Technical Report No. 66

Pilot Testing Prepayment for Health Services in Rwanda: Results and Recommendations for Policy Directions and Implementation

March 2001

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Partnerships for Health Reform



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Funded by: U.S. Agency for International Development



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March 2001

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Contract No.: Project No.:	HRN-C-00-95-00024 936-5974.13
Submitted to:	USAID/Kigali
and:	Karen Cavanaugh, COTR Policy and Sector Reform Division Office of Health and Nutrition Center for Population, Health and Nutrition Bureau for Global Programs, Field Support and Research United States Agency for International Development

Abstract

Rwanda ranks among the poorest countries in the world. With the introduction of user fees in 1996, utilization of primary health services fell from 0.3 consultations per capita in 1997 to a low of 0.25 consultations per capita in 1999, raising concerns about the poor's financial access to health care and the unused capacity of health facilities. Dire socioeconomic conditions, low consultation rates, and the high prevalence of communicable diseases contributed to the highest infant, child, and maternal mortality rates in Sub-Saharan Africa. In 1999, the Rwandan Ministry of Health, in collaboration with three rural district communities and with the technical and financial assistance from the Partnerships for Health Reform project, developed and implemented a pilot activity that included 54 prepayment health insurance plans managed by community members. Member benefits cover preventive and curative care in health centers and ambulance transport to the district hospital, where a limited package of services is available. Using a quasi-experimental design, the impact of the prepayment pilots on equity of access and financing was evaluated with data from providers, insurers, households, stakeholders, and patient exit interview surveys. This report draws first-year results of the Rwanda prepayment pilot test from different analyses conducted and compares these prepayment accomplishments with the Ministry of Health's objectives. Findings show that prepayment plans are a viable method to improve both providers' productivity and sustainability in health care financing, while providing better access to care for the poor. In addition to the incentives that have been set by the financing reform to providers, consumers, and insurers, prepayments' enhanced community participation has increased the population's awareness and understanding of issues related to health care financing and service delivery. Health insurance schemes with large membership pools have become important interest groups, requiring better value for the money paid to the health facilities, and have contributed to adding health and health financing to the political agenda of the districts. Prepayment schemes have proved to be a promising tool to subsidize in a targeted manner the demand for care of vulnerable groups, such as widows, orphans, and high-risk patients, and this has contributed to strengthened equity in access to health care. Based on these findings, policy recommendations suggest directions to take for the successful scale-up of prepayment for the remaining 37 health districts in Rwanda.

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Acronyms

AIDS	Acquired Immune Deficiency Syndrome
CAMERWA	Centrale d'Achat des Médicaments Essentiels au Rwanda (Center for Purchase of Essential Drugs for Rwanda
СНК	Central Hospital of Kigali
C-section	Cesarean section
CUSP	Centre Universitaire pour la Santé Publique (University Health Center)
DED	Deutscher Entwicklungsdienst (German Development Service)
DSS	Direction de Soins de Santé (Directorate of Health Care)
EU	European Union
GDP	Gross domestic product
GNP	Gross national product
HERA	Health Research for Action
НС	Health Center
HIV	Human Immunodeficiency Syndrome
МОН	Ministry of Health
MsF	Médecins sans Frontières (Doctors without Borders)
NC	New Case Consultation
NHA	National Health Accounts
ONAPO	Office National de la Population (National Population Office)
PHR	Partnerships for Health Reform Project
PPS	Prepayment schemes
RwF	Rwandan francs
SIS	Système d'Information Sanitaire (Health Information System)
SPP	Systèmes de Prépaiement (Prepayment Schemes)
TR	Technical Report
USAID	United States Agency for International Development
WHO	World Health Organization

Nominal Exchange Rate (Source: National Bank of Rwanda)

US $1 = RwF 335$ (official period average in 199	9)
US $1 = RwF 370$ (official period average in 200	0)

Acknowledgements

The development and implementation of prepayment schemes in Rwanda involves a large number of institutions and individuals. People of the following institutions have constantly contributed their efforts and time to make prepayment schemes possible in Rwanda:

The former and current Ministers of Health, Vincent Biruta and Ezechias Rwabuhihi

The director of the Directorate of Health Care Thomas Karengera and his staff

The director of ONAPO (National Population Office) Maurice Bucagu and his staff

The directors of the health regions Butare, Byumba, Gitarama, Kibungo, and Kigali and their staff

All members of the steering committee for prepayment schemes

The head of the Division Documentation and Research Vianney Nizeyimana and his staff

The owners (bishops) of church-owned health care facilities in the regions of Butare, Byumba, Gitarama, Kibungo, and Kigali and their staffs

The directors of the health districts and of the district hospitals of Bugesera, Byumba, Kabutare, Kabgayi, and Kibungo and their staffs

The Federations of Prepayment Schemes and all members of the 54 prepayment scheme bureaus in Byumba, Kabutare, and Kabgayi.

All responsibles and staffs in the 54 participating health centers in the districts of Byumba, Kabutare, and Kabgayi

The responsibles and staff of the health centers in the control districts Kibungo and Bugesera.

Also to be acknowledged are all contributions received from the participants of the community workshops and from representatives of the following organizations working in the districts of Byumba, Kabutare, and Kabgayi: DED, MsF, WHO, EU, and the Belgian Cooperation.

To be acknowledged are assistance and support from the following USAID/Rwanda staff: Chris Barratt and Eric Kagame, and from USAID/Washington: Robert Emrey.

Contributions and support from the following staff of Abt Associates and PHR/Rwanda have been highly appreciated: Nancy Pielemeier, Sara Bennett, Marty Makinen, Damascene Butera, and Joanne Jorissen.

Executive Summary

The sharp drop in demand for health services, down to 0.25 visits per capita per year during the post-genocide period, motivated the Rwandan government to change the way health care is financed locally by pilot testing the use of prepayment schemes in place of paying user fees at the time of consumption. With technical assistance and financial support from the Partnerships for Health Reform (PHR) project, funded by the U.S. Agency for International Development and administered by Abt Associates, the Ministry of Health (MOH) launched prepayment schemes (PPS) in a one-year pilot test in July 1999, and this was expected to provide the elements for replication. Results have been evaluated and presented in several PHR reports. This report summarizes the results accomplished by PPS in Rwanda in comparison with the Ministry's objectives, and it suggests policy recommendations to strengthen the current prepayment plans and prepare the Rwandan health sector for a scale-up.

Development and Implementation Process of Prepayment Schemes

A steering committee, headed by the director of health care and including representatives from the government central and regional levels and stakeholders, was established to coordinate the strategic activities. In February 1999, the MOH selected three experimental districts (Kabgayi, Byumba, and Kabutare) to pilot test PPS and two control districts (Kibungo, Bugesera) for comparison. Pilot districts were selected based on their sufficient health infrastructure, the population's repeated demand for technical assistance in developing and implementing prepayment, and the district's political will to participate in the pilot. During the design and development phase (March-June 1999), community and health care representatives met in the three pilot districts in 28 district workshops overall and in a series of community gatherings to discuss and agree upon the PPS modalities, the schemes' organizational and management features, and their implementation. Proposals stemming from these district meetings were shared with the central steering committee, which provided feedback and advice to the districts. As a result, the scheme features were designed; the legal, contractual, and financial tools were developed; and participants were trained and prepared to manage the 54 PPS, each entering in partnership with a health center on July 1, 1999.

The MOH was concerned that the availability of health insurance to a population group with accumulated demand for health services would lead to moral hazard and adverse selection, causing health care costs to rise. Consequently, the MOH decided to design prepayment combined with a provider payment that would set the necessary incentives to providers to improve their productivity and control for members' moral hazard behavior. After several discussions between providers and future scheme managers, capitation provider payment with a quality-related bonus was selected as provider payment to the health center, whereas the district hospitals are reimbursed by a per-episode payment.

Organization of Prepayment Schemes in Rwanda

Organizationally, each health center in the three pilot districts became the partner of a PPS. On July 1, 1999, Rwanda's 54 prepayment schemes in the three districts were constituted and ready to accept members. Following the Rwandan law, the schemes are mutual health associations, headed by

an executive bureau with four volunteers, elected by and among the scheme members during a general assembly.

On a district level, the schemes have federated to the PPS federation. Six members, who constitute the federation, have been elected by and among all PPS executive bureau representatives in their general assembly. The federation is the partner to the district hospital as well as to the health district and other authorities. Each prepayment bureau signed a contract with the affiliated health center, and each federation with the district hospital, defining in 17 articles the rules of collaboration between the insurer and provider. According to the Rwandan law and the schemes' by-law, members are invited to attend the prepayment scheme general assembly at least once per year.

Members enroll at the scheme affiliated with their "preferred" health center, which is the place members contact first in case of sickness and is usually their nearest public or church-owned facility. At the time of enrollment, members pay an annual premium of 2,500 Rwandan francs¹ (RwF) per family for up to seven persons. Membership entitles PPS members, after a one-month waiting period, to a basic health care package covering all services and drugs provided in their "preferred" health center, including ambulance transfer to the district public or church-owned hospital, where a limited package is covered². Members pay a 100 RwF³ copayment at each health center visit, the aim of which is to discourage moral hazard behavior. Health centers play a gatekeeper function, and hospital services are covered for members only if referred by their "preferred" health centers to dissuade members and providers from frivolous use of more expensive hospital services.

Evaluation Method

In early 1999, the Ministry set four main objectives to measure the impact of PPS on the performance of the district health services. An additional three objectives were added during the pilot phase. These seven objectives include improved financial accessibility to health care, improved quality of care, improved community participation, improved financial sustainability in health facilities and prepayment funds, reinforced democratic governance in health sector, capacity built in financial management, and strengthened social fabric in the Rwandan society. A quasi-experimental design has been selected involving data collection on several levels to evaluate to what extent prepayment contributes to the MOH objectives. Monthly routine data were collected in all health facilities in pilot and control districts documenting service utilization, cost, and finances the year prior and since the introduction of PPS. 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, and one household survey documenting households' and individuals' sociodemographic and economic characteristics, their prepayment participation pattern, and demand for curative and preventive care services (see Annex B). The impact of prepayment is evaluated by comparing health facility performance and demand for health services between members and nonmembers in the pilot districts, for all patients in the pilot and the control districts during the pilot year, and for all patients during the year before and since the introduction of prepayment.

Synthesis of Results

Health insurance causes health risk to be shared between the sick and healthy members of a financing pool, and compared to the user fee system, insured patients face less uncertainty about the

¹ July 1999: RwF 2,500 = US \$7.50.

² Premium rates were set by taking into account existing user fees and by assuming that utilization rates would increase by 25 percent compared to baseline levels. See Schneider 2000b et al.: chapter 3.1.1.

³ July 1999: RwF 100 = US\$0.3.

amount to pay at the health center when in need of care. As a result, it is expected in settings such as Rwanda that PPS can help remove financial barriers that may prevent people from using the health services they need.

Objective 1: Improved Financial Accessibility to Health Care

Three criteria were selected to evaluate the population's financial accessibility to health care: the use of health services in the district; partial financial exclusion that results in incomplete treatment among users of health services; and a household's ability to pay the annual contribution to PPS.

Findings revealed that the overall use of curative services for adults and children, and preventive health services for children and women, was up to five times higher for members than for nonmembers⁴. Members' higher service utilization shows that the population had an accumulated demand for health care; however, members' use rates are comparatively low to judge them as having reached a level of frivolous use. Capitation provider payment might have had a controlling effect on members' moral hazard behavior and providers' over-supply behavior and, therefore, prevented the frivolous use of health care services. Adverse selection seems not to have driven higher service utilization as only 13 percent of male members and 6 percent of female members interviewed said they enrolled because of chronic illness.

Patients who are charged user fees when they need care risk the possibility of being excluded from services if they lack the necessary amount to pay the bill. This exclusion has not been observed with member patients. Patient exit interview survey findings have shown that members had access to the entire treatment prescribed whereas nonmember patients were to a certain extent excluded from health care, with 20 percent lacking the necessary amount to buy the drugs prescribed during the health center visit. Nonmembers' incomplete drug consumption may lead to quality concerns, specifically if patients develop resistance against antibiotic or antimalaria drugs due to incomplete treatment.

Prepayment schemes aim to improve the poor's financial accessibility to care by making it possible for people to enroll at the time that they have cash available and, consequently, pay very little when they need to use health care services. Nevertheless, the poorest households may not be able to afford the annual enrollment fee. The household survey conducted in the five districts has shown that although the majority of prepayment members are poor, the poorest households are less likely to enroll than richer households. The financial incidence of prepayment membership on poorest households' annual monetary expenditures amounts to 20 percent, which is about five times more than the average household's. However, nonmember patients pay up to 12 times more per health center visit than members do, and 70 percent of male members and 85 percent of female members interviewed said prepayment is cheaper than paying out-of-pocket, it provides an opportunity to invest money, and it guarantees access to care when needed. The importance of prepayment membership for the poorest households has been recognized by church groups and other prepayment members, and it has caused prepayment to become a promising tool to subsidize access to care for the vulnerable in a targeted manner.

Objective 2: Improved Quality of Care

⁴ District averages are 1.5 curative consultations per member per year in Kabutare and Kabgayi, and 1.1 curative consultation per member in Byumba, whereas nonmembers' curative care consultation level scores around 0.2 consultation per nonmember per year.

Improved quality of care was evaluated based on the availability of limited resources, the continuity of preventive service use, and patients' satisfaction with care. PPS' capitation payment to health centers, health centers' gatekeeper function, an accumulated demand for basic care among the rural poor, and a limited hospital package dissuaded health centers from under providing care and referring member patients to hospitals.

Prepayment schemes have influenced the availability of drugs and trained personnel by creating a demand for quality care through better informed consumers. The schemes organized regular general assemblies where members and health center representatives discussed issues related to the health center, the scheme, or personnel behavior. Consequently, several health centers have improved their technical staff structure, which will in turn affect the prepayment enrollment rates, health centers' utilization level, and the quality of care provided.

The use of prenatal care and immunization services was measured to evaluate the continuity of preventive services. By increasing preventive service use, capitation payment to health centers provides an incentive to providers to keep members healthy. Household survey data revealed that female members were considerably more likely to have one or three prenatal care visits and seek professional assistance during delivery than nonmembers in pilot and control districts. The prepayment schemes in Rwanda have the potential to be an effective tool to guarantee access to safe motherhood and maintain children's good health.

Members and nonmembers interviewed in the patient exit survey were equally well satisfied with the provider's behavior and reception. Member and nonmember patients interviewed in the three pilot districts were more likely to be informed about their diagnostics (20 percent to 40 percent) than were nonmember patients in control districts (14 percent). The stakeholder focus group survey revealed that members are more demanding than nonmembers, and more demanding patients organized in consumer groups with purchasing power will set higher standards in the provision of care, which contributes to improved health service quality.

