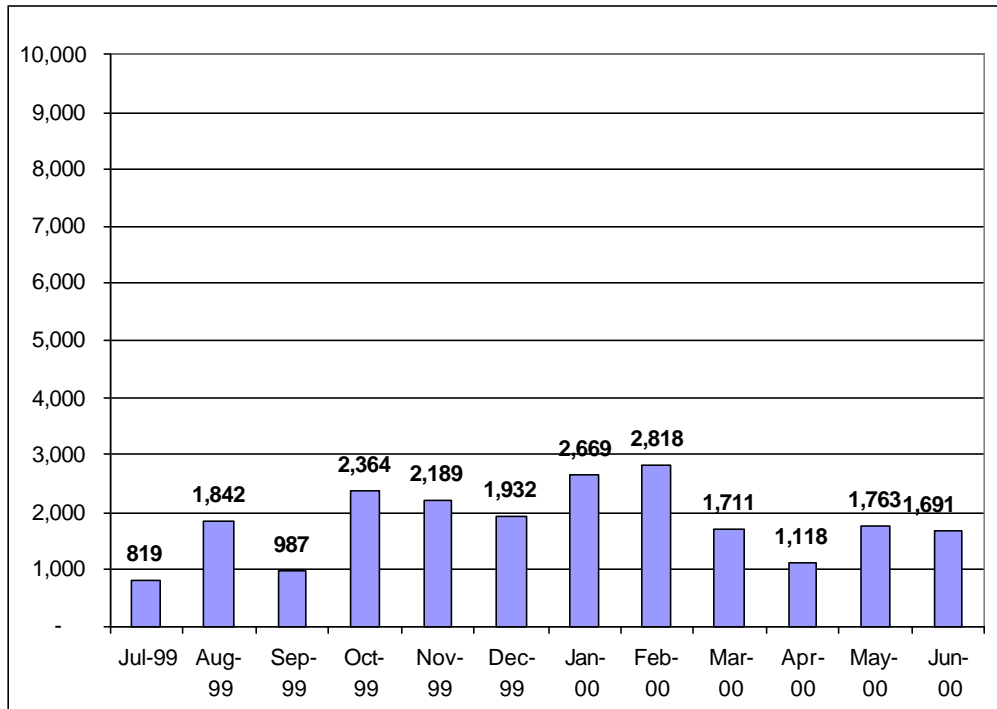
During the first half of the test year, monthly enrollment in the prepayment schemes (PPSs) in Byumba was around 4,000 new members, as Figure 1 indicates. This number has dropped since February to an average level of 2,500 new members per month. This may be explained by the fact that these months are the dry season, during which the rural population has no available cash. During October and November, the Mulindi tea factory enrolled its employees and their families.

Figure 1. Byumba PPS: Monthly Change in the Number of New Members



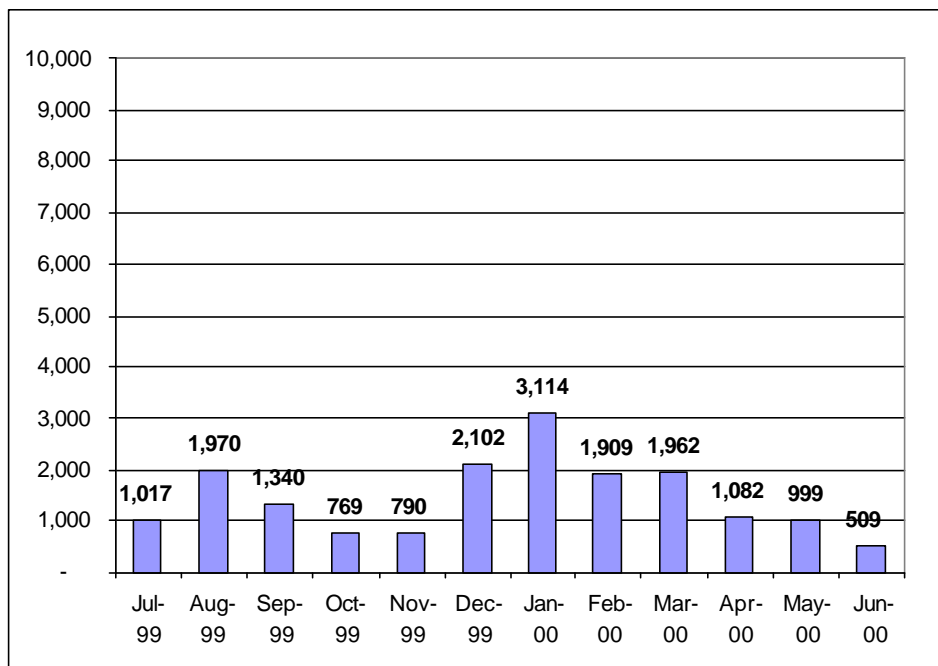
Monthly membership in the Kabgayi PPSs started off at a lower level than in Byumba, as shown in Figure 2. Kabgayi did not have the advantage of having a company join with a large number of employees. The monthly average of 2,500 for the months of October to February fell to an average of 1,500 new members since March, during the dry season.

Figure 2. Kabgayi: Monthly Change in the Number of New Members



In Kabutare, membership has always been lower than in the other two districts, and it barely reached 1,000 new members per month. The bishop of Kabutare and a religious congregation provided support for widows and orphans to join from December to March 2000. In June 2000, the last month of the test year, membership fell to its lowest level: 509 new members

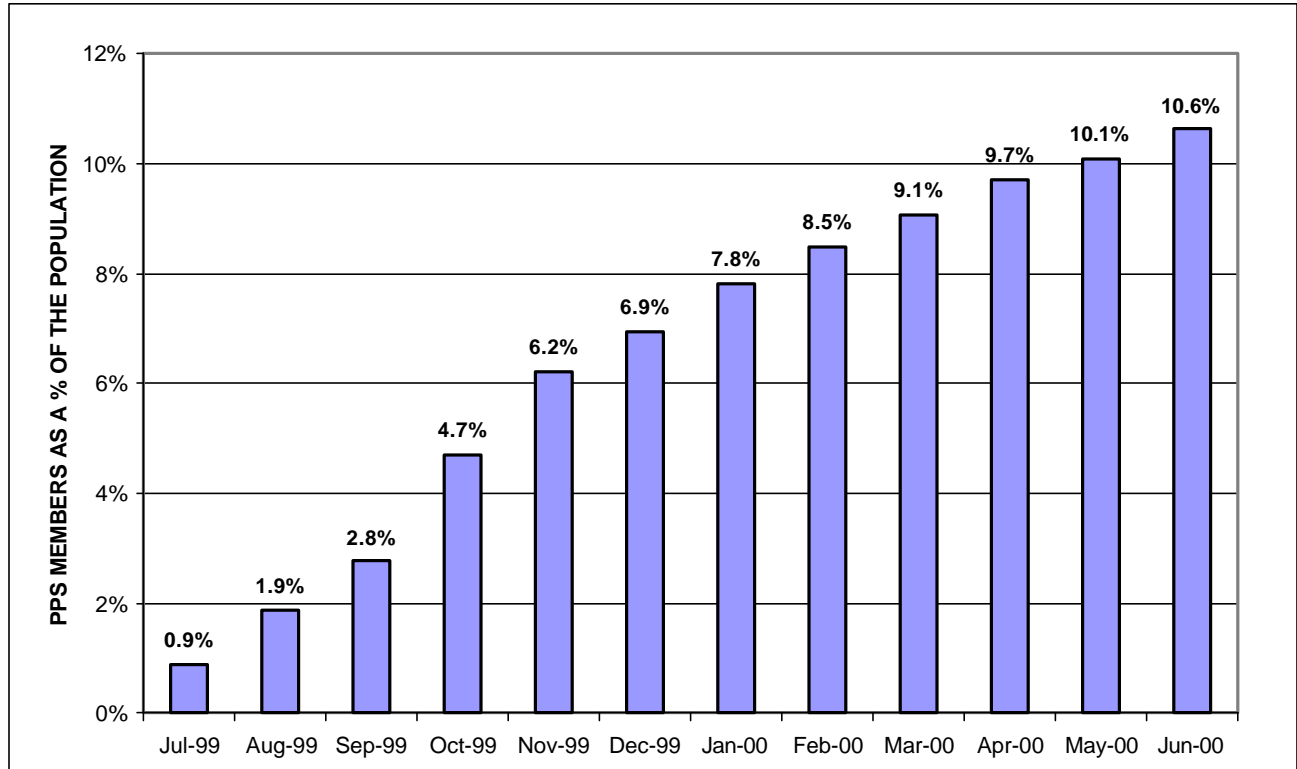
Figure 3. Kabutare PPS: Monthly Change in the Number of New Members



2.1.2 Changes in the Membership Rate for the Population

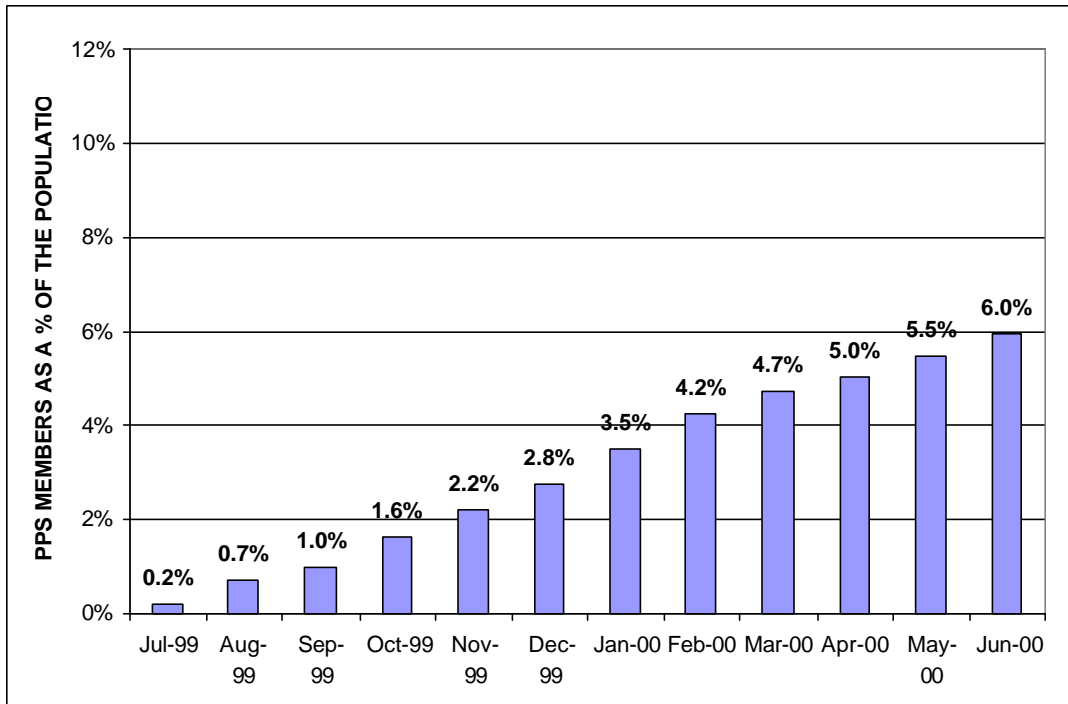
As indicated in Figure 4, the PPS membership rate reached 10.6 percent at the end of the first year, which amounts to 48,837 PPS members. The rate rose, especially in September and October, when the employees of the Mulindi tea factory joined. The increase in the membership rate was low during the months when the population had no available cash. This membership rate shows that the PPSs are deeply entrenched in the lives of the people in Byumba district.

Figure 4. Byumba PPS: Change in the Membership Rate for the Population



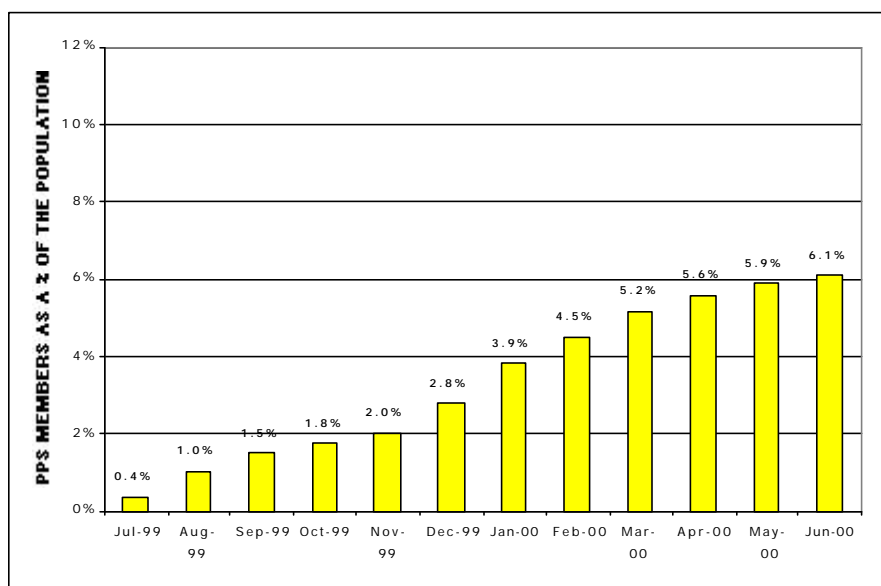
As Figure 5 indicates, the membership rate in the Kabgayi PPSs for the population rose continually by a half a percentage point per month and reached 6 percent at the end of the first year. This amounted to 21,903 PPS members. Membership of the population in Kabgayi is promising since enrollment has been rather stable each month. This situation occurred in roughly half of the PPSs.

Figure 5. Kabgayi PPS: Change in the Membership Rate of the Population



As shown in Figure 6, the membership rate of the population in Kabutare increased monthly by around 0.3 percent, except during the four months from December to March, when the church financed the enrollment of widows and children. As of the end of the first year, 6.1 percent of the population had joined the PPS, amounting to 17,563 people. Compared to the population of the other two districts, Byumba and Kabgayi, the prepayment schemes are entrenched but are still relatively less dynamic.

Figure 6. Kabutare PPS: Change in the Membership Rate of the Population



2.1.3 Summary

- > In the three districts of Byumba, Kabgayi, and Kabutare, the PPSs had 88,303 members as of the end of the first year. This is a population membership rate of 7.9 percent.
- > Over half of the members of the three districts live in Byumba district, where the PPSs are the most deeply entrenched with a membership rate of 10.6 percent.
- > Enrollment was highest during the months when businesses or churches financed membership dues.
- > Enrollment in Kabgayi grew at a rather steady pace, whereas the PPSs in Kabutare have experienced a slower growth rate.

2.2 Health Service Utilization: A Comparative Analysis

2.2.1 Utilization Level During the Base Year in Five Districts and the Pilot (Members and Nonmembers – Pilot Districts)

Since 1997, the consultation rate has continued to drop in Rwanda. Figure 7 compares the consultation rate in the health centers during the year before the PPSs with the years since there have been PPSs in the districts of Byumba, Kabgayi and Kabutare. The two districts of Byumba and Kabgayi have been able to maintain their consultation rate level, whereas the level in Kabutare dropped from 0.5 to 0.37 consultations per capita per year. Bugesera and Kibungo are the two districts with no PPSs. In Bugesera, the rate increased from 0.25 to 0.29. In Kibungo, the rate remained at a low level, with 0.19 consultations per inhabitant per year.

Figure 7. Consultation Rate in the Health Centers: Base/Pilot Year of the PPS

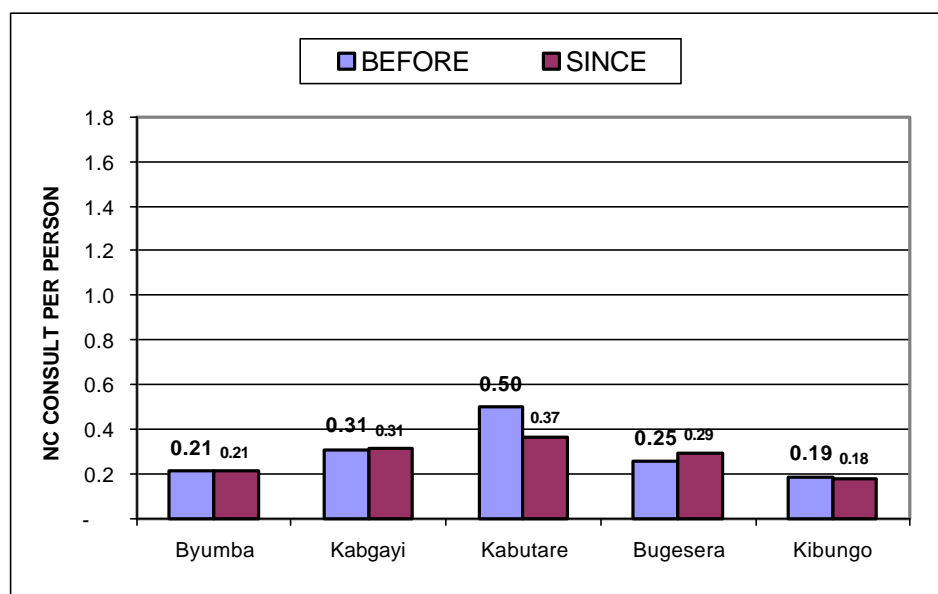


Figure 8 compares the consultation rate for PPS members with that of nonmembers. The consultation rate for PPS members is five times higher than for nonmembers. If the three districts had no PPSs, the consultation rate in the centers would probably be aligned with the level for nonmembers, which was 0.15 consultations per person in Byumba, 0.27 in Kabgayi, and 0.3 in Kabutare. This explains the importance of the PPS. In the districts of Byumba and Kabgayi, the portion of the population that had access to care facilitated by the PPS was able to maintain their consultation level in the health centers, and the district of Kabutare was able to remain at its high level. The PPS members in Kabgayi and Kabutare reported a higher consultation rate than the members in Byumba. There may be two explanations for this: first, the PPSs in Byumba have twice as many members as the PPSs in Kabgayi and Kabutare; and, second, with this larger pool, the PPSs in Byumba had more members in good health, which implies that the risk is more evenly distributed between members who are well and those who are not.

Figure 8. Consultation Rates During the Test Year

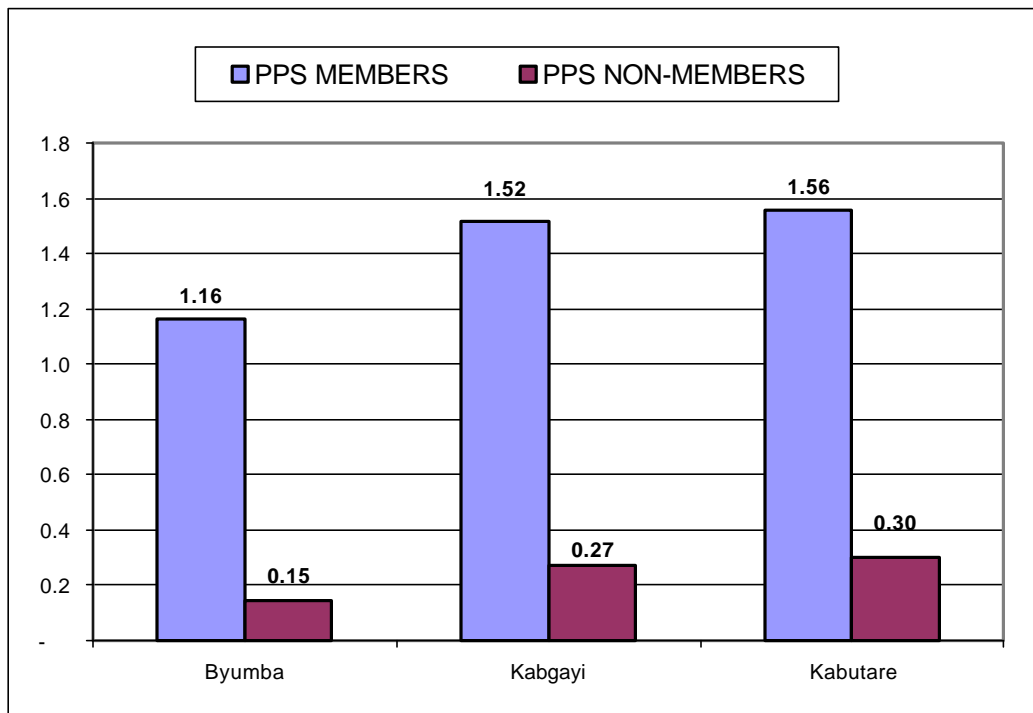
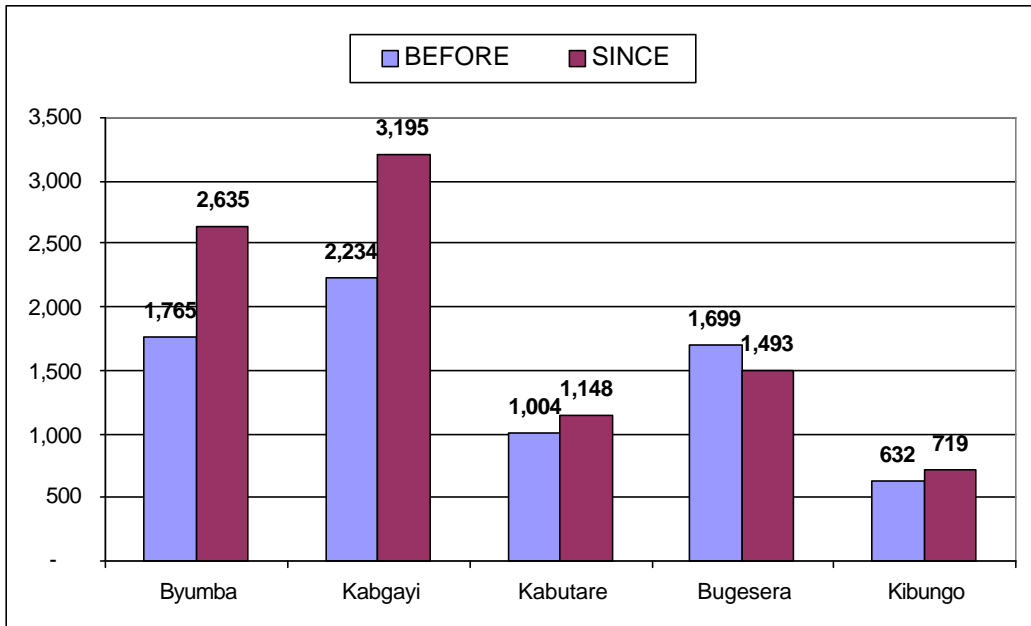


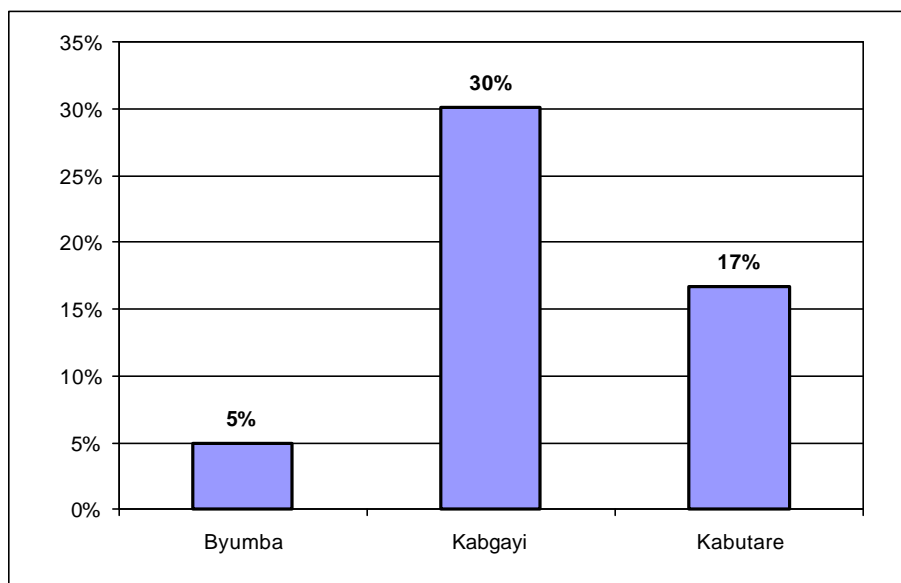
Figure 9 shows the change in deliveries in the health centers. Compared with the year before the PPSs, the number of deliveries in the health centers rose considerably in Byumba (49 percent) and Kabgayi (43 percent). This increase was less pronounced in Kabutare district (14 percent) since membership in the PPS has stayed low, and in Kibungo, a district with no PPSs. There was a drop in the number of deliveries in the health centers in Bugesera, the second district that has no PPSs.

Figure 9. Number of Deliveries in the Health Centers: Base/Pilot Year of the PPS



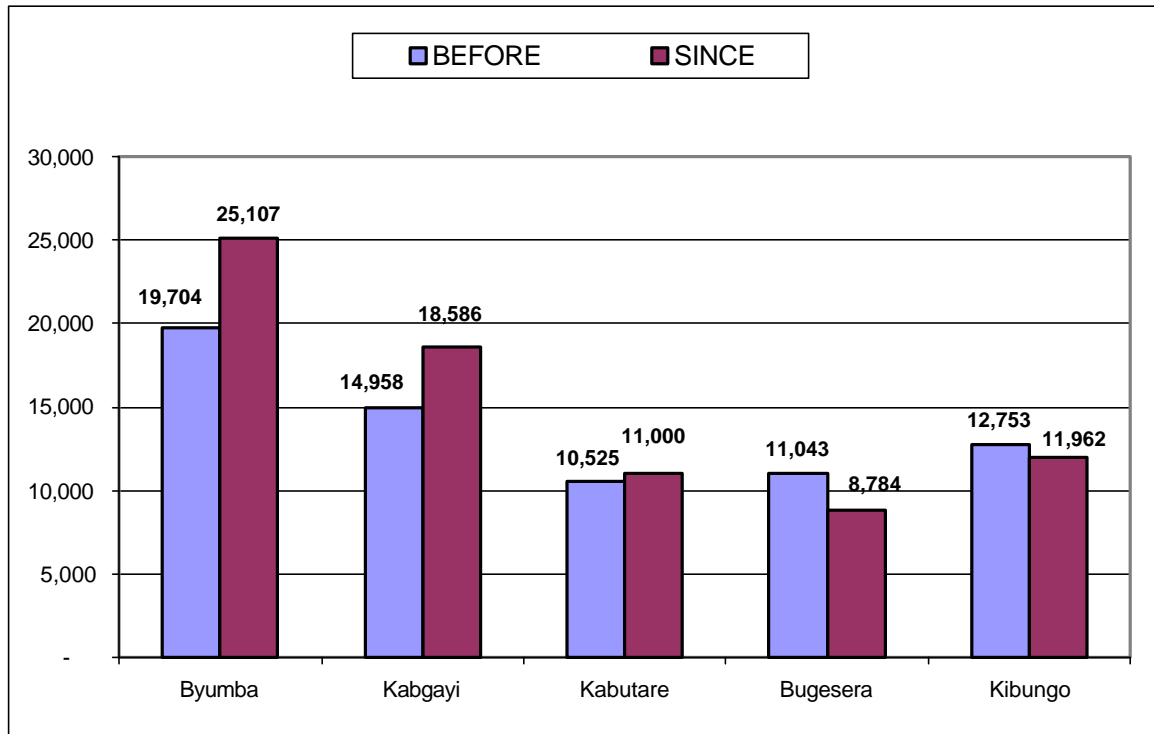
Compared with the total number of deliveries covered for the PPS members, the district of Kabgayi has six times more Caesarian births than Byumba, and the PPS in Kabutare had three times more Caesarian births than the PPS in Byumba district (Figure 10).

Figure 10. PPS Members: Number of Caesarian Births Compared to the Total Number of Deliveries (Total = Deliveries in the Health Centers and Caesarian Births in the Hospitals)



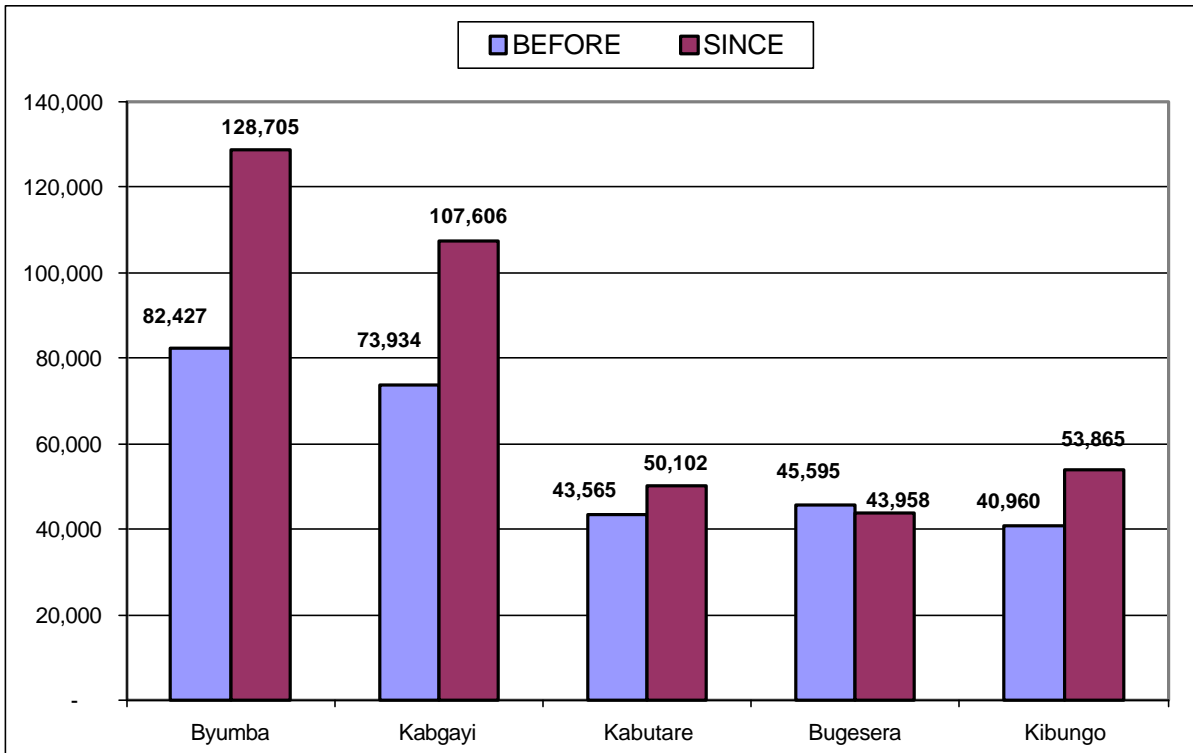
When the number of prenatal consultations (PNCs) that occurred in the health centers before the PPS is compared with the number that has occurred since then, a change similar to the change in deliveries emerges (see Figure 11). The increase in the number of PNCs in Byumba (27 percent) and Kabgayi (24 percent) is higher than in Kabutare (5 percent), where membership in the schemes is still low. The number of PNCs in the health centers in districts without PPSs (Bugesera and Kibungo) has fallen off since the previous year.

