ACCESS TO HEALTHCARE IN THE COMMUNITY HEALTH UNIT OF PETITE RIVIERE, VERRETES, LA CHAPELLE HAITI

RESULTS OF TWO EPIDEMIOLOGICAL SURVEYS ON MORTALITY AND ACCESS TO HEALTHCARE

September 2005

ACKNOWLEDGEMENTS

First of all, we thank the Haitian families living in the community health unit (CHU) of Petite Rivière, Verretes and La Chapelle who took the time to answer our questions. Without their contribution, this study could never have been done.

We are grateful to the personnel of the Haitian Ministry of Public Health at departmental level and at CHU level, particularly in Petite Rivière. Their support and assistance during the various stages of the survey were essential to the collection of data and the completion of the survey.

We thank the personnel working in the health structures of the CHU for making themselves available and providing us with the information we needed.

All the health partners provided data that complemented our study. Thank you to the management of Hôpital Albert Schweitzer and to the staff of the community health division, thanks also to Interaid for their warm welcome in the hills, to Service œcuménique and to Caritas.

Many other people contributed to this work, including our MSF colleagues in the field. We are grateful to everyone involved.

TABLE OF CONTENTS

EXECUTIVE SUMMARY 7

PART ONE INTRODUCTION AND CONTEXT 11

I. CONTEXT 11
II. HEALTH SECTOR 14
III. MSF'S PRESENCE IN HAITI 18
IV. THE CHU OF PETITE RIVIÈRE–VERRETES–LA CHAPELLE (PRVL) 18
V. REASONS FOR AN EPIDEMIOLOGICACAL SURVEY 20

PART TWO OBJECTIVES AND METHODOLOGY 22

I. OBJECTIVES 22
II. HYPOTHESES 22
III. METHODS 23
IV. TERMINOLOGY 26

PART THREE RESULTS OF THE HOUSEHOLD SURVEY 27

I. DESCRIPTION OF THE SAMPLE 27
II. RETROSPECTIVE MORTALITY 27
III. MORBIDITY 28
IV. ACCESS TO CARE 32
V. SOCIO-ECONOMIC CONDITIONS 47
VI. SOCIO-ECONOMIC CONDITIONS AND ACCESS TO CARE 52

PART IV DISCUSSION AND ANALYSIS OF THE RESULTS 55

I. POSSIBLE BIAS 55
II. INTERPRETATION OF THE RESULTS 56

PART V CONCLUSIONS AND RECOMMENDATIONS 63

I . CONCLUSIONS 63
II . RECOMMENDATIONS 64

ANNEXES 68

This report was written by Frédérique Ponsar with the assistance of the MSF team in Haiti, Dr Michel Van Herp, Dr Marcel Manzi and Dr Mit Philips.

Questions and comments should be addressed to:

Mit Philips
Médecins Sans Frontières
Rue Dupré 94
1090 Brussels
Belgium
mit.philips@msf.be

Georges, a father, told us his story

" My name is Georges Igomide and I live in Vaudré, in the district of La Chapelle.

I have a daughter who is 15 years old. The last time she had a fever, I went with her to the dispensary of La Chapelle. They asked me to do some tests to find out why she had a fever. The tests cost 100 gourdes. As I could not find 100 gourdes, I gave up and my daughter did not have any treatment. "

Nacius, young orphan and head of his household: "I do not know what to do if my brothers get very sick."

" I am 16 years old and I am the head of my family in Ingrand, in the hills. My father died and my mother left us to live somewhere else. My two brothers and I live in a house that is in poor condition. Sometimes our neighbours give us something to eat.
Our father left us some land but it is not enough to provide for our needs. When we get sick, we treat ourselves with leaves. "

EXECUTIVE SUMMARY

For two decades, which included several years of dictatorship, Haitians have been living in a state of chronic instability. They have seen the deterioration of the economic and social fabric of the country. Security is getting worse: violent crimes are frequently reported, especially in the capital, Port-au-Prince.

Haiti is one of the poorest countries in the northern hemisphere. All its economic indicators are in the red. In 2004 and 2005 Haiti was hit by a series of natural disasters. The island's rough climate is often a danger to its population, and threatens to worsen their already precarious situation. However, the plight of the Haitian people is not often given priority on international aid agendas.

The political and economic crisis has contributed, over many years, to the gradual collapse of the public health infrastructure. The country faces an acute lack of medical human resources, especially in rural areas. At the same time, the level of health has remained poor.

Haiti's government applies a system of direct patient contribution, where the patient pays at the point of receiving healthcare. There is no relief or assistance for those who cannot pay. Despite their low incomes, the patients themselves are the main contributors to healthcare financing.

Médecins Sans Frontières (MSF) has conducted an epidemiological survey in the community health unit (CHU) of Petite Rivière, Verretes and La Chapelle (PRVL) where MSF-Belgium has supported three primary health structures in Haiti for three years. The objectives of the survey were to improve the response to the needs of the population, and to give health policy actors in Haiti some reliable data on mortality and access to healthcare.

The survey focused on mortality rates and on financial access to primary health structures.

The flat-fee (FF) and cost-recovery (CR) systems coexisting in the CHU were the subject of separate surveys and their effects on access to care were compared. The two quantitative surveys of 900 households were carried out from November to December 2004, using the methodology of two stage cluster sampling.

MAIN RESULTS OF THE SURVEY

■ Mortality seems to be under control in the CHU surveyed.

- The crude mortality rates in our samples are 0.5/10,000/day for Sample FF and 0.7/10,000/day for Sample CR.

- For children under five, we observed a rate of 0.6/10,000/day for Sample FF and 1.5/10,000/day for Sample CR.

- In a high-income population, the expected mortality rate is 0.3/10,000/day. In a population experiencing stable development, the normal mortality rate is around 0.5/10,000/day. In an emergency context, we consider that the situation is under control if the total mortality rate of the population does not exceed 1/10,000/day and 2/10,000/day for children aged below five years. In spite of the silent emergency situation in Haiti, the rates observed in the CHU are below the emergency thresholds as defined above.

- The main cause of mortality reported by the households is fever or malaria.

■ **The whole population lives in extreme poverty.**

The weekly income of the population is extremely low: in both samples, 80% of the surveyed population live below the international threshold of extreme poverty, which stands at $1 (US dollars) per inhabitant per day. 50% of the population lives on less than $0.50 per inhabitant per day.

■ **Access to a complete course of treatment in the health centre closest to the patient's home varies considerably, depending on the payment system.**

In the cost-recovery system, two-thirds of the population do not have access to primary healthcare (as reported for the last episode of illness):

- 8% of the patients who consider a medical consultation necessary do not consult somebody outside the family.

- 5% of the patients go to the structure closest to home but do not receive a complete course of treatment.