Objective 3: Improved Community Participation in the Health Sector

Community participation was evaluated based on the population's acceptability of the schemes, its mobilization of financial resources for the health sector, and members' participation in the schemes' management.

The proportion of the district population enrolled in PPS measures the schemes' acceptability in the population. At the end of the first year, the 54 PPS – all voluntarily managed by their members – counted 88,303 members overall and showed a wide range of enrollment, spreading from 0.9 percent to 55 percent of the health center catchment area population enrolled. Average enrollment was 1,635 members per pool, corresponding to a participation rate of 8 percent of the target population.

The goal of PPS is to improve access to care while at the same time secure sustainability in health facilities through continuous financial participation of the community. With growing membership pools, prepayment contributions to health facilities become more important. During the first year, PPS contributed to basic care in health centers (where more than 20 percent of the catchment area population was enrolled in the partner scheme) equally as much as the government and donors combined. On a per capita level, PPS members contributed up to five times more to health centers than nonmembers in the pilot and control districts.

Prepayment schemes are organized as mutual health associations and managed in voluntary work by their administrative council, which is composed of four members elected by and among all members during a general assembly. All schemes have united their members in an average of three general assemblies per scheme per year to discuss issues related to health care and scheme management.

Objective 4: Improved Financial Sustainability in Health Facilities and Prepayment Schemes

Improved financial sustainability was measured by the health centers' cost recovery rates of total operational costs from prepayment and user fee revenue as well as their rational use of limited resources. Additional criteria included the financial viability of PPS and the use of financial and administrative management tools in health centers and prepayment schemes.

Total cost recovery rates in health facilities were calculated for member and nonmember patients' total operational costs. Cost recovery rates are higher for members than nonmembers in health centers that have membership pools large enough and operating at more efficient cost levels. The improved provider productivity caused by scheme members' higher demand for care is most evident in health centers that have previously had low utilization levels but have managed to partner with large PPS membership pools.

The rational use of limited resources was measured by calculating members' and nonmembers' unit costs for drugs and personnel per health care visit. Patients who seek care early at the onset of illness need fewer drugs to recover, and idle personnel and infrastructure capacity will be reduced with more patients visiting the health facilities. A detailed cost analysis found that due to nonmembers' low utilization level, personnel unit costs per visit are almost twice as high for nonmember patients than for PPS member patients. Also, nonmembers reported up to a 20 percent higher drug unit cost per visit than members.

At the end of each month, each prepayment scheme pays a capitation payment to the partnering health center and a fixed amount to the district PPS federation, who will reimburse the district hospital for the limited package covered by a per episode payment. In terms of the scheme's total annual expenditures, 7 percent is used to cover the scheme's own administrative costs, 7 percent is used for hospital care, and 86 percent for care in health centers. PPS received financial support in the form of targeted demand-side subsidies, such as in Kabutare, where churches paid annual enrollment fees for 3,000 widows and orphans and for about 40 HIV-positive individuals who are members of AIDS associations.

Annex A provides a detailed list of the additional management tools that have been developed and introduced in PPS and affiliated health facilities⁵. All PPS and health facilities had to work with these tools on a daily and monthly basis to calculate monthly payments.

Objective 5: Improved Democratic Governance in Health Sector

Prepayment schemes have contributed to democratic decision making in the health sector by introducing prepayment general assemblies with all members as a discussion and election forum; by using legal tools such as by-laws and contracts between payers and providers as framework for governance; and by bringing health to the political agenda during Rwanda's first elections of mayors for communities.

Objective 6: Capacity Built in Financial Management

⁵ See Schneider 2000b et al.

The request to design and implement PPS with strong community participation in the schemes' financial funds required capacity to be built on the central and peripheral level on subjects such as health care financing, insurance, provider payment, incentive systems, management and organization of microfinancing systems, and the implementation of a legal framework. These topics were new to the rural population, which was supposed to contribute to the design and management of the schemes. Scheme managers attended a series of district workshops during the entire pilot phase, which included continuous in-depth training on insurance and financial management. Similarly, strategic capacity was built on the MOH central and peripheral level to guide the launch and follow-up of PPS.

Objective 7: Strengthened Social and Civic Fabric in the Rwandan Society

Prepayment plans require the population to pool in solidarity groups and share risk between the healthy and sick, a social component that has been destroyed during the civil war and genocide in 1994. Thus, prepayment plans are social organizations equipped with the necessary management tools and knowledge that can be used to create other economic activities in these rural areas. They also provide the means to identify vulnerable groups to finance their enrollment fees either by the government, donors, or the local communities.

Recommendations

The evaluation of the pilot-tested health insurance schemes in Rwanda has shown that equity in financial accessibility to better quality care can be improved in low-income countries with carefully designed health insurance schemes, if these schemes set the necessary incentives to providers, insurers, and consumers to manage health service utilization and health care cost, and if they are used by the government and donors as a mechanism to subsidize the demand for care of the poorest society members. Sustainability and full effectiveness of the current prepayment plans require that the MOH continue to provide technical assistance and support in capacity building to the implemented prepayment plans in the three districts. At the same time, resources built in the three districts should be used in replicating prepayment in other districts, preferably where spillover effects already have taken place, such as in districts near the pilot districts.

It is recommended that the Rwandan national health policy incorporate prepayment with capitation provider payment as one of the pillars in its financing strategy. The MOH should maintain its technical and organizational capacity to support the current, widespread demand for replication in many parts of the country. A scale-up of prepayment is more likely to be successful if accompanied by health service system strengthening measures and organized community participation leading to enhanced local accountability and responsibility. These measures include adapting and enlarging the prepayment benefit package to the demand of the population, developing an alternative to fee-forservice reimbursement for hospital services covered in prepayment plans, and strengthening organizational and financial management in health facilities. In addition, health facilities need to be financially audited regularly by nonhealth sector representatives, and it is recommended that competition components be promoted between public and private providers, especially in urban areas, to improve the quality of care. It is also suggested to encourage strong local participation, organization, and accountability to improve health facility performance through higher quality standards that have been stressed by informed and empowered consumers. The MOH might want to consider a phased scale-up by starting in districts where positive spillover effects have already taken place.

1. Introduction

Growing concerns over rising poverty and the sharp drop in demand for health services during the post-genocide period motivated the Rwandan government to seek innovative ways to ensure financial accessibility to quality health care by pilot testing prepayment as an alternative to the predominant out-of-pocket user fee system. The Rwandan authorities in collaboration with local communities designed and implemented, with technical and financial assistance from the Partnerships for Health Reform (PHR) project, an innovative prepayment scheme (PPS) in three of the country's 40 health districts. This was expected to provide the elements for replication. This report synthesizes the schemes' development phase and first-year experience and recommends policy directions and implementations to optimize an extension.

1.1 Socioeconomic and Health Situation in Rwanda

With a per capita gross national product (GNP) of US \$250 in 1999, Rwanda ranks among the poorest countries in the world. From 1993 to 1997 there was a sharp rise in poverty, with the proportion of households falling below the poverty line increasing from 53 to 70 percent. More than 90 percent of the population engages in subsistence agriculture, which is the least productive sector. Table 1.1 depicts selected socioeconomic and health indicators for Rwanda and compares them with Sub-Saharan averages. The Rwandan public health sector is characterized by heavy dependence on external aid, with the country receiving close to US \$7.0 per capita for health. During the last decade the government's share of the overall contribution to health plummeted to a historical low of 10 percent of total health funds with households (40 percent) and donors (50 percent) assuming an increasing and unsustainable financial burden. Despite this heavy foreign support, Rwanda's health indicators such as maternal and child mortality as well as life expectancy rates score considerably worse compared with the rest of Sub-Saharan Africa.

Indicator	Rwanda	Sub-Sahara	
Economic Output and Growth			
GNP per capita, 1999 (dollars)	250	500	
Average annual growth rate in GNP per capita (percent, 1998-99)	4.8	-0.3	
Population and Fertility			
Population, 1999 (millions)	8	642	
Population density per square km, 1999	337	27	
Total fertility rate, 1998	6.1	5.4	
Health Indicators			
Life expectancy at birth, 1998			
Males, years	40	49	
Females, years	42	52	

Table 1.1: Selected Economic, Demographic, and Health Indicators in Rwanda and Sub-Saharan Region

Adult female mortality rate, 1998 (ages 15-59)	527	383	
Under-5 mortality rate, 1998 (per 1,000)	205	151	
Infant mortality rate, 1998 (per 1,000 live births)	123	92	
Health Expenditures			
Total per capita health expenditure, 1998 (dollars, official exchange rate)	12.7	33	
Foreign assistance for health per capita, 1990 (dollars)	6.4	2.5	
Health expenditures as percentage of GDP, 1998			
Total	5	3.2	
Public sector (Sub-saharan Africa for most recent year)	0.5	1.5	

(Source: World Bank 2000b and 2000c, Schneider et al. 2000a)

Health Care Financing in Rwanda⁶

Health care in Rwanda is to a large extent financed by consumers' out-of-pocket user fees. This predominant provider payment mechanism has caused serious concerns about large population groups being partially, temporarily, seasonally, or even permanently excluded from health services. When the Ministry of Health (MOH) reintroduced user fees in 1996, service utilization in health facilities plummeted from 0.3 curative consultations per capita in 1997 to a national average of 0.25 annual consultations per capita in 1999. Not surprisingly, Rwanda's health outcome indicators have remained on a worrisome level, placing the country among the world's lowest ranked in health care. The population has responded to the increasing burden of out-of-pocket payments and a number of spontaneous but isolated mutual funds have emerged throughout Rwanda as a result. The MOH favored the idea of launching prepayment schemes in a controlled way that would improve equity in access to better quality health services for the rural population and at the same time strengthen community participation and the practical knowledge of financial management.

Social and private insurance is to a lesser extent represented in Rwanda with approximately 0.6 percent of the total population insured. In an attempt to provide access to health care to all government employees, the government insured its 5,000 top-ranking employees with a private insurance company in January 1999. The remaining government employees became members of the pubic employee health insurance. To fund this public insurance, the government started to deduct 10 percent of all its employees' gross salary expenses on a monthly basis. Lacking a contract with providers, public and church-owned health centers and hospitals only started to treat members of the public insurance in September 1999. Patients' copayment is 25 percent of their bill. By the end of 2000, an increasing number of providers had refused to treat members of the public employee health insurance because a provider reimbursement system had not been put in place and providers had not been paid by the public insurance. This rather debatable experience has created negative side-effects to PPS in the three districts. First, the government insurance has caused the population to mistrust health insurance and has created hesitation to enroll with prepayment plans. Second, government employees living in the rural pilot districts initially refrained from enrolling with their local prepayment plan due to their anticipating government coverage. In the absence of any other formal sector private business in rural areas, the government employee insurance has separated the rural communities into two "insured groups," namely the rural less-educated population enrolled with prepayment plans and the better educated government employees who were supposed to be covered

⁶ Schneider et al. 2000a, on National Health Accounts of Rwanda, provides more detailed information on the financing of health care in Rwanda.

by the government insurance. As a consequence, PPS members complained about the lack of educated members who could be elected into their scheme's administrative council and help manage the schemes. Facing increasing resistance to accessing care, public employees progressively enrolled with local prepayment plans despite their regular salary deductions for the government insurance fund. The government experience with its public employee health insurance has demonstrated the administrative, organizational, and financial complexities of health insurance schemes for developing countries be it individual, community, or employer based.

1.2 Goals and Objectives of This Report

This final synthesis report on PPS combines the results of the different analyses of the impact of the prepayment pilot experience on the Rwandan health sector in the districts of Byumba, Kabgayi, and Kabutare, and compares these results with the Ministry's objectives. The Rwandan MOH in collaboration with its partners is currently in the process of finalizing the country's health sector policy, which was drafted in 1995 with the support of the World Health Organization (WHO). Recommendations for policy directions and implementations cited in this final prepayment report will support the MOH in its strategic planning in preparation of an extension of PPS and in its finalization of the country's health policy.

1.3 Role of the Final Report within the Prepayment Scheme Agenda

The development and implementation phase of prepayment schemes and their first-year results in the three districts have been documented and evaluated in several PHR technical reports. A quasiexperimental design was used to analyze and present these final results based on routine data collected in health facilities and PPS, as well as on information received from households, stakeholders, and patient exit surveys in three pilot and two control districts. The PHR technical report 45 describes the pilot test development and implementation phase and presents preliminary results of the first six months of the prepayment experience. A first focus group survey was conducted by Office National de la Population (ONAPO) during June/July 1999, evaluating the population's perception of the health care system and its interest in prepayment. The PHR technical report 61 analyzes the prepayment impact on health services, based on provider data collected the year prior and since the implementation of the reform in the five districts. A final three-day evaluation workshop took place in Kigali in September 2000. The workshop handouts consisted of detailed information on provider and prepayment results and included summaries of the patient exit interviews, the provider market analysis, and the follow-up focus group survey, which was conducted by ONAPO at the end of the pilot experience in August 2000 (Diop 2000). Different PHR and ONAPO reports cover this information in detail. This final report synthesizes the prepayment results and compares them with the Ministry's objectives.

Following the introduction, the second chapter provides a summary on the PPS' development and implementation process as well as their organizational set up in Rwanda. Using seven subsections, Chapter 3 compares each objective with the first-year results based on the evaluation criteria initially selected. The last chapter recommends policy directions and implementations to strengthen PPS and to support a successful replication in other health regions. Annexes contain supporting documents such as the PPS' legal framework, training material for workshop participants, and an overview of data collected.

2. Prepayment Schemes in Rwanda

In 1998, two years after the reintroduction of user fees, the MOH set a main objective of improving the financial accessibility to quality care for the low-income population and supported the rural population in the design and implementation of prepayment schemes. An initial focus group survey sought the views and attitudes of local households about their interest in solidarity-based health financing groups and their experience with health care providers. Focus group participants expressed concerns about their deteriorating financial access to health services, the poor quality of care, and their strong interest in participating in trustworthy mutual health organizations. However, they also acknowledged their lack of experience in organizing themselves in associations or mutual help organizations and in managing large financial funds. This chapter summarizes the development and implementation process of prepayment schemes in Rwanda as well as their organizational features. (See Schneider 2000b et al.).

2.1 Development and Implementation Process

In early 1999, the MOH selected three experimental districts (Kabgayi, Byumba, and Kabutare) to pilot test the PPS and two control districts (Kibungo, Bugesera) for comparison. Pilot districts were selected due to their sufficient health infrastructure, the population's repeated demand for technical assistance in developing and implementing PPS, and the districts' political will to participate in the pilot.