Figure 11. Number of Prenatal Consultations in the Health Centers: Base/Pilot Year of the PPS



Byumba and Kabgayi continue to show the same growth in the number of children vaccinated, as indicated in Figure 12. This growth is stronger than in Kabutare district, which has fewer members, and is stronger than those two districts without PPSs (Bugesera and Kibungo). During the year the districts had the PPSs, the centers in Byumba increased their number of vaccinations by 56 percent and the centers in Kabgayi by 46 percent. The increase in the number of vaccinations was higher in Kibungo (32 percent) than in Kabutare (15 percent). Bugesera had fewer vaccinations during the test year.

Figure 12. Number of Children Vaccinated in the Health Centers: Base/Pilot Year of the PPS



2.2.2 Summary

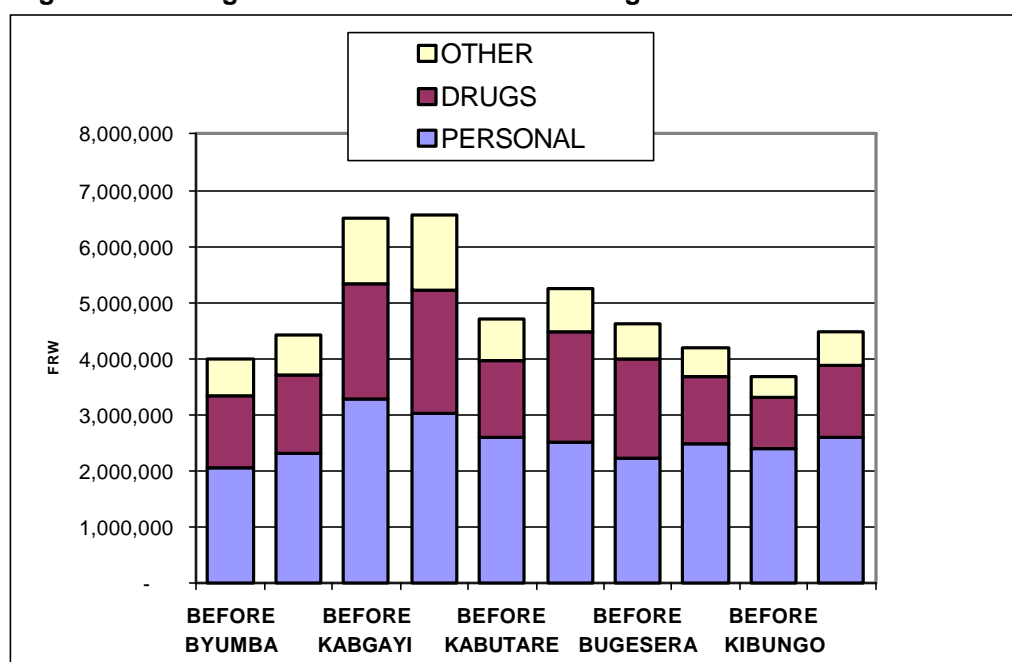
- > Since the year before the PPSs, the use of curative care has remained similar in quantitative terms in Byumba and Kabgayi, whereas Kabutare’s use fell.
- > PPS members go to the health centers five times more often than nonmembers. This shows that the members enjoy better access to care. Therefore, the more PPS members there are, the more the health centers can improve the level of curative care use.
- > The two districts of Byumba and Kabgayi, with more PPS members, have a higher growth rate in the number of deliveries in the health centers, prenatal consultations, and children vaccinated. These increases were not as high in Kabutare, the district with fewer members, or in Kibungo and Bugesera, the districts with no PPSs.
- > It may be concluded that PPS members have better access to curative care than nonmembers and that the PPSs have had a positive effect on the use of preventive services in the centers through sensitization and the plan for implementing the quality payment.

2.3 Costs of Health Services

2.3.1 Average Costs of Health Centers During the Base Year and Pilot Year (Personnel, Members, and Nonmembers)

The health centers in Byumba, Bugesera, and Kibungo have average costs of 4 million FRw per year. The centers in Kabgayi and Kabutare operate at a higher average cost of 6.5 million FRw and 5 million FRw, respectively. Over half the costs are for personnel. As shown in Figure 13, by comparing the year before the PPS with the year following the PPS, the average costs per center increased in the districts of Byumba, Kabutare, and Kibungo (a district with no PPS). In Byumba, this increase was caused by higher personnel costs. In Kabutare and Kibungo, the reason was the higher cost of drugs.

Figure 13. Average Cost of Health Centers During Base/Pilot Year of the PPS



2.3.2 Unit Costs of Personnel per New Consultation (Base Year, Pilot Year)

Compared with the year before the PPS, personnel costs per new patient increased in the health centers, except in Kabgayi. This increase was higher in the centers of Bugesera (475 FRw per new case) and Kibungo (486 FRw per new case), compared with the districts that had PPSs. The increase in Kabutare was particularly strong in personnel costs per new case due to the drop in consultations during the year, from 0.5 before the PPS to 0.37 during the year that followed.

Figure 14. Unit Costs of Personnel per New Consultation in the Health Centers: Base/Pilot Year of the PPS

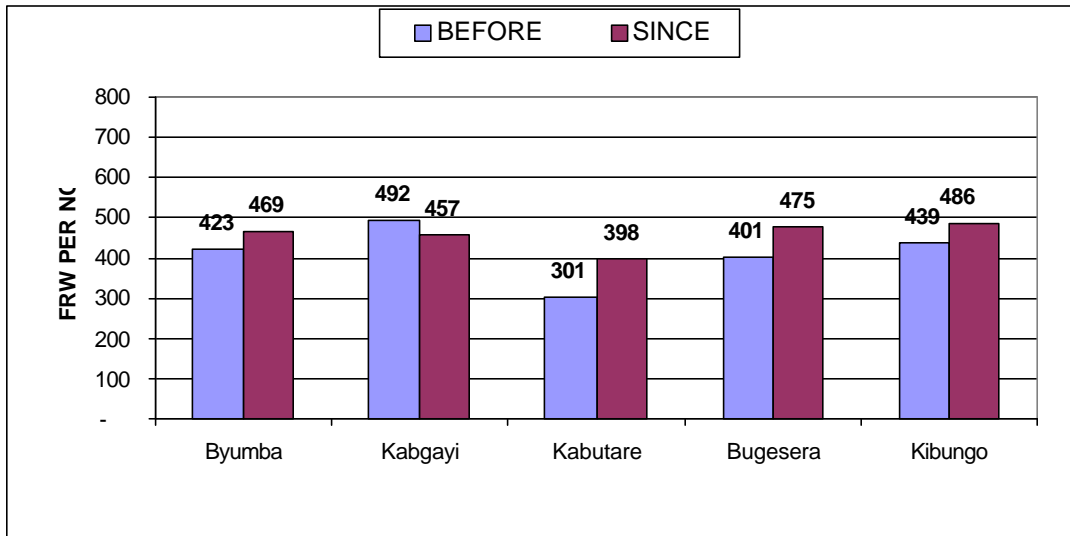
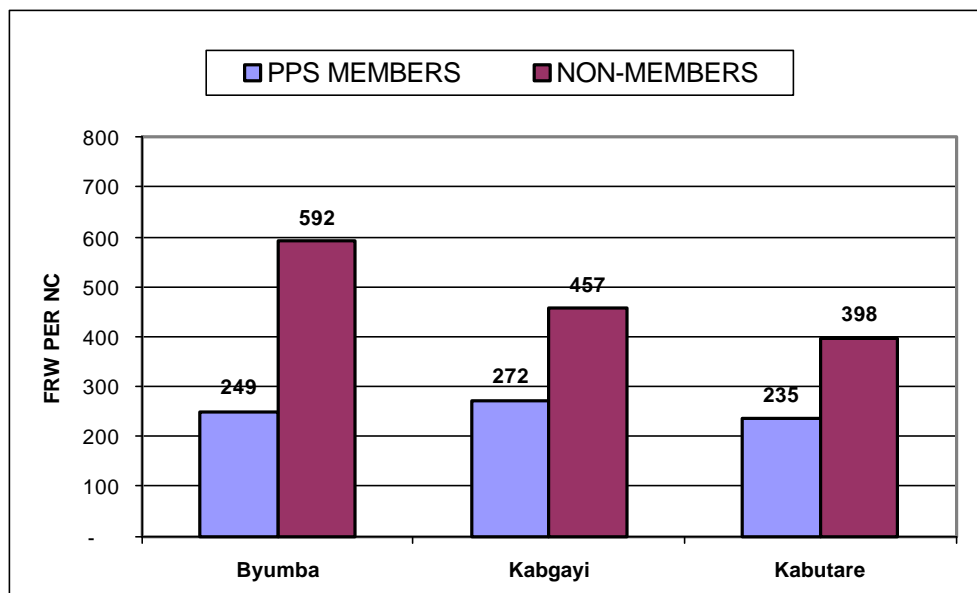


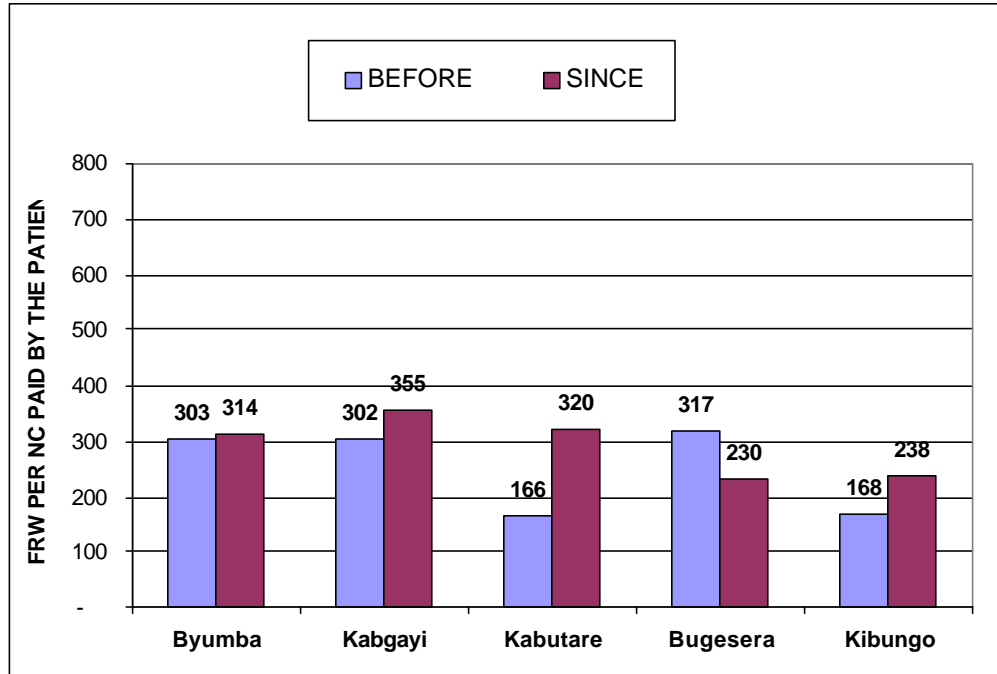
Figure 15 compares personnel costs per new PPS member case with new cases of nonmembers. Personnel costs per consultation are dropping off, with an increase in the number of consultations. Therefore, in the three pilot districts, the health centers are reporting that personnel costs per new consultation for members are half the cost of personnel costs for nonmembers. The more PPS members there are, the more the centers can lower their unit costs for personnel per new case.

Figure 15. Unit Cost for Personnel per New Consultation: PPS Members and Non-members



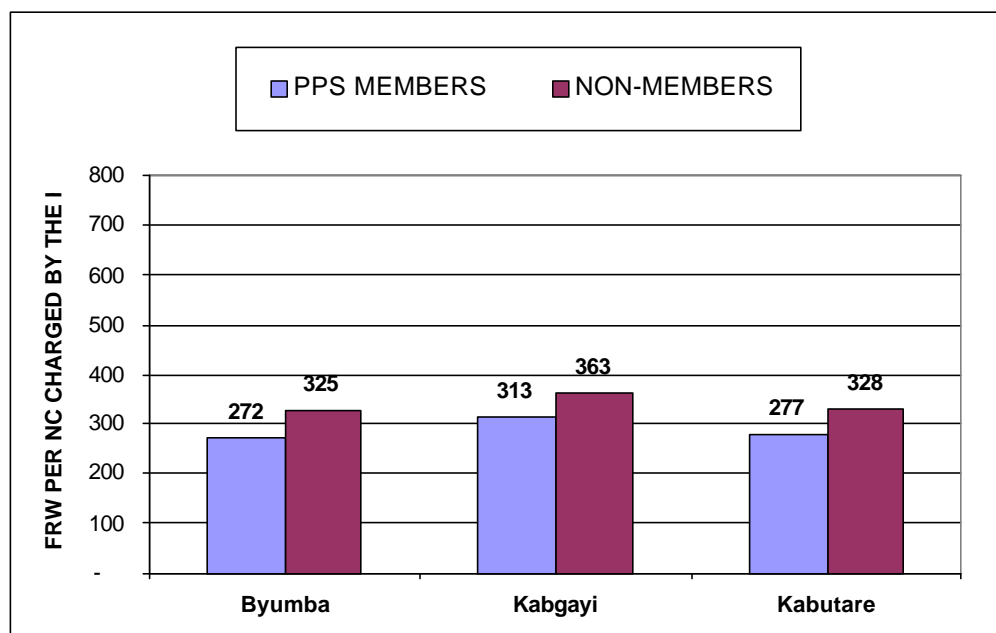
By comparing the values of drug consumption for patients of health centers, it was discovered that the centers prescribed a higher value of drugs during the PPS year, as shown in Figure 16. This increase in the value of drugs per consultation was caused by an increase in the price of drugs. This price hike was particularly pronounced in Kabutare district (166 FRw per consultation in the year before the PPS, and 320 FRw per consultation during the year since the PPSs), where the district pharmacy's sales of drugs to the centers were subsidized by Doctors Without Borders (*Médecins Sans Frontières*, MSF) during the year before the PPS.

Figure 16. Value of Drug Consumption per New Consultation in the Health Centers: Base/Pilot Year of the PPS



In the three PPS districts, nonmembers require more drugs per consultation than PPS members, as shown in Figure 17. This may be due to the fact that once the members become ill, they go to the centers sooner than nonmembers do; therefore, they need fewer drugs to cure the illness. Consequently, PPS members can return to work sooner than nonmembers.

Figure 17. Value of Drug Consumption per New Consultation in the Health Centers



2.3.3 Summary

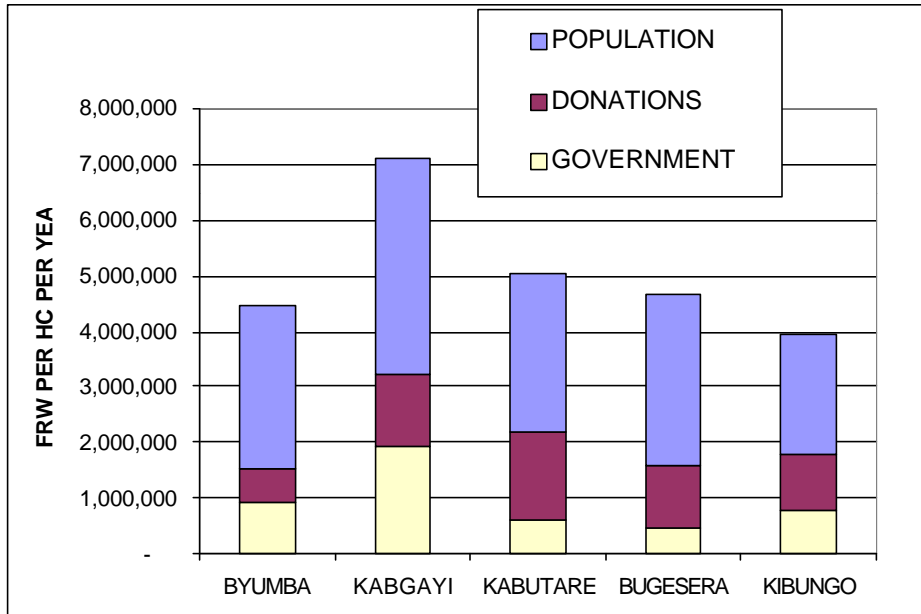
- > The average cost per health center increased in the districts. This was caused by the existence of more expensive salaries for personnel or higher drug costs. Most of the costs are related to employee expenses.
- > The more patients there are, the more employee costs per consultation decrease. This is why members generate lower personnel costs than nonmembers do. Thus, the health centers may reduce personnel costs by increasing the number of PPS members.
- > Ill members consume fewer drugs per consultation than nonmembers. This may be due to the fact that, once they become ill, the members go to the centers sooner than nonmembers do. Consequently, they need fewer drugs to be cured and to return to work.

2.4 Funding Sources

2.4.1 Average Levels of Resources of Health Centers (Government, User, PPS, External)

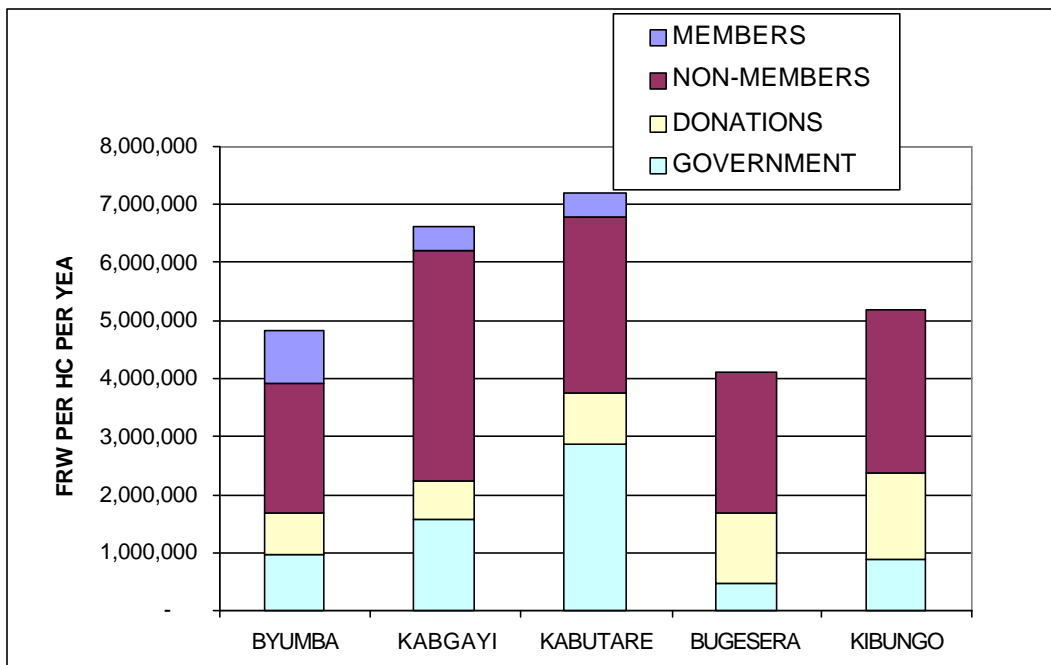
As Figure 18 indicates, on average, the centers in Kabgayi received more financial resources during the base year than the other districts. The higher level in Kabgayi was due to a higher contribution from the government and more income from the population than in the other districts.

Figure 18. Average Levels of Health Center Resources, Year Before the PPS (Average per health Center)



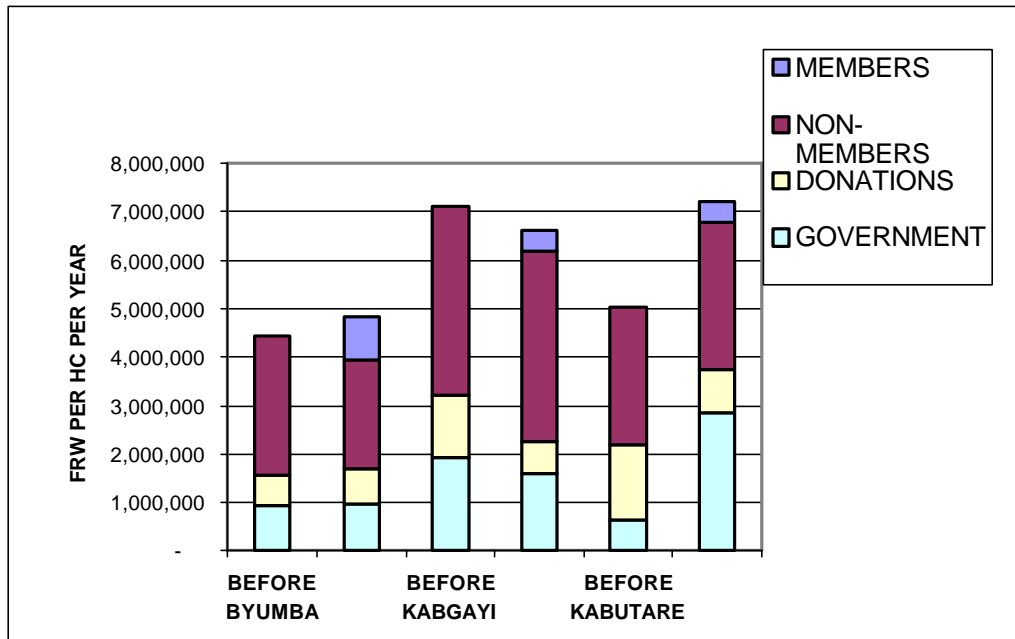
Financial resources rose in all the districts, but moreso in the districts with PPSs, and especially in Kabutare, where the government increased its contribution. In Byumba, contributions from PPS members for care became equal to government or donor support (see Figure 19).

Figure 19. Average Levels of Health Center Resources, During Pilot Year (Average per Health Center)



In comparing the year before the PPS was implemented with the years that follow, it has been observed in the three pilot districts that the PPSs began contributing a large part of the financial resources for the centers, especially in Byumba, which has the largest number of members (see Figure 20). Likewise, in the districts of Kabgayi and Kabutare, the population’s financial contribution rose at the same time the PPSs were being created. In Kabgayi, this growth in resources was almost able to offset the drop in government and other donations.

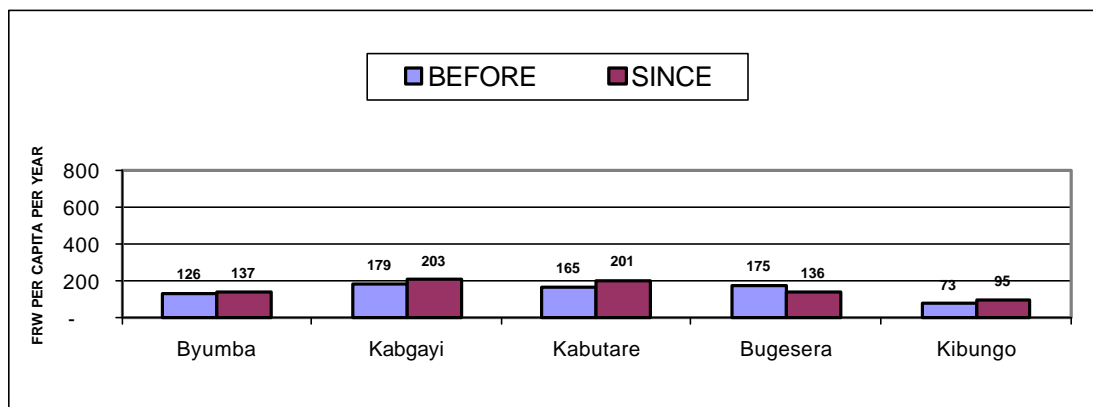
Figure 20. Average Levels of Resources for the Health Centers in the Three Pilot Districts, Base/Pilot Year of the PPS (Average per Health Center)



2.4.2 Self-financing: Income per Capita in the Health Centers

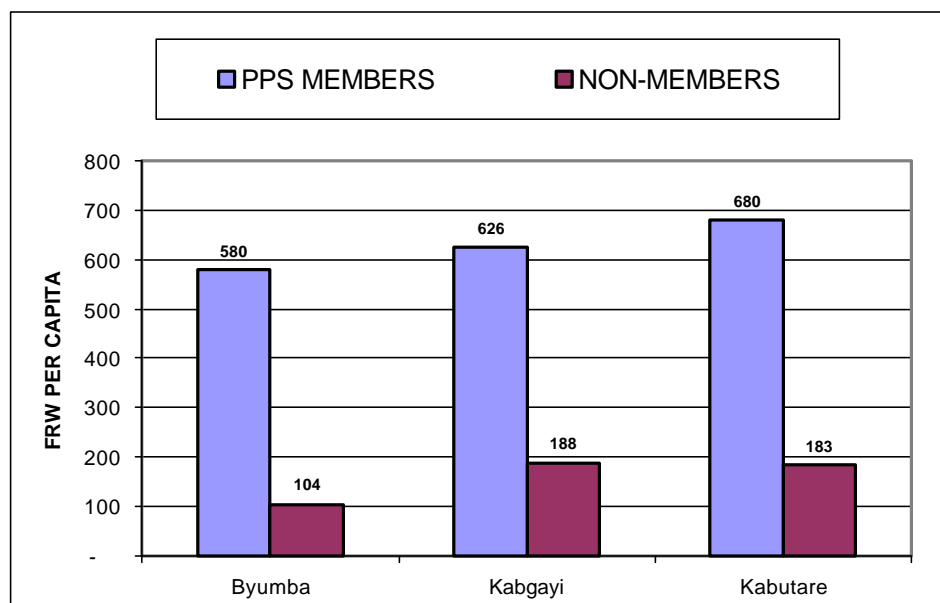
In the PPS districts, (Byumba, Kabgayi, and Kabutare), the average income per person rose during the year, while income fell or remained low in the two districts without a PPS (see Figure 21).

Figure 21. Self-financing: Income (Average per District) per Capita for the Health Centers, the Base and Pilot Year



Per capita income grew in the health centers due to the contributions of PPS members. As Figure 22 indicates, PPS members contribute up to five times more than nonmembers. Therefore, the PPSs have a potential for mobilizing financial resources for the centers. This works better when there are more members.

Figure 22. Self-financing: Income per Capita of Health Centers in the Pilot Districts



2.4.3 Summary

- > Financial resources have increased in the health centers since the base year.
- > Lower resources from the government or smaller donations were offset by an increase in resources from the population. In Byumba, which has the largest PPS, resources from members reached the same level as financial support from the government or donations.
- > Per capita, PPS members contributed up to five times more to health centers than nonmembers, which shows how much financial potential the PPSs have for Rwanda.

2.5 Cost Recovery

In the three districts with PPSs (Byumba, Kabgayi, and Kabutare), the cost recovery rate rose more than it did in Kibungo and Bugesera, where the latter actually experienced a decrease (Figure 23).

Figure 23. Cost Recovery Rate with Income from the Population in the District Health Centers: Base/Pilot Year of the PPS

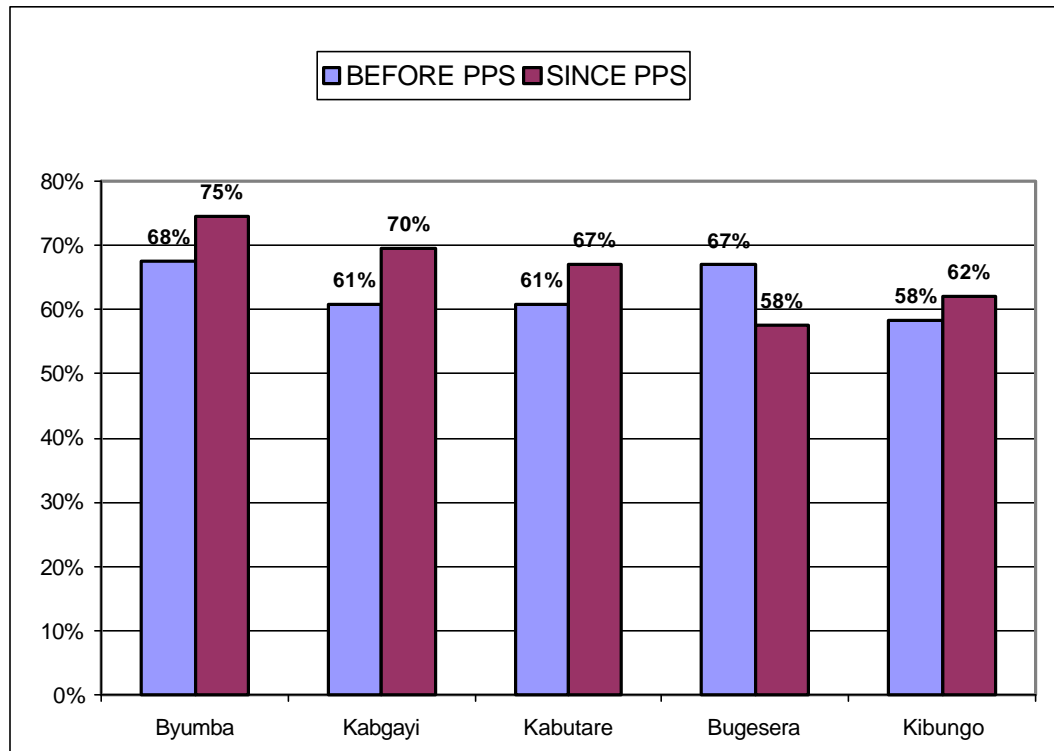
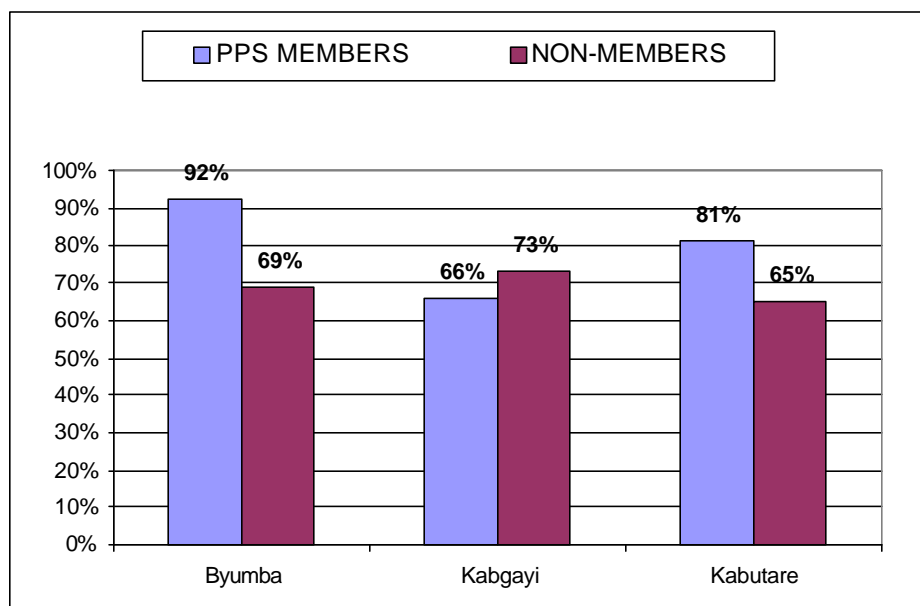


Figure 24 compares the cost recovery rates for members and nonmembers. Because of the size of its PPS, the Byumba pool has the highest rate for members. The rate in Kabutare is higher for members than in Kabgayi, and the reason for this may be a lower level of personnel costs than in Kabutare. Since fewer nonmembers visited the health centers in Kabgayi, and since total costs remained at the same level, the reason for the higher recovery rate for nonmembers in Kabgayi is an increase in the price of service.