- Among the patients who seek a consultation, 60% choose alternatives to the health centre nearest to their home.
    - 27% choose to go to another health centre
    - 10% go directly to hospital
    - 23% choose non-official structures

- In total, 67% of the patients do not have access to a complete course of treatment in the health centre closest to home. The main reason for this non-access is cost.

In the flat-fee system, two-thirds of the population have access to primary healthcare:

- 6% of the patients who consider a medical consultation necessary do not consult anyone outside the family.

- 2% of the patients go to the structure closest to home but do not receive a complete course of treatment.

- Among the patients who do seek a consultation, only 22% choose alternatives to the health centre nearest to their home.
    - 4% choose to go to another health centre
    - 11% go directly to hospital. These choices are due to lack of confidence in the health personnel or the absence of health personnel in the structures.
    - 7% choose non-official structures, mainly due to lack of money.

- In total, 69% of the patients have access to complete treatment in the health centre closest to home. This is twice the number recorded in the cost-recovery sample.

Access to care in the flat-fee system is double that of the cost-recovery system. However, even in the flat-fee system one-third of the population do not have access to complete treatment in the health centre closest to home.

■ **The cost of care in the cost-recovery system is five times higher than in the flat-fee system.**

- The average price of a consultation is 111 gourdes ($2.90) in the cost-recovery system against 20 gourdes ($0.50) in the flat-fee system.

- The cost of a consultation represents on average six days of an individual's income in the cost-recovery system against less than two days in the flat-fee system.

- The costs rise when transport or food linked to seeking a consultation are taken into account.

■ **Patients are resorting to extreme measures to pay for a consultation.**

- In the cost-recovery system, nearly 48% of the patients make themselves poorer when paying for healthcare (debt, sale of part of harvest or a piece of land, etc.).

- Even in the flat-fee system of 20 gourdes, nearly 49% of the households resort to extreme measure to pay for a consultation.

- Mechanisms of impoverishment affect the lowest-income families.

- The more isolated and vulnerable inhabitants of the hills are more affected by impoverishment.

■ **There is no system for protection of the poor.**

- In both samples, two-thirds of the households meet at least one of the criteria of vulnerability. Households headed by single women make up one-third of the vulnerable households.

- In both samples, 99% of the patients paid for care during the last episode of illness. There was no cost reduction granted on the basis of vulnerability. The only reductions were for personnel working in the health structures.

RECOMMENDATIONS

In view of the results of the survey conducted in the CHU of PRVL and experience gained in the field at St Marc and Petite Rivière, MSF observes that the cost-recovery system excludes a large part of the population.

Given the precarious state in which the Haitian population is living today, exclusion is unacceptable. The issue of financial access to healthcare must be seriously reconsidered.

An appropriate general policy must allow access to healthcare for all, including the most vulnerable groups. This is the responsibility of national and international health actors.

A. In the CHU of PRVL

Given the gravity of the situation – poverty and exclusion from essential healthcare – MSF is committed to working towards free healthcare.

We call on the health actors in the CHU to immediately apply a strategy of:

- **Donor support for actors working on access to care for the population**

We hope that with the assistance of donors, health partners will be able to continue and maintain at least their current level of commitment to improve the access to care for the population.

- **Special attention for vulnerable people**

We also hope to draw attention to vulnerable groups: the poorest households, single-parent households and people who live in the hills. For these groups, lightening the financial burden must be a priority.

B. Outside the CHU

The alarming results obtained in the district of Petite Rivière suggest that there may be an even more worrying situation in other less 'privileged' regions of the country and where alternatives to cost recovery do not exist. An evaluation of financial access to care at national level is needed in order to reassess the financial contribution of the population and to modify the cost of health in Haiti accordingly.

We recommend:

- **Supplying essential care in a largely subsidised way**

Given the precarious state in which Haitians live today, we think that it is the responsibility of the Ministry of Health to improve the coverage of the public health system. This system should be largely subsidised in order to remove the financial burden from the population.

- **Increasing the financing of health services**

The financing of health services must be increased, especially for recurring costs. We recommend the financing of essential medicines and personnel. This additional funding should allow the system to:

- replace the revenue currently coming from patient payments
- increase the capacity to respond to the needs of the population.

- **Priorities for health actors and donors:**

- **Financial support targeted at the poorest patients and patients in rural areas**

- **Real protection for poor and vulnerable groups**

- **A change in the current policy of financial participation, taking into consideration the results of the survey.**

We encourage the operational partners and donors to support the establishment of a free subsidised system that ensures access to care for as many people as possible.

PART ONE INTRODUCTION AND CONTEXT

I. CONTEXT

1.1 Demographic situation[1]

The Republic of Haiti shares the island of Hisponiola with the Dominican Republic, in the Caribbean Sea. Haiti, mainly mountainous, has a total area of 27,250 sq km.

The island is situated between the North Atlantic Ocean in the north and the Caribbean Sea in the south. The island of Cuba is north-west of Haiti across the Windward Passage and Jamaica is to the south-west, across the Jamaican Channel.

The country has nine administrative departements. The Haitian population is estimated at 8.4 million inhabitants with an annual growth rate of 1.7% and a urban population of 38%[2].

The population is concentrated in urban areas. The metropolitan area is overpopulated; a quarter of the people live in and around the city. This increasing urbanisation has lead to expansion of shantytowns.

There is large-scale emigration, mainly to the US and the Dominican Republic. More than 1.5 million Haitians live abroad.

1.2 Political situation

Christopher Columbus landed in Haiti in 1492. In 1804 Haiti was the first country in the Americas to be liberated from slavery. In 1844 the island was divided into two countries: Haiti and the Dominican Republic. Following military occupation by the US from 1915 to 1934, Haiti was ruled by the Duvalier family until 1986. From 1986 until 1991 Haiti was ruled by a series of provisional governments. In the last 10 years, the UN has undertaken six missions in Haiti.

In 1991, Jean-Bertrand Aristide was elected president by a huge majority. Seven months later he was overthrown in a violent coup by Raoul Cedras, who took power.

In July 1994 the UN security council adopted a resolution authorising member states to use all necessary means to facilitate the departure of Haiti's military leadership and to restore Haiti's elected government. In the weeks that followed, the US took the lead in forming a multinational force to carry out the UN's mandate by means of military intervention. In mid-September US troops entered the country under the banner of the UN. President Aristide returned on October 15, 1994.

The Haitian authorities organised parliamentary elections in July 1995 and presidential elections in December 1995. René Préval was elected president. The prime minister resigned on June 9, 1997 following protests over government policy and the loss of his political base in parliament. During this gridlock period the government was unable to hold local and parliamentary elections due in late 1998.

In January, President Préval dismissed parliamentarians and mayors whose terms had expired, with the consequence that he was left without a parliament. A provisional government was established by decree in February 1999, mandated to support a provisional electoral council in organising overdue local and parliamentary elections, and to restore the constitutional order.