Consequently, the MOH formed a steering committee, headed by the director of health care and including government and civil society representatives from the central and regional levels, to coordinate the PPS activities. In addition to this strategic central level committee, on a pilot district level, community and health care representatives met in 28 district workshops and in a series of community gatherings to agree upon the PPS organizational and management features and the modalities for its implementation (Annex A). Proposals stemming from these pilot district workshops were shared with the central steering committee, which provided feedback and advice to the district workshop participants. As a result of the steering committee meetings and district workshops, which took place over four months, the legal, contractual, and financial tools were developed and participants were trained and prepared to manage the 54 PPS, each partnering with a health center.

Members enrolled with the prepayment scheme affiliated with their preferred health center. The benefit package for PPS members in each district was agreed upon during district workshop and steering committee meetings, and it is summarized in Table 2.1. By paying an annual premium of 2,500 RwF per family (US \$7.50 equivalent) at the time of enrollment, members are entitled, after a one-month waiting period, to a basic health care package covering all services and drugs provided in their "preferred" health center, ambulance transfer to the district hospital, and a limited package at the district hospital.⁷ Because of its more comprehensive hospital package, Kabgayi's annual premium is slightly more expensive (2,600 RwF per family) compared with Kabutare and Byumba (2,500 RwF). Members copay 100 RwF (US \$0.30 equivalent) at each health center visit. Hospital services are covered for PPS members only if they are referred by their "preferred provider" health centers, which

⁷ Premium rates were set by taking into account existing user fees and by assuming that utilization rates would increase by 25 percent compared to baseline levels. See TR 45: chapter 3.1.1. (See Schneider 2000b et al.)

members contact first in case of sickness, and which play a gatekeeper function to discourage inappropriate use of hospital facilities.

Package	Kabutare	Byumba	Kabgayi
Health Center	 Services covered during first contact. Preventive and basic curative care by nurses Drugs on essential drug list of MOH Hospitalization at health center Ambulance transfer to district hospital 	Same as Kabutare	Same as Kabutare
District Hospital	 Covered with health center referral. Consultation with physician (fee-for-service payment) Overnight stay (fee-for-service) Cesarean-Section (per episode) 	Same as Kabutare	Covered with health center referral, full treatment per episode (per episode payment): • Cesarean-Section • Pediatric cases (<5 years) • Malaria (>5 years)
Annual Premium	Individual: 2,000 RwF Household: 2,500 RwF up to 7 people; if 8+ persons: 530 RwF for each additional person Groups (with 8+ people): 530 RwF per person	Same as Kabutare	Individual: 2,200 RwF Household: 2,600 RwF up to 7 people; if 8+ persons: 550 RwF for each additional person Groups (with 8+ people): 550 RwF per person

Table 2.1: Prepayment Schemes: Health Center and Hospital Benefit Packages and Premium

The MOH suggested that PPS be designed with a provider payment method that would set incentives to providers, insurers, and members and would thereby control moral hazard and eventual cost escalations caused by a poor population's accumulated demand for care. As a result, pilot district workshop participants and MOH steering committee members discussed the incentives set by the different provider payment systems (fee-for-service, per episode, capitation, budget). Participants agreed upon capitation payment with a quality component for health centers as a measure to control cost escalations that are caused by supply-side induced increases in demand for health care. At the same tim,e the capitation provider payment method to health centers should set incentives to providers to increase the provision of preventive care services to keep members healthy. Per-episode and fee-for-service payment was selected to reimburse the district hospital for the limited benefit package.

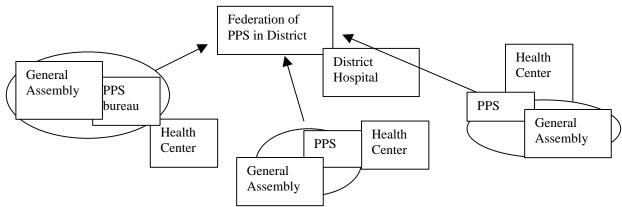
Several sensitization and awareness campaigns, using radio spots, newspaper articles, and community meetings with local political and church authorities, informed the population about PPS supporting the development and implementation phase.

2.2 Organization of Prepayment Schemes in Rwanda

On July 1, 1999, Rwanda's 52 prepayment schemes were constituted and ready to accept members⁸. Organizationally, each health center in the districts of Kabutare, Kabgayi, and Byumba affiliated with a PPS (see Table 2.2). Following the Rwandan law, the schemes are mutual health associations. Initially, the schemes started with an executive bureau constituted by local representatives that had been elected to the local parliament by popular elections during Rwanda's first sector and cellule level elections in April 1999. As soon as the schemes counted enough members, the executive bureau invited members to a general assembly where prepayment members elected four representatives among themselves for their executive bureau.

Autonomously managed schemes are headed by executive bureaus composed solely of community representatives, whereas comanaged schemes are managed by representatives of both the health and nonhealth sector. Health center representatives comanaged the schemes in Kabugayi and Byumba. Although Kabutare started with prepayment schemes that are autonomously managed by the population, the district converted to comanagement and added one health center representative to the PPS executive bureau midway during the pilot year.

On a district level, the schemes have federated to the PPS federation (Table 2.2). Six members who were elected in a general assembly of all PPS executive bureau representatives in each district constitute the federation. The federation is the partner to the district hospital as well as to the health district and other authorities. Once constituted, each prepayment bureau signed a contract with the affiliated health center, and each prepayment federation contracted with the partner district hospital. The contract defines, in 17 articles, the rules of collaboration between the different partners (Annex A). According to the law and the schemes' by-law (Annex A), at least once per year members are invited to attend the prepayment scheme general assembly (see 3.5.1).





The organizational and democratic development and implementation of PPS has fostered transparency in the provision and financing of health care and has supported the discussion between health care providers and the rural population (see section 3.5).

⁸ Two additional health centers (CUSP Butare, Kinihira) joined the schemes later during the pilot year, bringing the total number up to 54 schemes. See Annex C for a list of all health centers and prepayment schemes included in the pilot experience.

The implementation of the prepayment pilot was evaluated by an elaborate routine and survey data collection covering the base and test year in the three pilot and two control districts. The results of this first year prepayment experience are synthesized in the following third chapter and are compared with government's objectives.

3. Synthesis of Results of Pilot Phase

3.1 Objectives

During the development phase for prepayment schemes in early 1999, the Ministry set four main objectives to measure the impact of PPS on the performance of the district health services. These included improved financial access to health care, improved quality of care, improved community participation, and financial sustainability in health facilities and prepayment funds. During the pilot year, three additional objectives became important, and these have implications beyond the health sector. They take into account the prepayment's contribution to improved democratic governance, to the human capacity built related to health financing and insurance, and to the strengthened social and civic fabric in a society that was tormented by genocide and war in 1994. Table 3.1 presents an overview of these seven objectives, which will be discussed in this chapter. The table also lists the different sources of information collected to evaluate each objective. Annex B presents more information on the data collected, whereas the bibliography lists the different PHR reports that document this information.

Objectives of Prepayment Schemes	Source of Information	PHR Report
Improved financial access to health care	Health facilities monthly routine data Household survey	TR on utilization, cost, finances TR on households
Improved quality of care	Health facilities monthly routine data Patient exit interviews Focus group survey	TR on utilization, cost, finances ONAPO patient survey ONAPO focus group
Improved community participation	Health facilities and PPS routine data Focus group survey Household survey	TR on utilization, cost, finances ONAPO focus group TR on households
Strenghened financial sustainability	Health facilities monthly routine data Prepayment schemes monthly routine data Household survey	TR on utilization, cost, finances ONAPO focus group TR on households
Improved democratic governance	Prepayment schemes monthly routine data Focus group survey	TR on utilization, cost, finances ONAPO focus group
Capacity built in financial management	Prepayment schemes monthly routine data Health facilities monthly routine data Focus group survey	TR on utilization, cost, finances ONAPO focus group
Improved social and civic fabric	Prepayment schemes monthly routine data Focus group survey	TR on utilization, cost, finances ONAPO focus group

Table 3.1: Prepayment Schemes: Objectives and Information Sources

Note: TR on utilization, cost, finances: Schneider et al. 2001. TR on households: Diop and Schneider, forthcoming. Patient survey report: Republic of Rwanda, ONAPO 2000. Focus group report: Republic of Rwanda, ONAPO 1999.

The steering committee approved an evaluation plan to analyze to what extent PPS can contribute to the MOH objectives. A quasi-experimental design was applied to collect routine and survey data and to evaluate the PPS' impact on district health services. The analysis compared performance in health facilities for members and nonmembers in the pilot districts, for all patients in the pilot and the control districts during the pilot year, and for all patients during the year before and the year since the introduction of PPS.

3.2 Objective 1: Improved Financial Accessibility to Health Care

The change from user fees to PPS has caused the health risk to be shared between sick and healthy scheme members and the payment for health to be shifted from the time of illness to the day of enrollment. PPS member patients do not face the same uncertainty as nonmembers about what amount to pay at the health center when in need of care. These prepayment effects have improved financial accessibility to health care services for members in the three districts.

Three criteria were selected to evaluate the objective of improved financial access to health care. They include the use of health services in the district, partial exclusion of care among users of health services because of financial barriers, and households' ability to pay the annual contribution to PPS.

3.2.1 Use of Health Services

Routine data collected in health facilities in the three pilot and two control districts the year before (August 1998 to July 1999) and since PPS (August 1999 to July 2000) are presented in the PHR technical report on the utilization, cost, and financing of district health services. Findings reveal that PPS members report up to five times higher use rates of curative consultations, deliveries at health centers, prenatal care consultations, and immunization for children than do nonmembers in pilot and control districts. The members' resulting utilization level of a district average of 1.5 curative consultations per member per year shows that the population had an accumulated demand for health care and that capitation provider payment had a controlling effect on the members' moral hazard behavior and the providers' oversupply behavior and it has prevented the frivolous use of health care. The comparison of service use at all health centers indicates that independent from health centers' prepayment enrollment results and previous year service utilization levels, members in all health centers have reached a similar per capita service use, which is significantly higher than that of nonmembers. In addition, household survey data have shown that members' service use is equally high across all income groups. This is not the case for nonmembers, whose service utilization rates increase with higher income levels; however, even nonmembers in the highest income groups use care only half as often as prepayment members in the same income group.

The findings presented in the PHR technical report on utilization, cost, and finances show that PPS have improved financial accessibility to health services for members:

- > Prepayment improved members' access to care resulting in use rates of up to five times higher for members than nonmembers in curative services for adults and children and preventive health services for children and women. The impact of prepayment on members' service utilization was highest in health centers that reported low and medium utilization levels during the previous year.
- > Capitation provider payment has set incentives to control for members' moral hazard and providers' oversupply of drugs and other services, and it has prevented the frivolous use of

scarce resources.

- > Women who are members are up to three times more likely to deliver with professional assistance than nonmember women who will more likely deliver at home and alone.
- > Prepayment closed the utilization gap between higher and lower income members. Thus, members across all income groups have reached the same utilization level whereas nonmember's health service utilization increases with increasing income groups.

3.2.2 Partial Exclusion from Health Care Among Users

Patients who are charged user fees when they need health care are likely to be partially, temporarily, seasonally, or permanently excluded from services. Patients who lack the necessary funds to pay for their care when they are sick and thus postpone care until they find the money to pay are temporarily excluded. Seasonal exclusion exists when patients primarily seek care during the "cash seasons," which is the time when a rural population sells its harvest, but do not have access to care during the "noncash seasons." Patients bear the risk of being partially excluded from services if they lack the full amount to pay the health center bill, and, as a result, they do not receive all services or drugs prescribed by the provider or are sent away to raise the necessary amount from friends, which results in delayed treatment. Among the female members interviewed in the patient exit survey, 44 percent said prepayment is cheaper than paying user fees for care, and an additional 32 percent appreciated prepayment as an insurance that allows them to access the health system when they and their family members are sick.

The patient exit interview survey findings show that PPS effectively prevent temporary, partial, and seasonal exclusion from access to care for the services covered by the plan for PPS members:

- > PPS members did not report any partial exclusion from care, whereas nonmember patients reported partial exclusion from health care: 10 percent of the nonmember patients interviewed in the pilot districts and 10 percent of all patients interviewed in control districts lacked the necessary amount to buy the drugs prescribed during the health center visit.
- > Female members interviewed recognized the importance of prepayment to guarantee financial accessibility to health care for themselves and family members each time they are sick.
- > Nonmembers' incomplete drug consumption may lead to quality concerns, especially if patients develop resistance against antibiotic and anti-malaria drugs due to incomplete treatment.

3.2.3 Households' Ability to Pay for Health Care

Prepayment schemes aim to improve financial accessibility to care for the poor, thus poor society members need to be able to pay the annual PPS enrollment fee. The household survey conducted in the five districts provides information on member and nonmember households' socioeconomic background. It can be concluded from the low ratio of annual contributions for prepayment membership in terms of household expenses across all income groups that prepayment membership is affordable. For some groups in Kabutare, enrollment fees of the more vulnerable community groups (orphans, widows, HIV-positive individuals) were paid by church organizations.

- > Patient exit interviews revealed that nonmembers pay up to 12 times more than members do for the actual health center visit. Members' expenditures mainly consist of their copayment. Household survey data also show that PPS members save money as they are less likely to spend money on traditional medicine, herbs, and self-medication before going to a professional provider.
- > Of the PPS members interviewed in the household survey, one-third said the enrollment fee was too expensive whereas the majority thought the fee level was okay or easy to pay. Almost all members interviewed (96.3 percent) said they would re-enroll, and the few who would not were not certain they would have the money. Of the nonmembers interviewed, almost three-fourths would like to become PPS members. Lack of money and poverty was the main reason why one-fourth would most probably not enroll.
- > The household surveys revealed that both members and nonmembers are poor. Of all the member patients interviewed in the health facility exit survey, 53 percent were poor, 21 percent were middle income, and 26 percent were from higher economic groups, whereas nonmember patients were more likely to be poor: 69 percent were identified as poor, 20 percent as middle income, and 11 percent as having a higher economic background⁹. This finding is supported by household survey results that showed households from the highest income quartiles are twice as likely to enroll than those from the poorest income groups.
- > Prepayment expenditures correspond to an average of 6 percent of members' total monetary expenditures. This is affordable for those households who are in household survey income quartile 2, 3, and 4, but it is high for households in the lowest income quartile where prepayment expenses reflect 22 percent of their monetary expenditures.
- > Once they are a PPS member, the majority of the members interviewed in the household survey recognized that prepayment is cheaper than paying out-of-pocket, provides certainty in access to care when needed, and is a form of investment where savings accounts are not accessible for the poor¹⁰.

The findings discussed in this section show that those PPS members who are poor appreciated having better financial accessibility to care during the entire enrollment period, which resulted in higher curative and preventive care service use; however, this was not the case for the noninsured. PPS membership can be a financial burden for the poorest society members who constitute the majority of the membership pool. However, first-year experience has shown that PPS can be used as a tool to subsidize demand for care for the poor and improve their access to care. The following section evaluates how well prepayment schemes have responded to improved quality in care.