Figure 24. Cost Recovery Rate with Income from PPS Members and Non-members in the Health Centers



2.5.1 Summary

- > Districts with PPSs were able to raise the cost recovery rate through income from the population.
- > The higher cost recovery rate was due to contributions from PPS members in the districts of Kabutare and Byumba. In Kabgayi, however, the rate increased more for nonmembers than for members. This is due to higher service costs for nonmembers and not to consultations.
- > The PPSs help increase the recovery rate if the pool is rather large and if the centers operate at a cost comparable to that of Byumba.

3. Results by District

3.1 Results from Byumba

In the first year, nearly all the PPSs enrolled at least 1,000 members. The top three were the PPSs affiliated with the church-owned health centers (Bungwe, Rushaki, and Muyanza). The PPSs of Bungwe and Rushaki affiliated with the health centers already had experience with mutuelles. They succeeded in reaching the largest membership pools. Some PPSs (Mulindi, Rushaki, Gisiza, and Mukono) benefited from the tea factory joining the membership. Membership was low in Bwisige and Musenyi, indicating the population's lack of confidence either in the health center or in PPS management. The Kinihira PPS began operating in the last three months of the first year. Figure 25 indicates the number of members per individual scheme in Byumba at the end of the first year of implementation.

Figure 25. Byumba PPS: Number of members per PPS at the End of the First Year (June 2000)

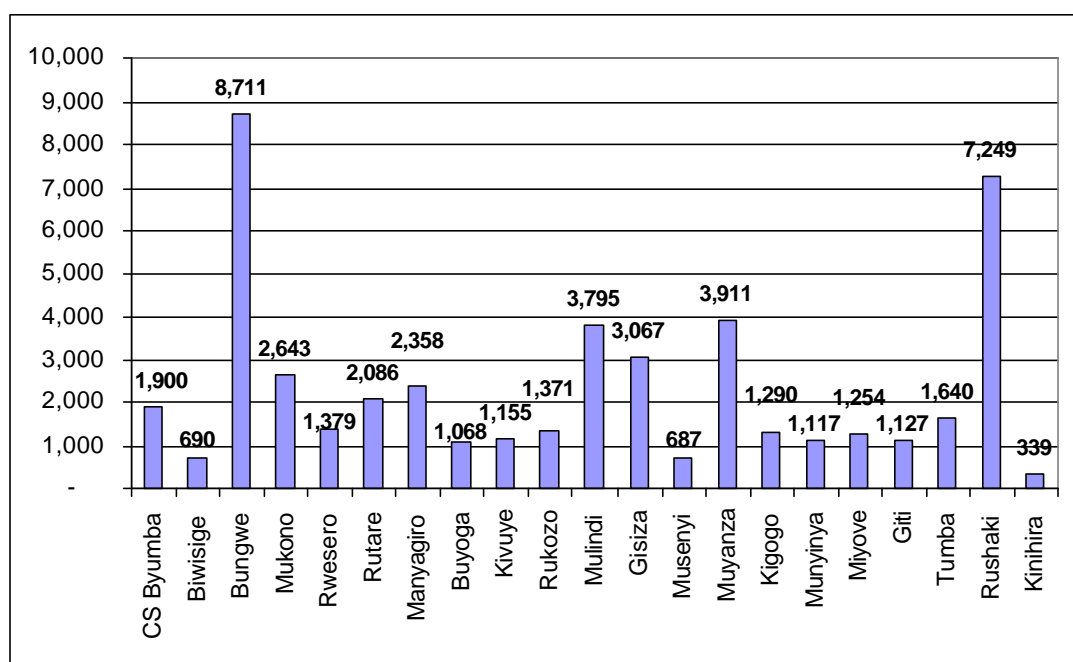
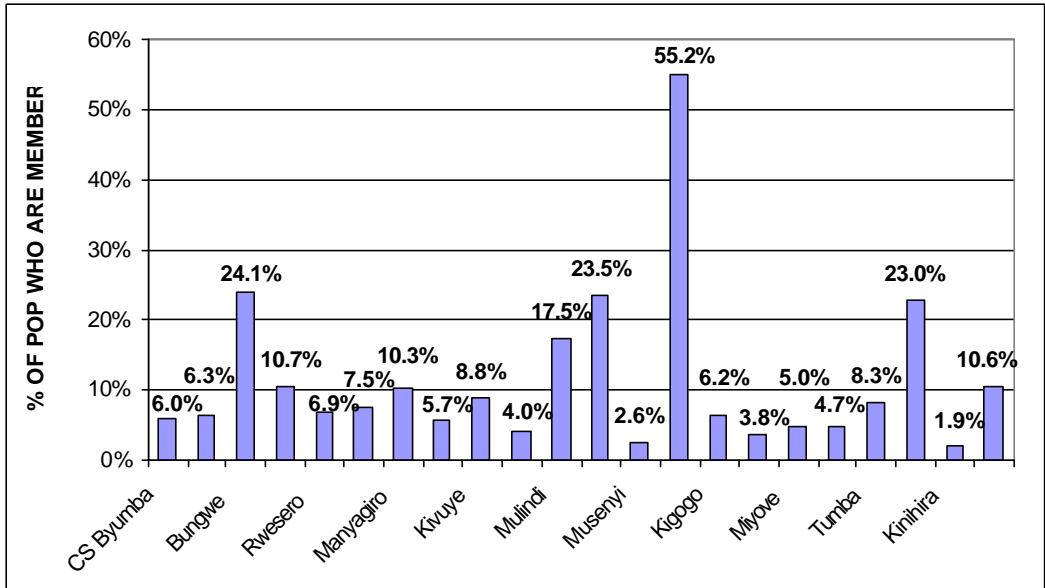


Figure 26 shows the percentage of PPS members compared to the size of the population in the coverage area of the health center. The Muyanza PPS has the smallest coverage area, yet a little more than half its population are members. The Bungwe PPS has the largest coverage area with 36,000 people, which represents one-fourth of the population. At the end of the first year, one in every 10 residents was a member of the Byumba district PPS.

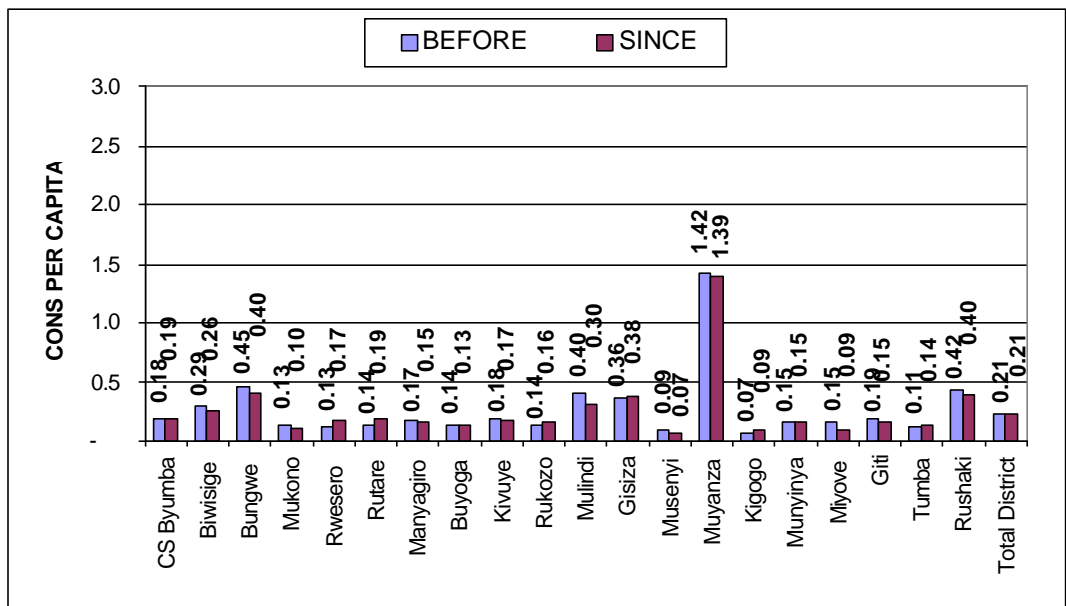
Figure 26. Byumba PPS: Membership Rate in the PPSs by Health Center at the End of the First Year (June 2000)



3.1.1 Utilization per Center

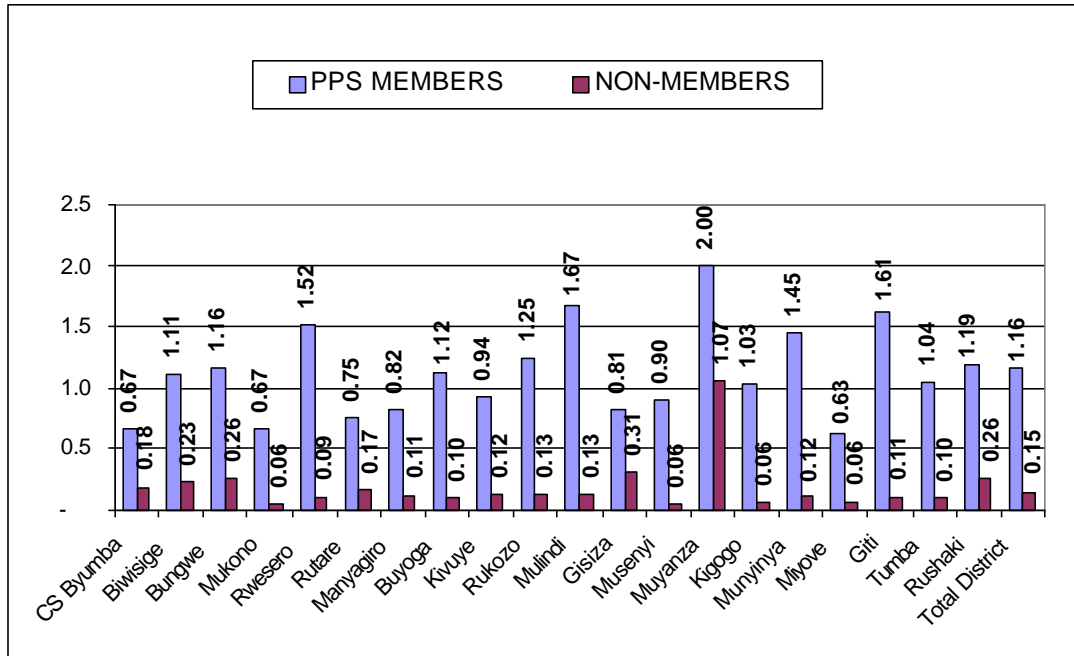
As Figure 27 indicates, during the year before and following implementation of the PPS, the consultation rate stayed at the same level of 0.21 consultations per capita. Those health centers that had a higher consultation rate during the year before the PPS successfully achieved larger PPS membership pools; these included Bungwe, Muyanza, Rushaki, Mulindi, and Gisiza. These five PPSs enrolled more than 15 percent of their relative population in the first year.

Figure 27. Byumba: Consultation Rate in the Health Centers for the Base/Pilot year of the PPS



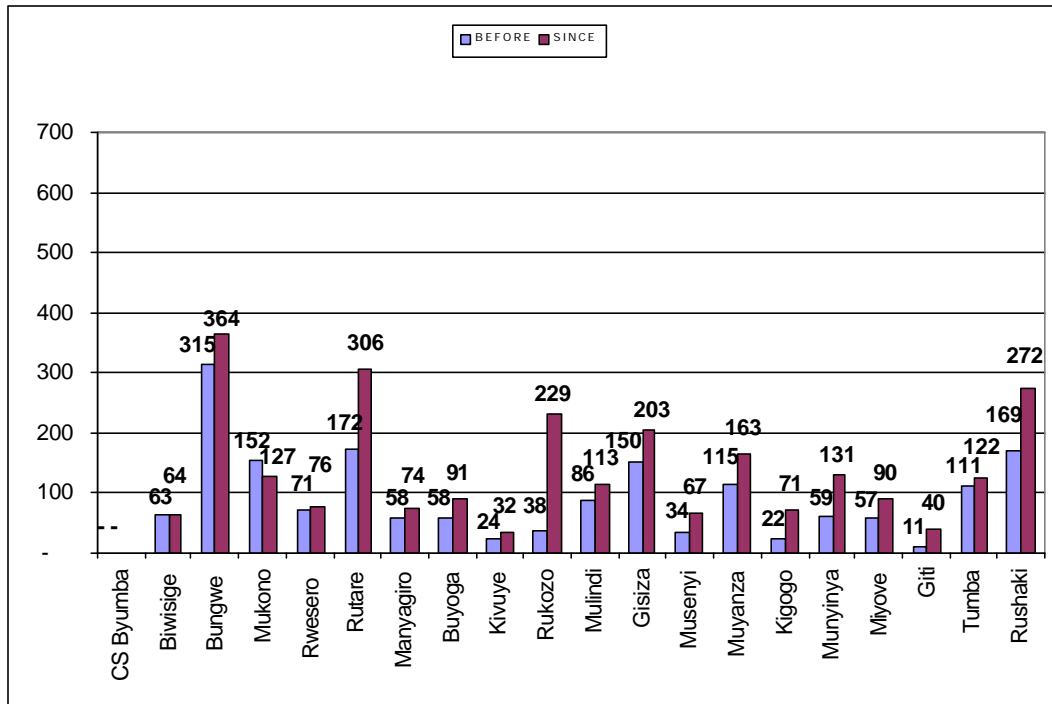
When comparing consultation rates between PPS members and nonmembers, as shown in Figure 28, members use the health centers about five times more often than nonmembers. When this was compared with the year prior to PPS implementation, the consultation rate for the nonmember population fell from 0.21 to 0.15 consultations per person. With a higher use of services by PPS members, the centers in Byumba district were able to maintain the utilization level of the previous year.

Figure 28. Byumba Health Centers: Consultation Rates for the PPS Members and Non-members During the First year



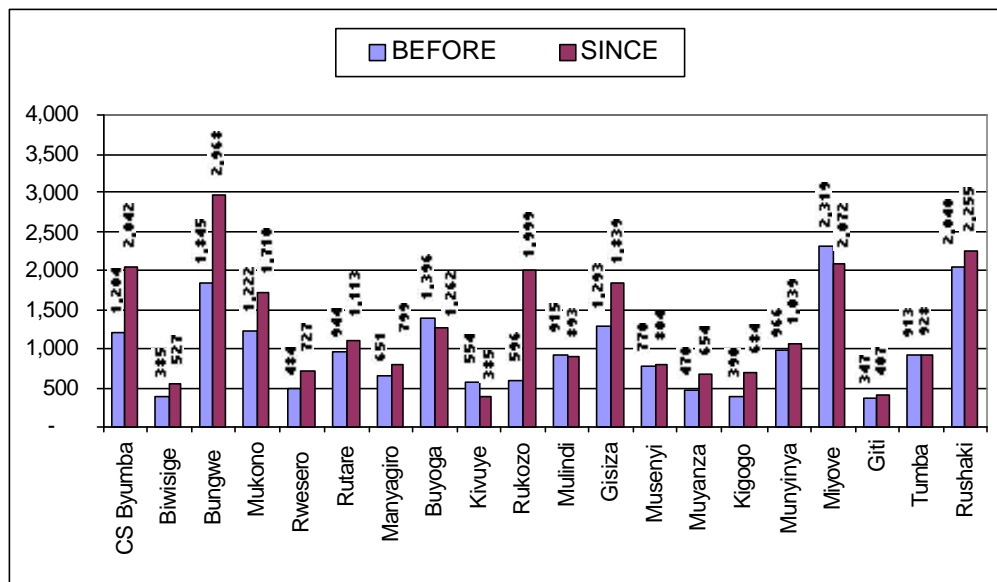
Nearly all the health centers reported that more pregnant women had deliveries at the center during the years since PPSs were implemented than during the year prior to PPSs (Figure 29). For the entire district, the number of deliveries at the centers rose 49 percent after implementation. One out of every four women who delivered at a health center was a PPS member. This shows that the PPSs improved access to care for pregnant women.

Figure 29. Byumba: Number of deliveries in the health Centers: Base/Pilot Year of the PPS



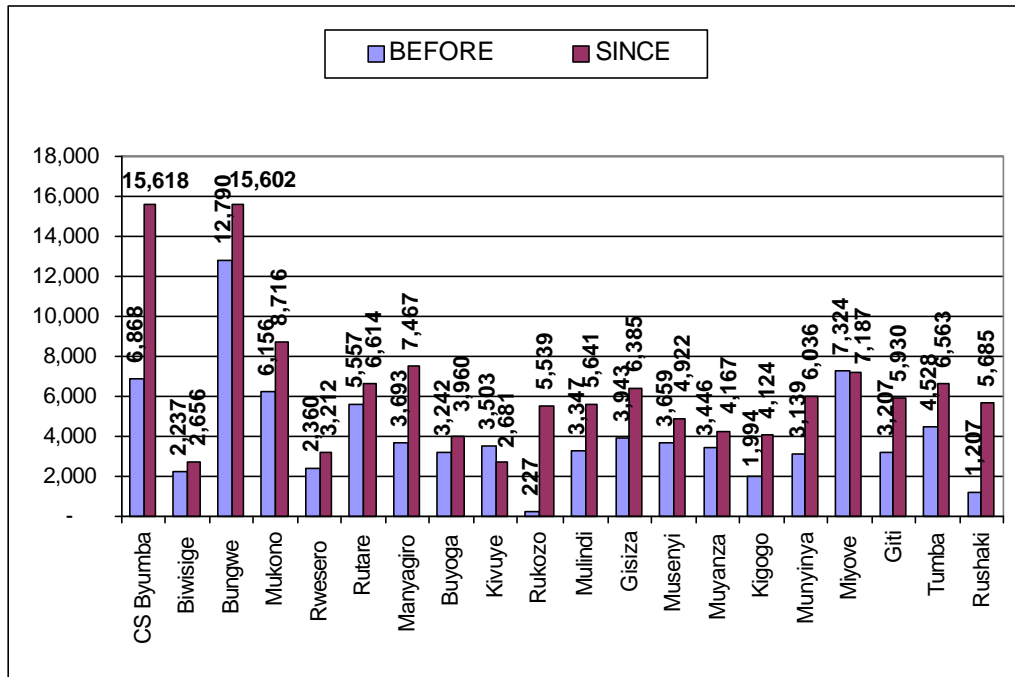
Health centers have also become more effective with regard to the number of prenatal consultations since the PPSs have been implemented (Figure 30). The number of PNCs in the health centers rose by 27 percent after PPSs were implemented.

Figure 30. Byumba: Number of Prenatal Consultations in the Health Centers: Base/Pilot year of the PPS



Since the PPS was implemented, the number of vaccinations has risen by 56 percent in the health centers in Byumba district (Figure 31). Those centers that have more than 2,000 PPS members show the largest increases. Children under five years of age have become members, and their parents have followed the recommendations on the membership card for vaccinating their children. Also, more nonmember children were able to take advantage of this vaccination service, offered free of charge.

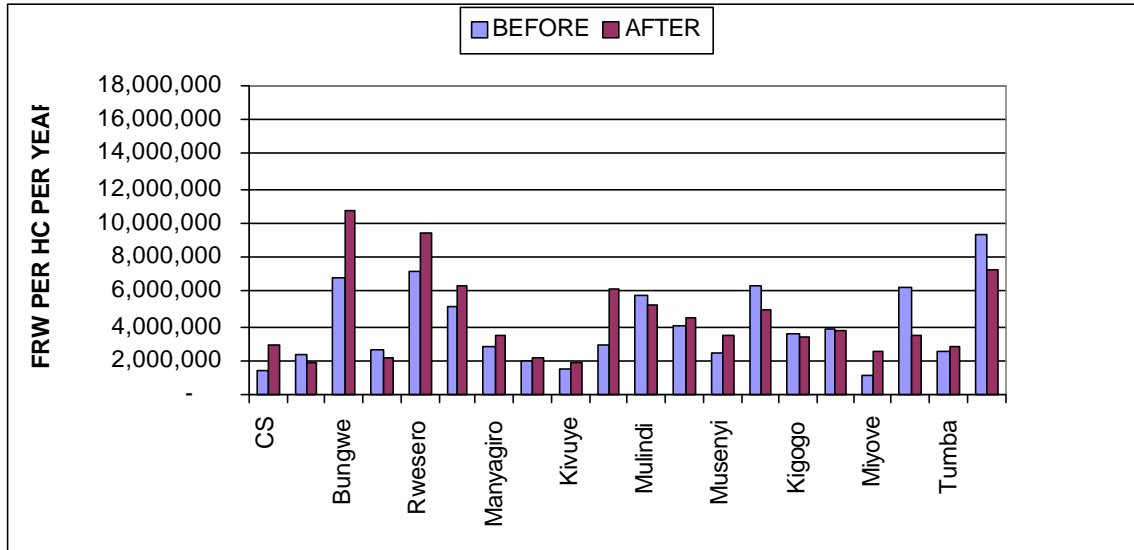
Figure 31. Byumba: Number of Vaccinations in the Health Centers: Base/Pilot year of the PPS



3.1.2 Cost of Health Services

On average, the health centers have operating costs of 4 million FRw. The four church-owned health centers generally have a larger workload and therefore operate at a higher cost level than the public centers. The Rwesero health center, where the consultation rate fluctuates between 0.13 and 0.17 per person, is an exception. Bungwe, the center with the largest PPS, reported growth in total costs, which can be explained by an increase in drug costs, while the Rushaki center had lower total costs during the year following implementation of the PPS (Figure 32).

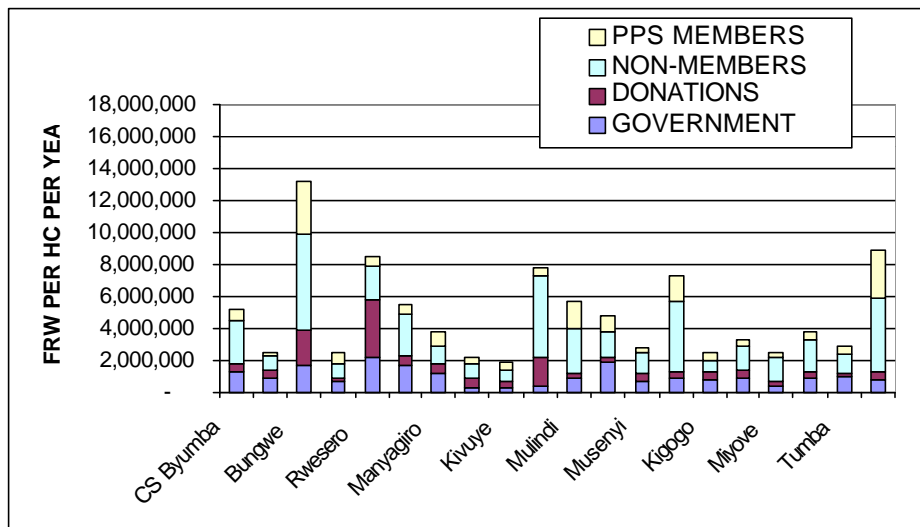
Figure 32. Byumba: Total Costs of Health Services in the Health Centers: Base/Pilot Year of the PPS



3.1.3 Sources of Financing

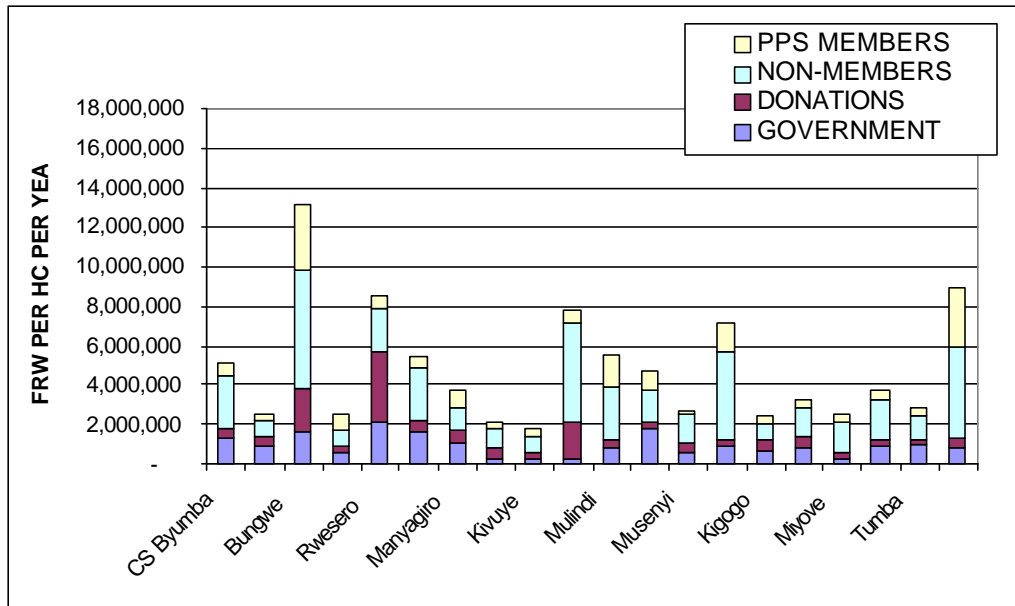
As Figure 33 indicates, most of the financing for the health centers comes from patient income, which makes the centers dependent on a steady frequency of patients to maintain this funding level. Therefore, centers with the highest utilization levels reported more sources of financing from the population than centers with low utilization levels. The latter will have a tendency to raise the cost for services in order to receive the same income level from patients when the number of health services performed drops.

Figure 33. Byumba: Sources of Financing in the Health Centers: Base/Pilot Year of the PPS



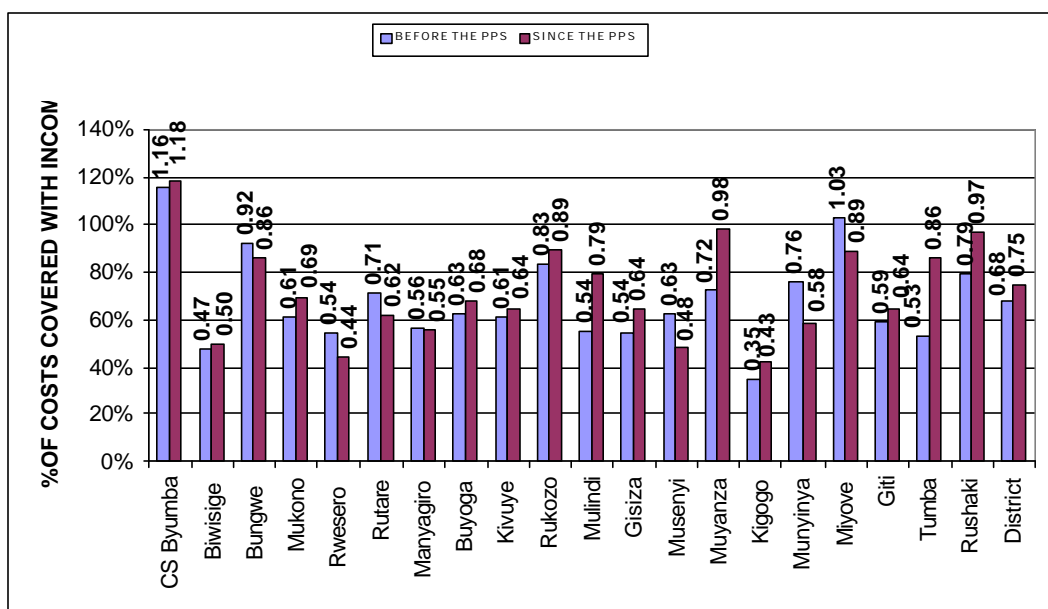
PPSs that have more than 2,000 members became major sources of funding for the health centers. Despite the fact that the three centers with the largest PPSs (Bungwe, Rushaki and Muyanza) reported fewer curative consultations since the schemes were implemented, they maintained the same level of funding sources from the population as a result of their PPS members. Health centers with low utilization levels will have the tendency to increase service prices charged to patients in order to receive the same revenue level, when the number of services provided drops (Figure 34).

Figure 34. Byumba: Funding Sources in the Health Centers for the Year Since the PPS



For the entire Byumba district, the cost recovery rate from patients increased from 68 to 75 percent during the year the PPS was implemented (Figure 35). A few centers had lower cost recovery rates, despite the fact that they had more PPS members; e.g., Bungwe. This drop was caused by nonmembers who went to the center less frequently, but paid roughly the same price and generated much less income, even though their treatment remained at the same cost level.