---

[1] This information comes from *Survey on mortality, morbidity and the use of services*, 2000, carried out by the Haitian Institute of Childhood for the Ministry of Public Health and Population.
[2] World Bank statistics database, *Haiti at glance* and *World development indicators 2004* and *Health, Nutrition and Population Data*.

The pre-election period was turbulent. There were demonstrations, some violent, and the murders of candidates and a journalist.

Finally, local and parliamentary elections were held on May 11, 2000. 95% of the members of parliament, 75% of the senators and about 60% of the mayors elected were from the Fanmi Lavalas party.

International observers did not endorse the elections and the US did not recognise the government. International assistance was suspended.

Opposition parties asserted that the May elections were fraudulent and should be annulled and held again. Despite this, the presidential election took place on November 26, 2000. All major opposition parties boycotted this election. Aristide won with 91.69% of the votes. The next candidate got 2.04% of the votes.

The International Civilian Support Mission in Haiti (MICAH) left on February 6, 2001.

Slowly, popular support for Aristide waned as people grew weary of waiting for the promised changes. His government was overthrown in February 2004 by a rebellion. A Multilateral Interim Force (MIF) of the US, Canada, France and Chile went to Port-au-Prince to ensure stability for the next four months. An interim government was nominated, with Gérard Latortue as interim prime minister.

In June a peacekeeping mission of the UN, the MINUSTAH took over from the MIF. The mandate of the mission was to restore security and a constitutional state, to organise local, parliamentary and presidential elections for the end of 2005, and to ensure that human rights were respected.

Since September 2004 insecurity has increased all over the country. There is a lot of violence, especially in the capital. Members of the former armed forces – the FAD'H, demobilised by Aristide in 1994 – have called for the forces to be reinstituted.

Haiti's next big challenges will be the elections of October 9 and November 13 and 18, 2005.

1.3 Economic situation[3]

Although it is difficult to get precise figures on the economic situation of the country, it is generally agreed that the situation worsened in the last decade. There was an embargo from 1991 to 1994, damage caused by cyclone George in September 1998, the disputed elections in 2000 and floods in 2003 and 2004. These factors strongly affected the economy of the country and the living conditions of the population.

Comparative social and economic indicators show that Haiti remains one of the poorest countries in the northern hemisphere, far behind its Caribbean neighbours. The World Bank classifies Haiti a low-income country. Annual growth is negative. According to World Bank data, the economy of Haiti declined by an average of 2.6% a year during the 1980s and 1.4% a year during the 1990s. In 2003, rising petrol prices affected the already precarious socio-economic conditions of the population.

The cost of living index shows that the prices of goods rose in 2003 and 2004. According to the Haitian Institute of Statistics (IHSI), in 2003, the cost of public transport increased by 111.5%, housing by 35.7%, food by 39.5% and healthcare by 37.5%.

[3] Statistics available on the World Bank site (*Haiti at glance and World development indicators 2004* and *Health, Nutrition and Population Data*) and the UNDP site (*Human Development Report 2003)*.

Exchange rate fluctuations have also had a negative impact on the purchasing power of the population in recent years. In 1997, $1 (US dollar) was worth 16.2 gourdes on average, in 2000 it was worth approximately 24 gourdes and today, 38. Those of few means cannot afford to buy basic goods and essential medicines.

Haiti has developed from an essentially agricultural economy into a market economy. According to the Emmus[4] survey, the informal sector represents 51.4% of employment, agriculture 44.5%, the formal public sector 1.3%, and the formal private sector 2.8%. The inactive population is estimated at 50%.

On infrastructure, the Emmus survey found that 'the energy sector is defective, the road network and telecommunications are far from adequate, and only one-fifth of the irrigable grounds are irrigated, during the rainy season'.

1.4 Economic and development indicators

Comparison	Haiti	Latin American and Caribbean countries
GDP (gross domestic product per capita in US dollars)	380	3,260
Annual growth (calculated on the gross national income/inhabitant)	-1.8	1.6
IHD (index of human development 2002)	0.463	0.777

There are significant differences in the economic indicators between the averages in Latin American and Caribbean (LAC) countries and those of Haiti:

- Haiti has a GDP more than eight times lower than the average GDP of its neighbours.
- The average growth of the region is positive, but Haiti posts negative annual growth.

According to the United Nations Development Programme (UNDP), Haiti is a country with low human development. It is ranked 153 out of 177 countries in the human development index. Not far from Haiti, Barbados is ranked first in the region, with an value index of 0.888.

The illiteracy rate is 48% against an average of 11% in LAC countries. According to the UNDP, for the period 1990-2001, 65% of the households lived below the absolute poverty threshold of $1 per person per day. According to IHSI[5] data, 28.8% of households live below the national poverty threshold. The figure is 40% in rural areas.

Although Haiti does not fit into traditional definitions of countries in humanitarian crisis or at war, the basic indicators of Haiti are comparable with those of crisis countries.

This situation causes many Haitians to flee to the US and Canada. In economic terms, money sent home by the emigrants (estimated at $800m a year)[6] contribute considerably to the survival of many families. However, the departure of a segment of the labour force has also meant that there are now many single-parent households, often headed by women, and dependent on a unstable source of income. The are therefore very vulnerable.

1.5 The international environment

Since the beginning of the 1990s international assistance in Haiti has suffered significant fluctuations brought about by the political instability.

[4] *Survey on mortality, morbidity and the use of services*, 2000, carried out by the Haitian Institute of Childhood for the Ministry of Public Health and Population.
[5] Survey of household consumption 1999-2000. The threshold of relative household poverty is estimated at incomes equal to or less than 2,951 gourdes a year. The estimated relative poverty threshold in rural areas is 1,952 gourdes.
[6] *Country report 2004*, The Economist Intelligence Unit, 2004.

- The beginning of the 1990s was marked by several years of embargo by the US and the Organisation of American States, after the 1991 coup. From 1993, the UN also applied sanctions against the military regime in place.
- From 1995 to 1999 international assistance began again after the return of the president and the peaceful transfer of power from Presidents Aristide to Préval. According to some, part of the assistance promised by the financial institutions did not arrive. As Aristide refused to undertake unconditional privatisation, the World Bank froze half the funds intended for reconstruction[7].
- From 2000, international assistance decreased again following the disputed elections.

Although all the indicators testify to the deterioration of the socio-economic situation during the 1990s, in 1994-1995 and 2001-2002, external assistance decreased overall by 76%[8].

In 2004, following the departure of President Aristide and floods in the north and south, assistance was restarted, in particular through temporary co-operation frameworks. $1bn was pledged at a donors conference in Washington in July 2004. However, according to Juan Gabriel Valdez, head of MINUSTAH, barely 10% of the promised assistance arrived. "Haitians still await the economic assistance which should have accompanied the military engagement by the international community," he said[9].