⁹ The patient survey does not report any household income or total expenditure information and defines patients' economic background based on the number of cattle, sheep, and goats owned per household.
¹⁰ Administrative fees charged by the bank to open a savings account are 3,000 RwF per account, which is more expensive than the annual prepayment enrolment fee for a family (2,500 RwF).

3.3 Objective 2: Improved Quality of Care

Prepayment schemes can impact the quality of health care on the structural process and the outcome level. The availability of drugs and trained personnel in health facilities are quality conditions on a structural level. Limited data exist from this first year experience about the eventual changes in quality of care. The MOH plan to provide a financial incentive through capitation payment to providers based on their quality results has been postponed to the second year of operation. The first-year experience shows that PPS have organized general assemblies where members and health center representatives meet and discuss questions and issues related to the quality of the health center, the scheme, or the staff behavior. These discussions have created awareness among members about their consumer rights. Several health centers in Byumba and Kabgayi have improved their technical staff structure by adding trained nurses, which has in turn affected their PPS membership pool, the quality of care delivered, and the health centers' service utilization levels.

3.3.1 Availability of Drugs and Medical Equipment

Health facilities in Rwanda buy drugs with their patient revenue at the district pharmacies or the national drug importer CAMERWA, and they receive drug donations from donors and the MOH. According to the MOH health information system (SIS), health centers and district pharmacies have reported sufficient drugs during the observation period. Monthly capitation revenue from PPS has contributed to health facilities' financial sustainability allowing them to buy the necessary drugs and equipment.

- > All members interviewed in the patient exit interview survey received the drugs prescribed.
- > Focus group survey participants proposed that health centers be staffed with trained personnel and equipped with radio communication, which will allow them to call the district ambulance in case of an emergency.
- > Health facilities have the necessary financial resources to ensure drug availability, however, isolated rupture of stock occurred and can be prevented by more effective drug management and the use of administrative tools.

3.3.2 Continuity of Preventive Services

The use of prenatal care services and immunization is measured to evaluate the continuity of preventive services. Capitation payment provides an incentive to health centers to keep members healthy, enhancing the use of preventive services. A message on the reverse side of the members' membership card reminds members about their right to use three prenatal care visits when pregnant and to have all their children immunized. The routine data collected in health facilities showed that overall use rates of preventive services and assisted deliveries increased as more members enrolled in prepayment schemes.

- > The two pilot districts, Byumba and Kabgayi, that have larger PPS membership pools reported an increase in the use of preventive care services for all patients of up to 40 percent, whereas results in the two control districts and in the pilot district with small membership pools did not show the same manifestation, or even decreased.
- > Female PPS members who responded to the household survey were up to twice as likely to

deliver at a public or church-owned health facility and be assisted by a medical professional during delivery compared with those who were noninsured.

> Women interviewed in the household survey were more likely to have one (90 percent) or three (54 percent) prenatal care visits if they were members compared with the noninsured (83 percent and 40 percent, respectively).

Prepayment schemes have proven to be an effective tool to promote access to safe motherhood and maintain children in good health.

3.3.3 Patient Satisfaction with the Provision of Care

The degree of patients' satisfaction with care received at the health center was measured by their satisfaction with the waiting period at the health center, the reception of the provider, and the information received from the provider about the diagnosis and treatment.

Patient exit interviews indicated that members and nonmembers are equally satisfied with the care received. However, the stakeholder focus group survey revealed that members are more demanding than nonmembers, an observation that has been supported by health center personnel when commenting on the discussions held during members' general assemblies. Members have suggested that health centers be staffed with better-trained personnel, such as physicians and gynecologists; that a separate fast-track waiting line be offered for member patients; and that they be treated as priority patients. Household survey findings show that higher educated community members are more likely to enroll in PPS. These higher educated members might have contributed to the other members' awareness and information level on health care and formed a greater willingness to be critical against providers. All participants in the focus group survey mainly complained about the behavior of health center staff, the use of inappropriate language, and the prescription of drugs without explanations.

- > According to the patient exit interviews, member and nonmember patients are equally satisfied with the health care received, but pilot district patients were more likely to be informed about their diagnostics (20 to 40 percent) than were the control districts' interviewees (around 14 percent).
- > The focus group survey revealed that PPS members are more critical and demanding of quality care, and this will set higher standards in the provision of care for health center staff. With growing membership pools, PPS have become important interest groups pushing for better quality care in return for their monthly payments to the health centers.

Based on the above key findings, it can be summarized that PPS contribute to better quality of care delivered in health centers by different means. First, the schemes contribute to sustainable availability. Second, prepayment schemes improve continuity in access to preventive care for mothers and children. Third, consumers organized in PPS are better informed about their rights and duties and actively negotiate as a group for higher value for the money paid, which will lead to higher quality of care standards.

3.4 Objective 3: Improved Community Participation

The entire development process, as well as the implementation and sustainability of PPS in the three districts, depends on the active participation of the local communities. The people for whose benefit the schemes were established have welcomed PPS as part of their socioeconomic life. The participatory life in a community can be strengthened by building social networks, such as insurance pools. The community's participation in PPS is measured by three criteria: the population's enrollment rate and acceptability of PPS, the mobilization of financial resources, and the population's participation in health service management.

3.4.1 Acceptability of Prepayment Schemes by the Population

The population was repeatedly encouraged through information provided during community gatherings, radio spots, newspaper articles, and TV discussions to enroll with the partner scheme of their preferred health center. Members were willing to pay the enrollment fee if they trusted that services would be rendered and if the value of the service received represented the price paid. High enrollment rates also point to a better sense of solidarity and risk sharing in a community group.

- > During their first operational year, PPS enrolled 88,303 members, corresponding to 8 percent of the three districts' population. Enrollment per scheme varied within 0.9 to 55 percent of the community population, and counted on average 1,635 members (see Annex C).
- > Prepayment schemes scored higher enrollment rates if the following conditions were fulfilled: first, they partnered with health centers that already reported higher utilization rates during the year prior to PPS; second, they received active support for their PPS awareness campaign from local medical, administrative, and political leaders; third, the health center and hospital provided the services as contracted with the scheme and promised to members; and fourth, the PPS administrative bureau was trustworthy and well organized with regular opening hours for interested members to buy membership cards.

3.4.2 Mobilization of Financial Resources for Health Care

Prepayment schemes aim to improve access to care and at the same time secure financial resources in health centers as members' increased demand may eventually lead to cost increases (see section 3.5 on cost recovery rates). With membership pools growing, PPS' contribution to health facilities becomes more important. During the first year, where more than 20 percent of the catchment area population was enrolled, PPS contributed equally as much to basic care in health centers as did the government and donors combined.

> Compared to the user fee system, PPS contribute on a per capita level up to five times more for health center care and at the same time improve the population's access to care significantly.

3.4.3 Participation in Management of PPS

Following the Rwandan law, the schemes are organized as mutual health associations and managed by the administrative council, which is composed of four members that have been elected

from among all members during the general assembly. Community participation in PPS management is measured based on members' participation in the schemes' management and other organizational tasks. During the first three operational months, members of all schemes successfully elected their representatives into the administrative council. Re-elections took place to replace council members whose management contributions were unsatisfactory. According to the PPS by-laws, the administrative council organizes a general assembly once per year and invites all members to attend the presentation of the financial results of the current year and the budget for the following year. In each district, the schemes have federated to the federation of PPS. The federation as well is managed by an administrative council composed of six representatives of the respective councils from the districts' schemes.

- > The scheme members, men and women of the communities, actively and democratically manage, through voluntary work, the finances and administration of PPS and the public relations with their partners.
- > All schemes united their members in at least one general assembly, with an average of three general assemblies per scheme per year.
- > Prepayment schemes became important interest groups in the communities and successfully contributed to adding health and health care financing to the political agenda of the districts.

As this section has shown, prepayment schemes were developed by the people who became PPS members and they are managed and financed by the communities, thus they fully depend on community involvement. They provide a forum for people to exercise their democratic rights and duties and to successfully negotiate within consumer groups for health care issues to become a subject on the political agenda.

3.5 Objective 4: Financial Sustainability in Health Facilities and Prepayment Schemes

Community participation depends to a certain extent on how reliable members and patients perceive the schemes' financial credibility and the availability of resources in health facilities. PPS need to support financial sustainability in health facilities, which in turn need to control cost escalations and manage their additional resources generated by the scheme members. However, adding insurance as an additional revenue source for providers may not be interpreted as an argument for the government to withdraw its subsidies. The following four criteria evaluate financial sustainability in schemes and health facilities: the cost recovery rate in health centers, the rational use of limited resources, the financial viability of the schemes, and the use of management tools by health center and scheme managers.

3.5.1 Cost Recovery in Health Centers¹¹

Compared with the year prior to PPS, pilot health centers raised overall cost recovery rates in Byumba from 68 to 75 percent, in Kabgayi from 61 to 71 percent, and in Kabutare from 61 to 67 percent. The two control districts reached lower levels compared with the pilot health centers, and Bugesera even signaled a decrease from 67 to 58 percent, while Kibungo reported a small increase from 58 to 62 percent of total costs. Cost recovery rates for services were higher for members than nonmembers in Byumba (92 percent versus 69 percent) and in Kabutare (81 percent versus 65 percent), revealing that the overall increase in recovery rates in these two districts was a direct consequence of PPS. Alternatively, health centers that financially depend on revenue from patients' user fees are tempted to increase price levels if they experience diminishing service utilization.

> Prepayment schemes contribute to higher cost recovery rates in health centers if membership pools are large enough and if health centers control their costs and operate productively.

3.5.2 Rational Use of Limited Resources

The rational use of limited resources is measured by drug unit costs and personnel unit costs per health care visit for members and nonmembers. Patients who seek care at the onset of illness need fewer drugs to recover, and idle personnel and infrastructure capacity will be reduced with more patients visiting the health facilities.

- > A detailed cost analysis revealed that personnel unit costs per visit are almost twice as high for nonmember patients than for PPS member patients. Similarly, nonmembers reported up to 20 percent higher drug unit costs per visit than did members.
- > The use of idle resources such as personnel in health centers becomes more cost-effective as more members are enrolled in PPS, largely because members report higher consultation rates (up to 1.5 per capita per year) than nonmembers (0.2 curative consultations per capita per year).
- > The improved provider productivity caused by scheme members' relatively higher demand for care is most eminent in health centers with previously low productivity levels. This finding means that the schemes have a potential to make changes in facilities ranking in the lowest performance groups.

3.5.3 Financial Management of Prepayment Schemes

At the end of each month, each PPS pays, per member enrolled, 10 percent of the monthly disbursement fund to the district PPS federation, which in turn reimburses the district hospital for the

¹¹ Cost recovery rates have been calculated for the base and pilot year in all health centers in the five districts and separately for member and nonmember lines of business. Total operational costs (personnel, drug, transport, and other costs) were used as well as all sources of funding (donors, government, and revenue from nonmembers and members). Fixed costs (staff and other operational costs) and their payments (public and donor funds) were distributed to members and nonmembers according to their proportional use of all services (consultations, laboratory, deliveries, etc.). Variable costs and revenue (drug purchase and revenue) were accounted for based on effective drug use by using information from the patient register for members and nonmembers. Cost recovery rates calculated the proportion of total costs covered by population revenue.

limited package covered and the rest as a capitation amount to the partnering health center. The Kabgayi schemes were confronted with a disproportionately high Cesarean section rate among their members, which was caused by the supply side and to a certain extent by adverse selection¹², and, as a result, Kabgayi received financial support from the Belgian Cooperation and the MOH to cover the hospital's Cesarean section bill.

- > During its first operational year, PPS in the three districts collected a total premium fund of 50 million RwF, of which 57 percent was disbursed and 43 percent retained to cover the remaining months for those members who had paid their annual premium at the time of enrollment. Of the total PPS expenditures, PPS administration used 7 percent and hospital care 7 percent, leaving the remaining 86 percent for health center care.
- > During their first operational year, the three federations in the three districts kept 4 percent of their total revenue to cover administrative charges while 93 percent was used for hospital payments and 3 percent was accumulated to cover future care for members.

3.5.4 The Use of Management Tools in Health Centers and Prepayment Schemes

The PHR technical report No. 45 on the development and implementation of PPS provides a detailed list of the additional management tools that have been introduced in prepayment schemes and their partnering health facilities (see Annex A). All PPS and health facilities had to work with these tools on a daily and monthly basis in order to calculate monthly payments. Thus, it was in the participants' own financial interest to adequately complete their administrative tools, hence a 100 percent proportion of correctly completed administrative tools was achieved. Health centers and prepayment bureaus have controlled each other's calculations and made corrections when necessary.

- > Understanding the need and use of management tools in PPS contributed to adequately completed administrative and financial management tools in prepayment schemes and health facilities and to a regular financial flow between the different partners.
- > Financial management capacity is built among the rural population by providing people with the opportunity to manage their own funds in a professional manner.

Clearly, the development and introduction of PPS has improved the awareness, understanding, and use of financial and administrative management among the prepayment and health facility managers. Better use of scarce resources through improved financial and administrative management was a prerequisite to reaching higher cost recovery rates in health centers and to sustaining PPS' financial viability.

In addition to the four main MOH objectives, the following three additional goals have been realized by PPS: democratic governance in the health sector has improved; capacity has been strengthened in financial health management; and the organizational set up and solidarity fostered by the schemes has contributed to the creation of social fabric in a society recently tormented by genocide.

¹² The Kabgayi hospital historically has reported considerably higher numbers of Cesarean sections compared to its catchment than all other hospitals in Rwanda. Adverse selection to a certain extent has occurred as women with previous C-sections had an incentive to enroll; however, this would have been a reason in the two other districts as well, where the consequences of adverse selection have not been observed.

3.6 Objective 5: Improved Democratic Governance in Health Sector

The Rwandan government aims to restore and reconcile a civilization that has been torn apart by the war of 1994. Prepayment schemes with their democratic organization have contributed to a better understanding of the rights and duties that are related to democratic governance and have caused decision making related to health and financing to become transparent and participatory. The criteria that evaluate improved democratic governance in the health sector include the use of PPS' general assembly, the changed decision making process in districts, and health as a subject on the political agenda.

3.6.1 Use of the PPS General Assembly

During the first year, the 54 PPS in the three districts invited their members on average to three general assemblies, during which the scheme administrative council presented financial and membership results and results from other activities. Members were able to ask questions, express their needs and concerns, suggest improvements related to the PPS as well as to the health facilities, and elect among themselves their administrative council for a two-year term. General assemblies have been used for other purposes as well, such as to collect money from members to pay for the membership of indigent community members, select indigent families who benefit from free membership, present the importance of preventing malaria by using mosquito nets, and express concerns to the health center personnel if there were any issues related to quality and provision of care.