Figure 35. Byumba: Cost Recovery Rate in the Health Centers: Base/Pilot Year of the PPS



3.1.4 Summary

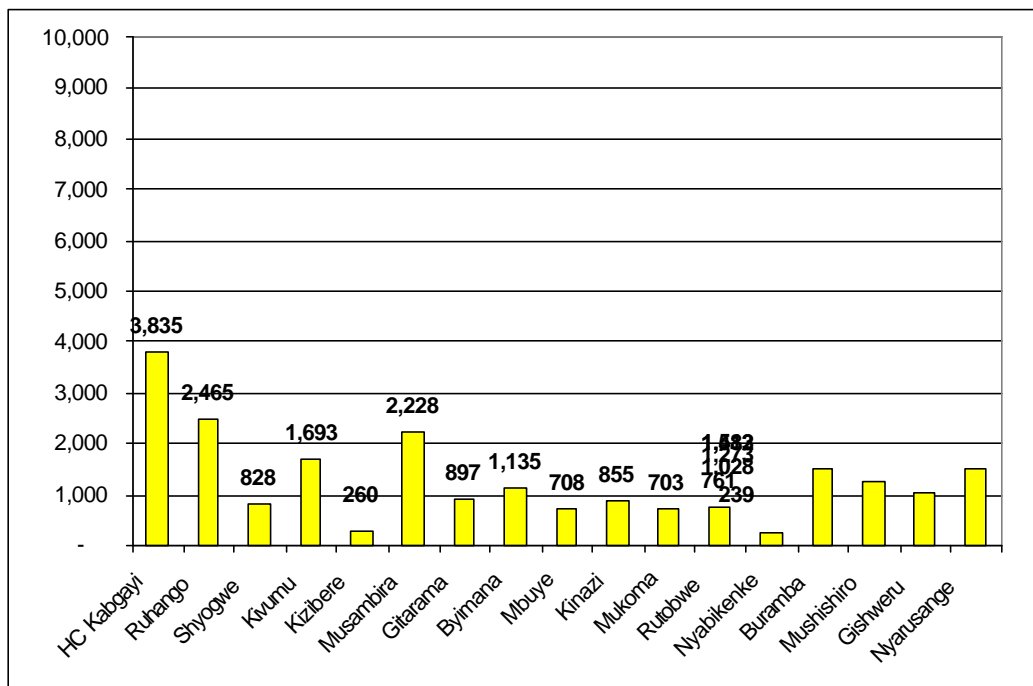
- > After the first year, the PPSs in Byumba district had enrolled more than 10 percent of the population. The most effective PPSs are those that partnered with health centers that have prior experience with *mutuelles*, or that partnered with centers that had a higher consultation rate during the year prior to the PPS compared with the district's average rate. Four PPSs and centers benefited from enrolling about 7,000 people, who were employees of the Mulindi tea factory and their families.
- > During the first year the PPSs were implemented, 10.6 percent of the population became members, 32 percent of patients in the centers were members, and 25 percent of the women who delivered in the centers were PPS members. The curative consultation level (0.21) remained steady in Byumba district due to a higher service frequency by PPS members (1.16) compared with nonmembers (0.15 consultations per person). The centers with PPSs had a higher increase in the number of deliveries, PNCs, and vaccinations than did the other four districts. This growth in service utilization was influenced by the sensitization of the population and by the "waiting" effect of the implementation of quality payments. It can be concluded that the PPSs in Byumba facilitated access to health care for pregnant women, women who gave birth, children under five years of age, and patients who required curative care.
- > The church-owned centers with a heavier workload had higher total costs. Operating costs in the centers were funded primarily by income from the population. During the year the PPSs were implemented, service utilization by nonmembers fell. Consequently, to maintain the same income level, the centers tended to increase their costs for services. The centers that have partnered with the largest PPSs were able to offset the drop in income from paying patients with additional sources from the PPSs.

- > The cost recovery rate rose for the entire district from 68 percent to 75 percent. Generally, this rate was higher for members than for nonmembers. The PPSs were able to facilitate access to care for the population that needed it and, at the same time, improve their financial situation in the health centers.

3.2 Results from Kabgayi

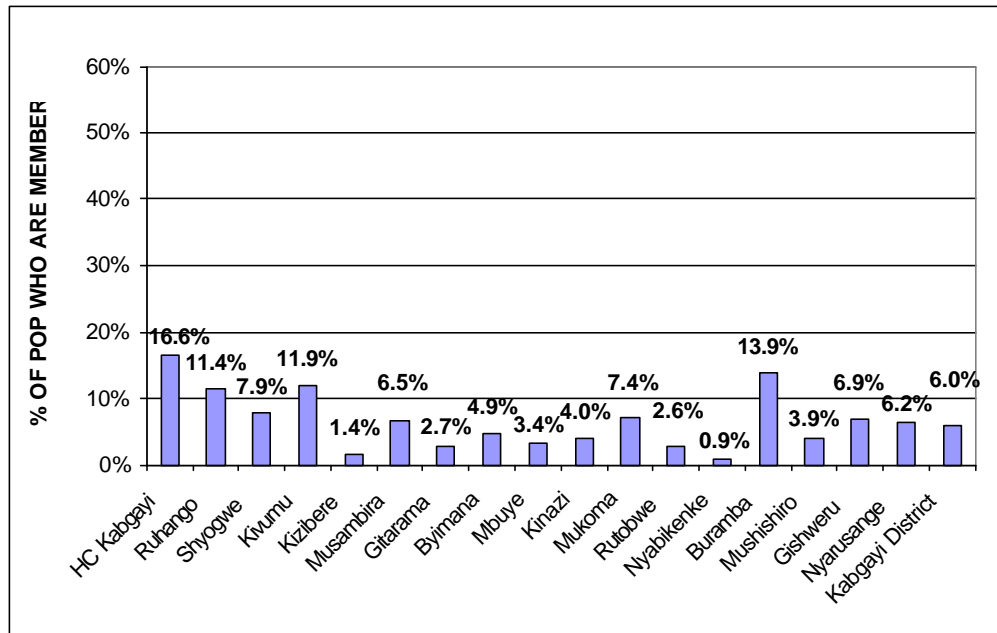
The PPSs in the Kabgayi district had no prior experience in mutual health organizations. In the first year, the PPSs in Kabgayi had 21,903 members (Figure 36). The PPSs that partnered with the church-owned centers (Kabgayi, Ruhango, Kivumu, and Nyarusange) performed better than the public centers. The prepayment schemes from the Kabgayi health center and of Gitarama count among their members' employees from the district hospital and from local companies. Membership doubled in three months since an experienced nurse replaced the former nurse from the Buramba health center.

Figure 36. Kabgayi PPS: Number of Members per PPS as of the End of the First Year (June 2000)



As shown in Figure 37, Kabgayi district had 6 percent of PPS members as of the end of the first year. Four PPSs (Kabgayi, Ruhango, Kivumu, and Buramba) had a membership rate higher than 10 percent compared with the population in the coverage area. On the other side, four PPSs had rates below 3 percent, namely Kizibere, Gitarama, Rutobwe, and Nyabikenke.

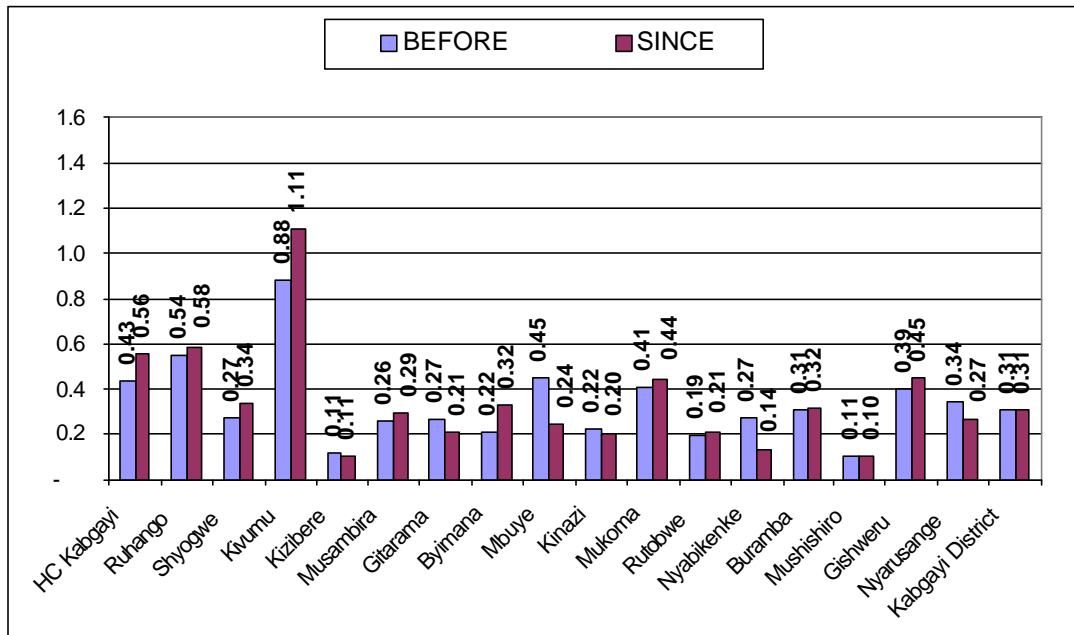
Figure 37. Kabgayi PPS: PPS Membership Rate by Health Center at the End of the First Year (June 2000)



3.2.1 Utilization by Center

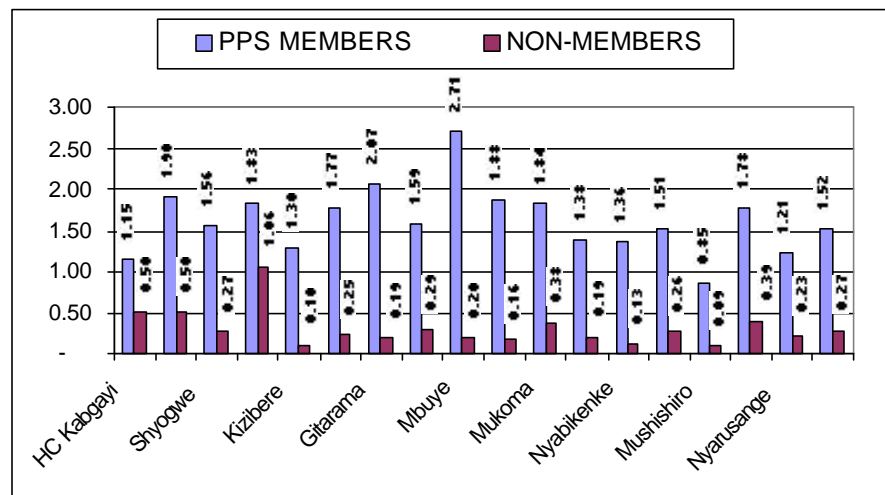
During the two observation years, the consultation rate in Kabgayi district remained at the same level with 0.3 consultations per capita. As shown in Figure 38, consultation rates rose in health centers affiliated with large PPS membership pools, such as Kabgayi, Ruhango, Kivumu, Musambira, and Buramba. Centers with few PPS members experienced a lower consultation rate than the year prior to implementing the PPS, namely Kizibere, Gitarama, Mbuye, Nyabikenke, and Mushishiro. These centers could have avoided this decrease if they had enrolled more members. As in Byumba, the centers in Kabgayi with a high consultation rate the year prior to PPS had more PPS members after one year. This is reflected positively in their consultation rate during the year that followed the implementation of the PPS.

Figure 38. Kabgayi: Consultation Rate in the Health Centers: Base/Pilot Year of the PPS



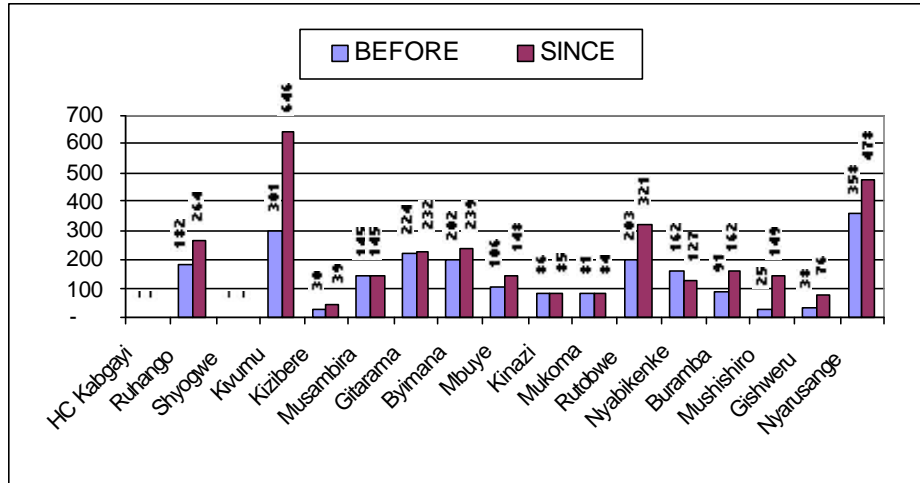
PPS members in Kabgayi have reported five times higher consultation rates (1.52 consultation per capita) than non-members in the same district (0.27 consultation per capita), as well as a higher average consultation rates than PPS members in Byumba (1.16 consultations per member). The 700 members of the Mbuye PPS are mainly patients who have abused the health center in order to reach a consultation rate that is 13 times higher than for nonmembers.

Figure 39. Kabgayi health Centers: Consultation Rates for the PPS Members and Non-members During the First Year



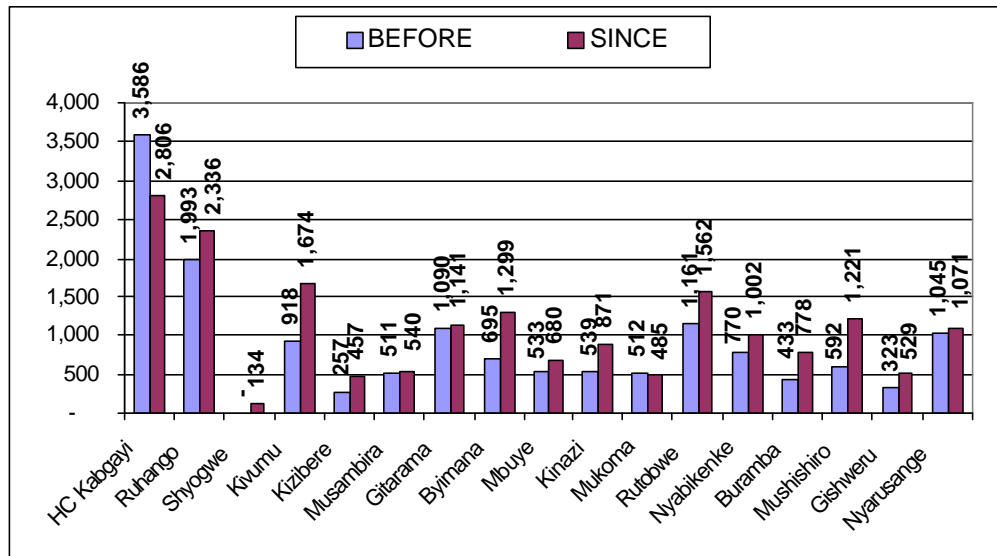
As shown in Figure 40, all the centers in Kabgayi were able to raise the number of women having deliveries, which resulted in an increase of 43 percent for the district. These increases were particularly interesting in the centers in Kivumu, Ruhango, Rutobwe, Mushishiro, Nyarusange, and Buramba. The number of deliveries at the two PPSs with few members (Kinazi and Nyabikenke) either remained at the same level or decreased.

Figure 40. Kabgayi: Number of Deliveries in the Health Centers: Base/Pilot Year of the PPS



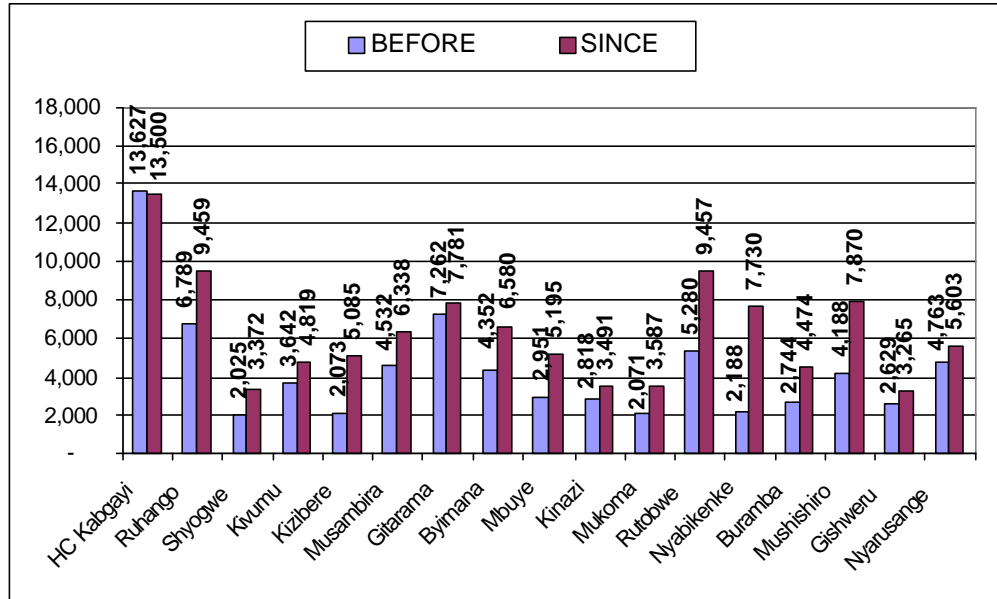
All the centers were able to increase the number of PNCs, except for the Kabgayi center, which remained at a high level. The largest increases were recorded in Kivumu, Mushishiro, Byimana, Ruhango, and Rutobwe, as shown in Figure 41. In total, 24 percent of PNCs were performed in the year since PPSs were implemented.

Figure 41. Kabgayi: Number of Prenatal Consultations in the Health Centers: Base/Pilot Year of the PPS



The number of children’s vaccinations rose in every center, as indicated in Figure 42, and throughout the district, vaccinations rose by 46 percent. Increases were highest in centers attached to PPSs with few members, such as Nyabikenke, Rutobwe, Mushishiro, and Kizibere. Even with a small pool of PPS members, these centers could possibly have improved their vaccination level, which was lower than the other centers.

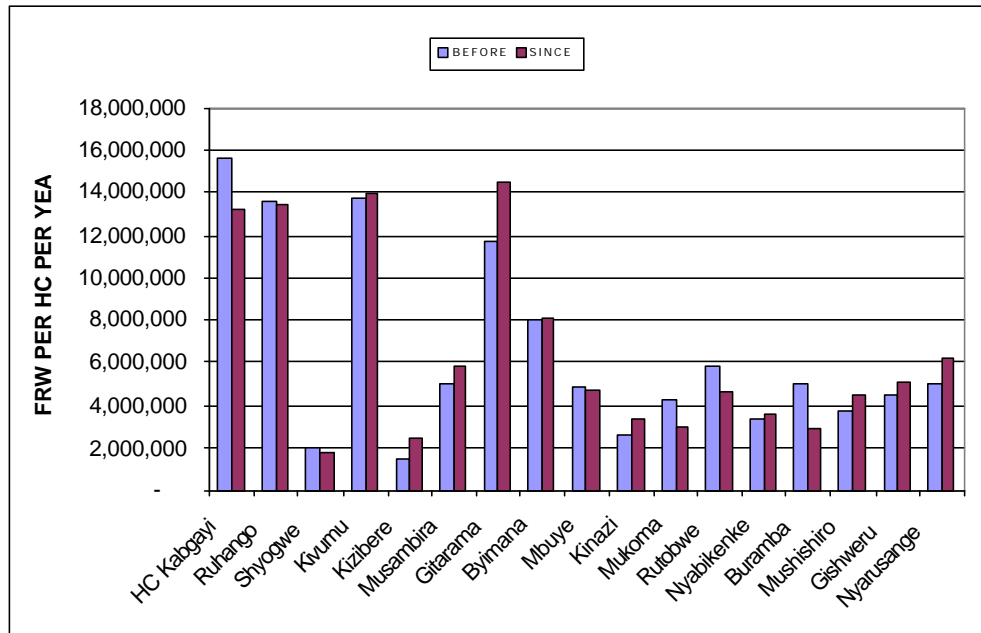
Figure 42. Number of Vaccinations in the Health Centers: Base/Pilot Year of the PPS



3.2.2 Cost of Health Services

Several centers in Kabgayi are operating at a total cost level that is considerably higher than the centers in Byumba, where the average cost is 4 million FRw. These expensive centers are the following: Kabgayi, Ruhango, Kivumu, Gitarama, Byimana, Rutobwe, and Nyarusange (see Figure 43). If these centers do not receive sufficient support from donors and the government, they will be forced to raise the prices of their services in order to finance their costs if service utilization declines.

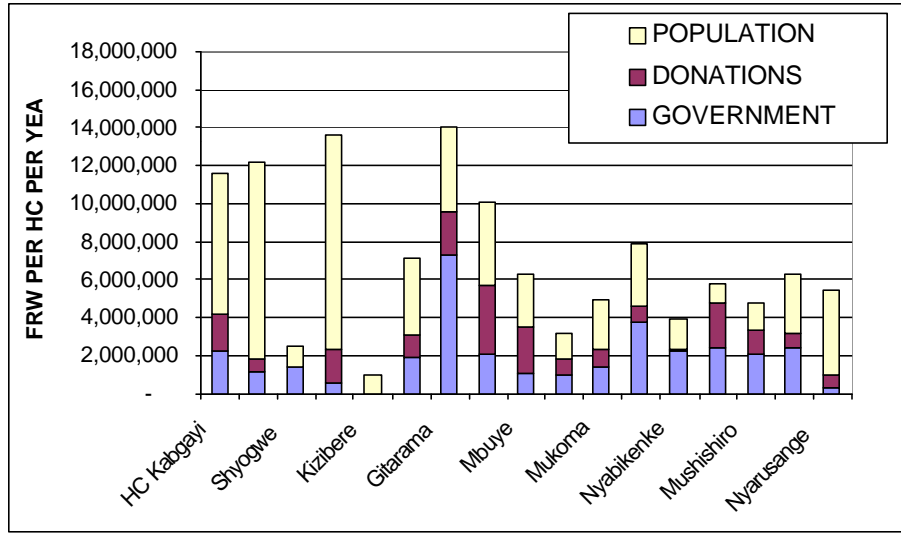
Figure 43. Kabgayi: Total Costs of Health Services in the Health Centers: Base/Pilot Year of the PPS



3.2.3 Funding Sources

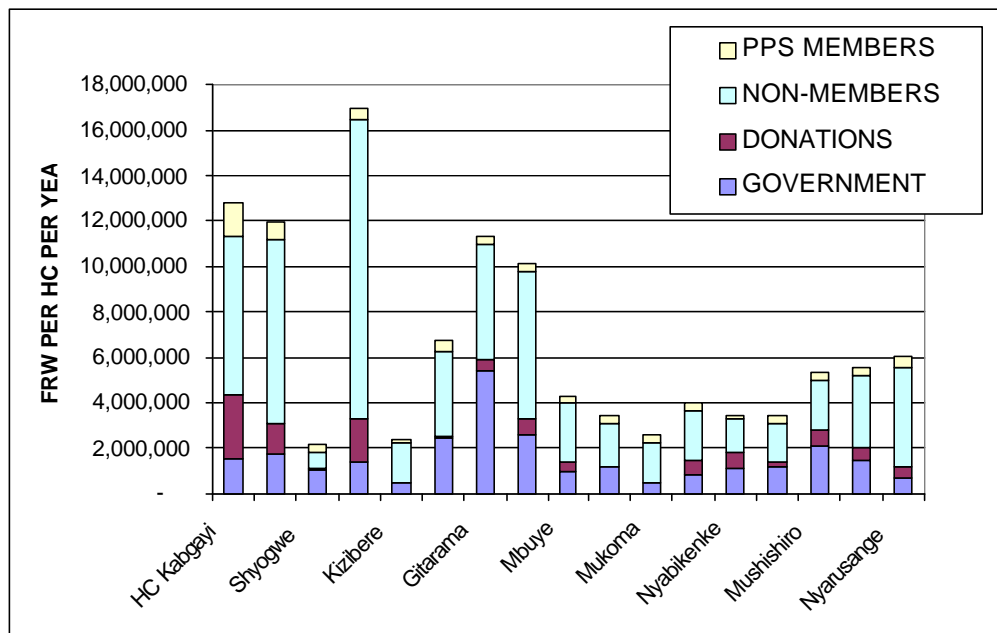
As shown in Figure 44, during the base year, income from the population was the largest source of financing in most centers, especially in Kabgayi, Kivumu, and Ruhango – centers that treat a large number of patients. The exception was the Gitarama Health Center, which receives the most financial support from the government in all five districts (Byumba, Kabgayi, Kabutare, Bugesera, and Kibungo), despite its rather low activity level. This example shows that government subsidies do not necessarily reach the most efficient center.

Figure 44. Kabgayi: Funding Sources in the Health Centers in the Year Before the PPS



In the year the PPS was implemented, the center received less in donations, as shown in Figure 45. Several centers were able to maintain the same level of total resources by increasing their funding from the population. In the centers with a large PPS pool, such as Kabgayi, this offset occurred thanks to additional PPS sources, whereas the other centers (Gitarama and Byimana) were forced to raise the price of their services for nonmembers. This occurred because the nonmember population was treated less frequently at the centers. In the Kabgayi, Ruhango, and Kivumu centers, PPS payments are beginning to become major sources.

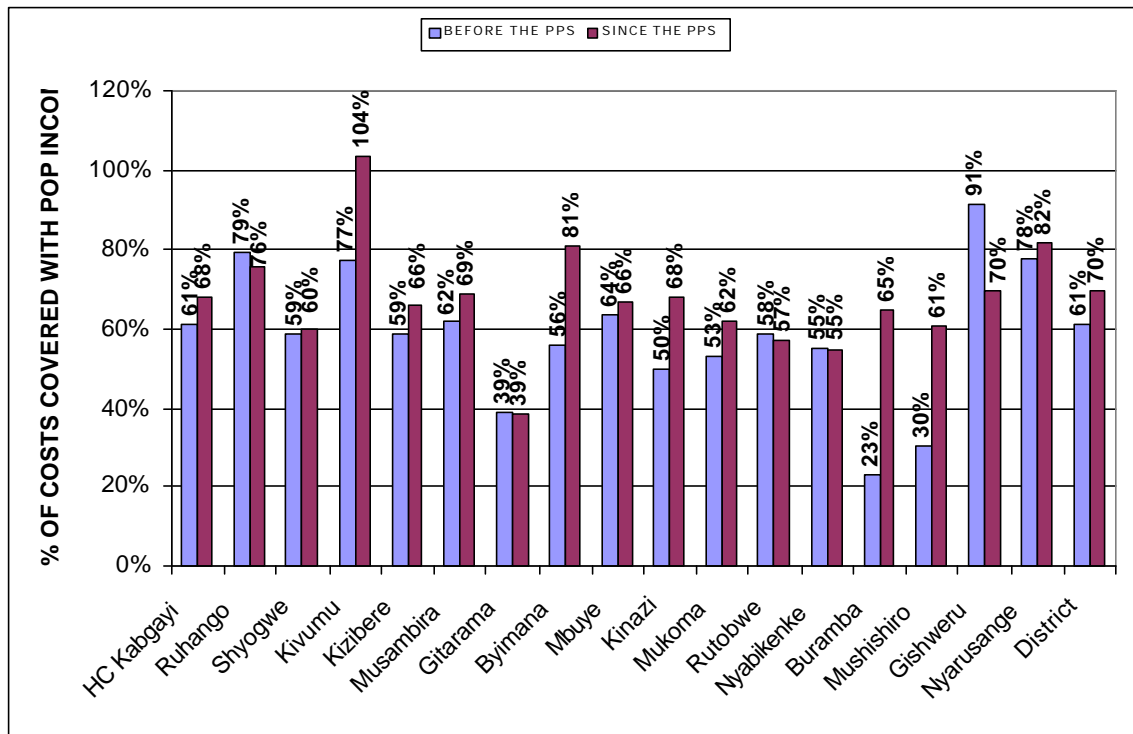
Figure 45. Kabgayi: Funding Sources in the Health Centers in the Year Since the PPS



3.2.4 Cost Recovery Rates

Compared to the year before prepayment schemes, health centers have increased their cost-recovery rates from a district average of 61 to 70 percent. Increases were impressive in the centers in Buramba, Byimana, and Mushishiro. The Kivumu center should lower its prices since the portion of sources that comes from the population is greater than the cost level. Because of its strong support from the government, the Gitarama Center continues to have a low cost recovery rate, compared with the other centers. This is an indication that the selection criteria of those health centers that receive subsidies need to be redefined.

Figure 46. Kabgayi: Recovery Rate of Costs in the Health Centers: Base/Pilot Year of the PPS



3.2.5 Summary

- > During the first year the PPS was implemented, almost 22,000 people joined prepayment systems in the Kabgayi district. This amounts to a membership rate of 6 percent for the district's population. Five PPSs have membership pools of over 1,500 people: Kabgayi, Kivumu, Ruhango, Musambira, and Buramba. As in Byumba district, the PPSs that reported the best performance had partnered with the church-owned centers, or centers with rather high utilization levels, during the year before the PPSs. In Kabgayi district, the PPSs do not have prior experience with mutuelles, nor do they have large companies that enrolled their employees and their families, as in the Byumba district.
- > During the first year with the PPSs, 6 percent of the population joined, 16 percent of patients in the centers were members, and at least 8 percent of the women who delivered in

the centers were PPS members. The curative consultation level (0.31) remained steady in the district due to higher use of services by the PPS members (1.51 consultations per capita) than nonmembers (0.27 consultations). The centers in Kabgayi showed a high increase in the number of deliveries (43 percent), PNCs (24 percent), and vaccinations (46 percent). Moreover, in Kabgayi district, 115 female PPS members were transported to the district hospital and had Caesarian deliveries, a service covered by the PPSs. It can be concluded that the PPSs in both Kabgayi and Byumba facilitated access to health care for pregnant women, women who were delivering, children under five years of age, and patients who required curative care.

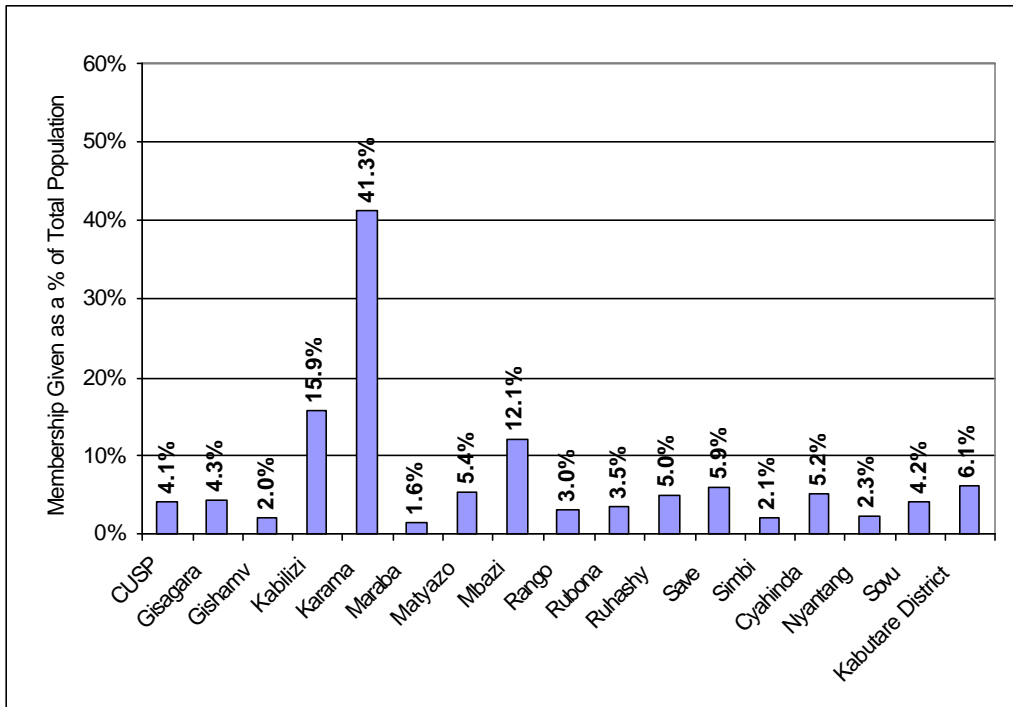
- > The church-owned centers with a heavier workload had higher total costs. The operating costs in the centers were primarily funded with income from the population. During the year with the PPSs, service utilization by nonmembers consequently decreased. In order to retain the same income level, the centers tended to raise their prices for patient services. The centers that partnered with larger PPSs were able to offset the drop in income from paying patients and donor donations by acquiring additional PPS resources.
- > The cost recovery rate in the centers in Kabgayi increased for the entire district from 61 percent to 70 percent. Since the centers in the district have much higher costs than comparable centers in Byumba (Bungwe, for example), this rate increase indicates that, to arrive at this level, some centers in Kabgayi district raise their cost recovery rates by charging higher prices for services. A price increase will make access to care more difficult for nonmember patients who pay cash. This limit was not imposed on the PPS members, who continued to use the center at a higher rate than the nonmember population.