II. HEALTH SECTOR

2.1 Some medical indicators[10]

COMPARISON	HAITI	LAC
Crude mortality rate (/1,000)	14	6
Infant mortality rate (/1,000 live births)	79	28
Mortality rate for children under five (/1,000)	118	34
Maternal mortality (per 100,000 live births)	523	193*

*data from 2000

The mortality rate reveals a huge disparity between Haiti and its neighbours.

Acute malnutrition affects 4.5% of the children. Moderate chronic malnutrition or severe malnutrition afflict 22% of the children under five[11]. Life expectancy at birth is 52 years compared to 77 years in LAC countries. In the last five years, life expectancy fell by almost three years.[12]

We did not find recent data for many indicators, a fact which in itself says a lot about the prevailing situation.

2.2 Health services

Various sectors are active in Haiti, offering a range of services. The main ones are:

- The public sector: The economic and political state of the country has left the public health infrastructure in poor condition, especially outside the capital. Haiti applies the

[7] *Hypocrisis of development and the health of the Haitian poor*, Paul Farmer and Didi Bertrand in *Dying for growth,* Common Courage Press, 2000.
[8] *Plan stratégique national pour la réforme du secteur de la santé*, Ministry of Public Health and Population, n.d.
[9] From an article in *Le Monde*, 10 February 2005.
[10] The data used here are from statistics on the World Bank site (*Haiti at glance* and *World development indicators 2004* and *Health, Nutrition and Population Data*) and the UNICEF site (*Situation des enfants dans le monde en 2005)*.
[11] Report of the Group on health and nutrition, *Cadre de coopération intérimaire 2004-2006*.
[12] Report of the Group on health and nutrition, *Cadre de coopération intérimaire 2004-2006*.

principle that the population must contribute directly to the cost of healthcare. There is a cost-recovery system in place.
- The philanthropic private sector: These are mainly NGOs and religious organisations. Depending on available grants, some structures apply flat-fee rates or offer free healthcare. The few examples of these cases are often in well-targeted areas or phases such as floods. The most common payment system is cost-recovery.
- The profit-making private sector: This sector attracts qualified personnel and offers attractive facilities such as laboratories, obstetric services and minor surgery at very high costs. This sector is mainly present in towns and in the capital.
- The mixed sector: These are profit-making private institutions whose personnel is paid in whole or in part by the state.
- Traditional medicine (medicine leaves and hougan, or voodoo priest): This is widespread in some parts of the country. The fees paid by the patients vary widely.

2.3 The public health system

In the 1990s, the state launched a reform of the health sector with decentralisation as the main priority. According to the 1995 Ministry of Public Health and Population (MSPP) national policy, the objective of decentralisation was to:

- promote community involvement
- improve access to services.

The community health unit (CHU) is now the basic unit in the decentralised model. This unit co-ordinates all the medical structures in its zone. Management of the health services is organised at local level so that resources are used efficiently. The departemental coordinates the setting up of CHUs.

The first level of the healthcare pyramid is subdivided into two sublevels:

- First-line structures are the basic institutions that offer the minimum package of services. These include health promotion and curative care, primarily for outpatients. Dispensaries and health centres with and without beds are also first-line structures; the entry point to the health system.
- Second-line services are provided by the community reference hospital (CRH), the primary referral institution for all first-line structures. The CRH has four departments: medicine, surgery, paediatrics and obstetrics. It also has hospitalisation facilities.

Specialist care is provided by the hospital of the departement.

The minimum package of services defined by the MSPP is comprised of the services that must be available to everyone in the country through the health system. These are:

1. Medical care for children
2. Care for pregnancy, childbirth and reproductive health
3. Emergency surgery
4. Basic dental care
5. Prevention of infectious diseases
6. Cleaning up the environment and providing drinking water
7. Availability of and access to essential drugs
8. Community health education

According to the MSPP, the lack of legal framework for the decentralisation process and the lack of resources delayed the setting up of the CHU. Indeed, the coordination offices and the medical structures of the CHU do not have an operational budget from the MSPP, with the exception of the CRH.

2.4 Human resources in the public sector

The public sector faces enormous human resource problems:

- There is a shortage of people who are qualified and motivated to work.
- It is difficult to get people to work outside the capital city.

The shortage of human resources is due to the lack of training. For example, the only school for midwives trains just 30 midwives a year. Yet, 1,200 midwifes are needed to meet the country's maternity care requirements. It will be years before that target is reached. Also, it appears that the public services are not hiring new staff, but replacing people as they leave.

According to WHO statistics[13], medical personnel coverage is estimated at 10.7 per 100,000 inhabitants for nurses and midwifes (834 for the country) and 25 per 100,000 inhabitants for doctors (1,998 for the country).[14] These numbers are far lower than those of other countries in the region.

Available personnel are unevenly distributed throughout the country. They are primarily concentrated in Port-au-Prince and in big towns. Health personnel posted to rural areas are frequently absent at the end of the week. The majority of the dispensaries are managed by health assistants whose level of training is low.

To mitigate the problem, there is a system of cooperation with Cuba which sends, at Haiti's request, doctors and nurses for one or two year placements. Also, Haitian doctors and nurses spend a year working in rural areas just after completing their studies.

2.5 Financial resources[15]

2.5.1 State budget

There was a marked decrease in expenditure for health between 1995-1996 and 1999-2000: from 8.3% to 6%. The state budget is fixed in gourdes but its value decreases when depreciation of the gourde against the dollar is taken into account. Most of the health sector inputs are charged in dollars[16].

Just 14.1% of the Haitian state expenditure is for health[17]. By comparison, African states undertook in 2001 to devote at least 15% of their national budget to health[18]. Haitian health per capita is estimated at $22/person/year. These numbers are still lower than the WHO's guides on appropriate financing of healthcare. In 2001, the WHO estimated the average cost of a minimum package of essential care at $34/person/year[19].

Of the $22 spent on health, 53.4% is paid by the state, or $12/person/year, according to WHO statistics. Private expenditure represents 46.6% of the health expenditure, or $10.20/person/year. Half of this expenditure is paid directly by the population, the other half by external assistance.

[13] Statistics from the WHO site, http://www.who.int, updated October 2004
[14] According to WHO standards, the minimal level of human resources should be 2.5 medical personnel per 1,000 inhabitants. In Haiti, the number is 0.36.
[15] The statistics in this section come from the *Plan Stratégique national pour la réforme du secteur de santé*, Ministry of Public Health and Population, n.d.
[16] The health budget was last voted on in 1998: $29,000,000 (in gourdes), equivalent to $25,000,000 today.
[17] WHO statistics, 2001, www.who.int/whosis
[18] African summit on HIV-Aids, tuberculosis and other infectious diseases, Abuja, Nigeria, April 2001.
[19] *Macroeconomics and health: investing in health for economic development,* report of the Commission on macroeconomics and health, chaired by Jeffrey Sachs, Geneva, 20 December 2001.