> The PPS general assembly became a forum in which the rural population could practice democratic rights and duties and members' awareness, transparency, and knowledge of health-related issues could increase.

3.6.2 Decision-making Process in Districts

As in most other countries, the decision-making process within the health sector in the three districts is hierarchical. The community workshop participants in collaboration with the central level steering committee developed the schemes' legal documents, including their by-laws, internal regulations, and the contract between the schemes and the providers. Prepayment and health center managers increasingly learned how to use their by-laws and contract in the decision-making process, and articles were actively discussed with members during general assemblies.

> Prepayment schemes foster a democratic decision-making process, as well as the legal understanding of a population, by providing knowledge on the correct use of legal tools in decision making, such as by-laws, regulations, and contracts, that have been developed and voted upon by the community.

3.6.3 Putting Health on the Political Agenda of the District

Several PPS counted large membership pools at the end of the first year with close to 9,000 people enrolled, corresponding to more than one-fifth of the community's population. The regular discussions of health-related issues during PPS general assemblies, community workshops, and PPS administrative council meetings created an awareness among the districts' administrative and political leaders about health and health financing issues.

> Election candidates have recognized the importance of the large PPS pools and have included the creation of PPS awareness into their election campaigns, resulting in increases in membership¹³.

Prepayment schemes had a positive spillover effect on implementing democratic governance in Rwanda. The schemes have provided a forum with their democratic organization, such as general assemblies and administrative councils, and their legal framework. These democratic forums have put health onto the political agenda during community elections for mayor.

3.7 Objective 6: Capacity Built in Financial Management

The MOH wanted the communities to manage their own PPS, but the rural communities in the three districts mainly count subsistence farmers, and the majority of them are illiterate. This group hardly had any experience with insurance, or other solidarity and cooperative organizations. Thus, financial management capacity needed to be built in order to have about 300 members capable of managing the schemes as members of the PPS' administrative council. The achievement of this objective can be measured by the capacity built on the community and on the central MOH level.

3.7.1 Capacity Building on the District and Community Level

The specific financial, administrative, and organizational features of prepayment schemes were discussed, developed, and agreed upon in the course of 28 workshops, which took place in the three districts and in Kigali from March until June 1999. On average, about 80 representatives from the districts' health facilities, communities, churches, and the districts' administrative and political leaders attended these one-day workshops. The results of these workshops were the by-laws for the schemes and for the federation of PPS and the contract between the schemes and the partnering health centers and between the federation and the district hospital. Workshop participants — among them peasants, teachers, and nurses — were trained on the financial and administrative management of community-based health insurance. During the initial implementation phase, these trainees became the members of the schemes' administrative councils, but they had to be confirmed in elections held during a general assembly with all members, which took place during the first three operational months (July–September 1999).

The implementation and follow-up phase of PPS lasted from July 1999 until September 2000. During this phase another 31 workshops were organized to train the newly elected council members and to discuss specific PPS issues that the scheme and health facility managers encountered, such as utilization, cost and financial results, awareness and marketing campaigns, public relations, or provider payment calculations.

> Through the practical development and implementation of prepayment schemes, approximately 300 local community members received continuous training on health insurance and financial management issues during a total of 59 workshops held in the three pilot districts and in Kigali.

¹³ For example, the current PPS federation president of Byumba is from the area of the communities of Kivuye and Tumba, where he has served as mayor and run for elections.

3.7.2 Capacity Building on the Central MOH Level

A strategic steering committee of 16 members was created in February 1999 and headed by the director of health care at the MOH. Committee members included representatives from the pilot and control regions and districts, the MOH central level, and donors partnering with the MOH. The steering committee met at least monthly during the entire development and implementation phase. A regular information exchange took place between the steering committee and the district workshops. During these meetings, the PPS' features and legal instruments were finalized and strategic decision taken, based on the discussions held in the district-based workshops. Preliminary results were discussed and presented during a three-day workshop in March 1999, and final results during a three-day workshop in September 2000.

> With the technical assistance of PHR, strategic capacity was built on the MOH level to develop, implement, and follow up community health insurance such as PPS.

It can be concluded that through the practical design, development, and implementation of prepayment schemes, which involved a large number of local and central-level representatives, significant financial, administrative, and organizational capacity has been built in rural communities to manage organizations such as community health insurance. These technical resources are now available to initiate and manage other microfinancing projects in Rwanda's communities, supporting enhanced economic activities.

3.8 Objective 7: Improved Social and Civic Fabric in the Rwandan Society

In 1994, Rwanda was tormented by a war and genocide, which resulted in a deeply divided society, destroyed social fabric, and loss of cohesive community behavior. To what extent prepayment has contributed to restored social and civic fabric can be measured by spillovers to other socioeconomic community activities and by its impact on including the poor and other vulnerable groups in the benefits schemes.

3.8.1 Rebuilding a Post-War Society

The reconstruction of the country and reconciliation of the society rank among the main objectives of the Rwandan government. Initially, there were concerns about divided community members being ready to share their financial health risk and enroll in prepayment schemes, which are based on principles of solidarity. During the first year, Rwandan women and men of all ethnic groups enrolled in PPS and were elected to manage and represent their schemes in the administrative council and in their prepayment federation.

> Through their organizational and democratic set-up, prepayment schemes have provided an environment where all community members can contribute to the reconstruction of a destroyed society and strengthen solidarity with vulnerable groups.

3.8.2 PPS Spillover to Other Community Activities

There is little cooperative, association, and microfinancing activity in rural communities. Most farmers produce in subsistence farming and mostly trade their goods in kind. Cash is used to buy the few nontradable goods available, or to pay for transport and other costs, such as school fees and taxes.

Community members have created basic solidarity groups that share the financial risk of funerals or patient transport costs. Prepayment schemes have taught members how to manage the financial, administrative, and organizational issues of a microfinancing fund in a professional way and how to incorporate the use of legal, contractual, and public relations requirements that are related to microbusiness. These prepayment managers are now skilled resources available to initiate other microbusiness and economic activities in the communities.

> Prepayment schemes provide learning opportunities to build management capacity and skilled resources in the communities, which could lead to other microfinancing activities in rural communities.

3.8.3 Strengthening Solidarity by Targeting the Poor

Health facilities in Rwanda do not provide any free care, thus access to care is determined by a patient's ability to pay or access to a financial support system. When illness strikes, if the poor are not able to pay service fees, they have to ask family, friends, or other community members for financial support in order to pay their health care bill. The PPS by-law suggests that 5 percent of all members may be enrolled as indigent members without paying the annual enrollment fees. Other practices have been developed to facilitate membership for those who can't afford to pay the 2500 RwF enrollment fee, mainly indigents and other vulnerable society members (orphans, HIV-positive individuals). Fundraising to pay for indigents' enrollment fee took place during members' general assemblies, and "tontines" were formed where five families get together with each paying 500 RwF per week over a period of five weeks, resulting in all "tontine" households enrolled within five weeks.

- > Households who lack the annual membership fee have created "tontines," which allow all tontine households to enroll in the PPS at the end of a certain period.
- > Prepayment schemes are an effective tool to channel subsidies to the poor and vulnerable high-risk groups, such as HIV-positive patients who otherwise would be excluded from access to basic health care.

The first-year PPS experience indicated that, through the PPS, the rural population has taken the opportunity to contribute to the rebuilding of a democratic society, to be aware of solidarity financing mechanisms and initiate other microfinancing businesses, and to improve equity in access to care by targeting the poor and vulnerable groups.

Box 1: The Voices of Stakeholders

The following quotations illustrate public opinion of prepayment schemes.

You cannot rule a country in which you don't live. Thus, local authorities who are not prepayment schemes members cannot be very supportive of these schemes. Health center management committee member. Kabgayi.

Health is economic development: when we speak of prepayment schemes, we are speaking of the development of the population, which directly impacts the development of the community. Mayor of Kivuye and president of the prepayment scheme federation of Byumba.

I clearly understand the importance of prepayment schemes. I have just paid 500 francs for health care services received at the health center, whereas members of prepayment schemes only pay 100 francs for their co-payment. I will immediately find the money to sign up; I must also become a member. Health center patient Miss Nubahimana. Murore. Byumba

Source: DSS/WHO: Visit of the Byumba by representatives from the district and PPS Kabutare.

4. Recommendations for Policy Directions and Implementation

Piloting prepayment schemes has provided the necessary experience to move from a status of uncontrolled emergence of isolated *mutuelles* in Rwanda to a well-prepared and guided development and implementation process for a scale-up. The results of the prepayment pilots will help to guide subsequent policy measures and corrective actions in preparation and during an extension. When preliminary results were presented in March 2000, and during the final PPS result workshop in September 2000, participants of two workshops held in Kigali made suggestions to strengthen the current experience and prepare the extension. Their suggestions, as well as recommendations derived from the findings shown in the previous chapter, are presented in section 4.1, which focuses on the current prepayment program, and in section 4.2, where policy directions for the health sector are proposed to prepare a scale-up. These recommendations directly address the currently discussed policy and planning issues within the Rwandan national health policy.

4.1 Current Prepayment Programs

Although the MOH has spearheaded the prepayment pilot, the practical realization of the schemes is the result of a close collaboration with many community members from different backgrounds. Several prepayment features need continued attention to sustain the success of the current risk-sharing plans in the long term and prepare the population for an extension. Also, a successful implementation of the policy recommendations, as suggested in section 4.2, will depend on strengthened program issues, such as capacity building, awareness campaigns, institutionalization at the central and peripheral level, legal framework, and organizational strengthening.

It is recommended that *capacity building* continue in the pilot districts with representatives from health facilities, prepayment bureaus, and health district administration. The same technical and management capacity ought to be built in other districts, where prepayment is planned for implementation. Current and newly elected members of the schemes' administrative bureaus need on-going training and discussion of health financing related issues. These subjects should include the calculation of the provider capitation payment and of monthly financial and membership information; the premium/package relationship; discussion of the implications of the schemes' legal documents such as by-laws, internal rules, and the contract with the health care provider; and discussion of issues related to awareness campaigns and public relations. The experienced prepayment and federation members of the three pilot districts, as well as health facility head nurses from affiliated health centers, should be used as resources and teachers to guide other interested districts in their prepayment planning and implementation activities.

The population has to be informed about the opportunity to enroll in PPS through *awareness campaigns* in community gatherings, radio and TV shows, radio spots, newspaper articles, and other public means. Local political, administrative, religious, and health sector representatives and experienced prepayment plan leaders should head and support these awareness campaigns to enhance current and new enrollment and foster the discussion with the rural population.

With the growing importance of prepayment for health care in Rwanda, the MOH should *institutionalize at the central level* a technical unit in charge of the follow-up and controlled scale-up of the pilot to other districts. Ideally, this unit would work in close collaboration with the Ministry of Finance, the Ministry of Local Administration, the Ministry of Justice, participating donors, and the prepayment and health representatives in the regions and districts. The unit would serve as a technical body to the PPS steering committee, which should continue to meet monthly to prepare and support an eventual extension. *On a district and regional level*, secretaries in charge of prepayment were *institutionalized during the pilot phase*, serving as partners to the schemes and their federation, the MOH, donors, and other groups. This peripheral institutionalization should be established in each district where prepayment is to be implemented and become a task that can be added to a district supervisor.

Legally, PPS follow Rwanda's law and include by-laws (status and internal rules) and a contract with the partnering health facility, and they are in the process of being *legally accredited as nonprofit mutual health associations* by the prefect of the corresponding administrative region. Newly developed plans in other districts should follow and implement the same legal framework as the pilot schemes did.

Newly established as well as experienced schemes must go through continuous *organizational strengthening*, which is part of the capacity-building process during workshops. Additionally, the PPS' executive bureaus and general assemblies need to be visited regularly by the federation, district, or MOH representatives to validate and correct their organizational, administrative, business, and financial functioning. Well-operating, experienced schemes should adopt weak or new schemes to strengthen their organizational learning process. It is recommended that the organizational set-up of the prepayment schemes as piloted in the Byumba district be applied in a scale-up. That is, the schemes would be comanaged by two representatives from the nonhealth sector and two from the health sector. It should be the district's choice if it prefers a larger hospital package, as in Kabgayi, at a slightly higher premium level, or if the hospital benefit package should be tailored to the Kabutare and Byumba option (see Table 2.1).

The 54 PPS and the three federations in the three pilot districts count approximately 300 community members who are to be used as experienced resources in a scale-up. They can teach their prepayment knowledge to other interested groups who need support to prepare and implement prepayment. In addition, the MOH can contribute to the sustainability of the current schemes as well as contribute to the establishment of new schemes with the realization of the following health policy directions.

4.2 Health Policy Directions

Piloting PPS before mainstreaming them with their specific modalities and provider payment mechanism will avoid costly mistakes and encourage policy makers to learn from the community as to what works best. In this section, three main policy directions to support a successful rollout of PPS are suggested to the MOH. The first provides recommendations about the schemes' replication. The second gives additional insight to the current predominant health care financing strategies and recommends strategies on health financing based on the prepayment experience. The third discusses several health service delivery recommendations, which might be addressed in Rwanda.

4.2.1 Replication of Prepayment for Health Services

The successful pilot of PPS for health services in the three districts of Byumba, Kabgayi, and Kabutare, and the population's continuous demand for prepayment in other parts of Rwanda leads to the recommendation to replicate these schemes. Clearly the pillars of an extension are the trained and experienced prepayment and federation managers in the three pilot districts and the steering committee for prepayment at the MOH, headed by the director of health care.

A scale-up of PPS in the remaining 37 districts will require the successful implementation of the MOH program-strengthening suggestions, a partnership with one or several donor agencies who will provide the necessary financial and technical support for an extension, and the preparation of the population living in the target districts. Spillover effects in the form of the population's awareness and knowledge already exist in the control districts of Kibungo and Bugesera, in districts bordering the three pilot districts, or in districts that belong to the same health regions as the pilot districts do. The momentum of these effects should be used for an immediate and controlled replication of the piloted plans into these districts, allowing for the efficient use of available resources.

An extension will demand that the MOH closely coordinate the linking of experienced and available resources in the pilot districts with the supporting donors to provide maximum benefit to those districts eager to implement PPS.

4.2.2 Financing Strategy for Rwanda's Health Sector

National Health Accounts (NHA) revealed that the government finances 10 percent of total health care, the population contributes four times more, and the donors five times more. Out-of-pocket user fee payments are the main provider payment mechanisms. Rwanda's private, social, and government insurance cover only a small part of the population. The findings of the prepayment pilot have shown that community-based health insurance is a viable tool to increase per capita spending for health care, resulting in additional financial sources in health centers, and at the same time improving financial accessibility to care.