3.3 Results from Kabutare

3.3.1 PPS Membership

At the end of the first year, the PPSs in Kabutare had 17,563 members. The PPSs in Karama and Kabilizi were able to take advantage of support from the bishop of Butare and a religious congregation. They financed the enrollment of around 3,000 widows and orphans. The Save center is located in one of the few communities in Rwanda that has a female mayor. During the people's meetings, the mayor reiterated the importance of a population in good health and PPS membership. Since half of the PPSs have just 700 members, the PPSs in Kabutare are not yet as deeply entrenched as in the two other districts, except in a few centers such as Mbazi or Save. Figure 47 indicates the percentage of members by health center.

Figure 47. Kabutare PPS: Membership Rate by Health Center at the End of the First Year (June 2000)



The health centers in Kabutare district reported fewer consultations (0.37 consultations per capita) during the year since the PPSs was implemented than during the previous year (0.5 consultations per capita). The center in Karama with the largest PPS is the one center that was able to maintain its high consultation level, and the center in Cyahinda was at least able to maintain its consultation level, which was the lowest in the district (Figure 48). Except for Karama, the PPSs in Kabutare are not yet big enough to impact the consultation rate in the centers.

Figure 48. Kabutare: Consultation Rate in the Health Centers: Base/Pilot Year of the PPS

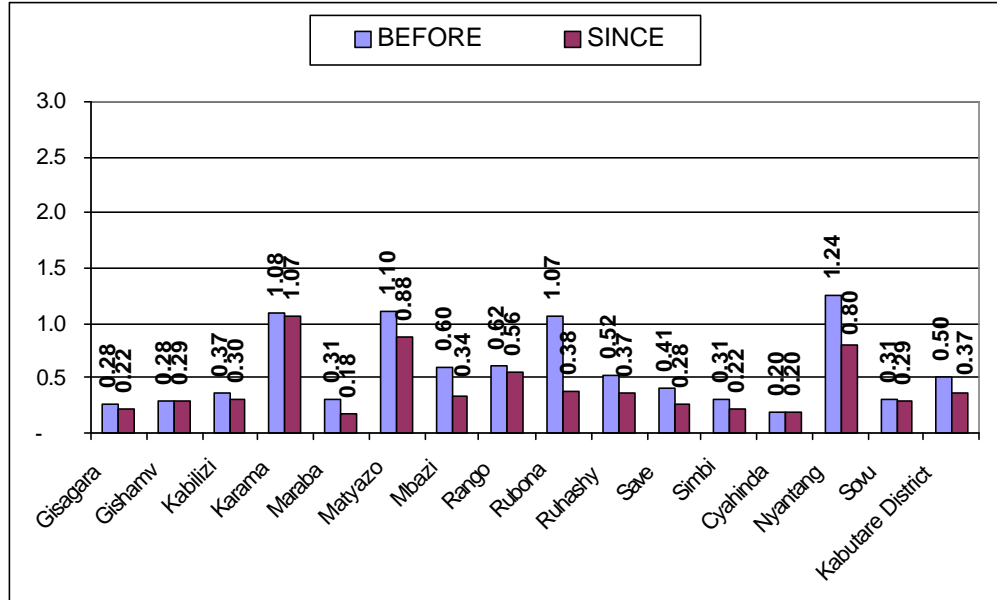
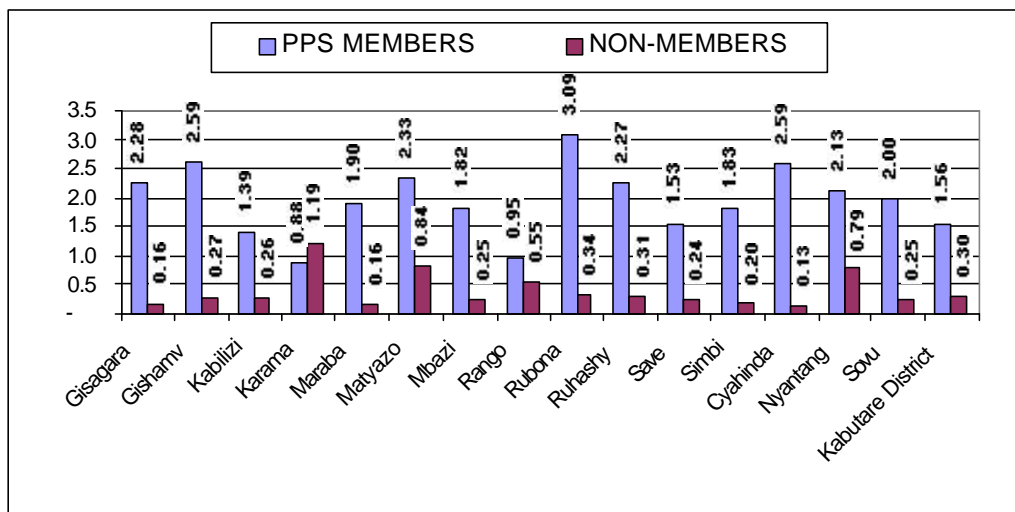


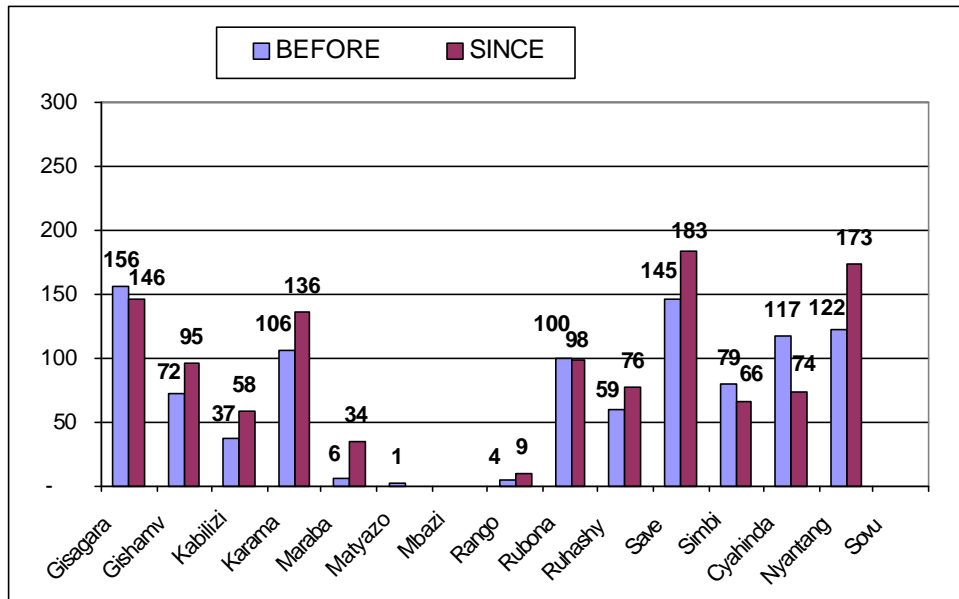
Figure 49 shows that the PPS members in Kabutare frequent the health centers more than non-members. The consultation rate for the members for the entire district was 1.56 per capita, a higher level than for nonmembers at 0.30 per capita. The fact that several centers have more than two consultations per member indicates that the PPSs with few members had adverse selection and that their pool is still too small to share the risk between those who are ill and the members who are in good health. Therefore, it is suggested that Kabutare district do everything in its power to support an increase in the number of PPS members in order to reinforce solidarity between those who are ill and those who are not.

Figure 49. Kabutare Health Centers: Consultation Rates for the PPS Members and Non-members During the First Year



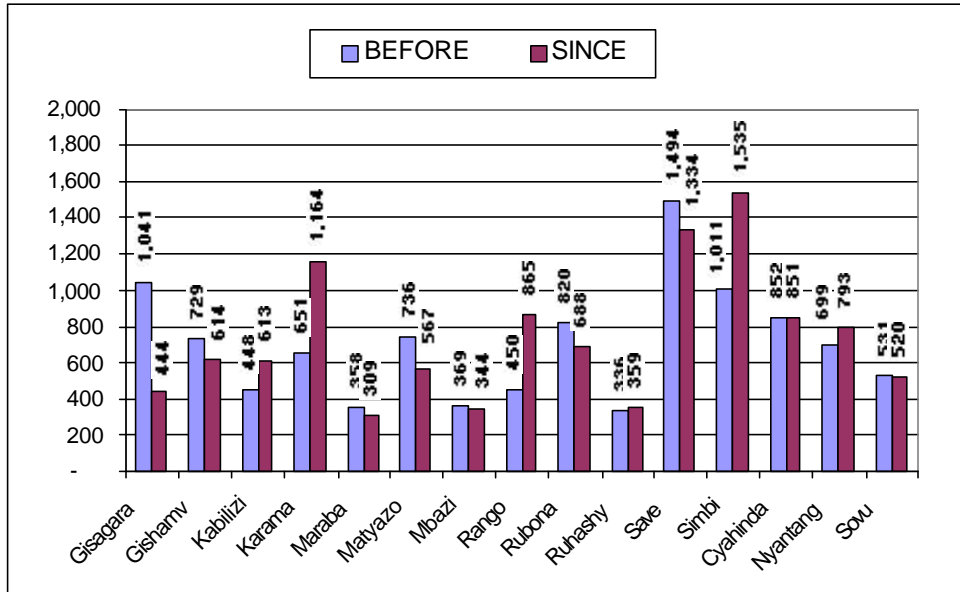
The total number of deliveries in the centers in Kabutare rose by 14 percent (Figure 50). This increase is smaller than in Kabgayi and Byumba. Likewise, the total number of deliveries in the centers is still at a lower level in Kabutare than in the other two districts. The PPSs' partner centers that have over 1,500 members were able to increase the number of their deliveries (Kabilizi, Karama, and Save), whereas the centers that are partnered with small PPSs, such as Nyantang and Simbi, went in a different direction. This observation underscores the finding regarding consultations: the PPSs are still too small to be able to impact service utilization in the health centers in Kabutare.

Figure 50. Kabutare: Number of deliveries in the Health Centers: Base/Pilot Year of the PPS



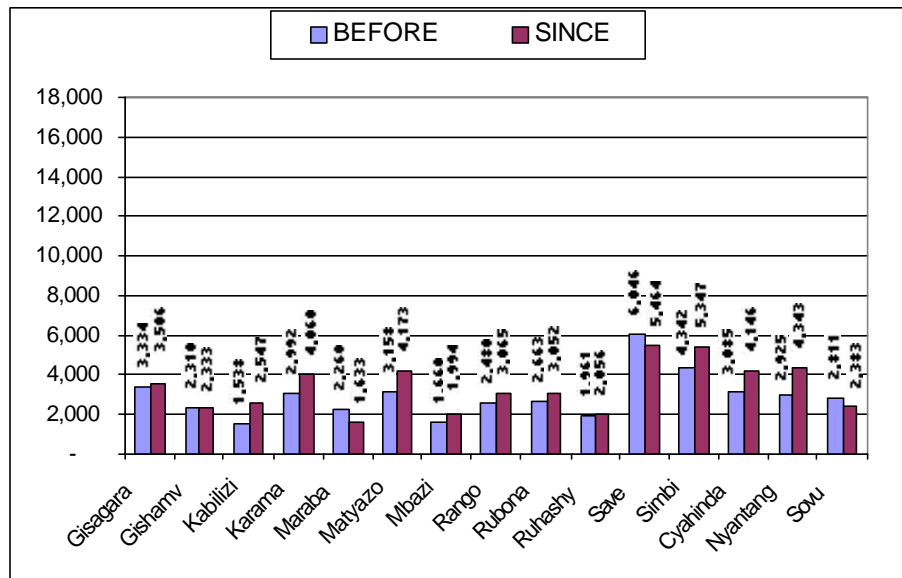
The number of PNCs in Kabutare, as shown in Figure 51, increased by 5 percent for the year. Centers such as Karama and Kabilizi that have partnered with the PPSs have shown an increase, while the number of PNCs has dropped slightly at the Save center. This could make it possible to conclude that the PPSs are not yet large enough to have an influence on service utilization.

Figure 51. Kabutare: Number of Prenatal Consultations in the Health Centers: Base/Pilot Year of the PPS



As shown in Figure 52, the number of children’s vaccinations in Kabutare district has increased in almost every center, with a 15 percent increase for the district. This increase is not as significant as in the other two districts, however. It does not depend on the size of the PPS that has partnered with the center. The largest PPSs that have partnered with centers have benefited from an increase or have been able to maintain a level higher than the others (see Save).

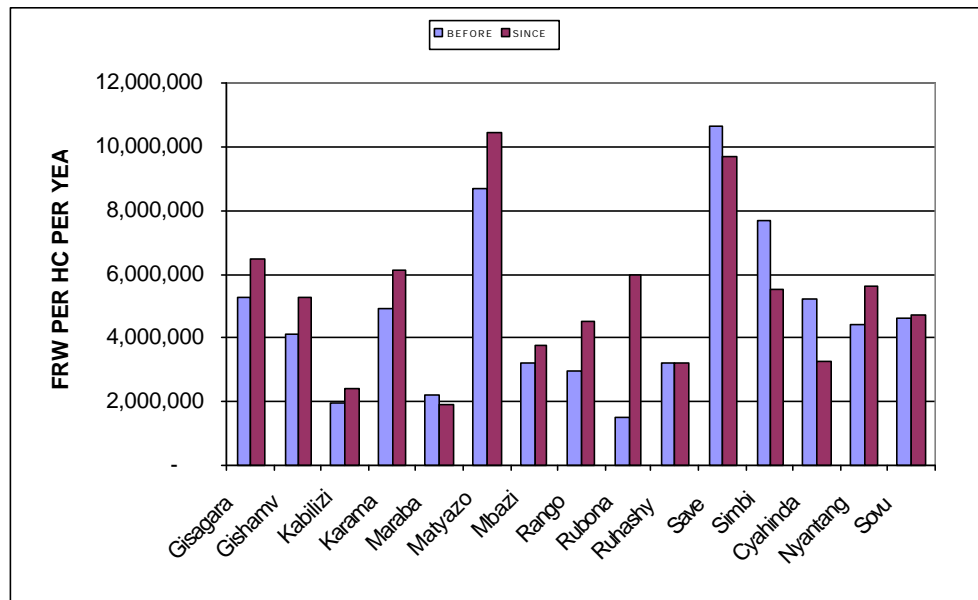
Figure 52. Kabutare: Number of Vaccinations in the Health Centers: Base/Pilot Year of the PPS



3.3.2 Cost of Health Services

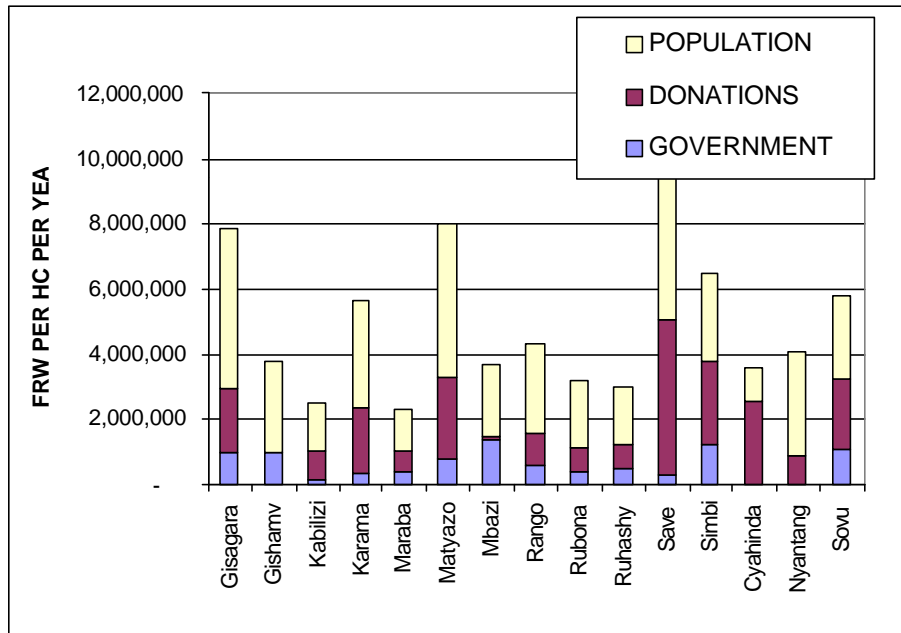
Although the health centers in Kabutare did not see as many patients during the year the PPS was implemented, nearly every center increased its total costs. This increase is due to the fact that since July 1999, the centers have had to purchase drugs at the district pharmacy's selling price. During the year before the PPSs, drug prices for the health centers were subsidized by MSF.

Figure 53. Kabutare: Total Costs of Health Services in the Health Centers: Base/Pilot Year of the PPS



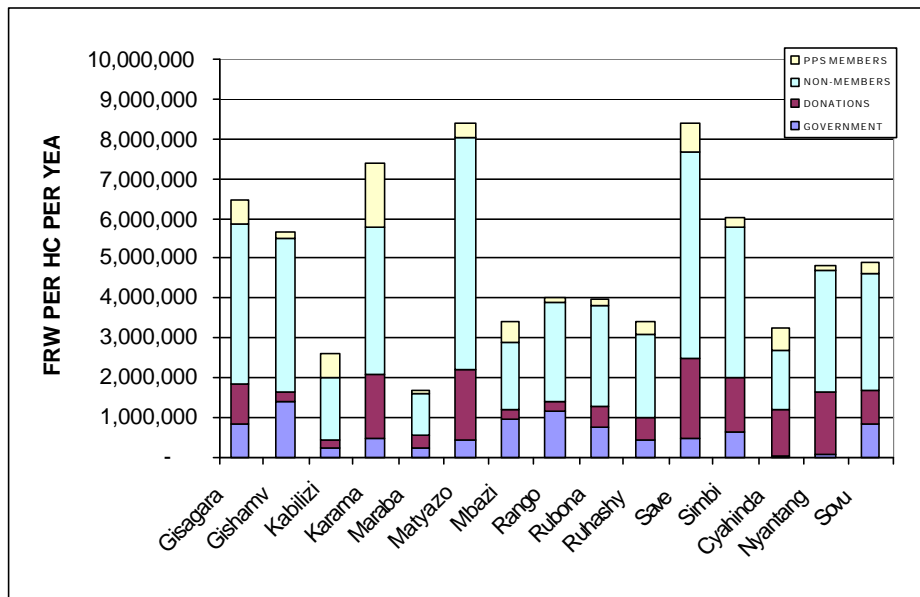
As in the other two districts, contributions from the population in Kabutare have reached a level of more than half of all sources in the health centers. In almost every center, contributions in the form of donations have played a more important role than government subsidies. Figure 54 indicates the sources of funding prior to the implementation of PPSs.

Figure 54. Kabutare: Sources of Funding in the health Centers the Year Before the PPS



The contributions in Karama, Kabilizi, Save, and Gisagara are currently greater than government subsidies. Total contributions from nonmembers have decreased, impacted by the lower number of patients. Some centers have been able to offset this decrease by increasing the price of services. This reaction of raising prices could be avoided if the centers obtained a larger contribution from the PPS, which could be achieved with more members. Figure 55 shows the various sources of funding.

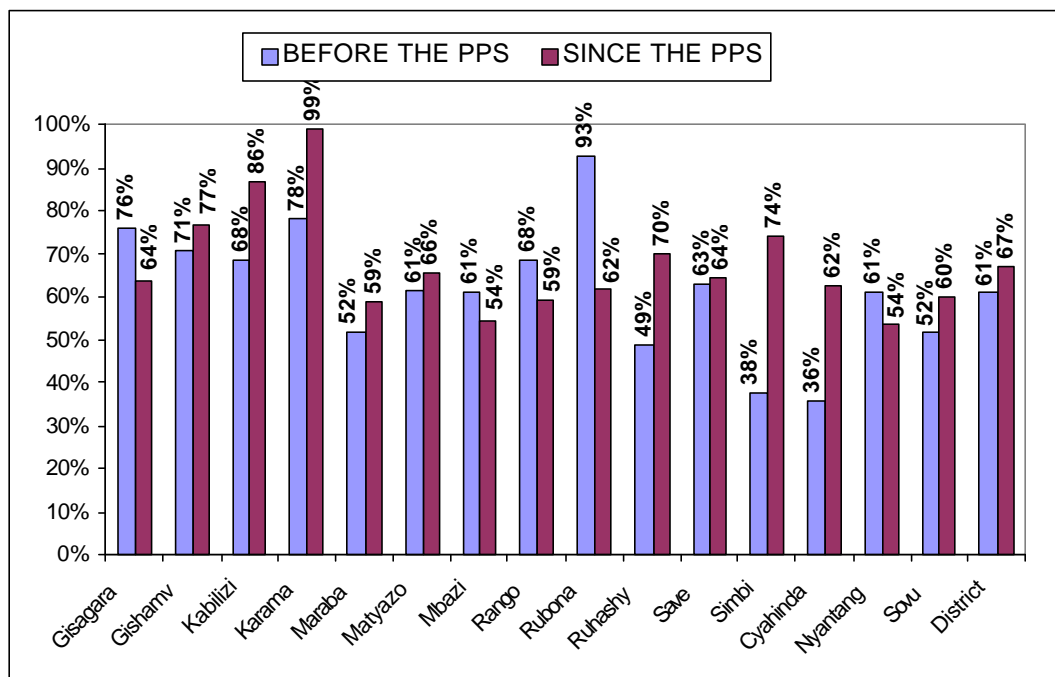
Figure 55. Kabutare: Sources of Funding in the Health Centers Since the Year of the PPS



3.3.3 Cost Recovery Rates

The centers in Kabutare have increased their cost recovery rate from 61 percent prior to PPS to 67 percent since PPS was implemented, as shown in Figure 56. The increase in the rate in Simbi is brought about by lowering total costs and, at the same time, by increasing sources from paying patients. Since the consultation rate in Simbi has fallen during the same period, additional income from paying patients is attributable to higher prices. The centers in Kabilizi, Karama, and Save, which have partnered with large PPSs, and which have a member consultation rate that has remained at a moderate level, have been able to increase their cost recovery rates. Consequently, the PPSs give the centers in Kabutare district the means to maintain a high utilization level and, at the same time, to increase resources from the population.

Figure 56. Kabutare: Cost Recovery Rates in the Health Centers: Base/Pilot Year of the PPS



3.3.4 Summary

- > Kabutare had fewer PPS members in its population than did Byumba and Kabgayi. In the first year, 17,563 people joined prepayment schemes in Kabutare district. This amounts to a membership rate of 6.1 percent of the district's population. Four PPSs have membership pools larger than 1,500 people: they are Karama, Save, Kabilizi, and Mbazi. In Kabutare district, the PPSs cannot take advantage of any prior experience with mutuelles, or the existence of a large company as a member. The two PPSs in Karama and Kabilizi have profited from a church subsidy that has financed dues for widows and orphans.

- > Therefore, during the first year of the PPS, 6 percent of the population of Kabutare joined, 15 percent of the patients in the centers were members, and at least 8 percent of the women who gave birth in the centers were PPS members. The curative consultation level fell in the district, despite higher service utilization by the PPS members (1.56 consultations per capita) than nonmembers (0.3 consultations). The centers in Kabutare reported more deliveries (14 percent), PNCs (5 percent), and vaccinations (15 percent). It can be concluded that the PPSs in Kabutare have facilitated access to health care for pregnant women, women who have delivered babies, children under five years of age, and patients who require curative care. This opportunity needs to become accessible to a larger portion of the population.
- > Operating costs in the centers were funded primarily by income from the population. During the year of the PPSs, service utilization by nonmembers decreased. Consequently, income from patients fell unless the centers raised the price of services. Those centers that have partnered with the largest PPSs were able to offset lower income and donations with additional sources from the PPSs.
- > The cost recovery rate in the centers in Kabutare increased for the entire district from 61 percent to 67 percent. The cost recovery rate was higher for members than for nonmembers. Therefore, the PPSs in Kabutare are in a position to improve access to care for patients and increase financial resources in the health centers at the same time.

4. Graphic Summary of Patient Survey Data (July–August 2000)

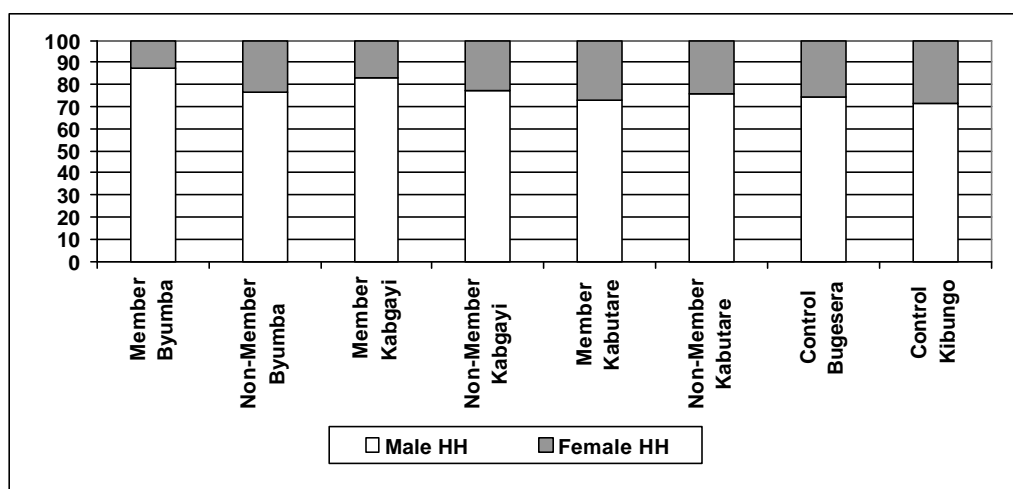
This study provided information regarding household (HH) characteristics; individual characteristics; the utilization of health care sources, excluding health centers; sources of partial exclusion at the health center level; and patient illness-related spending.

4.1 Household and Individual Characteristics

The breakdown of member and nonmember patients according to the sex of the head of household suggests that members of prepayment schemes come as much from male-headed households as from female-headed households (Figure 57).

In Kabutare district, for example, more than one-fourth of the member patients are from female-headed households.

Figure 57. Breakdown (%) of Health Center Patients According to the Gender of the Head of their Household, the District and Status of Participation in the Prepayment Scheme

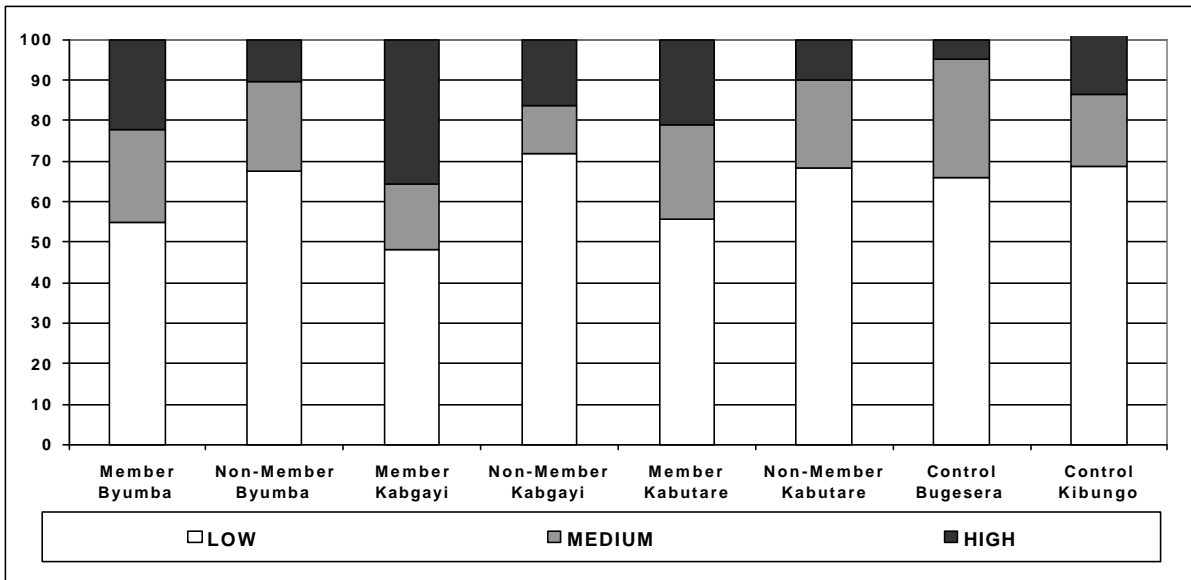


Source: Patient Survey, July 2000

The breakdown of patients according to the socioeconomic status² of the households to which they belong (Figure 58) suggests that the members of the PPSs come as much from relatively poor households as they do from households with a relatively high socioeconomic status.

In Kabgayi district, however, PPS member patients have a relatively higher socioeconomic status than nonmembers.

Figure 58. Breakdown (%) of Health Center Patients According to the Socio-economic Status of the Household to which They Belong, District and Status of Prepayment Scheme Membership



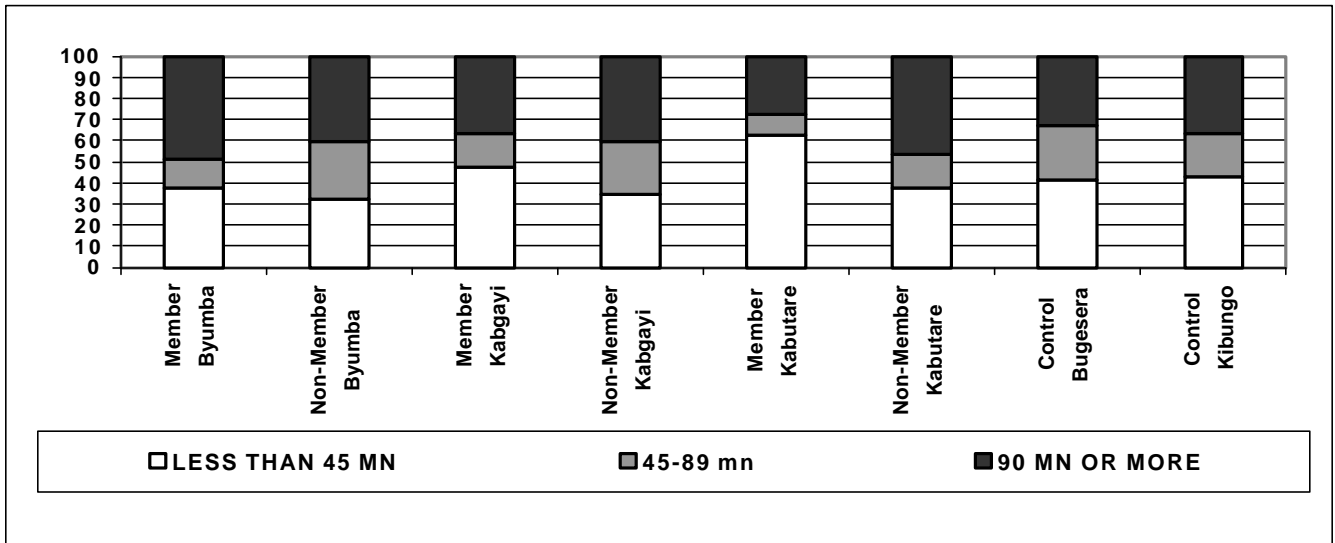
Source: Patient Survey, July 2000

As demonstrated in Figure 59, 40 to 50 percent of patients who are members of PPSs live at least 90 minutes away from the Byumba and Kabgayi health centers.