The budget allocated to health is not well distributed: the central level and hospitals absorb more than the half the budget. According to the MSPP, in the first-line and second-line structures the average public expenditure is 40 gourdes/person/year, or $1[20].

2.5.2 External assistance[21]

Just as with general external assistance, the external assistance for health saw a downturn in the fluctuations of the last decade. Whereas external assistance decreased overall by 76% between 1994-1995 and 2001-2002, assistance for the health sector decreased by 37%. In the period 1998-1999, the reduction was 43%: from $48m to $28m.

These reductions brought about an increase in private household expenditure on healthcare:

	1995-1996	1999-2000
Private expenditure	21%	48%
External assistance	31%	18%
NGO	36.7%	23%

Over the last few years there has been a drop in public health expenditure and expenditure financed by external assistance and NGOs. At the same time, there has been an increase in healthcare cost to households, to cover the loss of other financing sources.

2.6 Payment system

2.6.1 The policy of financial contribution

According to the strategic plan for the reform of the health sector, "tariff-setting for services in the public medical institutions is not based on sharing costs (except for medicines, laboratory tests and radiography), but rather on the financial capacity of the population; there is a flat fee for consultation and hospitalisation and patients pay for medicines and tests"[22].

In general, patients pay a flat fee for a consultation in first-line care. The cost of medicines and tests – which seem to be fixed by the institutions themselves – are extra. There is no common tariff-setting across the various facilities. The prices can vary, depending on when the service is sought and where the medical supplies come from.

For second-line care, the tariffs to be paid by the patients can be very high.

Extended vaccination and tuberculosis programmes are free national programmes. There is a charge for preventive services like prenatal consultations and family planning[23].

Exemptions exist but they are not monitored according to any well-defined procedures.

2.6.2 Regulation of the pricing system

In theory, it is at departement level of the medical pyramid that tariffs and funds raised from receipts from patients are checked. In practice, it is difficult to verify that the levels are respected. The financial data of the institutions are generally not available, the accounts are not consolidated and not analysed. There are no clear instructions on the pricing policy, nor on the allocation of receipts. As stated above, it appears that prices vary greatly from institution to the next.

[20] For the departement we surveyed, it is 28 gourdes/inhabitant/year, or $0.73.
[21] *Plan stratégique national pour la réforme du secteur de la santé*, Ministry of Public Health and Population, n.d.
[22] *Plan stratégique national pour la réforme du secteur de la santé*, Ministry of Public Health and Population, n.d.
[23] The difficulty in ensuring that preventive care remains free in a cost-recovery system was discussed in *Practice and policies on user fees for immunisation in developing countries,* England et al. , Department of vaccines and biologicals, WHO, Geneva, 2001.

III. MSF IN HAITI

MSF has been in Haiti since 1991. MSF-Belgium started work in the South departement of Haiti with a training programme to establish an emergency response network. Since 1994, MSF-B has worked on several projects in St Marc: rehabilitation work and staff training at St Nicolas Hospital, support for the district office of St Marc and the establishment of the CHU, training for doctors with surgical experience and anaesthetics nurses, and finally a project to reduce maternal mortality, in the period 2000 to 2004.

Since 2001, MSF-B has been working at the MSPP's request on a project of access to care in the district of Petite Rivière, supporting three first-line health structures. A convention of partnership with the ministry has been just renewed for another year. MSF also helped in several emergencies: in 1994 after cyclone Gordon, in 1998 after cyclone George, in 2004 after the floods in Mapou and cyclone Jeanne in Gonaïves.

To deal with the impact of the troubles during President Aristide's departure in 2004, MSF invested in an emergency project at the St François de Salle Hospital in Port-au-Prince and at the St Nicolas Hospital.

IV. THE CHU OF PETITE RIVIÈRE–VERRETES–LA CHAPELLE (PRVL)

4.1 Context

The CHU of PRVL is in the departement of Artibonite. The main town of the departement is Gonaïves. With more than one million residents, it is second in population size after the West departement. The Artibonite plain's rural zone is densely populated.

The economy of the department relies mainly on agriculture. For a long time, Artibonite was considered the bread basket of the country. Rice is the most important product of the Bas-Artibonite plains and is grown on 80% of the irrigable land.

The most fertile parts of the valley stretch towards Petite Rivière and Verretes. In the mountainous areas people grow mainly coffee, cocoa, fruits and vegetables.

Although rice is the main crop, income from rice production goes to a small number of people, most of whom live outside the area. Trade is the second most important economic activity of the departement, after agriculture.

The CHU of PRVL accounts for a total population of 322,500 inhabitants[24] (see Annex 1 for the population numbers for the district and district sections of the CHU). The road network is under-developed and apart from the main road connecting St Marc to Mirbalais, the other smaller roads in the CHU are sometimes in very bad condition.

4.2 The health system

There is a community platform that gathers the principal health actors working in the CHU. There are public, private and district actors[25]:

- Ministry of Health: The MSPP manages four structures: one in the district of Verretes and three in Petite Rivière. There are two dispensaries and two health centres with beds. All the structures implement cost-recovery. The cost of a consultation is 10 gourdes, medicines are extra. As elsewhere in the public system, tariff-setting of the prices for care vary from institution to institution.

[24] Statistical database of the Albert Schweitzer Hospital.
[25] See Annex 2: list of health structures in the CHU and their services.

- Albert Schweitzer Hospital (HAS): The HAS is managed by the Grant Foundation, along with six first-line structures. The HAS is the CHU's reference hospital.

  In 1956, Dr Larimer Mellon and his wife, Gwen Mellon, founded the hospital in Verretes. At first intended as a 'simple country hospital', the HAS grew in size and recognition. The quality and the accessibility of care quickly attracted patients from other parts of the country.

  A community health system has developed throughout most of the CHU. A network of health workers promotes health, nutrition and vaccination. The HAS charges a flat-fee that varies according to where patients are from. Each structure has a well defined coverage area. People who live within the area are considered 'in-unit' and pay a flat fee of 19 gourdes for consultation and treatment[26]. People who live in the CHU but outside the area are regarded as 'out-unit' and pay a flat fee of 35 gourdes. Everyone living in the CHU is considered 'in-district'. People who live 'out-district' can use the HAS but at a much higher price than those in-district: 235 gourdes.

- Caritas: This NGO supports a dispensary in Petite Rivière. The dispensary receives help with infrastructure and the supply of start-up stock as well as with the payment of personnel. The dispensary runs on a cost-recovery model of 10 gourdes for a consultation plus payment by unit for the necessary medication.

- Interaid: This NGO supports two dispensaries in Pérodin and Médor, in the mountains of Petite Rivière. Interaid helped with the renovation of district structures and payment of personnel, and provided an operating budget on which to start activities and to train staff to manage these structures autonomously. They also promoted community participation. There is a flat-fee system in place: 25 gourdes for consultation and treatment. According to the personnel, this system cannot be maintained in the long-term without external support due to the cost of the medicines.