By no means is prepayment to be used to justify less public funding. On the contrary, Rwanda aims to increase its health expenditures and enter the debt relief cycle. The government and donors should use PPS as a financing tool to identify the vulnerable groups in a community and subsidize their enrollment fee and to prevent the poor and high-cost patients from being excluded from care. Once prepayment is established, the MOH could match the local prepayment funds by a proportional subsidy, rather than finance the supply side of care in health centers. This will enhance enrollment and lead public funds to quality providers, as the population prefers to enroll in quality health centers. It is also suggested that the government use the opportunity to finance maternal care in a targeted way and reimburse necessary Cesarean sections, which the prepayment federations have not been able to fully pay to the district hospitals.

Part of an efficient financing strategy is the improved collection and availability of reliable utilization, cost, and financial data in the health sector. This requires that the MOH train staff working in the health facilities and district administration and supervise the collection and administration of health information. As a result, the MOH will be equipped with the necessary data for evidence-based decision making.

4.2.3 Health Service Delivery in Districts

During the prepayment pilot experience several health service delivery issues surfaced in the pilot districts that the MOH needs to address in all districts and, specifically, in preparation for a rollout of prepayment to other districts. These points include the financial mix of the basic benefit package, the organizational requirements in health care delivery, the public and private mix in providing care, and the quality of care provided in health facilities.

4.2.3.1 Financing of Basic Package

Prepayment schemes serve as a means to spread the risk of expensive illnesses and their costs among a pool of healthy and sick members. The participants of the initial prepayment workshops defined the basic benefits package for the pilot phase in accordance with the health care services available in the districts. In order to respond to the health needs of all society members, one or two additional prepayment benefit services might be calculated and added to the current package, which pays all services and drugs in health centers, and the ambulance transfer to the district hospital, where a limited amount of services are covered. At a higher premium level, a second-level package could cover all levels of health services within a district, including drugs and services in health centers and a selected range of services at district hospitals. A third, and more complete, prepayment benefits package could be offered to the wealthier more demanding community members so that in addition to all district health care, the transfer to and care at the country's main referral hospital in Kigali (CHK) also would be covered.

Capitation provider payment to health centers by PPS has proven to be a payment method that is easy to implement and administer, resulting in all contracting health centers being paid their monthly capitation amounts on time. Capitation payment has set the necessary incentives to balance the insurance effects of prepayment and to provide better preventive care to keep members in good health¹⁴. Capitation payment ought to remain a key component of the schemes to prevent moral hazard as well as supply-side induced demand increases leading to cost escalation and rising premiums.

The covered district hospital services are currently reimbursed by a fee-for-service or perepisode payment; however, the MOH should consider harmonizing the provider payment and paying a monthly capitation amount or other method that "bundles" services to the hospital as well, depending on the package covered.

4.2.3.2 Organizational Requirements in Health Care Delivery

Health centers, hospitals, and districts need to fulfill the organizational requirements they have agreed to offer in the contract signed with the PPS. Health centers have to be staffed with qualified personnel and equipped with medical and technical supplies, such as drugs, maternity and preventive care services, and radios to contact the hospital if an ambulance is needed.

Similarly, district hospitals need to provide the package that is covered by the district's prepayment plan. Physicians have to be trained in Cesarean sections as well as in assisting more complicated deliveries to prevent a supply-side induced increase of Cesarean sections, which are technically easier to perform. The use of hospital ambulances should be limited to transporting patients from health centers and other places to the district hospital and the referral hospital, and vice-versa.

¹⁴ See PHR TR on utilization, cost, and finances.

On a district level, the follow-up of prepayment in health centers becomes part of the monthly supervisory visits by the district health team. This team has to work in close collaboration with the district federation of PPS by incorporating a federation representative into the supervisory visits.

Although health facilities have the financial authority over their revenue sources, it is recommended that a neutral representative regularly audit the health district administration and all facilities. A successful audit requires that all health facilities apply and follow the standard accounting procedures and be staffed with at least one person trained in accounting. The financial performance and use of district and hospital ambulances need to be included in this audit.

All health facilities¹⁵ should submit their monthly utilization and finance data to the MOH health information system. The MOH should continue to evaluate this data quarterly and add comprehensive financial analysis. The findings of these quarterly evaluations ought to be disseminated to all participating health facilities during the monthly district meetings, and corrective actions be applied where necessary to improve the efficient use of limited resources.

4.2.3.3 Public/Private Mix

There are approximately 10 privately owned practices outside Kigali in rural Rwanda, and most of these are comparatively expensive and financially not accessible to the rural poor. The church-owned health facilities perform an important role in the provision of care in Rwanda, counting on average a larger patient load compared with publicly owned facilities. Because of their financial structure, public health centers behave to a certain extent like private providers and set user fees to maximize their revenue.

The prepayment experience has shown that including the better performing church-owned sector in the provision of care is an option to enhance competition between health centers in promoting quality improvements. The 23 prepayment plans that were partnering with church-owned health centers have achieved higher enrollment rates than the 31 schemes that were partners of public health centers (see Annex C).

Prepayment schemes have been pilot tested in Rwanda's rural areas. An extension of PPS into the urban Kigali area will eventually require that PPS be offered in privately owned practices. This is strongly recommended, as enhanced competition by better performing private providers could lead to significant improvements in quality in public health centers.

4.2.3.4 Quality of Care in Health Centers and Hospitals

Better informed consumers triggered important impacts in PPS on the structure, process, and outcome of the quality of care delivered in health facilities. Members became more demanding and used preventive and curative care services more frequently than they had prior to enrolling in PPS. The marginal impact of prepayment on the health centers' provision of care was highest in what had previously been low- or medium-performance centers. Low occupancy rates in district hospitals point to idle staff capacity; thus more experienced hospital nurses should be transferred to district health centers, and this will contribute to an improvement in the quality of health centers' structure, process, and work outcome, and a productivity gain in hospitals.

¹⁵ Health facilities include all public and church-owned health centers, district hospitals, and referral hospitals (CHK, University Hospital Butare, Psychiatric Hospital Ndera).

^{4.} Recommendations for Policy Directions and Implementation

It is recommended that all health centers be included in a scale-up area as the prepayment findings revealed that the centers gain additional quality improvement and efficiency when prepayment is offered in health centers of different performance levels.

The quality of care can be improved through consumer empowerment. It is therefore recommended to use PPS general assemblies and inform members about preventive measures such as the use of mosquito nets, HIV/AIDS prevention, vaccination, and prenatal care follow-up. In response to an increased demand for better care, the MOH should staff health centers with qualified personnel, which will add to structural improvement. Quality training of health center and hospital staff, as it is already implemented in collaboration with donors, should be maintained¹⁶.

Health facilities have to use patient revenues to improve the quality of services delivered. This includes the daily management of the supply, use, and stock of drugs and medical material, employment of qualified staff, and the procurement of technical and operational supplies. Health centers with small PPS membership pools should be targeted specifically for quality improvement, training, or replacement of staff with better qualified nurses.

Thus, a successful scale-up of PPS in Rwanda depends on effective health delivery system strengthening, which includes a well-defined financing strategy that sets appropriate financial incentives from the beginning, functioning health facility organizations, the quality enhancing use of a public/private mix, and quality improvement measures that give a voice to consumers. Given the prepayment contributions to health system strengthening, it is recommended that the MOH and its partners consider supporting PPS in national health financing reforms. The Rwandan government should receive support for a scale-up of prepayment from a donor with an experienced health-financing track who is willing to assist technically and financially in building local capacity for implementing PPS with its modalities as piloted in the three districts.

¹⁶ (DED in Byumba, Belgian Cooperation in Kabgayi, and Health Net in Kabtuare)

Annex A: Tools

The following collection of tools includes the workshop discussion papers on insurance modalities that have been used to train participants about insurance features; a list of additional accounting and administrative tools that have been developed and implemented in prepayment schemes and in partnering health facilities; the contract that defines the collaboration between PPS and health facilities; and the legal by-laws for PPS.

Developing the Modalities for Prepayment Schemes in Rwanda: Discussion Paper for Workshops during Development Phase of Prepayment Schemes

Kigali, Rwanda, April – June 1999

Francois Diop, PhD

Abt Associates Inc.

PREPAYMENT SCHEMES FOR HEALTH CARE IN RWANDA

WORKSHOP N° 1 Composition of the benefits package at district level

Definition:

The <u>benefits package</u> defines the health care services that are covered by a given prepayment scheme. By health care services covered, one understands services to which the individual will have access in health facilities without paying from his or her pocket, because he/she belongs to a prepayment scheme. As the individual makes annual contributions for a given benefits package, he/she has the right to benefit from the package as and when the need arises during the year.

However, <u>limits</u> can be imposed while covering different benefits packages. For example, as drugs are included in the package, only duly defined, essential drugs may be covered. That is why a beneficiary of the system can't receive any refund from prepayment schemes when his/her prescription covers drugs that are not on the predefined list. If the hospitalization is included in the benefits package, the prepayment schemes can limit the hospitalization coverage to a specified period of days (not more than 15 days for example) so that when the beneficiary is hospitalized for 20 days he/she pays for the extra 5 days on his/her own. These limits are generally imposed to ensure that certain services covered by the system are not overused.

Attention:

It is important that by consensus everybody should know what is covered and what is not covered by the prepayment schemes at the level of any given district. In other words, it is necessary that composition of the benefits package should be defined in terms that can be understood by majority of the population.

The level of periodical contributions or premiums (annual or semestrial) will depend on the composition of the benefits package, the frequency of utilizing different benefits package and the respective average costs of the benefits.

The more attractive the package, the more the population will wish to participate in the prepayment schemes in order to benefit from it.

Any service that is free at the district hospital or health center level would be excluded from the package. Only services that are paid for should be considered when determining the benefits package.

Important:

Definition of the package composition can be used for promoting an efficient utilization of health services, while reinforcing the referral system to higher health facilities.

Hence, the package composition should promote the utilization of services in health facilities that are less expensive. If the benefits package includes only those services performed at the district level, the adherents will bypass the health center level to go to the district hospital level each time they need health care, though it's expensive at the district level. If there are services available at both health center and district levels, the package should indicate that the beneficiary should go to the district hospital only when they are referred by the health center. Such services may for example be maternity services available at both levels.

Key questions for determination of the benefits package at district level:

For each of the following questions, it will be necessary to discuss the reasons why the service should or should not be included in the district package.

1. Delivery of services at health centers

Will curative consultation be included in the benefits package at the health center level?

Will antenatal/post natal consultation be included in the package at the health center level?

Will maternity services be included in the package at the health center level?

Will laboratory examinations be included in the package at the health center level?

Will simple surgery be included in the package at the health center level?

Will hospitalization be included in the package at the health center level? If the answer is yes and if the hospital admission charge at the health center level is daily, will the days of admission be limited or unlimited? If the days will be limited, specify their number.

2. Delivery of services at district hospital (HD)

Note: When responding to each of the questions one should specify whether referral to the district level by a health center is mandatory in order to be eligible for services included in the benefits package.

Will the district hospital's external consultations be included in the package?

Will the district hospital's laboratory examinations be included in the package?

Will the district hospital's radiography be included in the package?

Will the district hospital's maternity services be included in the package?

Will the district hospital's surgical interventions be included in the package?

Will the district hospital's internal admissions be included in the package? If the answer is yes, and if the hospital charges are daily, will the number of days be limited or unlimited? If limited specify the number of days.

3. Drugs

Will drugs be included in the district package?

If the answer is yes, what type of drugs? The drugs included in the list of essential drugs as defined by the Ministry of Health for the health districts? Is there another list of drugs to be defined?

PREPAYMENT SCHEMES FOR HEALTH CARE IN RWANDA (Enrollment) WORKSHOP N° 2 Registration/packet for adherents (Facultative prepayment)

Definition:

The idea of adverse selection: When individuals have a propensity of participating in a prepayment system just because they are sick (or due to knowing that they fall sick often), we say that there is an adverse selection phenomenon. A system of obligatory prepayment would avoid adverse selection; in a facultative prepayment, measures should accompany conception of the system for reducing the adverse selection. The waiting period (see point n° 3) and group adherence period are measures put in place in this regard.

The idea of adherents and beneficiaries: In a prepayment system where it is only possible to adhere as an individual, the idea of an adherent and a beneficiary become one. In a system where the individuals can adhere in a group (family, cooperative society, or another group), it is useful to differentiate the idea of adherent from that of a beneficiary. This differentiation is important because adherence in a group reduces the problem of adverse selection. In other words, group adherence is a means for promoting financial viability of the prepayment scheme. Consequently a prepayment scheme that is well conceived would incite the individuals to adhere in groups. In this regard the prepayment scheme can define different premium levels, depending on whether the members adhere individually or in groups, with subsequent lower premium levels for the enrollment groups.

In view of the fact that group adherence is a principal characteristic of the prepayment scheme, the ideas of adherents and beneficiaries become important. For example, when a woman adheres with her children, we say:

That the woman is the adherent;

That the woman has adhered in a group;

That the woman and the children are the beneficiaries.

This differentiation is useful before discussing fixation of the premium level, because

The number of individuals who pay is no longer the same as that of beneficiaries: it is the adherents who pay;

Payment by each adherent is going to vary according to the category of adherence.

Important:

The health district should define the adherence rules in the prepayment scheme.

The adherence rule should be coherent with socioeconomic realities of the health district. The concerned population should also easily understand it. In this perspective and as the rule promotes group adherence, the defined groups should correspond with a stable socioeconomic reality or solidarity and mutual understanding which are the essential characteristics of groups.

One thinks already of the family or the household.

Motivation measures should be taken to motivate the masses to adhere in groups if this is the adhesion policy. These measures are generally financial; for example, if the annual payment for a person who adheres individually is 1500 RwF, one can ascertain the politics of saying that a family of two persons adhering in a group will pay 2700 RwF annually; whereas a family of three people will pay 3,900 RwF. That way the family of two persons will save 300 RwF because of adhering in a group, whereas the family of three persons will save 600 RwF. In this example, we call « the individual », « the family of two persons » and « the family of three persons » the group adherence categories.

Key questions for the determination of adherence rules at district level.

It is necessary to give reasons of each answer to the following questions.

Will the adherence to the prepayment system be by person, by family, or by a combination of the two?

If the adherence should be by family and an adherence combination by person and by family, which are the adherence categories required in addition to the category « by person? ».

What other group adherence than the family will be allowed? Cooperative Unions? Or other already formed groups? If the answer is « Yes » describe the groups and give the examples.