However, in Kabutare district, more PPS members come from the vicinity of the health centers (less than 45 minutes) than do nonmember patients.

² Households that do not own goats or cows were classified as “households with a low socioeconomic status;” households with goats and at least one cow were classified as having “medium socioeconomic status;” while households with at least two cows were classified as having “relatively high economic status.”

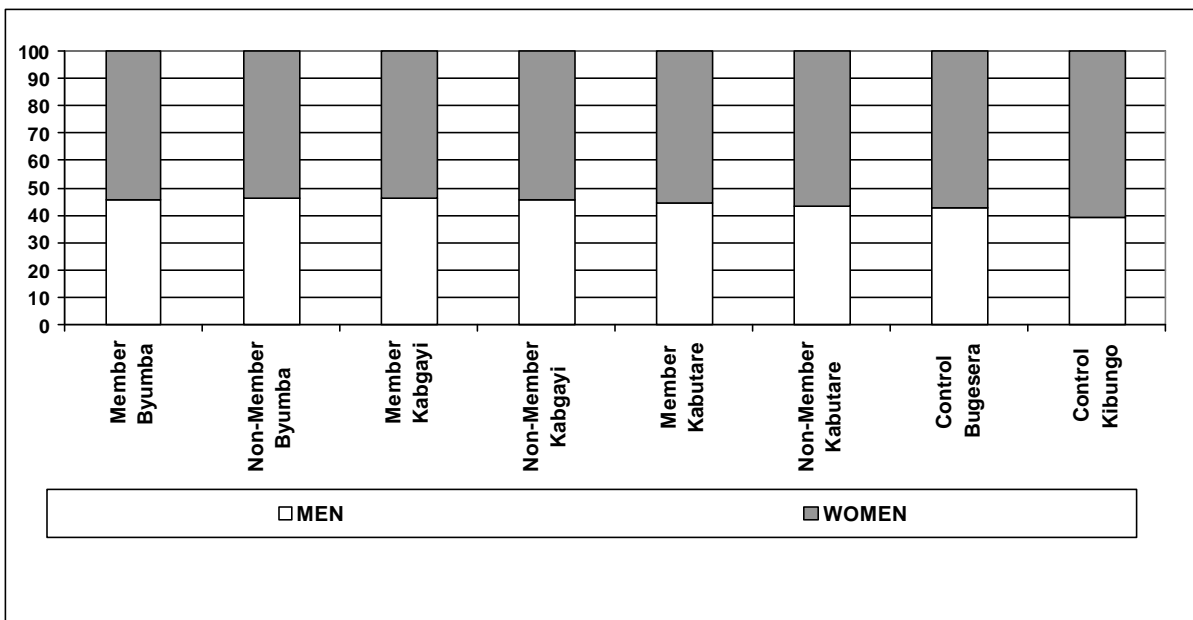
Figure 59. Breakdown (%) of Health Center Patients According to Time (Minutes) to Travel from their Residence to the Health Facility, the District and Prepayment Scheme Membership Status



Source: Patient Survey, July 2000

Patient breakdown according to sex (Figure 60), among PPS members and nonmembers, suggests that equal numbers of men and women are members.

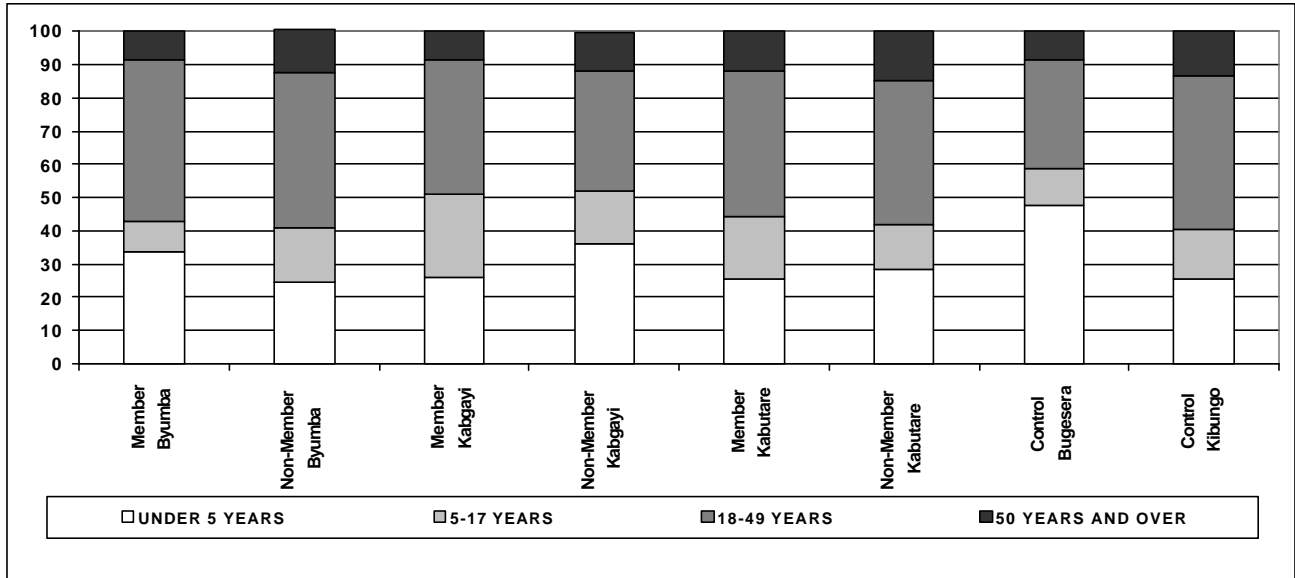
Figure 60. Breakdown (%) of Health Center Patients According to Patient's Sex, District and Prepayment Scheme Membership Status



Source: Patient Survey, July 2000

The patient breakdown according to age, as shown in Figure 61, suggests that individuals of all ages are members of the PPS. This result must have been facilitated by promoting membership in the PPS based on the family.

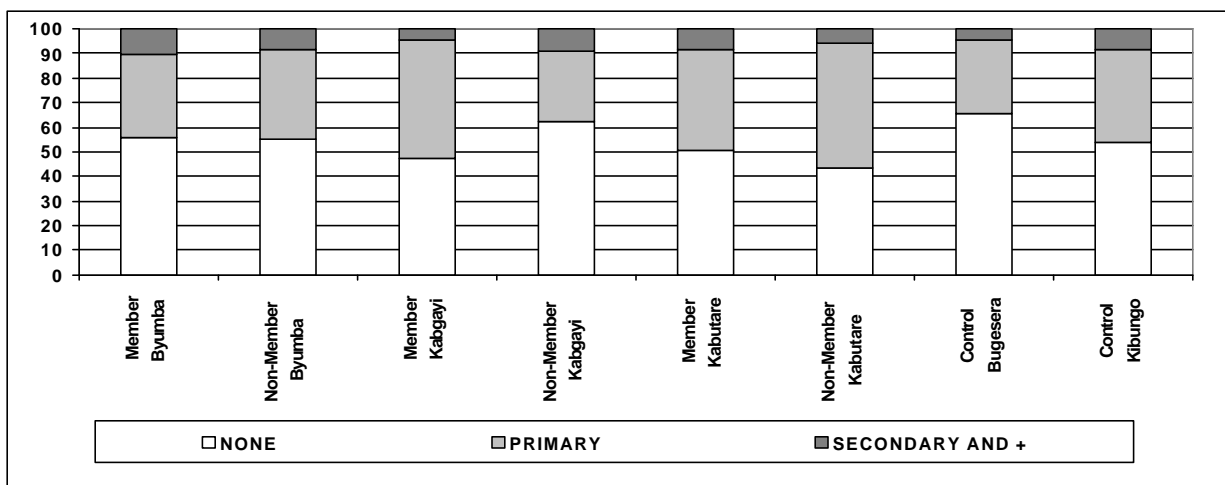
Figure 61. Breakdown (%) of Health Center Patients According to Patient Age, District and Prepayment Scheme Membership Status



Source: Patient Survey, July 2000

As shown in Figure 62, patient breakdown according to education level is comparable between the pilot districts and Kibungo, the control district; education levels seem lower in Bugesera district. Education levels between member and nonmember patients of PPSs are comparable, except in Kabgayi, where members seem to be more educated than non-members.

Figure 62. Breakdown (%) of health center Patients According to Patient Education Level, District and Prepayment Scheme Membership Status



Source: Patient Survey, July 2000

Summary

The implications of introducing PPSs for health care system performance depend on the structure of populations who are PPS members. The household survey will provide more in-depth information about the characteristics of PPS member and nonmember households in the three pilot districts; however, the patient survey gives information about characteristics of households that are either PPS members or nonmembers. The information provided in Figures 57 to 62 can be used to draw the following partial conclusions:

Household characteristics

- > Membership in PPSs has affected households headed by men just as much as it has affected households headed by women. For example, in Kabutare district, the data from the patient survey suggest that women-led households are more numerous among PPS member households than the general population.
- > Members of PPSs come from relatively less poorer households and households with relatively high socioeconomic status. Except for Kabgayi district, where PPS members come from households with a relatively higher socioeconomic status than nonmembers in the district, PPSs in pilot districts essentially cover rural households with relatively poor socioeconomic status. More than 50 percent of PPS member patients are from households that have no cows or goats.
- > Households that reside in the vicinity of the health centers and those that reside at locations far from the health centers have joined the PPSs. Of the total number of PPS members, 40 to 50 percent live at least 90 minutes from the Byumba and Kabgayi health centers. However, in Kabutare district, more patients who are PPS members are from the vicinity of the health centers (less than 45-minute distance) than nonmembers.

Characteristics of individuals

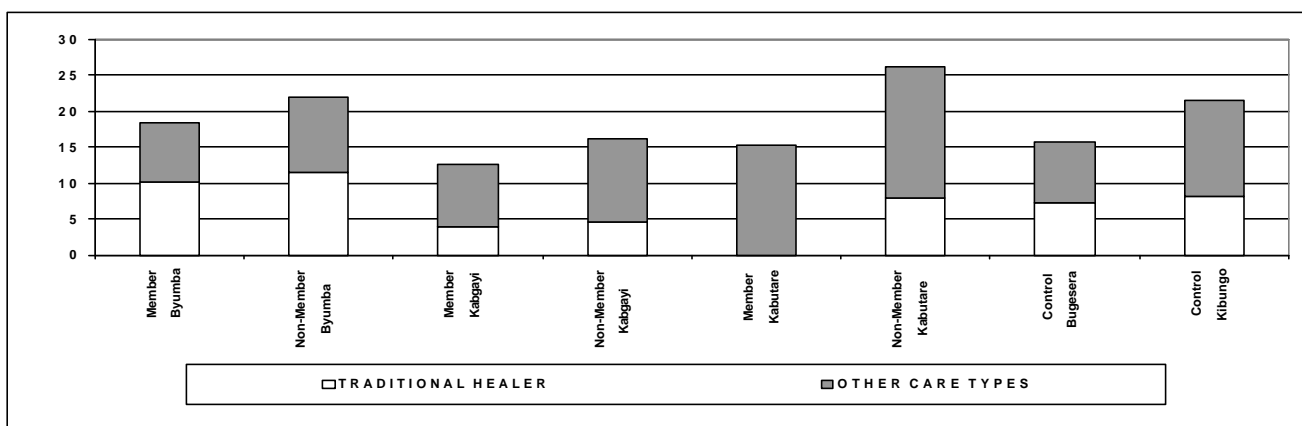
- > Equal numbers of men and women join the prepayment scheme. On a different note, the breakdown of patients according to age suggests that individuals of all ages are covered by the PPS. These characteristics make it possible to have better risk sharing among the most vulnerable populations – children, women and the elderly – and the other less vulnerable categories of the population. This result has been obtained by promoting family-based membership in the PPS.
- > Patient breakdown according to education level is comparable between the pilot districts and the Kibungo control district. Education levels seem lower in Bugesera district. Between patients who are members and nonmembers of PPSs, education levels are comparable, except in Kabgayi, where PPS members seem to have a relatively higher level of education than nonmembers.

4.2 Utilization of Health Care Services from Alternative Sources

The use of other sources of care before visiting a health center during an illness, including traditional healers and relatives, is a frequent practice in all the control districts (see Figure 63). However, it is remarkable that the use of other sources of health care prior to using PPSs is relatively less frequent compared with nonmembers' use of other sources. These results suggest that the PPS could lower the use of other care sources whose quality is difficult to judge.

The use of other health care before visiting a health care center includes taking medication such as plants for self-care. The use of plants seems to be a more frequent practice in Bugesera and Byumba districts. However, the use of plants among PPS members compared with that of nonmembers in Byumba district should be noted. There is even less use of this in Kabutare district among members of PPS.

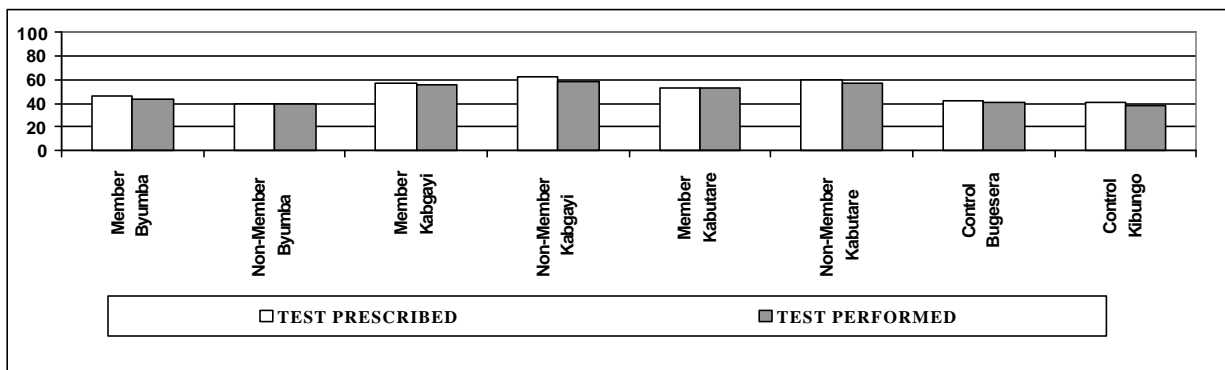
Figure 63. Percentage of Patients Using Other Care Before the First Visit to the Health Center According to Type of Care, District and Membership Status in the PPS



Source: Patient Survey, July 2000

Payment for lab exams is seldom a source of partial exclusion³ from care due to the relatively low prices and rates. In fact, the majority of patients for whom a lab test was prescribed underwent these tests, as shown in Figure 64. This is true for the five pilot and control districts.

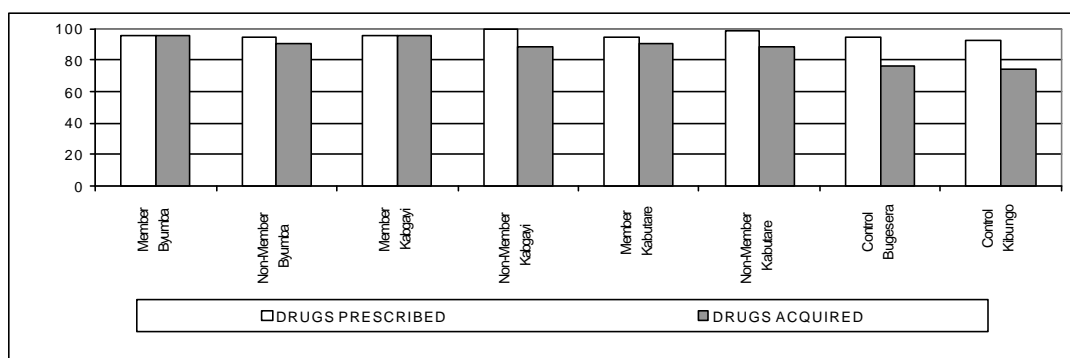
Figure 64. Percentage of Patients for whom a Lab test was prescribed and who Underwent the test, according to District and PPS Membership Status



Source: Patient Survey, July 2000

In the control districts of Bugesera and Kibungo, almost 20 percent of the patients who received prescriptions for drugs were unable to acquire the prescribed drugs, as indicated in Figure 65. This is also true in 10 percent of the cases among PPS patients in Kabgayi and Kabutare. Hence, direct payment for acquiring medication continues to be an obstacle to the financial accessibility of quality health care.

Figure 65. Percentage of Patients for whom Drugs have been Prescribed and Percentage that Acquired the Drugs According to District and PPS Membership Status

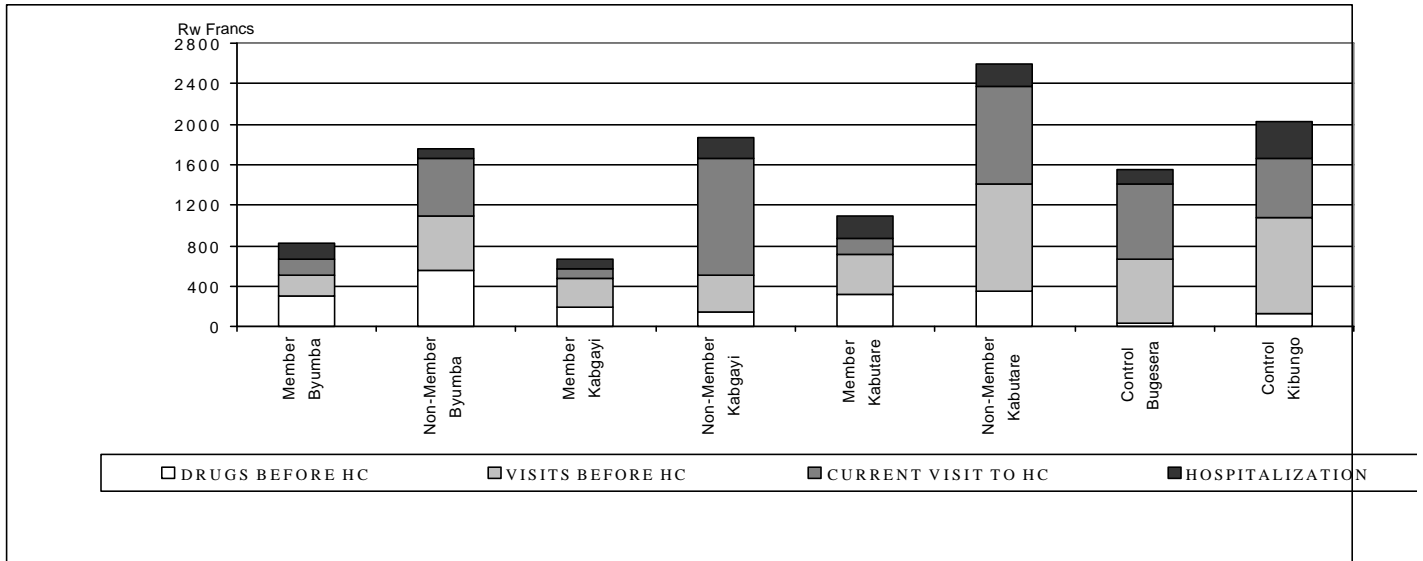


Source: Patient Survey, July 2000

³ *Partial exclusion* is an indicator of the financial accessibility of care. *Seasonal exclusion* related to seasonal income fluctuation of households. *Temporary exclusion* is due to delayed use of care when needed because the ailing individual who needs a given service or product has been identified by a prescriber to acquire the prescribed service or product to treat the illness.

Patients who were not PPS members spent an average of 1,500 FRw to 2,000 FRw in the control and pilot districts. Average spending by patients who were not members amounted to 2,600 Frw in Kabutare (Figure 66). In all three pilot districts, patients who were PPS members spent from 1,000 FRw to 1,500 FRw less to treat their illnesses than nonmember patients in their respective districts. Thus, the PPS dramatically lowers spending to treat illnesses, but does not eliminate it.

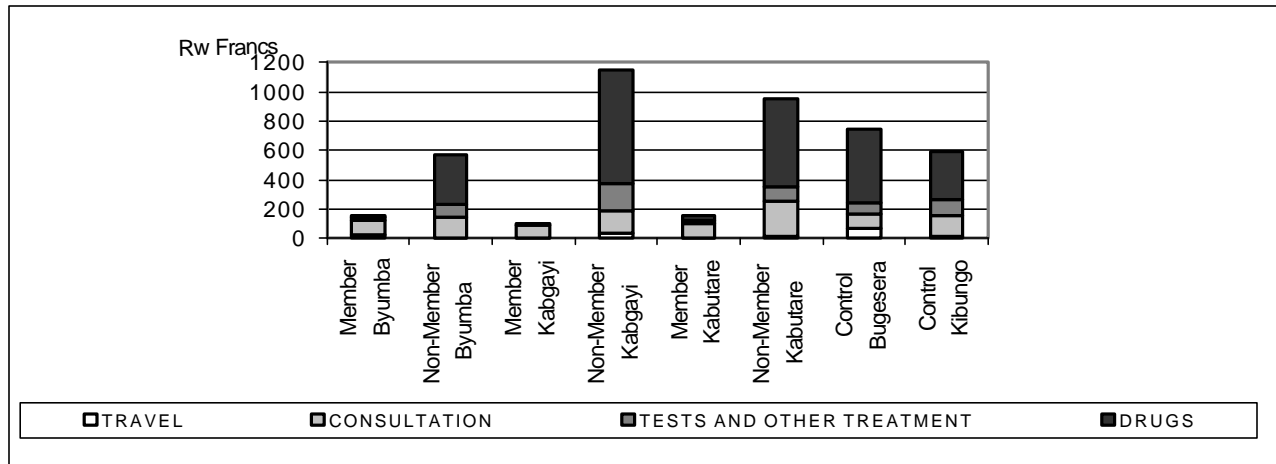
Figure 66. Average Spending (FRw) by Patients According to Source of Spending During an Illness, District and Membership Status in the PPS



Source: Patient Survey, July 2000

Through the pilot and control districts, the structure of patient spending during the current visit suggests that spending to acquire drugs is the largest expense for patients. This is no longer the case for PPS members. Based on patient spending during the current visit, patients who were not members of PPSs spent nearly four times more than PPS members in Byumba, six times more in Kabutare, and nearly 12 times more in Kabgayi. The structure of total spending during an illness according to type of expense also suggests that drugs continue to be the main component of spending to treat an illness (Figure 67).

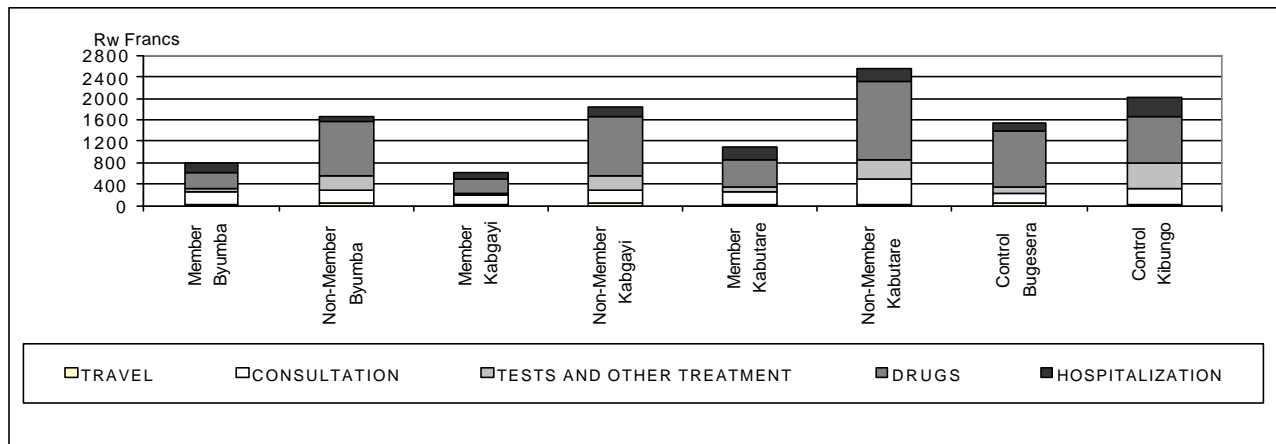
Figure 67. Average Spending (FRw) of Patients During Current Visit According to Type of Spending, District and PPS Membership Status



Source: Patient Survey, July 2000

Even patients who are PPS members continue to pay for drugs. Such drugs may not be on the list of essential drugs at their preferred health center, or the drugs may have been acquired outside the health units. However, their spending on drugs is still considerably lower than spending by patients who are not PPS members (Figure 68).

Figure 68. Average Spending (FRw) by Patients During Current Illness According to Spending Type, District and PPS Membership Status



Source: Patient Survey, July 2000

4.3 Summary

The implications of introducing PPSs for health care system performance depends on changes in the behavior of the demand for care by PPS members. Already, routine data from the health care centers and PPSs are showing that the level of health center use by members is four to five times higher than the level of use by nonmembers. One needs to wait for the survey data to be available to confirm this result and analyze how these differences in levels of use vary according to the characteristics of households and individuals. A preliminary data analysis of the patient survey can be used to draw the following partial conclusions on the behavior of the demand for health care.

4.3.1 Use of Sources of Care Other than the Health Centers

The use of other sources of health care before visiting a health center during an illness, including traditional healers and relatives, is a frequent practice in all the control and pilot districts. However, it is remarkable that the use of other sources of health care by PPS members is relatively less frequent than for nonmembers in Kabutare district. These results suggest that the PPS could lower the use of other sources of health care whose quality is difficult to judge.

The use of other care before visiting a health center includes not only drugs, but plants as well. The frequency of plant use varies considerably from one health district to the next. The use of plants seems to be a more frequent practice in Bugesera and Byumba districts. In the pilot districts, however, the use of plants is less frequent among PPS members than among nonmembers. This variation was observed in Byumba district, but it is more frequent in Kabutare district, where the use of plants is nearly nonexistent among PPS members.

4.3.2 Sources of Partial Exclusion⁴ at the Health Center Level

Payment for lab tests is rarely a reason for exclusion from health care since prices and rates are relatively low. In fact, when a lab test is prescribed, most patients have undergone these tests. This is true in the five pilot and control districts.

In the control districts of Bugesera and Kibungo, nearly 20 percent of patients for whom drugs have been prescribed were unable to acquire the prescribed medication. This is also true in 10 percent of the cases among patients who are not members of PPSs in Kabgayi and Kabutare. Thus, direct payment for acquiring drugs continues to be a source of partial exclusion from health care. Consequently, this is an obstacle to the financial accessibility of quality health care. For patients covered by prepayment schemes, this obstacle has been eliminated.

⁴ *Partial exclusion* is an indicator of the financial accessibility of care. *Seasonal exclusion* is the seasonal fluctuation of household monetary income. *Temporary exclusion* is related to the delay to go for treatment when needed because of financial constraints. Partial exclusion is an ailing individual's inability to acquire the prescribed product or service to treat the illness when that individual needs a given service or product that has been identified by a prescriber.

4.3.3 Illness-related Spending by Patients

Patients who are not members of PPSs spent an average of 1,500 FRw to 2,000 FRw in the pilot and control districts. In Kabutare district, average nonmember patient spending reached a level as high as 2,600 FRw per patient.

In all the pilot districts, patients who were PPS members spent between 1,000 FRw and 1,500 FRw less to treat the illness than patients who were not members in their respective districts. As a result, the PPS dramatically lowers payments to treat an illness but does not eliminate them.

Through the pilot and control districts, the spending structure for patients during the current visit suggests that spending for acquiring drugs is the largest expense for patients. This is not the case for patients who are PPS members. Based on spending by patients during the current visit, nonmember patients spent almost four times more in Byumba than PPS members, six times more in Kabutare, and nearly 12 times more in Kabgayi.

The structure of total spending during an illness according to spending type also suggests that medication continues to be the main component of spending to treat an illness. Even patients who are members of prepayment schemes continue to pay for drugs. These are either drugs that are not on the list of essential drugs at their preferred health center, or drugs that they acquire outside the health organizations. However, their spending on drugs is much lower than that of patients who are nonmembers.

5. Analytical Summary of the Beneficiary Survey (September 2000)

5.1 Introduction

This study was conducted in order to achieve the following three goals: first, to compile information on the perspectives of the beneficiaries about the procedures for implementing prepayment schemes (PPSs); second, to collect information on the advantages and disadvantages of PPS organization; and third, to identify the factors that have promoted or hindered the implementation of PPSs in the pilot districts.

Data were collected in the three health districts that comprised the project pilot area: Byumba, Kabgayi, and Kabutare. The sample was comprised of PPS members, nonmembers of the PPS, members of PPS management committees, and service providers in areas that were sampled. Participants were divided into these four separate categories. There were 10 participants in each group, except for the latter two categories, especially the service-provider category, where it was difficult or impossible to attain that many people. These participants were chosen from two health centers per district. In accordance with the instructions from Partnerships for Health Reform (which commissioned the study) for drawing the sample, and according to the evaluation plan for its program, participants were to be selected in the health facility that had the most PPS members and the one with the fewest members as of May 2000 (or after the eighth month of PPS operation). In sum, 24 focus groups were created in the following health facilities shown in Table 1.

Table 1. Health Facilities that Comprised the Sample

Health district	Health facility	PPS membership level among the population
Byumba	1. Bungwe	highest
	2. Muyanza	lowest
Kabgayi	Kabgayi	highest
	Nyabikenke	lowest
Kabutare	1. Karama	highest
	2. Maraba	lowest

5.2 Research Themes

5.2.1 Theme I: Prepayment Scheme Procedures

The purpose of this theme was to highlight the perspectives of PPS beneficiaries regarding the package of benefits they currently have; provide upgrades to this benefits package so that they better meet the beneficiaries' needs; determine the desire and ability to pay for an expanded package of benefits; obtain ideas on membership categories as identified and upgrades to be made; and determine annual dues (by membership category and frequency), as well as the management of the use of care (probation period, contact center, copayment, and referrals).