- MSF: MSF-B supports three structures managed by the MSPP in Petite Rivière: two dispensaries and one health centre with beds. So far, MSF has provided support for renovation works and personnel training and motivation. Since October 2004, MSF has helped to establish a flat fee for prenatal consultations (10 gourdes), family planning (5 gourdes) and childbirth (100 gourdes, since July 2004). Other types of care fall under the cost-recovery system.

- SOE (Service œcuménique): This NGO supports two centres without beds; one in the Verretes and the other in La Chapelle. Cost-recovery is applied.

- The community: Two dispensaries that were formerly supported by private organisations (HAS and SOE) are now managed by the community itself, with a cost-recovery system.

We identified 17 first-line structures and one reference hospital for the entire CHU. The presence or absence of a doctor in the structure determines the name: dispensaries are run by an health assistant whereas health centres have a doctor at least part of the time.

Of the 17 structures of the CHU, there are:

- Eleven dispensaries (Pérodin, Médor, Ségur, Jean-Denis, Savane à Roche, Marin, Christant, Gabriel, Bastien, Plassac, Deslandes)
- Four centres without beds (Liancourt, Deschapelles, Desarmes et La Chapelle)
- Two centres with beds (Charles Colimon et Dumasais Estimé).

[26] These tariffs were in place until the beginning of 2005.

The two centres with beds are intermediate structures, between first-line care and the reference hospital. They can provide hospitalisation. Eight of the structures use a flat-fee system and nine have a cost-recovery system.

Regarding the provenance of medicines, the departement's stores provide some and private partners supplement the stock with international purchases or from national level stores (the central purchasing office Promess in Port-au-Prince or other private suppliers).

In the CHU, different health systems co-exist: private and public. Five structures are public, 10 are philanthropic private structures and two are community structures.

The community health platform gathers the different partners with the aim of coordinating and synchronising the services offered.

The means available to the CHU do not allow it to fulfil its role. Of the management personnel, only two are financed by the public sector, the others are paid by a partner. To date, little data is available at CHU level.

V. REASONS FOR AN EPIDEMIOLOGICACAL SURVEY

Haiti's complex situation over recent years has weakened a medical system that was already undergoing massive changes. Although people here do not earn much, they are still the main source of finance for the healthcare system because of Haiti's policy of cost-recovery. There is no formal exemption system for those most in need.

The Emmus survey[27] carried out in 2000 states that in 16% of the families surveyed, no one was consultated during the last episode of illness. The number is 20% in rural areas and 10% in urban areas. In 41% of cases, the reason given for not attending a medical structure was 'medical costs too high'. These high costs were more often cited as a reason by low socio-economic households (52%).

Other than the Emmus survey, we do not have reliable quantitative information to explain how people manage their health problems, nor to determine if the current government policy of cost recovery is realistic, given its aim of improving access to services.

We do not have data on those who do not use the structures. Only an survey of the population could provide us with that information.

MSF experience in St Marc had already indicated significant access problems, especially in second-line care.

On the basis of these different elements, MSF decided to study the impact of the cost-recovery system on people's access to care by carrying out an epidemiological survey.

As MSF has been in Petite Rivière for three years, working to improve accessibility to healthcare, we chose to conduct the survey in the CHU of PRVL.

This survey should make it possible to adjust MSF's support to the current structures and to provide necessary information to partners working in the field of health in the CHU. In particular, the survey should make it possible to determine a cost level to be paid by patients that ensures the broadest possible access to first-line healthcare.

The data collected should also allow extrapolations to other regions of the country. The departement of Artibonite is often considered less poor than other rural areas due to the

[27] *Survey on mortality, morbidity and the use of services Emmus-III*, Haitian Childhood Institute, June 2001.

availability of irrigation, so we assume that the results will be better in the CHU of PRVL than everywhere else in rural Haiti.

The survey measures the accessibility of first-line care. In terms of second-line care, the reference hospital of the CHU is managed by HAS and applies a flat-fee system. The high attendance rates as well as our observations in the field seem to indicate a good level of accessibility to second-line care. However, a separate study could be done to look into this.

We hope that the data from our survey launches a discussion on the role of public services in the population's access to healthcare, particularly for the most vulnerable people.

Finally, we hope that the results of our survey will be useful to actors in the field and to donors who are committed to improving the medical situation and poverty reduction strategies in Haiti and elsewhere.

PART TWO OBJECTIVES AND METHODOLOGY

This section presents the objectives in detail, the underlying hypotheses and the methodology used by MSF in conducting this survey in the CHU of PRVL.

I. OBJECTIVES

The general objective of the survey is to measure the financial access to primary healthcare according to the payment systems generally applied in the CHU.

Specific objectives:

1. To describe the relevant health structures and the different methods of financial contribution.
2. To establish the proportion of patients living in proximity to a health centre and using it, relative to the payment system in place.
3. To measure the proportion of patients excluded from healthcare.
4. To measure the mortality of the population of this area.
5. To collect data that would provide indications of the population's income and expenditure, as well as households' coping mechanisms when dealing with health-related expenditure.

This information will enable MSF to assess the limits of its primary healthcare projects and to reorient its programmes, if necessary.

The data should also enable the partners in the CHU, political decision-makers, humanitarian actors and medical staff to have reliable information on access to care so that they can improve their initiatives and their response to the needs of the population.

II. HYPOTHESES

2.1 Principal hypotheses

- A large part of the population does not have access to healthcare. In rural areas, the degree of exclusion from primary healthcare is around 20%. The main reason for the exclusion is the lack of money.
- The degree of non-utilisation varies significantly according to the type of tariff system.

2.2 Secondary hypotheses

- The degree of financial access to healthcare is higher in flat-fee systems than in cost-recovery systems.
- The degree of access is lower in tariff systems that charge per unit than in those charging a flat fee.
- Poor households do not have sufficient cash to pay for healthcare and are obliged to incur a debt. This has disastrous consequences on the social and economic situations of households, in the short and long terms.
- The exemption system does not protect the poor from exclusion or impoverishment.
- The flat fee protects the poorest patients from exclusion from primary care.
- The flat fee protects patients from incomplete treatment.
- The flat fee means patients are better informed about prices.

III. METHODS

We adopted quantitative and qualitative techniques to reach the objectives of the study.

A pre-survey study was done in order to categorise the health centres in the CHU according to tariff system. A household survey was organised for each category. Supplementary information came from interviews with key actors in the health system.

3.1 Limits of the survey

The survey was focused on access to care in health centres in the CHU that were functional at the time of the study. By functional we mean that the structure offered patients at least a general consultation service every day of the week.

We concentrated on access to primary healthcare and therefore only in dispensaries and health centres (with or without beds), and not in hospitals. We included both public and private structures. The survey was done in the lowlands of the CHU as well as in the mountainous zones.

The survey does not examine the quality of the healthcare provided.