Example 1

Example 2

Example 3

* Family of two
* Family of three
* Family of four
* Family of five
* Family of six and + (more)

Family of 2-3Family of 2-4Family of 4-5Family of 5-7Family of 6-7Family of 8 ANDFamily of 8 and 7 +(more)

Annex A: Tools

Prepayment Schemes for Health Care in Rwanda

Workshop N° 3 Package costing

Important:

Premiums will be fixed according to the defined package in the first workshop (Composition of the benefits package at the district level). The Ministry of Health and the PHR team are going to support you in fixing appropriate premiums. You should know that these charges are going to depend on the frequency of utilizing services included in the package and the average service costs. In addition to basic necessary charges for covering the costs of services utilized by the prepayment schemes beneficiaries, there will be provisions for covering charges like the administrative prepayment schemes costs.

What is important now is to determine whether the prepayment schemes are going to take measures for reducing (i) the over utilization of health care by the prepayment schemes beneficiaries or (ii) the utilization of district hospital services without any referral mechanism from a health center in the district. In the first instance, beneficiaries of the prepayment schemes who will no longer need money at the time of utilization may have the tendency of utilizing the services abusively. In the second instance, if the benefits package includes health center and district hospital services, the beneficiaries can have the tendency of utilizing district hospital services abusively in that they rush to the district hospital and yet they could be treated efficiently at health centers.

The first case necessitates the following considerations. First of all, the prepayment schemes are put in place in order to reduce financial barriers, which hinder access to health care.

Secondly, there are other barriers, which hinder access to health care, and that prepayment schemes will not change, such as physical obstacles and transport charges for their journeys to health facilities. If such barriers reduce significantly the utilization of district level services, they can be sufficient enough to prevent the overutilization of services covered by the district benefits package. Otherwise, it is necessary to consider the possibility of a moderating fee in order to reduce the over-utilization of services at district level. (See below.)

In the second case, it is necessary to make the following considerations. First of all, from the global point of view it is not in the interest of beneficiaries when district health services are overutilized; since the district hospital services are more expensive, their overutilization can mean an increase of the prepayment schemes periodical premium. Secondly, it is the Ministry of Health's policy that patients should be referred to district level hospitals by their respective health centers, if it is necessary. In other words, neither the prepayment scheme beneficiaries nor the health care providers have any interest in individual beneficiaries who consume health care services at inappropriate levels compared to their needs. Therefore, it is important that dissuasion measures should be put in place in order to discourage such behavioral tendencies.

However, there might not be any health center where the district hospital is situated; and as such people living in the vicinity have to resort to the district hospital when they are sick. In such an event, there should be at the district hospital a service that should cater for such cases by establishing proper entry points for receiving such beneficiaries, the service of sorting out for example.

Definition:

The idea of a moderating fee (co-payment): As its name indicates, the moderating fee is a direct payment requested from the beneficiary of a prepayment scheme at the material time of utilizing services covered by prepayment schemes package of benefits in order of reducing overutilization of the services. The moderating fee is much lower than the normal health facilities fixed charges; otherwise people would not have any motivation for participating in the prepayment schemes.

To incite the beneficiaries to utilize the services appropriately, penalties can be imposed on beneficiaries who utilize the district hospital services without being referred by a health center.

Key questions for determination of the package at district level:

It is necessary to give arguments regarding answers to the following questions:

Will it be necessary to initiate a co-payment once the prepayment system is put in place in the health district?

Which measures will be taken to dissuade the overutilization of district hospital services? Will a system of penalties be put in place? If yes, which ones?

PREPAYMENT SCHEMES FOR HEALTH CARE IN RWANDA

WORKSHOP N° 4A The waiting period (Facultative prepayment)

Definition:

The idea of *adverse selection*: When people have the propensity of enrolling in the prepayment schemes just because they are sick or because they know that they always fall sick, then we have to say that there is a phenomenon of adverse selection. Such a selection would result in high costs for those falling sick often as compared to member's contribution. In other words, such a selection would reduce financial viability of the prepayment schemes.

An *obligatory* prepayment scheme would avoid adverse selection. However, in a facultative prepayment scheme, measures should accompany the system conception in order to reduce the adverse selection. The *waiting period* and group adherence (see point 6) are measures put in place in this regard.

In prepayment schemes, the *waiting period* is the period that has to be observed between the moment of becoming a member of the prepayment schemes by paying the premium and that of actually benefiting from the benefits package covered by the prepayment schemes. It is a measure that is put in place to avoid individuals who decide to join the prepayment schemes because they are sick and they need an immediate coverage.

Attention:

If the waiting period is too long, it can dissuade both individuals and households from participating in the prepayment schemes. Otherwise, if it is too short, it does not fulfill its objective.

When a specific period of the year (say a month or two) is reserved for registration in the prepayment schemes, for the purpose of collecting money after the harvest when the targeted population has more money than ever before, then the politics of the waiting period can be altered. In such a case if the periodicity of premium is in the range of six months to one year to a smaller range, the waiting period can be reduced, even cancelled for those who pay their premium within the defined registration period.

Key questions regarding the waiting period at district level:

You should give reasons for answers to the following questions:

Will one or several periods be fixed for registration in the prepayment schemes and premium? Which one or which ones? Why does it sound good to you that the registration should take place at that very good time?

Will a waiting period be reserved? If yes, how long will it be?

Will registration in the prepayment schemes be possible before or after the defined registration period that is mentioned in (i)?

If registration in the prepayment schemes is possible before or after the defined period of registration that is mentioned in (i), how long will the waiting period be during that part of the year?

PREPAYMENT SCHEMES FOR HEALTH CARE IN RWANDA

WORKSHOP No. 4 B Payment of premium/periodicity

Definition :

The ideas of *economic* and *financial accessibility*. We consider a period of determined duration, say a year, and we confirm that such a health service is economically accessible for a certain group within the targeted population as and when their annual revenue earning allow them to pay for the stipulated health service. However, the annual earning of the same population might be irregular or seasonal in such a case that they may not have any money whether earned or borrowed to acquire the stipulated services; we might say that the health service is financially inaccessible to them during such periods.

This situation typically occurs in rural areas where agricultural produce is sold seasonally. After the harvest and the related marketing campaign, rural households can earn reasonable revenue, but thereafter you find that their revenue is dramatically lowered.

Important:

One of the principal reasons for putting in place prepayment schemes is the improvement of financial accessibility to health care. In this regard, it will be necessary to identify the period (s) during which rural households tend to have money in order to determine the periodicity of premium payments within the prepayment schemes.

Attention:

The periodicity would be fixed in such a way that permits the majority of the targeted population, the district population, to participate in the prepayment schemes quite easily by paying the premium without any difficulties. One or two periods of premium can be fixed according to socio-economic realities of the health district.

The more premium payment periods there will be in a year, the more administrative charges there will be in respect of the prepayment schemes. The lesser premium payment periods there will be, the higher will the premium rate be. Thus, fewer people will have the flexibility of paying their premium in such an event. Therefore, it will be necessary to balance the two situations while considering the population preferences.

Key questions concerning the payment of premium and their periodicity:

Specify reasons for answers to the following questions:

What will the premium duration be in the health district?

If a period is determined, when (day and month of the calendar year) will it start and when (day and month of the calendar year) will it end?

If there are two periods, specify when each of them should start and when each should end.

If there are two periods, what advantages will beneficiaries have by virtue of paying all the annually required money at once?

Can one conceive the possibility of premium in kind that will be paid within the health district? If the answer is yes, which products will be appropriate?

How will they be stocked, and how will they be sold?

PREPAYMENT SCHEMES FOR HEALTH CARE IN RWANDA

WORKSHOP No 5 The identification of adherents (Facultative prepayment)

CHALLENGES:

There are two problems linked to the identification of adherents of the facultative prepayment schemes:

The identification of adherents would render it possible to deny non-adherents, the chance of benefiting from the prepayment schemes.

The identification of adherents would render it possible to grant benefits to members of the prepayment schemes correctly.

The identification process and tools would simultaneously attain the two objectives without necessitating registration burden that would be otherwise a barrier preventing people from participating in the prepayment schemes.

Important:

In the health districts where the facultative prepayment schemes will be implemented, each adherent will select a health center, which we shall call *the first contact health center for the adherent*. It is important that the health center should be near the adherent's home, because it is that health center of first contact that will identify the adherent and validate his/her status if the premiums have been duly paid to enable him/her to benefit from the prepayment schemes. In other words, the first contact health center will be the entrance for the adherents each time they wish to exploit benefits of the prepayment schemes.

Attention:

It will be necessary to give each contributing adherent an identification card that will help to determine whether the adherent has paid his premium and who is to beneficiate from the prepayment schemes (dependants). Therefore the prepayment scheme membership card would be elaborated for this purpose and would contain data simplifying identification of the adherent without any ambiguity. The card would at least contain the following data:

Name of the adherent

Address of the adherent

Identification card number of the adherent

The adherent's membership number.

The category of adherence

Address of the first contact health center for the adherent

The data appearing on the identification card should always be easily available on the list of adherents associated with the first contact health center.

Additional information can be included on the identification card and the first contact health center list, apart from the data enlisted above. Yet the production of additional information should not cause unnecessary problems to the adherent. The same should not be a barrier preventing them from participating in the prepayment schemes. For example, it wouldn't be necessary for an adherent to pay an extra 200 RwF in order to produce the additional information whereas he/she is supposed to contribute only 1200 RwF to the prepayment schemes. Then, of course, it would be odd if the adherent has to travel long distances to and from in order to get the additional information.

Key questions concerning the payment of premium and the related periodicity:

Specify reasons for answers to the following questions:

Is the above list of minimally required data sufficient as regards the identification of adherents?

Otherwise, what other information would be included in the adherent's health card to render his/her identification devoid of any ambiguity? What would it cost (money or travelling) the adherent, in order to produce the information?

How will the prepayment schemes participants without identification cards be identified (minors, for example)? Would one register them by using the identification number of their parent or their guardian?

Would it be obligatory for each adherent to present a health booklet and the identification card before utilizing any health service?

PREPAYMENT SCHEMES FOR HEALTH CARE IN RWANDA WORKSHOP N° 9 Contract between health facilities and the prepayment schemes

Important:

The relations between the prepayment schemes and the health facilities constitute one of the factors of mastering the prepayment schemes concept. The relations define in which way adherents of the prepayment schemes can have access to the benefits package while also defining obligations and engagements of health facilities as regards the adherents and the prepayment schemes, plus the obligations and engagements of the prepayment schemes as regards to health facilities. These relations should be included in a contract linking the health facilities and the prepayment schemes.

Two questions are particularly important as regards these relations: the quality of health care at the level of health facilities and the health facilities modalities of refund by the prepayment schemes. Primarily, as the population adheres to prepayment schemes, they anticipate high-quality services, which they are in need of. Perspectives of the benefiting population as regards the quality are not necessarily the same as those of the health care providers. The benefiting population is more concerned with the availability of services in general, waiting period before benefiting from the health care, reception by the health care providers and the availability of drugs. Very long waiting periods can result in high opportunity costs that can discourage the adherents from participating and/or renewing their participation in a facultative prepayment scheme.

Otherwise, having paid for the drugs by means of the semestrial or annual premium, the adherents will not tolerate paying heavily prescriptions for other drugs in case health facilities drugs get out of stock. It is important that the way to handle matters or to behave in case of such problems should be duly discussed by both health facilities personnel and promoters of the prepayment schemes; they should be core of contractual arrangements.

The questions linked to pay the health facilities are: « How », « When » and « Who ». The question « How » concerns the modalities which will be utilized in order to refund the health facilities for the services rendered to adherents of the prepayment schemes: charges for the action, fixing the tariff charges, capitation, etc. The question « When » concerns the periodicity of health facilities invoices to the prepayment schemes and payment to health facilities when fee-for-service payment is chosen. The question « Who » concerns who is going to benefit from the payments made by the prepayment schemes: the health facilities or individual health care providers, or both. These questions are very important questions and we will elaborate more on each of them.

Key questions concerning the payment of premium and their periodicity:

Specify reasons for answers to the following questions:

A. The quality of health care

What will the health facilities do to reduce waiting period for the adherents and beneficiaries of the prepayment schemes?

What will the health facilities do to ensure the availability of drugs?

What else will be done by the health facilities in order to ameliorate the quality of health care?

B. Refund modalities

Will the refund by health facilities be based on « fee-for-service payment according to the prevailing action », « per episode reimbursement » or « per capita refund »?

Who will be beneficiary of refunds by the prepayment schemes. the health facilities, the health care providers (the doctor, the nurse, the midwife), the health facilities and the health care providers? If the health facilities and the health care providers, on what basis will they share the refunds (example: 50-70 percent of the consultation fees can be given to the medical consultants, whereas the balance can be taken by the health facilities)?

According to which periodicity should the health facilities submit their invoices to the prepayment schemes?

How long would the prepayment schemes take in order to pay for the invoices?

PREPAYMENT SCHEMES FOR HEALTH CARE IN RWANDA

WORKSHOP N° 10 Exoneration

Important:

The prepayment schemes will be implemented in an environment where exoneration politics is already prevailing. Otherwise, the introduction of prepayment schemes can be accompanied by the action of putting in place exoneration measures for ameliorating the access to health care services for the most vulnerable groups or for ameliorating access to public health services (vaccination, PF, Tuberculosis, etc). Generally, where there is exoneration policy, there should also be a source of public finance (or another organization), which pays for the exonerated services.

It is important that in the health districts where the prepayment schemes are going to be implemented, the exoneration politics prevailing or to be introduced should be explicit in order to avoid the following:

The benefits package of the prepayment schemes should not include exonerated services in order to avoid double payment for these services.

Exonerated individuals should not pay for participating in the prepayment schemes according to prevailing politics.

As regards the foregoing last reason, the criteria of eligibility for exoneration should be as unambiguous as possible.

Key questions concerning the payment of premium and their periodicity:

Give as many details as possible regarding the following questions. Specify whether the politics of exoneration is prevailing or whether it is going to be introduced during the following year, after introduction of the prepayment schemes.

C. Services and free treatment

List the services (actions, products, etc.) that are free at district level and organisms that finance the said services?

Are there sicknesses whose treatment is free completely or partly?

If partly, specify the treatment components that are paid for and those that are free?

D. Exoneration based on the characteristics of a patient

Are there some patients who are exonerated by health facilities due to other reasons?

Characteristics apart from sickness (age, income, pupils, military personnel, family member related to some worker of health facilities, etc.)

If yes, describe clearly the criteria of eligibility and who identifies those who are exonerated.