5.2.2 Theme II: Organization of Prepayment Schemes

Through this theme, the authors addressed PPS organization at the coverage area level, establishing management frameworks near members (sector, cell); co-management of PPSs or otherwise with health care personnel; role of local authorities (mayors, councilors, cell officials) in PPS management; membership in the PPS executive committee; frequency of meetings; procedures for reimbursing service providers (capitation payment); contribution of PPSs to the population's involvement in health; and upgrades to be made in organization and PPS management.

5.2.3 Theme III: Sensitization and Involvement in Prepayment Schemes

In this case, the purpose of the theme was to determine which factors helped establish the PPSs; the level of sensitization of the population to the PPS by the local administrative authorities, health care personnel, health directors, religious authorities, and others; channels that are used to sensitize a larger portion of the population; constraints for establishing the PPSs; the contribution of the PPSs to access to health care and in assuming responsibility for the indigent; and the reasons for joining or not joining the PPS.

5.3 Principal Results from the Interviews with NonMembers

Nearly all members have already commented on the financial benefits of belonging to the mutual. It is less costly than what is usually paid for care and offers health security to the family. Some even made the calculations and found that each person per family pays 44 FRw/month. In view of this observation, the participants had two attitudes regarding PPS membership. The apparent majority would like to have the money and join the mutual immediately, but they confront the issue of raising the 2,500 Frw all at once. That is why many have asked to pay in installments or to pay individually. Some even proposed methods that would allow the poor to have the money to join, make loans to people who formed an association, or give people who participate in public works the ability to pay the membership due for them as a reward. For extreme cases, they could even put up their land as collateral until they paid off their debt to the mutual (when installment payments were accepted).

The second attitude regarding membership involved hesitation to join for a number of reasons:

- > Rumors about the services provided to the beneficiaries discouraged the population from joining. These are primarily poor reception, distribution of ineffective and less expensive drugs, and the belief that beneficiaries were taken care of last, after those who paid their money directly.
- > Objections to membership categories and PPS organization were the fact that they could not treat the entire family, at least not all children still too young to marry (21 years), and that they could not be treated in all health centers.
- > Dissatisfaction regarding services provided in the health districts also served as a deterrent. This involved the fact that the beneficiaries (other than pregnant women) have to pay for health care in the district themselves (except for ambulances and hospital beds); the fact that the body of a patient who dies in the district is not returned by ambulance; and regular travel from the home to the district to bring food for ill people is difficult.

5.4 Principal Results Found During Interviews of Members (Beneficiaries)

Members had the following opinions regarding the PPS:

- > In general, members liked the idea of the PPS and were prepared to renew their membership as long as money could be raised. This was particularly true for those who had received assistance to join in the first place (Karama) or could take advantage of opportunities to pay in installments if they could not raise the entire amount required all at once.
- > Members criticized the services provided: quantity and quality (competency, talking impolitely to patients); the type of personnel in the least effective health centers; insufficient quantity and quality of drugs; and lack of their own means (ambulance) of transportation for patients who were transferred to certain health centers. Some members found that the health care employees neglected them in favor of those who paid immediately. In other words, they did not receive drugs quickly or they were not given drugs in sufficient amounts.
- > Members did not appreciate the limit of seven members per family when there were more than that number in a family or when the family was taking care of other people who were unable to pay the dues themselves. They suggested increasing dues as needed in order to avoid “dividing” the family.
- > They considered that dues for single people were very high and should be adjusted downward.
- > They wanted to be able to obtain treatment at all the health facilities in the district.
- > They disliked the fact that the authorities were not members of the mutual.
- > They supported co-management and the possibility of a rapprochement between PPS management and the people (cell, sector).
- > Some people wanted to have a special status for reception at the health care center (a row set aside just for them).

- > Members asked for help in finding income-generating projects in order to be able to pay the dues.
- > Members wanted to have a fund set up that would give them a loan so that they could pay their mutual and they would repay the loan.

5.5 Principal Results of Interviews with Management Committee Members

Although the cost of health care is lower, management committee members expressed the following reasons for not joining the mutual:

- > Illiteracy and ignorance
- > Political and administrative as well as religious authorities that are not involved in PPS sensitization, yet they are the opinion leaders
- > Poverty of the population, making it difficult for them to raise the needed money
- > Limitation on family members covered according to age and number of children
- > Poor quality of services in certain health centers
- > Insufficient sensitization in general, but more particularly in the area served by the Nyabikenke health center. The members of the Nyabikenke and Musenyi management committees even indicated that the authorities were destroying the PPSs.

The following quotation from people interviewed at the Kabgayi health center drives home the insufficient involvement of the authorities in sensitization: *“You cannot govern an area unless you live there. Authorities that do not belong to the mutuelle cannot be helpful to the mutuelle.”*

5.6 Principal Results of Interviews with the Service Providers

The service providers reported the following about the PPS:

- > Much of the population has not yet been informed about the PPSs.
- > PPS members, however, criticize the system because dues are high and most of the people are poor and unable to pay the money. However, the population expressed the desire to pay the dues in installments.
- > Vulnerable people wanted to have lower dues so that they could join.
- > In general, people complained about the month-long probation period after paying their dues, except for certain people who acknowledged that it takes time to start up an organization. However, even those who did not complain felt that the probation period should be shortened to a few weeks.
- > Members and nonmembers alike are against the limit of seven people per family. They insist on having all family members receive care with one and the same card.

- > Children who are heads of households would like for their households to be considered as regular families and for all their household members to be covered by the PPSs.
- > Youth over 18 years of age wanted to be considered individually because the idea of forming groups did not appeal to them.
- > The population has nothing against the 100 FRw copayment, but instead complained about the quality of reception they were given by the health personnel.
- > Most health facilities do not have sufficient qualified personnel or equipment.
- > Members feel uncomfortable having to obtain care solely in the contact center. Even those who have not yet joined find that unacceptable. They want to be treated and accepted at all health facilities as long as they are PPS members.
- > Beneficiaries are not clearly informed of illnesses treated within the PPS framework. Until now, only malaria and Caesarian births were covered. They would like to see all illnesses and diseases covered.
- > In general, the population is not sufficiently sensitized to the PPSs. Even members are not well informed of PPS procedures. All they know is that they have to pay 2,500 or 2,600 FRw and then they will be treated. They know nothing about membership, payment for services that the health centers provided, or how meetings are conducted.
- > The local and religious authorities, health care employees, health directors, and beneficiaries must be involved in PPS sensitization. The different methods of communication should be enlisted to sensitize the people to the PPSs.
- > The authorities and different leaders are not members of the PPS, yet its success is largely contingent on their joining (providing an example).
- > Beneficiaries like the idea of electing their representatives to manage the PPS and to co-manage it with health care personnel.
- > In most health centers that have an ambulance, the vehicle is used only to transfer women in labor so they can give birth in a hospital.
- > Patients who are transferred must pay for medical care in the health facilities where they are transferred. The population wonders why the PPS does not pay for these costs as well.
- > Strategies must be found to assist people to set up associations or to establish income-generating projects to earn income and pay for the mutual.

5.7 Recommendations

- > Quality of care plays a major role in attracting people to the PPS. Receiving patients, or observing order without neglecting to take care of the severe cases first, using proper language with patients – all of these must be addressed carefully. The availability of drugs in quantity and variety and the availability of a lab and ambulance were again pointed out as conditions that foster PPS membership. It is important to honor all promises made to mutual members.
- > The role of authorities, administrative in particular (mayor, sector council, cell official), has long been mentioned as essential for promoting the PPS. This role must be played both in order to sensitize the people and to set a good example that is reflected in having the authorities join the PPS. A method should be found to identify those authorities that are not PPS members and thus do not set the example for their people. In order to improve membership, opinion leaders in general should behave in an exemplary manner in an effort to succeed with sensitization. In addition to the authorities, everyone in society should become involved in sensitization, because the authors believe that a major portion of the population is wasting money, principally on alcoholic beverages. When they fall ill, they use medicinal plants or traditional healers, often at a much higher cost, but with much lower effectiveness than modern medicine.
- > The number and category issue of people listed on the membership card has arisen everywhere (grandchildren living with grandparents, orphans or other dependent children in families that joined the PPS, children of women who are not legally married, youth over 18 years of age still taking care of their parents). New calculations should be proposed and carried out with the people. They should be told how the amounts of 2,500 or 2,600 FRw were arrived at, that this amount covers only common illnesses that handicap the people, and that chronic illnesses cannot be included in this type of solidarity (the current PPS).
- > The probation period of one month after paying the dues is an annoyance for nearly everyone interviewed, except the members of the management committees, who understood the importance of this probation period. Thus, the reason for the delay needs to be properly explained, especially since those interviewed noted that the issue applies primarily to people who pay their dues for opportunistic reasons (knowing that someone in the family is about to get sick or a woman is scheduled to give birth).
- > It is important to study how to facilitate access to care in the various health facilities in the district. However, this should be done without complicating the work of the most sought-after health facilities.
- > It is urgent to train trainers at all levels for more appropriate PPS sensitization.
- > It is important to emphasize and discuss intergeneration solidarity in detail during sensitization by bringing in many young dues-paying members who would support their elders, even if they do not often get sick and therefore believe that they do not need to join the PPS.

6. Market Study of the Health Centers

A survey (conducted three times using the same questionnaire) was conducted with health center nurses in the pilot districts of Byumba, Kabgayi, and Kabutare to assess how centers view and adjust to changes in their “market.” Market changes include implementation and contracting with the prepayment scheme, and a change from fee for service to capitation provider payment. The health center head nurses first responded to a questionnaire at the beginning of the PPS pilot year in July 1999. The same questionnaire was completed in January 2000 and then again at the end of the pilot phase in June 2000.

6.1 Survey Results

How do the centers adjust to financial risk?

- > The understanding and reaction of the centers to financial risk are limited. For example, the centers understand that if they have fewer patients who pay cash, they have to raise prices in order to be able to keep the center at the same level of income.
- > The centers have not yet understood that they could improve their financial risk situation by improving their productivity if they followed the Health Ministry’s standardized treatment protocols. The centers can improve their productivity and cost-effectiveness by incorporating these protocols into their work processes.
- > A few centers in Kabutare have understood that they bear the financial risk with “capitation” payment. Consequently, they have recognized the importance of the standardized protocols, but they have not yet arrived at the point of evaluating how they will work better according to these protocols.

How do the centers understand their “market?”

- > Most of the centers understand that their “market” extends beyond their catchment area, but they do not know how to estimate market volume outside their catchment area or the level of competition from the other centers in the region “outside their catchment area.”
- > The centers have no competitive strategic behavior. They behave as “polite neighbors.”
- > Fewer centers purchase drugs from CAMERWA and more centers go to the district pharmacy to obtain drugs. The centers seldom purchase drugs from private pharmacies.
- > The centers have signed a contract with the PPS, which limits drugs covered for PPS members to drugs that are on the Ministry’s essential drugs list. However, only 40 percent of the centers questioned know that there is a Ministry’s essential drug list.

According to the head nurses, what are the reasons that patients choose a health center?

- > Before signing a contract with the PPSs, the centers felt that patients choose this center for the following reasons:
 - ↑ The quality of care at the center
 - ↑ The center's equipment
 - ↑ The employees' behavior.
- > Since the centers have partnered with PPSs, they believe that the following criteria are important if patients are to choose them:
 - ↑ Quality of care at the center
 - ↑ Waiting time for patients in the center (waiting time is shorter for members than for nonmembers)
 - ↑ Having a contract with a PPS.
- > With more PPS members, the centers consider the price level for patients as a less important criterion for selection. This is an effect of capitation payment by the PPS to the centers, where the price per service is no longer of any importance.

According to the head nurses, what are the competition criteria between the health centers?

- > After signing a contract with a PPS, the following criteria have become more important for the health center than before:
 - ↑ Quality of care
 - ↑ Integration of services
 - ↑ Employee reputations.
- > Having a contract with a PPS was important at first, but has become less important now that all the centers in the three districts have partnered with a PPS.

How do the health centers see their sources and mechanisms of financing?

- > At first, the centers did not recognize government and donor grants as a source of financing.
- > Over time, the centers have realized that government grants and donations from donors are resources for them. This effect may be attributed to the collection of financial data in the centers during the pilot phase and to the training that accompanied the data collection.
- > There is no financial auditing in public and church-owned health centers.

How do the centers change service packages to improve their financial situation?

- > The centers have not yet realized that they can improve their financial situation by contracting with a neighboring center for certain services. Until now, they have been absorbing financial risk by offering underutilized services, which generates low productivity levels in health centers.
- > The centers do not see how the use of standardized treatment protocols can improve their financial side.

- > Additional services are added to a center's package of services because employees have been trained, for example, in a laboratory.

6.2 Preliminary Findings

Participation in the pilot phase of PPSs has established management capabilities among health center nurses, who are at the same time vice chairmen of the affiliated PPS association. This participation has generated a better understanding of changes in the market. The centers recognized the PPSs as a tool for improving their use and self-financing levels. Thus, the centers are beginning to alter their behavior so that interested parties identify them as preferred centers and enroll in the PPS partner. Compared with standardized protocols, which place no direct monetary incentive on health centers, it can be concluded that the centers adjust their behavior sooner if there is a financial change in the market that imposes a financial risk on them, such as affiliating with a prepayment pool and capitation provider payment.

Annex A. Draft Legal Documents for the PPSs on the Mutualist Associations

Statutes of the Mutualist Federation of the Byumba Health District

Title 1. Name and purpose of the federation
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Article 1 – Name

A federation of mutualist associations of the Byumba health district has been established according to the Decree of April 15, 1958, and Article 3 in particular, known as the Mutualist Federation of the Byumba Health District. Hereinafter the organization is referred to as the “federation” in the context of these statutes.

Under these statutes, the mutualist associations in Byumba district are called “federated associations.”

Article 2 – Territory

The federation’s territory is the Byumba health district.

Article 3 – Headquarters

The federation’s headquarters is in the city of Byumba.

Article 4 - Period

The period for the existence of the federation is unlimited.

Article 5 – Purpose

The purpose of the federation is as follows:

- > To jointly organize the services of the member federated associations, mainly to provide the medical care offered by the district hospital
- > To establish an arbitration committee for disputes between the federated associations, between these associations and their members, or between the members of these federated associations, provided that the dispute involves a point that pertains to the mutual.

The purpose of the federation is enshrined in the activities stipulated in Article 1.I. A, C and E, and in Article 3 of the Decree of April 15, 1958.

Article 6 – Languages

In all its documents, the federation and its organizations are required to use Kinyarwanda and may in addition use one of the other two official languages.

Article 7 – Liability (Article 22 of the Decree of April 15, 1958)

The federation is liable for misconduct by its employees or the organs through which it exercises its will. The administrators shall incur no personal obligations regarding the federation's obligations. Liability is limited to the performance of the mandate they have received and to misconduct in their management.

Federated associations and their organs are not organs of the federation.

Title 2. Members of the Federation

Article 8 – Definition of Membership

According to these statutes, the members of the federation are the mutualist associations that have joined the federation.

Article 9 – Federation Membership

Any mutualist association within the Byumba health district may become a member of the federation.

To become a member the candidate mutualist association first files a written application for membership with the federation, duly signed by its board of directors. Next the candidate must produce the minutes of the general meeting of its members. The minutes must show that the general meeting is in favor of joining and has agreed to comply with the statutes and rules of order of the federation, or it must produce the statutes demonstrating that such a decision has been made.

After completing these procedures, the board of directors places the matter of the membership application on the agenda of the general meeting. The general meeting of the federation rules on the application. There is no appeal or recourse.

The names of the federated associations are listed in the member register by the federation's board of directors.

Title 3. Administration and Operation of the Federation
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Article 10 - Definitions and Conditions of Admission

The governing bodies of the federation are:

1. The general meeting
2. The board of directors.

All members of these governing bodies must be members of a federated association and must be in possession of a membership card.

Sub-Title 1. General Meeting

Article 11 – Members of the General Meeting

All the federated associations are the members of the general meeting. These associations are represented by the members of their board of directors. The number of representatives is limited to four persons.

(A board of directors with 10 members and a change of statutes should be avoided, as this would complicate the federation's work.)

The federated associations must inform the federation's board of directors immediately of any change of director on their board of directors.

Article 12 - Authority

The general meeting has authority for the following:

1. Amend the statutes (Article 34)
2. Appoint directors (Article 19)
3. Determine that a candidate is ineligible to serve as director and disqualify a director (Article 21)
4. Approve of the budget and the accounts (Article 13 and 21)
5. Have membership in a mutualist association (Article 9)
(In the first five cases, the decision of the general meeting is required in order to arrive at a decision as stipulated by Article 13 of the Decree of April 15, 1958.)
6. Appoint members of the arbitration commission (Article 27)
7. Sanction members of the governing bodies of the federation and directors of federated associations (Article 16)
8. Admit or remove a mutualist federation from the next higher level as stipulated in Article 3 of the Decree of April 15, 1958
9. Approve the rules of procedure, which applies to all the federated associations and to the members of these associations
10. Determine how the association's assets are invested in accordance with article __ of these statutes as well as the interest rate
11. Decide cases in which the board of directors will use the association's financial reserves
12. Choose the member of the Bar of the Republic of Rwanda who serves as arbitrator for the disputes and disagreements referred to in Article 36 of these statutes
13. In general, conduct all the items on the agenda.

Article 13 – Meeting Announcement

In accordance with Article 15 of the Decree of April 15, 1958, all the federated associations must be invited to attend general meetings.

The board of directors is responsible for inviting members to the general meeting. Meeting announcements are sent at least two weeks prior to the general meeting by sending the agenda to the boards of directors of the federated associations. A notice is also posted on the door of the district hospital and on the door of the mutualist association's office at least two weeks prior to the scheduled date. The notice includes the agenda for the general meeting. The general meeting takes place at the location in the district indicated on the agenda; if that is not possible, the meeting shall be held at the headquarters of the federation.

The general meeting is held at least once a year on the first Sunday in February of the year. At the meeting, the board of directors submits to the general meeting for approval the financial statements for the fiscal period ended December 31 of the previous year and the budget for the next fiscal year of the year in progress.

In accordance with Article 29 of the Decree of April 15, 1958, the financial statements and budget, approved by the general meeting, are sent out every year before the end of March to the Prefect or his delegate, using the format he devises.

Article 14 - Agenda

The federation's board of directors prepares the agenda. The agenda must include the points to be presented to the general meeting, as well as the date, time, and place of the general meeting.

All proposals, signed either by 50 directors or by one-fifth of the federated associations, must be placed on the agenda (Article 15 of the Decree of April 15, 1958).

Article 15 – Decision-making

All association representatives have equal voting rights at the general meeting. Voting is by show of hands and the chairman is in charge of counting the votes.

Except:

- > For that which is indicated in Article 34 pertaining to amendments to the statutes;
- > For decisions pertaining to the disqualifications stipulated in the article of these statutes or to the sanctions to be adopted by a vote of two-thirds of the members present,
- > The general meeting's decisions are made by an absolute majority of votes of members present.
- > For a decision to be valid, the general meeting must have a quorum of half of the representatives of the federated associations.

Article 16 – Sanctions

The board of directors reports to the general meeting on any failure of a federated association to comply with the legal rules, the federation's or the association's statutes, the rules of order, and any failure of a federated association to comply with the rules pertaining to the budget or bookkeeping.

Any director who is the subject of a sanction may not sit at the general meeting as a director. However, said director must be present in order to testify.

The general meeting rules on compliance issues and institutes the appropriate sanctions as necessary, selecting among the following:

- > Immediate expulsion of the board of directors or of a director and, in some cases, that person's expulsion from the mutualist association. This sanction must be posted by notice at the headquarters of the federation and the association, at the district hospital, and at the health centers frequented by the members of the association in question;
- > A reprimand from the board of directors or from a director. This sanction must be posted by notice at the headquarters of the federation and the association, the district hospital, and the health centers frequented by the members of the association in question;
- > Immediate reimbursement of funds.

The general meeting may demand additional information and may take necessary temporary measures, such as the suspension of a board of directors or a director.

The general meeting may call a meeting of its board for the board to organize a general meeting at the association level. The federation's board shall assume all the duties of the association's board of directors at the meeting.

The general meeting may decide to file suit with the courts.

Article 17 – Chairmanship and Secretariat for the General Meeting

The chairman of the board of directors serves as the chairman of the general meeting. If he is unable to do so, the vice-chairman of the board shall replace him. If so, he proceeds as stipulated in Article 23 of these statutes.

The secretary of the federation's board of directors serves as secretary for the general meeting. He draws up the minutes of the general meeting. The chairman and secretary sign the minutes and the minutes include the decisions the general meeting has made regarding the agenda items.

No later than two weeks after the general meeting, and for a period of one month, the chairman shall be responsible for having the secretary post a copy of the minutes of the general meeting at the following locations: on the door of the federation office; on the doors of the mutualist associations; on the hospital door and on the doors of the district health centers.

Sub-Title 2. Board of Directors
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Article 18 - Composition

A board comprised of six representatives administers the federation. The representatives must:

- > Be members of the federation as stipulated in the article of these statutes
- > Be able to read and write Kinyarwanda
- > Be citizens of Rwanda
- > Be at least 25 years old.

The six representatives, also called directors, are as follows:

- > Chairman
- > Vice chairman
- > Secretary
- > Assistant secretary
- > Treasurer
- > Assistant treasurer.

To meet and for decisions to be valid, the board of directors must have a quorum of six members.

Article 19 - Election of Board Members

Directors are elected for a two-year term by the federation's general meeting. They may be reelected only once. The last and first names, age, and occupation of the potential candidates and the office for which they are running are listed in the agenda of the annual meeting.

Article 20 – Prohibition and Disqualification

In accordance with Article 20 of the Decree of April 15, 1958, the following categories of persons may not serve as directors:

- > Persons who have been unconditionally convicted and are the subject of a final judgment for a dishonorable offense
- > Persons who are known to have improper conduct or poor morals, or who are affiliated with a businesses that has subversive tendencies
- > Persons who have committed serious acts, and assaults in particular, such that associates no longer have confidence in them
- > Persons who seriously or habitually neglect their duties, including but not limited to the act of failing to exercise their duties in accordance with the Decree of April 15, 1958 and these statutes.

A two-thirds vote of the general meeting decides on disqualification in accordance with Article 15 of these statutes. The last and first names and title of the director being considered for disqualification, as well as the reasons for disqualification, are listed in the agenda.

Any person who meets the criteria in the first section of this article may not run for the office of director.

Article 21 - Authority

The board of directors' authority encompasses all powers and obligations not expressly set aside for the general meeting in the decree or statutes.

The board of directors is in charge of daily management. It also represents the federation in judicial and extrajudicial proceedings, is responsible for keeping the books of the federation, and keeps the following books: cash book, book of current accounts, register of federated associations, and register of the directors of the federated associations. More generally, it implements the decisions of the general meeting. It uses the reserves for the purposes identified by the general meeting.

The board of directors also implements the decisions made by the mutualist federation(s) at the higher level.

The board ensures that the federated associations comply with the law, their statutes and rules of order, as well as the proper keeping of the budget and financial statements. If it is found that this is not done or if misconduct is found it shall take all temporary measures, on an urgent basis, such as suspending the organization or the director, by a duly reasoned decision. It shall immediately convene a general meeting of the federation. It may go before the courts.

It may use any managers or accountants of its choosing for management and for auditing the budget and the books of the federation and federated associations.

A majority is required for a decision to be valid, and the chairman's vote shall prevail in case of a tie.

Article 22 – Authority of the Chairman

The chairman convenes and chairs the meetings of the board of directors as well as the general meeting. He is required to convene one meeting per quarter.

He prepares the agenda for the meetings. The agenda must be given to the other directors. He signs the minutes of these meetings. He signs the federation's budget and financial statements for approval before they are presented to the general meeting.

The chairman is in charge of relations between the federation and the mutualist associations of the health district, relations between the district hospital and the health centers to which the federation is bound by the cooperation agreement, as well as the other service providers.

Article 23 – Authority of the Vice Chairman

The vice chairman attends the meetings of the board of directors and carries out all of the chairman's duties when the chairman is unable to do so. Absence is to be duly noted and recorded in the minutes of either the general meeting or the board of directors.

Article 24 – Authority of the Secretary and Assistant Secretary

The secretary has day-to-day responsibility for the roster of associates. He informs the federation's board of directors in writing each month of the new members and those who have lost their membership status. He submits the list of indigents in accordance with Article 10 of these statutes.

He keeps the minutes of the general meeting and meetings of the board. The minutes must include:

- > The decisions regarding the agenda items
- > The budget report stipulated in Article 25 of these statutes if applicable
- > In accordance with Article 23 of these statutes, the notice of the chairman's absence if applicable.

The chairman and secretary are required to draw up and sign the minutes.

Under the chairman's responsibility, the secretary is required to submit the financial statements and the budget as stipulated in Article 30 of the Decree of April 15, 1958 and in Article 13 of these statutes.

The secretary serves as secretary of the general meeting as indicated in Article 17 of these statutes.

The secretary is in charge of the federation's regular correspondence. He files and retains the various documents regarding the operation of the federation.

The assistant secretary carries out all of the secretary's duties when the secretary is unable to do so. In such a case, this event and the duration thereof should be duly recorded and written in the minutes of either the general meeting or the meeting of the board that follows the event.

Article 25 – Authority of the Treasurer and Assistant Treasurer

The treasurer keeps the cash books and account books on a daily basis in the name of, on behalf of, and under the control of the board. The treasurer files a report with the board as required or at the chairman's request.

The treasurer collects the federation's resources and is responsible for them. He seeks out and suggests means for increasing the federation's resources.

On behalf of and for the federation, he complies with the content of Articles 30 and 31 of these statutes.

The treasurer deposits all the financial resources into a bank account before using them.

The treasurer and the chairman sign the federation's financial documents.

The assistant treasurer takes over all the treasurer's duties when the treasurer is unable to perform them. This event and its duration must be duly recorded and indicated in the minutes.

Title 4. Arbitration Committee
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Article 26 – Composition of the Arbitration Committee

The committee is comprised of three members.

The members choose from among themselves the person who will serve as chairman.

They divide up the arbitration cases evenly among themselves. For each case, they appoint one member as the reporting member who investigates the case and reports to the others. The reporting member keeps the minutes of the committee as part of the case for which he is responsible.

Article 27 –Appointment of Arbitration Committee Members

Committee members are elected for a two-year term by the federation’s general meeting. They may be reelected for one additional term. The last and first names, age and occupation of each potential candidate and the position they are interested in are included in the general meeting’s agenda.

They are subject to the same prohibitions and disqualifications as the members of the board as indicated in Article 20 of these statutes.

Committee members must know how to read and write Kinyarwanda.

If it is impossible to form an arbitration committee, the board of directors shall take over all the duties of the arbitration committee. However, if one or more directors is familiar with the matter other than through his duties, or if there is a direct or indirect link with one of the parties to the dispute, he may not sit on the Board of Directors or assume the duties of the arbitration committee in the dispute in question.

Article 28 - Authority

The arbitration committee has the authority to rule on disputes between federated associations, between members of these associations and between an association and its members. It rules by duly reasoned arbitration decisions.

Article 29 – Counsel

The arbitration committee may obtain assistance from an attorney or any other counsel based on a reasoned decision as to the necessity of such use and choice of counsel. The expenses and fees of the attorney(s) are defrayed in full by the party that loses the dispute or arbitration proceedings. If there is no losing party, the method determined by the arbitration committee following a reasoned decision on its part shall be used. The committee may require a deposit of amounts to be used for the expenses and fees of the attorney(s).

Title 5. Resources for the federation and financial management

Article 30 – Resources

The federation has the following financial resources:

- a) Ten per cent (10 %) of dues collected by the federated associations after they take a percentage not to exceed five per cent (5 %) of amounts intended to defray costs other than medical treatment and to be used by one or more of the federations at a higher level;
- b) Proceeds from the various lucrative activities organized to support the federation;
- c) Donations and gifts to the federation with the authorization of the Prefect or his delegate, in accordance with the rule in Article 15 of the Decree of April 15, 1958.

All the financial resources combined comprise the social funds.

Article 31 – Use of Dues and Other Social Funds

The use of the budget at the association level for purposes other than health care and the budget to be used for the higher level federations, such as administrative and other costs, may not exceed five percent (5 %).

The other social funds, such as those identified in points b) and c) of Article 30 of these statutes are on deposit with a financial institution. They are the association's reserves and the general meeting decides how they are to be used (Article 12 of these statutes). These reserves may be used for purposes other than those identified in Article 5 of these statutes, but may not be used for administrative expenses.

Article 32 – Financial Management

The maximum amount the board of directors may hold is one-twelfth of the annual proceeds from dues. **The surplus is invested or deposited under the federation's name in bank accounts.**

As soon as the social funds as identified in Article 30 of these statutes exceed one-twelfth of the annual proceeds from dues, the surplus shall be invested or deposited in bank accounts under the federation's name. The general meeting may authorize giving twenty-five percent (25%) of the assets to medical companies, hospitals or pharmaceutical companies to be used for treating federation members. The general meeting sets the interest rate.

Article 33 – Buildings

The mutualist association may not own buildings that are unrelated to its headquarters or real estate required to achieve the goals it set for itself.

Title 6 Amendments to Statutes

Article 34 – Amendments to Statutes (*Article 17 of the Decree of 1958*)

The statutes may be amended only by a general meeting convened specially for this purpose.

To be valid, the general meeting's decisions must be made with the votes of a two-thirds majority of members present and having voting rights. For everything else, the statutes refer to the Decree of April 15, 1958 on mutualist federations. A quorum of two-thirds of the members is required.

Furthermore, for an amendment to be valid and final, each general meeting of federated associations must endorse its statutes by a vote.

Title 7. Resignation of a Federated Association

Article 35 – Resignation and Its Consequences

Under the law and these statutes, federated associations have the right to resign from the federation if its general meeting decides to do so.

If a dispute or disagreement that is submitted to the arbitration committee of the federation pertains to the association that voted to have the federation resign, or if it pertains to one of its members, the mutualist association is required to comply with the arbitration procedure that has been initiated.

Title 8 Arbitration for Disputes between the Federation and Its Federated Associations

Article 36

Before disputes or disagreements between the federation and its federated associations are taken to the court having jurisdiction, said disputes or disagreements must be brought before an attorney who is a member of the Bar of the Republic of Rwanda. This attorney shall serve as arbitrator based on the laws in effect.

However, an attorney may be used as an arbitrator only if the attorney was selected by the general meeting before the dispute arose.

The arbitrator is required to rule no later than two months after the requesting party asked him to intervene.