3.2 Pre-survey

There is no map that shows the CHU health structures, with information about the type of tariff system in use. So from mid-October to mid-November 2004 we criss-crossed the three districts of the CHU to locate all the structures, accompanied by the doctor of the Petite Rivière district.

We gathered information from health authorities and partners working in the CHU: the location of health structures, what area they served, services offered, payment system, and population figures.

Of the 17 structures identified, only two are health centres with beds. The other structures do not have hospitalisation facilities.

We defined flat fee and cost-recovery systems as follows:

- **Flat-fee system:** the patient pays one amount that covers consultations, treatment and medicines.

- **Cost-recovery system:** the patient has to pay for consultations, medicines, treatment, hospitalisation and materials separately. The rates are fixed by the structures.

We identified eight structures with a flat-fee system and nine structures with a cost-recovery system[28]. The structures with flat fees are managed or supported by NGOs or foundations, that is, HAS and Interaid. These organisations charge 19 et 25 gourdes respectively, which covers consultations, lab work and medicines. Of the nine structures with the cost-recovery system, four are managed by the MSPP. Then there is one Caritas dispensary, two SOE health centres and two community dispensaries.

The SOE and Caritas structures say that they have a flat-fee system of 25 or 35 gourdes. However, we did not classify the centres as flat-fee structures because the fee does not cover most antibiotics and lab tests, where available. As the costs differ from one patient to another we classified the centres as structures with a cost-recovery system.

[28] See Annex 2: list of health structures in the CHU and their services.

3.3 Household survey

3.3.1 Calculation of the sample size

Two stage cluster sampling was chosen for each tariffication group. The sample size was calculated on the basis of a percentage of access of 50% in the cost-recovery system and of 10% more in the flat-fee system.

If the margin of error was fixed at +/- 5% with a cluster effect estimated at 2, we would require 768 households. For a margin of error of +/- 4,5% with a cluster effect estimated at 2, we would require 948 households. Therefore, for each of the systems we decided to interview 900 households with at least one ill member, in 30 clusters of 30 households.

For each system, the 30 clusters were allocated by systematic sampling proportional to the size of the population covered by each health centre.

The retrospective period studied for the mortality survey was three months.

3.3.2 Defining the sample

Two types of health centres were compared according to their tariffication system.

The population covered by the health centres of the relevant category was calculated and the number of clusters required was calculated in proportion to this population[29]. The locality of each cluster was randomly selected in proportion to the populations of the health centres' coverage areas. Thus, each cluster corresponded to a locality[30]. Two clusters out of 60 had to be completed in a second locality because the chosen locality did not have enough inhabitants to complete the cluster.

In order to focus on financial access, the households surveyed were selected from among the population living within 5km of the health centre. This made it possible to minimise problems of geographic access and focus on other reasons for exclusion, particularly those linked to problems of financial access.

Distribution of the clusters in the flat-fee system

Flat-fee health centres	Population within 5km	% population	Number of clusters
PLASSAC HC (HAS)	10,499	17.4%	5
LIANCOURT HC (HAS)	25,175	41.6%	13
DESCHAPELLES HC (HAS)	9,997	16.5%	5
BASTIEN HC (HAS)	2,285	3.8%	1
DESLANDES HC (HAS)	4,474	7.4%	2
GABRIEL HC (HAS)	1,396	2.3%	1
MEDOR HC (INTERAID)	2,659	4.4%	1
PERODIN HC (INTERAID)	4,008	6.6%	2
Total	60,493	100%	30

[29] The population numbers used for the whole CHU come from the HAS database. We decided to base our survey on these numbers for the following reasons:

- The database is updated regularly by the health agents
- It covers the three districts of the CHU up to the level of population by locality.
- We did not know of any other database that goes up to the level of the locality. Even the preliminary results of the fourth census of the Haitian Institute of Statistics and Data Processing use data by district and not by locality.
- We compared the HAS data with 2004 projections from the censuses for 1999 and 2003 and we saw that the proportions by district and sections of districts are respected.

[30] See Annexe 3: the complete list of localities visited for the survey.

Distribution of the clusters in the cost-recovery system

Cost-recovery health centres	Population within 5km	% population	Number of clusters
Charles Colimon HC (MSPP/MSF)	28,487	23.5%	7
JEAN DENIS HC (MSPP/MSF)	27,142	22.4%	7
SEGUR HC (MSPP/MSF)	11,878	9.8%	3
Dumasais Estimé Hospital (MSPP)	11,274	9.3%	3
DE DESARMES HC (SOE)	5,406	4.5%	1
CHRISTANT HC (Community)	8,057	6.6%	2
MARIN HC (Community)	10,367	8.5%	2
SAVANVE A ROCHE HC (CARITAS)	8,353	6.9%	2
LA CHAPELLE HC (SOE)	10,364	8.5%	3
Total	121,328	100%	30

3.3.3 Random selection of households

After choosing the locality, the households to be surveyed were selected at random.

On the plain we used the bottle method[31] to identify the first surveyed household. In the mountains we had to use a different method because of large distances between the houses and difficult access. Where there were family registers that had been kept up to date by health agents, we used the table of random numbers to identify the first family. The rest of the procedure was identical to that used on the plain.

3.3.4 Human resources

On average, six two-person teams were selected on the basis of their abilities, their knowledge of the field and their fluency in French and Creole. The teams received specific training on the methodology and the procedures. They did preparations tasks to ensure that the information was well understood and would be applied uniformly. The teams were monitored by two supervisors headed by a general coordinator.

3.3.5 Survey questionnaire

The questionnaire contained 26 questions in six groups: composition of the household, mortality, morbidity, access to healthcare and socio-economic situation (see Annex 4 for the complete questionnaire).

The questionnaire was translated into Creole and tested before use. Unlike the mortality survey, the questions on access to healthcare only applied to households where at least one person had been ill in the last three months. If there had been more than one sick person in the household during this period, the questionnaire applied to the most recent episode.

[31] The surveyors begin in the centre of the locality, where a bottle or a feather is spun to determine the random starting direction. The team members follow the direction indicated until they reach the periphery, counting the number of houses as they go. Which house the surveyors visit first is determined by a table of random numbers. The surveyors then continue to the nearest house to the right of the first house and so on.

We chose to survey by household rather than by family because the latter term can be understood in a wider sense of extended family, including people who do not necessarily live under the same roof. Talking about family members who do not share the everyday life of the person interviewed could have biased the data by lack of precision in the answers and difficulty remembering.

The following definition was used for a household: people who sleep and eat under the same roof at least three days a week. Depending on the type of the home and people's situations, a household could be comprised of: brothers, sisters, cousins and others who fit the definition.

3.3.6 Analysis of data

The data were input every day using the EPI INFO program, version 6.04. Data were verified twice: in the field and in Brussels. Data analysis was done in Brussels.