New Accounting and Administrative Tools for Health Facilities and Prepayment Plans

Accounting and Administrative Tools	User	Purpose
Member patient registry (in addition to already existing register for nonmembers)	Health center and hospital	Tracks members' drug and service utilization pattern in detail. To be used for comparison with nonmembers.
Monthly summary of member patient registry (in addition to monthly SIS report on nonmembers)	Health center	Summary of members' care as reported in detailed register. To be used for comparison with nonmembers.
Prepayment journal of members' care	Health center	Compares captitation payment to health centers with fee-for-service charges per sick member that would have been paid if health centers were reimbursed by FFS.
Cash and bank book	PPS bureau	Tracks cash and bank activities.
Revenue and expenditure journals	PPS bureau	Summarizes daily revenue/expenditure activities as tracked in cash book.
Monthly treasury book	PPS bureau	Monthly summary financial report on PPS revenue and expenditures.
Membership book	PPS bureau	List of members' demographic and premium information.
Membership cards for 3 categories (individual, family, group)	PPS bureau	Identity card entitling members to receive PPS benefit package.
Members' sociodemographic information sheet	PPS bureau	Summary of sociodemographic information on each member/family filled in when members sign up and pay premium.
Membership book on indigent members	PPS bureau	List of indigent members exempt from paying premium
Monthly summary report on new members and premium amount collected	PPS bureau	Summary of new members per membership category and total premium amount collected
Book on members leaving PPS	PPS bureau	List of members leaving PPS

Source: Schneider 2000b et al.

Contract between Health Facilities and Prepayment Schemes

By and between, party of the first part:

- 1. The mutual health federation of the Byumba health district, with its headquarters located at
- 2. The following mutual health 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 mutual health association whose dues are current and whose name has been submitted to the district hospital by the mutual health federation or mutual health 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 mutual health 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)*¹⁷;
- > Upon presenting a membership card, to treat the members of those mutual health associations to which the health center is bound by this agreement;
- > To treat the members of the mutual health association who need care, using the standardized

¹⁷ Republic of Rwanda, Ministry of Health, B.P. 84 – Kigali: Normes du District de Santé au Rwanda, February 1997.

treatment protocols;

- > To give receipts to the member of the mutual health association who receives treatment, and to do so for nonmembers as well;
- > To collect the copayment of one hundred Rwandan francs (100 RwF) from each member who receives treatment. The copayment is due for each episode of curative treatment. The copayment is to be entered in the cash book;
- > To enter each member treated in the Contact Information Register;
- > At the end of each month, to send the following monthly copies to the mutual health association's board of directors of the community in which it is located:
 - **Î** Of the summary of the Contact Information Register, and
 - **Î** Of the health center's Contact Information Register
- > 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 mutual health 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 mutual health 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 mutual health association of the community in which they reside;
- > To treat the members of the federated mutual health associations 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 members who received care;

- > At the end of each month, to send the copies to the mutual health federation's board of directors:
 - **Î** Of 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** Of Contact Information Register of the district hospital.

Article 4 - Obligations of the Mutual Health Association

The mutual health 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 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 Mutual Health Federation

The board of directors of the mutual health 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 mutual health 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:

- > Overnight stay 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 mutual health association.

Article 9 – Requirements for Access to Treatment

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

- > Being a member in the mutual health 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 mutual health federation or mutual health associations are as follows:

- > The member must go to his health center located in the coverage area of his mutual health 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 Rwandan francs (100 RwF) 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 mutual health federation, under any circumstances;
- > In accordance with the number of members on the list per health center, the mutual health 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 mutual health 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 mutual health 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 RwF per night, Doctor's appointment: 200 RwF per appointment; Billing is based on the following rate per illness episode, including procedures, drugs, appointments, materials, and treatment: Caesarian delivery: 12.000 RwF per episode of treatment.

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"¹⁸;
- > 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, the data reported by the SIS (Health Information System), and additional surveys;
- > The determination, based on a quarterly analysis 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 a reasoned decision made by the arbitrator.

¹⁸ Republic of Rwanda, Ministry of Health, B.P. 84 – Kigali: Normes du District de Santé au Rwanda, February 1997.

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.

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 mutual health federation of the Byumba health district, with headquarters located at

For the following mutual health associations:

For the hospital of the Byumba health district......

For the following health centers:

By-laws and Rules for Prepayment Schemes Organized as Associations

By-laws of the Mutual Health Association of

Title 1. Name and Purpose of the Association

Article 1 – Name

In the community of a mutual health association has been established, according to the Decree of April 15, 1958, called the mutual health association of, hereinafter called "association" in the context of these statutes.

Article 2 – Territory

The mutual health association's area of jurisdiction extends throughout the territory of the community of

Article 3 – Headquarters

The headquarters of the mutual health 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 mutual health associations at the higher level have signed a cooperation agreement.

The purpose of the mutual health 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 Mutual Health Associations

The association is a member of the federation of mutual health 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 mutual health 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 Mutual Health Association

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 mutual health association.

The federation of mutual health associations in the health district determines membership categories, comprised of the following:

- > Individual persons 18 years of age or older;
- > Households, comprised of parents with dependent children;
- > Family groups, namely persons who reside together and share household expenses;
- > 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 mutual health 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 mutual health federation, the mutual health 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 mutual health 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 mutual health 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 percent of the members of the mutual health 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 mutual health 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 mutual health association.

Other than in cases of force majeure, to be eligible for benefits procured under the mutual, the 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 mutual health association are:

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

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

Sub-Title 1. General Meeting

Article 15 – Authority

The general meeting has the authority:

- > To amend the statutes (Article 33);
- > To appoint directors (Article 21);
- > To prohibit nomination for the position of director and to disqualify a director (Article 21);
- > To approve the budget and financial statements;
- > To dissolve the association or to merge it with another association (Articles 34 and 35);
- > 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.
- > To sanction the members of the governing bodies and members;
- > To join or resign from a federation of mutual health associations at a higher level as stipulated in Article 4 of the Decree of April 15, 1958;
- > To draw up the list of indigents in the coverage area;
- > To approve the rules of order applicable to all the members of the association;
- > To decide how to invest the assets in accordance with Article 31 of these statutes and to determine the interest rate;
- > To decide how the board of directors will use the association's financial reserves;
- > 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;
- > 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 meting. 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 mutual health 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 mutual health association.

Subtitle 2. Board of Directors

Article 20 – Composition

A board of directors comprised of four representatives governs the mutual health 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 business 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 extradjudicial 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 mutual health 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 mutual health associations of the health district, relations with the health centers to which the mutual health 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 mutual health 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 Mutual Health Association within the Mutual Health Federation of the Health District

The members of the board of directors represent the mutual health association within the federation of mutual health association of the Byumba health district by taking part in this federation's general meting 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 Rwandan francs (2,000 RwF) per individual;
- > Two thousand five hundred Rwandan francs (2,500 RwF) per household/family membership card (maximum 7 persons), five hundred thirty Rwandan francs (530 RwF) per additional member if there are 8 or more persons;
- > Five hundred thirty Rwandan francs (530 RwF) per person for a group of 8 or more persons;
- > Other payments as determined by the federation of the health district's mutual health associations;
- > Proceeds from the various lucrative activities organized to support the mutual health 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 percent).

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 Rwandan francs.

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 percent) 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 mutual health 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

Article 33 – Amendments to Statutes (Article 17 of the Decree of 1958)

The statutes may be amended only by a general meeting convened specifically 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 mutual health associations.

Article 34 - Dissolution of the Mutual Health Association (Article 31 et seq. of the Decree of April 15, 1958)

The mutual health 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 *license* 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 mutual health association may merge with associations that have the same purposes provided that the legal provisions in these matters are observed.

tle 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 mutual health associations and order $n^{\circ}26/276$ of May 20, 1959, on implementing measures, shall apply.

The members of the board of directors of the mutual health association of _____:

Names, signatures, dates, places:

Chairman Vice Chairman Treasurer Secretary
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Rules of Order of the Mutual Health 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 12-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 12-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 mutual health 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 mutual health association requires a one-month probation period in order to be eligible for the rights the mutual health federation and the mutual health association offer for 12 months.

Article 6 – Conditions for Accessing Treatment

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

- > Being a member in the mutual health 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 mutual health federation or mutual health associations are as follows:

The member must visit his health center located within the coverage area of his mutual health 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 Rwandan francs (100 RwF) 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 mutual health 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 mutual health association pays 10 percent of the dues to the mutual health 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 12 months of the year, for the following purposes:
- > The base payment at the beginning of the month, depending on the number of members enrolled in the health center;
- > 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, e.g., employee wages, travel expenses, rent, office supplies, 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 defined by the prepayment members during their general assembly.

Annex B: Data Collection

Data Sources	Study Area	Scope of Study	Data Collection Method	Time Period/Periodicity
Prepayment schemes (PPS)	52 PPS and 3 federations of PPS in 3 pilot	membership new members	PPS survey: Structured questionnaire	Time period: Jul 1999-Jul 2000
	districts	premium contributions medical care expenses: health center capitation payment, federation transfer for district hospital bill hospital payments by federation PPS administrative expenses	Unit of observation: Prepayment systems associated with the health center PPS federation of the health district	Periodicity of collection: Monthly routine data
Health centers and district hospitals	52 health centers and 3 district hospitals in 3 pilot districts	availability of resources: medical equipment personnel drugs	Provider survey: Structured questionnaire Unit of observation: - health facility	Time period: Aug 1998-Jul 1999 (Baseline) Aug 1999-Jul 2000 (Pilotyear)
	24 health centers and 2 district hospitals in 2 control districts	logistics management tools use of services for PPS members and for non-members: curative consultation vaccination prenatal consultation delivery laboratory exam surgery hospitalization costs of care: personnel costs costs of drugs other functioning costs funding sources:	- health facility	Periodicity of collection: Monthly routine data

Data Sources	Study Area	Scope of Study	Data Collection Method	Time Period/Periodicity
		internal private sources		
		payment by users		
		prepayment system		
		external sources		
Patient	3 pilot districts	sociodemographic characteristics	Exit interview at health centers	Time period:
survey	2 control districts	quality of prepayment system members	Sample: 800 patients	July/August 2000
		purpose of visit	Structured questionnaire	
		perception of the quality of care and		Periodicity of collection:
		services	Unit of observation :	Once
		expenses related to illness	Patients	
Beneficiary /	3 pilot districts	Voluntary/compulsory membership	Survey: Thematic discussion	Time period:
stakeholder		benefits package	guidelines	
survey		level of contributions		July 1999
		type of membership	Focus groups:	July 2000
		waiting period	prepayment system members	
		'ticket modérateur'	non-members	Periodicity of collection:
		reimbursement of	management committee	Twice
		providers	providers	
		coverage for the poor		
		financial access to health care		
		organization and management of prepayment		
		systems		
		community participation		
Household	3 pilot districts	sociodemographic characteristics of	Structured questionnaires:	Time period:
survey	2 control districts	individuals	household	October 2000
		socioeconomic characteristics of	curative care	
		households	preventive care	Periodicity of collection:
		sources of income		Once

Data Sources	Study Area	Scope of Study	Data Collection Method	Time Period/Periodicity
		prepayment system pattern demand of care: curative care vaccination prenatal consultation obstetrical care	Sample: 3,772 households counting 17,198 individuals Unit of observation: household individual	

Annex C: Health Centers with Prepayment Included in Analysis

Rank	Name of PPS and HC	Health District	Owner	First Year % PPS Enrollment Rate	Population in HC Catchment Area	Number of PPS Members
1	Muyanza	Byumba	Church	55.18	7,088	3,911
2	Karama	Kabutare	Church	41.32	10,621	4,389
3	Bungwe	Byumba	Church	24.09	36,167	8,711
4	Gisiza	Byumba	Church	23.55	13,024	3,067
5	Rushaki	Byumba	Church	22.98	31,549	7,249
6	Mulindi	Byumba	Public	17.50	21,686	3,795
7	CS Kabgayi	Kabgayi	Church	16.57	23,143	3,835
8	Kabilizi	Kabutare	Public	15.86	10,891	1,727
9	Buramba	Kabgayi	Public	13.87	10,899	1,512
10	Mbazi	Kabutare	Public	12.10	13,054	1,579
11	Kivumu	Kabgayi	Church	11.91	14,215	1,693
12	Ruhango	Kabgayi	Church	11.44	21,544	2,465
13	Mukono	Byumba	Public	10.68	24,741	2,643
14	Manyagiro	Byumba	Church	10.29	22,921	2,358
15	Kivuye	Byumba	Public	8.81	13,107	1,155
16	Tumba	Byumba	Public	8.28	19,815	1,640
17	Shyogwe	Kabgayi	Church	7.88	10,509	828
18	Rutare	Byumba	Church	7.46	27,964	2,086
19	Mukoma	Kabgayi	Church	7.39	9,519	703
20	Gishweru	Kabgayi	Public	6.94	14,823	1,028
21	Rwesero	Byumba	Church	6.93	19,906	1,379
22	Musambira	Kabgayi	Public	6.55	34,020	2,228
23	Biwisige	Byumba	Public	6.26	11,021	690
24	Nyarusange	Kabgayi	Church	6.25	23,738	1,483
25	Kigogo	Byumba	Public	6.19	20,845	1,290
26	CS Byumba	Byumba	Public	6.02	31,550	1,900
27	Save	Kabutare	Church	5.89	33,108	1,949
28	Buyoga	Byumba	Public	5.72	18,677	1,068
29	Matyazo	Kabutare	Church	5.41	17,098	925
30	Cyahinda	Kabutare	Church	5.15	23,954	1,234
31	Ruhashy	Kabutare	Public	4.97	11,943	594

32	Miyove	Byumba	Public	4.97	25,239	1,254
33	Byimana	Kabgayi	Public	4.89	23,207	1,135
34	Giti	Byumba	Public	4.72	23,862	1,127
35	Gisagara	Kabutare	Church	4.29	25,331	1,086
36	Sovu	Kabutare	Church	4.19	16,193	679
37	Kinazi	Kabgayi	Public	3.96	21,583	855
38	Rukozo	Byumba	Church	3.95	34,705	1,371
39	Mushishiro	Kabgayi	Church	3.92	32,510	1,273
40	Munyinya	Byumba	Public	3.83	29,151	1,117
41	Rubona	Kabutare	Public	3.48	14,071	490
42	Mbuye	Kabgayi	Church	3.41	20,757	708
43	Rango	Kabutare	Public	2.98	7,323	218
44	Gitarama	Kabgayi	Public	2.70	33,256	897
45	Rutobwe	Kabgayi	Public	2.63	28,908	761
46	Musenyi	Byumba	Public	2.61	26,311	687
47	Nyantang	Kabutare	Public	2.26	9,007	204
48	Simbi	Kabutare	Church	2.07	27,838	575
49	Gishamv	Kabutare	Public	1.98	22,591	447
50	Maraba	Kabutare	Public	1.62	15,137	245
51	Kizibere	Kabgayi	Church	1.38	18,901	260
52	Nyabikenke	Kabgayi	Public	0.90	26,488	239
	Total Prepayment Schemes/Health Centers in Pilot District Sample Size			7.99	1,085,509	86,742

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