The party that loses the dispute or disagreement pays the arbitrator's expenses and fees. If there is no losing party, payment shall be based on the method determined by the arbitrator based on a reasoned decision by him.

Title 9. Final provisions

Article 37

For any matters that are not expressly addressed or discussed in these statutes, the provisions of the Decree of April 15, 1958, regarding mutualist federations and Order n°26/276 of May 20, 1959, on implementation measures shall apply.

The members of the Board of Directors of the federation of Byumba health district

Names, Signatures, Dates, Locations:

Chairman	Vice-Chairman	Treasurer	Assistant Treasurer	Secretary	Assistant Secretary
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Statutes of the Mutualist Association of

Title 1. Name and Purpose of the Association

Article 1 – Name

In the community of a Mutualist Association has been established, according to the Decree of April 15, 1958, called the Mutualist Association of, hereinafter called “association” in the context of these statutes.

Article 2 – Territory

The mutualist association’s area of jurisdiction extends throughout the territory of the community of

Article 3 – Headquarters

The headquarters of the mutualist association is located in

Article 4 - Period

The period of existence of the association is unlimited.

Article 5 – Purpose

The sole purpose of the association is to provide health care services for its members in the Health Centers of Byumba District and in the Byumba District Hospital, or any other health centers with which the federations of mutualist associations at the higher level have signed a cooperation agreement.

The purpose of the Mutualist Association is enshrined in the activities stipulated in Article 1.I. A, C and E of the Decree of April 15, 1958.

Article 6 – Languages

In all its documents, the association and its organs must use Kinyarwanda and may in addition use either of the other two official languages.

Article 7 – Liability (article 22 of the Decree of April 15, 1958)

The Association is liable for the negligence of either its employees or organs by which it exercises its will. The directors contract no personal obligations with regard to the Association’s commitments. Liability is limited to the performance of the mandate they have received and to negligence committed in their management.

Article 8 – Membership in the Byumba Federation of Mutualist Associations

The association is a member of the federation of mutualist associations of the Byumba health district and agrees to comply with the statutes and rules of order of that federation.

The general meeting of the association retains its rights to resign from the federation. In the event of resignation, this article and any reference in these statutes to the federation of mutualist associations of the Byumba health district shall be considered null and void. The association then assumes the powers delegated to the federation to the extent that these powers are consistent with its objectives and missions assigned to the association by these statutes and by the law.

Title 2. Members of the Mutualist Association
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Article 9 – Definition of the Concept of Member

According to these statutes, the term “member” describes the same capacity of persons as defined in this Title 2.

Article 10 - Definition of Membership and Membership Categories

All persons 18 years of age and over are eligible to become members of the Mutualist Association.

The Federation of Mutualist Associations in the health district determines membership categories, comprised of the following:

- a) Single persons 18 years of age or older;
- b) Households, comprised of parents with dependent children;
- c) Family groups, namely persons who reside together and share household expenses;
- d) Groups of eight or more persons, such as associations, cooperatives, schools and orphanages.

The policyholder of each category of membership is responsible for applying for membership status.

To be insured by the Mutualist Association, the policyholder of a membership category must be in possession of a membership card. Persons who are members of groups under d) must be in possession of a membership card.

Membership in the Association is acquired by purchasing a membership card.

When health services are required, persons listed on the membership card present themselves with the card at the first contact health center in the community.

The board of directors lists each member's name on the membership roster.

Article 11 - Indigence

Based on standards for identifying indigents as defined by the health district's mutualist federation, the mutualist association may provide health care for indigent persons who live in the community.

According to this article, indigent persons are chosen by the general meeting of the Mutualist Association that is held on the basis of the rules in Articles 14 to 18 of Title 1, Subtitle 1 of these statutes.

A list of indigents is prepared and reviewed annually.

The Board of Directors forwards the list of indigents to the community health center and the board of directors of the mutualist federation in the health district. In turn, the federation immediately passes on the list to the district hospital.

The number of indigent members may not exceed 5% of the members of the mutualist association. The Chairman of the Board of Directors ensures compliance with this rule in preparing the agenda and during the general meeting.

Article 12 – Process and Identification Instrument

The Byumba health district federation determines the process and identification instruments of the members of the mutualist association.

Article 13 - First Contact Health Center

According to this article, the first contact health center is the center a person contacts first to obtain care. This health center is located in the territory of the community in the coverage area of the mutualist association.

Other than in cases of force *majeure*, to be eligible for benefits procured under the mutual, the member, policyholder in a category, or persons who are members of one of the categories listed in Article 9 of these statutes must visit the health center in the community coverage area of the association.

Title 3. Administration and Operation of the Association

Article 14 – Definitions and Admission Requirements

The governing bodies of the mutualist association are:

- > The general meeting
- > The board of directors.

All the members of these governing bodies must be members of the mutualist association and be in possession of a membership card.

Sub-Title 1. General Meeting

Article 15 - Authority

Thee general meeting has the authority:

1. To amend the statutes (Article 33)
2. To appoint directors (Article 21)
3. To prohibit nomination for the position of director and to disqualify a director (Article 21)
4. To approve the budget and financial statements
5. To dissolve the association or to merge it with another association (Articles 34 and 35)
6. (In these first five cases, the decision of the general meeting is mandatory and is prescribed in Article 14 of the Decree of April 15, 1958.)
7. To sanction the members of the governing bodies and members
8. To join or resign from a federation of mutualist associations at a higher level as stipulated in Article 4 of the Decree of April 15, 1958;
9. To draw up the list of indigents in the coverage area
10. To approve the rules of order applicable to all the members of the association
11. To decide how to invest the assets in accordance with Article 31 of these statutes and to determine the interest rate
12. To decide on how the board of directors will use the association's financial reserves
13. To choose, if necessary, the member of the Rwandan Bar who will serve as arbitrator for the disputes and disagreements stipulated in Article 34 of these statutes
14. In general, all agenda items.

Article 16 – Meeting Announcement

In accordance with Article 16 of the Decree of April 15, 1958, all the members of the association are invited to attend the general meetings.

The board of directors has the authority to invite members to the general meeting. The invitation is posted no later than two weeks before the scheduled date on the door of the health center and on the door of the mutualist association. The notice includes the agenda for the general meeting.

The general meeting shall be held in the coverage area at the location indicated in the agenda or at the association's headquarters.

The general meeting is held at least once a year, on the last Sunday in January of the year. At the meeting, the board of directors submits the financial statements for the fiscal year just ended the previous December 31 to the meeting for approval, as well as the budget for the next fiscal year in progress.

In accordance with Article 29 of the Decree of April 15, 1958, the financial statements and budget, approved by the general meeting, are sent each year before the end of March to the Prefect or his delegate, following the format he prepares.

Article 17 - Agenda

The board of directors prepares the agenda, which must include the items to be presented to the general meeting, including the date, time and place of the general meeting.

All proposals that are either signed by fifty members or by one-fifth of the members must be put on the agenda (Article 14 of the Decree of April 15, 1958).

Article 18 - Decisions

All members have equal voting rights in the general meeting. Voting is by show of hands. Votes are counted under the chairman's supervision.

Except:

- > For what is indicated in Article 33 on amendments to the statutes
- > For what is indicated in Articles 34 and 35 on dissolution and merger
- > Decisions regarding disqualification stipulated in Article ___ of these statutes or sanctions that are to be taken based on a two-thirds majority vote of members present.

Resolutions and decisions of the general meeting are made based on an absolute majority of votes of members present.

Article 19 – Chairmanship and Secretariat for the General Meeting

The chairman of the board of directors serves as chairman for the general meeting. If he is unable to do so, the vice-chairman of the board replaces him. If the vice-chairman chairs the meeting, the provisions of Article 25 of these statutes should be followed.

The secretary of the board of directors serves as secretary for the general meeting. The secretary draws up the minutes for the general meeting. The minutes are signed by the chairman and secretary and include the decisions made by the general meeting regarding the agenda items.

No later than two weeks after the general meeting and for a period of one month, the secretary, under the responsibility of the chairman, shall post a copy of the minutes of the general meeting on the door of the health center and on the door of the mutualist association.

Sub-Title 2. Board of Directors

Article 20 - Composition

A board of directors comprised of four representatives governs the mutualist association. They must:

- > Be members of the association as stipulated in these statutes
- > Know how to read and write one of the three national languages (English, French or Kinyarwanda)
- > Be citizens of Rwanda
- > Be at least 25 years old.

The four representatives, also called directors, are:

- > The Chairman
- > The Vice Chairman
- > The Secretary
- > The Treasurer.

There must be a quorum of three members of the board in order for the meetings and decisions to be valid.

Article 21 - Election of Board Members

The directors are elected for a two-year term by the general meeting of the association. They may run for re-election one time. The last and first names, age and occupation of potential candidates and the office they are running for are to be listed in the agenda of the general meeting.

Article 22 – Prohibition and Disqualification

In accordance with Article 21 of the Decree of April 15, 1958, the following categories of persons may not serve as directors:

- > Persons who have been unconditionally convicted and are the subject of a final judgment for a dishonorable offense;
- > Persons who are known to have improper conduct or poor morals, or who are affiliated with a businesses that has subversive tendencies;
- > Persons who have committed serious acts, and assaults in particular, such that members no longer have confidence in them;
- > Persons who seriously or habitually neglect their duties, including but not limited to the act of failing to exercise their duties in accordance with the Decree of April 15, 1958 and these statutes.

A two-thirds vote of the general meeting decides on disqualification in accordance with Article 16 of these statutes. The last and first names and title of the director being considered for disqualification, as well as the reasons for disqualification, are listed in the agenda.

Any person who meets the criteria in the first section of this article may not run for the office of director.

Article 23 - Authority

The board of directors' authority encompasses all powers and obligations not expressly set aside for the general meeting in the decree or statutes (Article 28 of the Decree of April 15, 1958).

The board of directors is in charge of daily management. It also represents the association in judicial and extrajudicial proceedings, is responsible for keeping the books of the association and keeps the following books: cash book, book of current accounts, and the membership roster. More generally, it implements the decisions of the general meeting. It uses the reserves for the purposes identified by the general meeting.

The board of directors also implements the decisions made by the federation(s) of mutualist associations at the higher level.

A majority is required for a decision to be valid, and the chairman's vote shall prevail in case of a tie.

Article 24 – Authority of the Chairman

The chairman convenes and chairs the meetings of the board of directors as well as the general meeting. He is required to convene one meeting per quarter.

He prepares the agenda for the meetings. The agenda must be given to the other directors. He signs the minutes of these meetings. He signs the federation's budget and financial statements for approval before they are presented to the general meeting.

The chairman is in charge of relations between the federation and the mutualist associations of the health district, relations with the health centers to which the mutualist association is bound by the cooperation agreement, as well as the other service providers.

Immediately after his election, or after any change in the board of directors, he informs the federation(s) at the higher level.

Article 25 – Authority of the Vice Chairman

The vice chairman attends the meetings of the board of directors and carries out all of the chairman's duties when the chairman is unable to do so. Absence is to be duly noted and recorded in the minutes of either the general meeting or the board of directors.

Article 26 – Authority of the Secretary

The secretary has day-to-day responsibility for the membership roster. He informs the federation's board of directors in writing each month of the new members and those who have lost their membership status. He submits the list of indigents in accordance with Article 10 of these statutes.

He keeps the minutes of the general meeting and meetings of the board. The minutes must include:

- > The decisions regarding the agenda items;
- > The report on the budget, financial statements and revenue as stipulated in Article 25 of these statutes if applicable;
- > In accordance with Article 25 of these statutes, the notice of the Chairman's absence if applicable.

The chairman and secretary are required to draw up and sign the minutes. Then they are to forward them to the board of directors of the health district's mutualist federation no later than two weeks after the meeting.

Under the Chairman's responsibility, the secretary is required to submit the financial statements and the budget as stipulated in Article 29 of the Decree of April 15, 1958, and Article 15 of these statutes.

The secretary serves as secretary of the general meeting as indicated in Article 19 of these statutes.

The secretary is in charge of the federation's regular correspondence. He files and retains the various documents regarding the operation of the federation.

Article 27 – Authority of the Treasurer

The treasurer keeps the cash books and account books on a daily basis in the name of, on behalf of, and under the control of the board. The treasurer files a report with the board as required or at the chairman's request.

The treasurer collects the mutual association's resources and is responsible for them. He seeks out and suggests means for increasing the federation's resources.

On behalf of and for the association, he complies with the content of Articles 30 and 31 of these statutes.

The treasurer deposits all the financial resources into a bank account before using them.

The treasurer and the chairman sign the prepayment scheme's financial documents.

Article 28 – Representation of the Mutualist Association within the Mutualist Federation of the Health District

The members of the board of directors represent the mutualist association within the federation of mutualists of the Byumba Health District by taking part in this federation's general meeting as members.

Title 4. Resources of the Association and financial management

Article 29 - Dues

The prepayment scheme's resources come from the following sources:

- > Membership dues for twelve months in the following amounts:
- > Two thousand FRw (2,000 FRw) per individual
- > Two thousand five hundred FRw (2,500 FRw) per household / family membership card (maximum 7 persons), five hundred thirty FRw (530 FRw) per additional member if there are 8 or more persons
- > Five hundred thirty FRw (530 FRw) per person for a group of 8 or more persons
- > Other payments as determined by the federation of the health district's mutualist associations
- > Proceeds from the various lucrative activities organized to support the mutualist association
- > Donations and gifts to the association with the authorization of the Prefect or his delegate, in accordance with the rule in Article 15 of the Decree of April 15, 1958.

The amounts of dues are set on the date these statutes are signed. These amounts are linked to the consumer price index (CPI) or any other index that replaces it, as set by the Ministry of Finance and Economic Planning.

All the financial resources combined comprise the social funds.

Article 30 – Use of dues and Other Social Funds

The dues are used in accordance with the rules of order of the association or federation at a higher level.

However, the use of the budget at the association level for purposes other than health care and to be used for the higher level federations, such as administrative and other costs, may not exceed five percent (5 %).

The other social funds, such as those identified in points b, c and d of Article 29 of these statutes, are deposited with a financial institution. They are the association's reserves and the general meeting decides how they are to be used (Article 15 of these statutes). These reserves may be used for only for medical purposes.

Article 31 – Financial Management

The maximum amount the Board of Directors may hold is million FRw.

As soon as the social funds exceed one-twelfth of the annual proceeds from dues, the surplus shall be invested or deposited in bank accounts in the association's name. The general meeting may authorize

giving twenty-five percent (25%) of the assets to medical companies, hospitals or pharmaceutical companies, to be used for treating association members. The general meeting sets the interest rate.

Article 32 – Buildings

The mutualist association may not own buildings that are unrelated to its headquarters or real estate required to achieve the goals it set for itself.

Title 5. Amendments to Statutes
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Article 33 – Amendments to Statutes (*Article 17 of the Decree of 1958*)

The statutes may be amended only by a general meeting convened specially for this purpose.

To be valid, the general meeting's decisions must be made with the votes of a two-thirds majority of members present and having voting rights. For everything else, the statutes refer to the Decree of April 15, 1958, on mutualist associations.

Title 6. Dissolution of the Association and Merger

Article 34 - Dissolution of the Mutualist Association (*article 31 et seq. of the Decree of April 15, 1958*)

The mutualist association may be dissolved by a decision of the courts or the general meeting. In the latter case, it must be convened specially for this purpose. Three-fourths of the members present with voting rights must vote in favor of dissolution.

If the general meeting decides to dissolve the association, it shall appoint a liquidator at that same meeting. The liquidator must have a *licence* degree in law and must be an attorney who is a member of the Bar of the Republic of Rwanda.

The liquidator must comply with the provisions of the Decree of April 15, 1958. The period stipulated in Article 33 of the Decree of April 15, 1958 is six months.

Article 35 – Merger of Associations

In accordance with Article 40 of the Decree of April 15, 1958, the Mutualist Association may merge with associations that have the same purposes provided that the legal provisions in these matters are observed.

Title 7. Arbitration

Article 36

Unless an association is a member of a federation at a higher level that is in charge of arbitration, disputes or disagreements must be brought before an attorney who is a member of the Bar of the Republic of Rwanda. This step must be taken before disputes or disagreements between the association and its members are taken to the court having jurisdiction, said. This attorney shall serve as arbitrator in accordance with the laws in effect.

However, an attorney may be used as an arbitrator only if the attorney was selected by the general meeting before the dispute arose.

The arbitrator is required to rule no later than two months after the requesting party asked him to intervene.

The party that loses the dispute or disagreement pays the arbitrator's expenses and fees. If there is no losing party, payment shall be based on the method determined by the arbitrator based on a reasoned decision by him.

Title 8. Final Provisions

Article 37

For all matters that are not expressly provided for or addressed in these statutes, the provisions of the Decree of April 15, 1958, on mutualist associations and order n°26/276 of May 20, 1959, on implementing measures, shall apply.

The members of the Board of Directors of the Mutualist Association of _____
_____:

Names, Signatures, Dates, Places:

Chairman	Vice-Chairman	Treasurer	Secretary
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Rules of Order of the Mutualist Federation of the Health District of Byumba

Article 1 – Application of the Rules of Order

These rules of order, adopted by the general meeting in accordance with the statutes, are applicable to all federated associations and their members.

Article 2 – Care Covered at the Health Centers

Basic health care for members in the first contact health centers includes the following care over a twelve-month period once the probation period is over (Article 5):

- > Preventive, curative and promotional care generally covered by a health center and that does not require a referral to the district hospital
- > Hospitalization in the first contact health centers for members
- > All generic drugs and essential drugs on the list prepared by the Health Ministry
- > Transportation of ill beneficiaries to a health center, except in case of a highway accident
- > District ambulance service for transfers to the district hospital.

Article 3 – Care Covered at the District Hospital

Hospital care in the district hospital includes the following over a twelve-month period after the probation period is over (Article 5):

- > A stay in the district hospital for members referred by their first contact health center or admitted in an emergency
- > Consultations with a district hospital physician if the patient is referred by his health center
- > Caesarian delivery in the district hospital for members referred by their first contact health center or admitted for an emergency.

Article 4 – Care Not Covered

The mutualist association does not cover any care that is not addressed in Articles 3 and 4.

Article 5 – Probation Period

Effective with the adoption of these rules of order, membership in a mutualist association requires a one-month probation period in order to be eligible for the rights the mutualist federation and the mutualist association offer for twelve months.

Article 6 - Conditions for Accessing Treatment

The conditions for being eligible for treatment covered by the mutualist association are:

- > Membership in the mutualist association (policyholder or dependents listed on the policyholder's membership card)
- > Having completed the one-month probation period
- > Being current in the payment of dues (see membership card)
- > Having identified a first contact health center (see membership card) and being on that center's membership list.

Article 7 – Access Procedures

The procedures for accessing care covered by the mutualist federation or mutualist associations are as follows:

- > The member must visit his health center located within the coverage area of his mutualist association and with which he has an agreement;
- > In an emergency, an ailing member may go to the nearest health center. That health center sends the invoice for treatment to the member's first contact health center for payment;
- > Each member must show his membership card to the health unit;
- > To obtain access to hospital care in the health district hospital, a member submits a

document attesting to the fact that he was referred by the first contact health center, except in emergencies.

Article 8 – Co-payment

The member must remit the co-payment of one hundred FRw (100 FRw) to the health center for each illness.

Article 9 – Use of Dues

In accordance with Article 31 of the federation’s statutes and with the association’s statutes, dues are spent as follows:

Every month, each federated mutualist association retains no more than 5 percent of all the annual dues to provide for the following for the entire year:

- > Administrative and operating expenses, such as employee wages, travel expenses, rent and office supplies, etc.
- > The reserves.

Each month, the remainder of the dues is used as follows:

- > Each mutualist association pays 10 percent of the dues to the mutualist federation. This amount is used for treatment to cover care at the district hospital and for administrative and operating expenses for the federation.
- > Each association uses the balance of the dues, to be staggered over the twelve months of the year, for the following purposes:
 - Î The base payment at the beginning of the month, depending on the number of members enrolled in the health center
 - Î The quality payment at the end of the month, depending on the results of the performance of the health center as defined by the federation.

The federation uses the percentage of dues it receives from the federated associations as follows:

- > Five percent is retained for administrative and operating expenses, such as employee wages, travel expenses, rent and office supplies, etc., and the reserves.
- > The balance of the percentage of dues will be used to pay for the services provided by the district hospital.

Article 10 – Criteria for Indigence

The criteria for a person or group official to be declared indigent are as follows:

Cooperation Agreement between the Federation of Mutualist Associations, the Mutualist Associations, and the Health Facilities in the Byumba Health District

By and between, party of the first part:

1. The Mutualist Federation of the Byumba Health District, with its headquarters located at
2. The following mutualist associations:

And party of the second part:

The hospital of the BYUMBA health district

The following health centers:

The Aforementioned Parties Have Reached the Following Agreement:

Article 1 - Definition of Membership

By member, the signatories mean any member of a mutualist association whose dues are current and whose name or officers are submitted to the district hospital by the mutualist federation or mutualist association.

The first signatories, federation and associations, periodically inform (at least monthly) subsequent signatories, the hospital and health centers, of their membership list or of any changes made to that list.

Article 2 – Health Center’s Obligations

The first contact health centers agree to do the following:

- > To join or to have all their employees join the mutualist association in the community where they reside
- > To offer quality health services throughout their coverage area so that they can meet the principal needs of the population in terms of health, as defined in *Les Normes d’activités des Formations Sanitaires du District Sanitaire (Standards for Activities of Health Facilities in the Health District)* ⁵
- > Upon presenting a membership card, to treat the members of those mutualist associations to which the health center is bound by this agreement
- > To treat the members of the mutualist association who need care, using the standardized treatment protocols
- > To give receipts to the member of the mutualist association who receives treatment, and to do so for nonmembers as well

⁵ REPUBLIC OF RWANDA, MINISTRY OF HEALTH, B.P. 84 – KIGALI: Normes du District de Santé au Rwanda, February 1997.

- > To collect the co-payment of one hundred FRw (100 FRw) from each member who receives treatment. The co-payment is due for each episode of curative treatment. The co-payment is to be entered in the cash book.
- > To enter each member treated in the Contact Information Register (CIR)
- > At the end of each month, to send the following monthly copies:
 - Î Summary of the Contact Information Register and
 - Î Health center's Contact Information Register (CIR)
- > To the mutualist association's board of directors of the community in which it is located
- > To refer members to the district hospital when they need services not offered by the health centers
- > To call an ambulance when a member is transferred to the Byumba district hospital
- > To pay for the cost of the ambulance out of their base payment fund that they receive from the mutualist association
- > To use their base and quality payment fund to pay the invoices from the other health centers to treat the members for whom they are the contact center and for whom, in an emergency, received treatment at another health center
- > To invest part of the payment received from the association in upgrading care quality as stipulated in Article 13 of this agreement
- > To notify the board of directors of the mutualist association of any changes that have occurred in the status of their members, including any deaths, newborns, and members who have moved.

Article 3 – District Hospital Obligations

The district hospital agrees:

- > To have all its employees join the mutualist association of the community in which they reside
- > To treat the members of the federated mutualist associations in the mutualist federation of the Byumba health district when they are referred from their first contact centers, or members who are victims of accidents and who require care, within the limits of the package set forth in Article 7 of this agreement
- > To give a copy of the invoice to the ill member who received care
- > At the end of each month, to send the copies:
 - Î To the members who received the care, without indicating the patient's name for reasons of professional secrecy, with a description of the diagnosis and treatment, and

- Î To the Contact Information Register (CIR) of the district hospital to the mutualist federation's board of directors.

Article 4 - Obligations of the Mutualist Association

The mutualist association agrees:

- > To verify the copies of document received from the health center, namely:
 - Î The summary of the Contact Information Register and
 - Î The health center's Contact Information Register.
- > After verification, to send the copy of the health center's Contact Information Register (CIR) to the federation
- > During the first three days of every month, to deposit the base payment into the bank accounts of the health centers
- > During the last three days of the month, to deposit the quality payment into the health centers' bank accounts
- > To forward all information pertaining to changes in health center members to their first contact health centers
- > To manage the funds and prepare the financial reports each month
- > To represent its members in the event of a disagreement with the health facility.

Article 5- Obligations of the Mutualist Federation

The board of directors of the mutualist federation agrees:

- > To audit the hospital's invoices for members who are transferred by comparing them with the hospital's contact register and with the health centers' Contact Information Registers
- > After the audit, to reimburse the district hospital for treatment covered as stipulated in Article 12 of this agreement
- > To verify the calculation of the base and quality payment to be remitted to the health centers, based on the evaluation of the amounts contributed and the number of members identified per health center
- > To inform the boards of directors of the mutualist associations of the amounts of the base and quality payments to be paid to the health centers
- > To send a copy of this information to the boards of directors of the federated associations at the district level.

Article 6 – Treatment Covered at the Health Center Level

The basic health care provided for members of the first contact health centers is as follows:

- > Preventive, curative, and promotional care, generally covered by a health center and not requiring any referral to the district hospital
- > Hospitalization for members in the first contact health centers
- > All the generic and essential drugs that are on the Ministry of Health’s list
- > Transportation of ill beneficiaries to a health center or district hospital in an emergency
- > District ambulance service for transfers to the district hospital.

Article 7 – Treatment Covered at the District Hospital Level

Hospital care in the district hospital includes:

- > Housing in the district hospital for members referred by their first contact health center or admitted in case of an emergency
- > Appointments with a district hospital physician when a patient is referred from his health center
- > Caesarian delivery in the district hospital for members referred by their first contact health center or admitted in case of an emergency.

Article 8 – Treatment Not Covered

Care not included in Articles 6 and 7 is not covered by the mutualist association.

Article 9 – Requirements for Access to Treatment

The requirements to be eligible for the treatment services covered by the mutualist association are:

- > Membership in the mutualist association (policyholder or dependents listed on the policyholder’s membership card)
- > Having completed the observation period (see membership card)
- > Being current in dues payments (see membership card)
- > Having identified a first contact health center (see membership card) and being on that center’s membership list.

Article 10 – Access Procedures

The procedures for accessing the care covered by the mutualist federation or mutualist associations are as follows:

- > The member must go to his health center located in the coverage area of his mutualist association with which he has an agreement.
- > In an emergency, an ill member may go to the nearest health center. That health center sends the invoice for treatment to the member's first contact health center for payment.
- > Each member presents his membership card to the health facility.
- > In order to gain access to hospital care at the health district hospital, a member presents a document attesting to the fact that he was referred by his first contact health center, except in emergencies.

Article 11 – Payment to the Health Centers

Payment is made as follows to the health centers:

- > The ill member remits the copayment of one hundred FRw (100 FRw) to the health center per illness and receives receipts for the services received during treatment. The service provider is not permitted to change the amount of the copayment, identified by the mutualist federation, under any circumstances.
- > In accordance with the number of members on the list per health center, the mutualist association deposits the base payment into the health center's bank account at the beginning of the month and receives the Contact Information Register from the health center.
- > The mutualist association deposits the quality payment into the health center's bank account at the end of the month.

Article 12 – Payment to the District Hospital

Payment to the Byumba district hospital is made as follows:

- > The mutualist federation receives the copies of the invoices and the CIR from the hospital and then reimburses the hospital directly at the end of every month for the services that are covered;

Billing is based on the following rate:

Bed in the ward: 100 FRw per night,

Doctor's appointment: 200 FRw per appointment;

Billing is based on the following rate per illness episode, including procedures, drugs, appointments, materials and treatment:

Caesarian delivery: 12.000 FRw per event.

Article 13- Evaluation of Services Offered by the Hospital and Health Centers

The services offered in the health centers and district hospital are periodically evaluated by the federation's board of directors or under its control, in order to ensure that they always meet the patients' needs and that they do so satisfactorily, including:

- > Diagnosis and treatment based on the standardized treatment plans and compliance oversight
- > The obligation to prescribe generic essential drugs on the Health Ministry list
- > The obligation to comply with preventive care plans
- > The obligation to comply with the instructions for quality care as identified in "Les Normes du District de Santé au Rwanda"⁶
- > The obligation to comply with administrative and management guidelines
- > The audit and analysis by the health center of the use of services reported in the Contact Information Register (CIR), the data reported by the SIS (Health Information System), and additional surveys
- > The determination, based on this analysis for three months per health center, of the monthly quality payment coefficient.

The hospitals and health centers agree to do everything necessary to facilitate the audit by the board of directors of the federation or under its control.

Article 14 – Settlement of Disputes

Before any dispute or disagreement between the signatories is submitted to the court having jurisdiction, it is submitted to an attorney who is a member of the Bar of the Republic of Rwanda. This attorney shall serve as arbitrator in accordance with the laws in effect.

In an instrument separate from this agreement, the parties shall select the attorney they hire.

The party that loses the dispute or disagreement pays the arbitrator's expenses and fees. If there is no losing party, these expenses and fees shall be paid according to a reasoned decision made by the arbitrator.

Article 15 – Denunciation of the Agreement

Any party to the agreement may denounce it by informing each of the signatories in writing that they are doing so. A return receipt must be requested, and the denunciation must take place two months before this agreement is terminated.

⁶ REPUBLIC OF RWANDA, MINISTRY OF HEALTH, B.P. 84 – KIGALI: Normes du District de Santé au Rwanda, February 1997.

Article 16 – Effective Date

This agreement takes effect on the date it is signed by all parties.

Made in Byumba, [date] in as many copies as there are parties to the agreement, and each party shall receive an original.

For the Mutualist Federation of the Byumba Health District, with headquarters located at

For the following mutualist associations:

For the hospital of the Byumba health district

For the following health centers:

Annex B. Bibliography

Maceira, D. 2000. *Prepayment schemes and provider response in Rwanda*. PHR Trip Report. August 12–19, 2000. Bethesda, MD: Partnerships for Health Reform.

ONAPO. 2000. Stakeholder Survey. In collaboration with Partnerships for Health Reform. Kigali, Rwanda.

_____. 1999. Focus Group Survey. In collaboration with Partnerships for Health Reform. Kigali, Rwanda.

Republique Rwandaise, Ministere de La Sante. 2000. *Les Systèmes de Prépaiement dans les Districts de Byumba, Kabgayi, et Kabutare. Résumé des Résultats*. Document for final workshop, Kigali, 12-14 septembre 2000. In collaboration with Partnerships for Health Reform.

Schneider, P., F. Diop, D. Maceira, and D. Butera. March 2001. *Utilization, cost and financing of district health care in Rwanda*. Technical Report. Bethesda, MD: Partnerships for Health Reform.

Schneider, P., F. Diop, and S. Bucyana. 2000. *Development and implementation of prepayment schemes in Rwanda*. Technical Report No. 45. Bethesda, MD: Partnerships for Health Reform.

Schneider, P., and M. Schneidman. *New prepayment Schemes for health in Rwanda*. World Bank Flagship On-line Journal. <http://www.worldbank.org/wbi/healthflagship/journal/index.htm>.