3.4 Information gathered at HCs

We made information sheets on each of the 17 HCs of the CHU. The sheets contained details on: type of unit, services offered, management and support of the unit, personnel, the area covered, tariffs, exemptions and monthly number of consultations. In general, the information came from the manager of the structure.

The co-ordinator collected these data at the pre-survey stage and missing details were added over time. Also, partners made available their recent reports on their activities and structure.

3.5 Interviews

Open interviews were held with various health actors. These interviews gave us general information about the health system in the CHU. We spoke to the coordinating doctor, district doctors and the coordinators of partner health actors working in the area.

IV. TERMINOLOGY

Within the framework of this study, we use the terms **access** and **exclusion** as follows:

- By **access**, we mean access to a complete course of treatment in the health centre nearest to the home of a survey subject. The nearest centre must be within a 5km radius. We consider that a person has access to healthcare if, during the last[32] episode of illness considered to be 'serious', he or she went to the health centre closest to home, had a consultation and received a complete course of treatment.

  We consider that a person does not have access to healthcare if, during the last episode of illness, he or she did not go to the health centre closest to home for a consultation, or he or she went to the nearest health centre but did not receive a complete course of treatment there.

  The reasons for not going to the nearest health centre will be examined in this survey, with special attention given to the problems of financial accessibility.

- By **exclusion**, we mean the absence of any kind of consultation. We consider that a person is excluded from healthcare if, during the last episode of illness, he or she did not consult any person outside the family for medical care, although he or she considered that a consultation was necessary.

[32] We considered any episode of illness which occurred in the last three months in order to obtain as much precision as possible in the replies given by the households. Where there was no sick person in the last three month, only the questionnaire on mortality was completed by the surveyors.

PART THREE RESULTS OF THE HOUSEHOLD SURVEY

I. DESCRIPTION OF THE SAMPLE

In total, 2,367 households were interviewed: 1,151 households for the flat-fee system group and 1,216 for the cost-recovery system group[33].

For families where no one was sick in the three months preceding the survey, only the questionnaire on the composition of the family and on mortality were completed.

	Sample FF	**Sample CR**
Composition of households	Number of people	Number of people
<5 years	796 (13.2%)	733 (11.9%)
5-14 years	1,674 (27.8%)	1,654 (26.9%)
15-50 years	2,796 (46.4%)	2,967 (48.3%)
>50 years	748 (12.4%)	784 (12.7%)
Total	6,014	6,138
Average number people/family	5.22	5.04

Family composition is similar for both groups. There is a high percentage of households without children under five years: 50.1% for Sample FF and 56.3% for Sample CR. In Sample FF 46.7% of the households have at least one person over 50; 47.6% in Sample CR.

The percentage of families without children under five is relatively high compared to the percentages in other African contexts.

II. RETROSPECTIVE MORTALITY

The retrospective mortality survey was conducted over a three month period.

2.1 Global mortality

Mortality in absolute values

Age bracket	**FF**	**CR**
0-59 months	4	10
05-14 years	1	2
15-50 years	8	10
51 years and over	15	19
Total	28	41

Mortality rate by category

Age bracket	**FF**: deaths/10,000/day and 95% CI	**CR**: deaths/10,000/day and 95% CI
Crude mortality rate	0.5 {0.3-0.7}	0.7 {0.5-1}
Crude mortality rate <5 years	0.6 {0-1.1}	1.5 {0.5-2.5}

The crude mortality rate is similar in the two samples. The crude mortality rate of children under five is 2.5 times higher in Sample CR than in Sample FF but the difference is not significant.

[33] We refer to the samples using the following terms: 'Sample FF' or 'FF' for flat-fee system and 'Sample CR' or 'CR' for cost-recovery system.

2.2 Specific mortality

Cause of mortality	**FF**		**CR**	
	N	%	N	%
Malaria/fever	7	25	11	26.8
Respiratory condition	3	10.7	2	4.8
Diarrhoea	2	7.1	8	19.5
Problems due to childbirth	2	7.1	4	9.7
Violence	0	0	1	2.4
Car accident	1	3.5	2	4.8
Cancer	2	7.1	1	2.4
Gastric pain	2	7.1	1	2.4
Cardiac problems	6	2.1	3	7.3
Age	2	7.1	1	2.4
Mystic diseases	0	0	1	2.4
Other	1	3.5	2	4.8
Total	28	100	41	100

The main cause of mortality is malaria/fever in both samples. There is no difference between the two samples on specific mortality.

III. MORBIDITY

In randomly chosen households, the interviewer asked if one or more people had been ill during the past three months. If there was more than one, the person who had most recently been ill was questioned.

3.1 Description of the sample

3.1.1 Number of families with at least one person sick in the last three months

FF	**CR**
1,033 (89.7%)	1,069 (87.9%)

The proportion of families with a sick member is similar in each sample.

3.1.2 Composition of families with a sick person

	Sample FF (N=1,032)	**Sample CR** (N=1,068)
Composition of households*	Number of people	Number of people
<5 years	742 (13.5%)	664 (12%)
5-14 years	1,514 (27.6%)	1,491 (27%)
15-50 years	2,537 (46.3%)	2,672 (48%)
>50 years	686 (12.5%)	688 (12.4%)
Total	5,479	5,515
Average number of people/family	5.3	5.1

*1 missing data for the age variable of the patients in both samples

The composition of the households with at least one sick member is similar to that of the total sample. This is also the case for the percentage of households without children aged below five years (48.7% and 55.1% respectively) and households with elderly members (48% and 47.7% respectively).

3.1.3 Mortality in families with sick persons

Age bracket	**FF**	**CR**
<5 years	4	8
Total	24	31

Age bracket	**FF**: deaths/10,000/day and 95% CI	**CR**:deaths/10,000/day and 95% CI
Crude mortality rate	0.5 (0.3-0.7)	0.6 (0.4-0.9)
Mortality rate <5 years	0.5 (0.2-0.7)	1.3 (0.2-2.5)

Mortality in families with sick members is similar to mortality in the total sample. There is no significant difference between the mortality rates of the two samples when taking into consideration only the families with sick members.

3.1.4 Distribution of sick people by age bracket

	FF	**CR**
Age bracket	N (%)	N (%)
<5 years	180 (17.4%)	176 (16.5%)
5-14 years	155 (15%)	143 (13.4%)
15-50 years	458 (44.4%)	510 (47.8%)
>50 years	239 (23.2%)	239 (22.4%)
TOTAL	1,032	1,068

The average age of sick people is 31.0 years in Sample FF and 31.1 years in Sample CR. There is no difference in distribution of sick people by age bracket between the two samples.

3.1.5 Proportion of sick people by age bracket

(number of sick people in an age bracket/population of this age bracket in the sample)

	FF	**CR**
Age bracket	N (%)	N (%)
<5 years	180/742 24.2%	176/664 26.5%
5-14 years	155/1,514 10.2%	143/1,491 9.5%
15-50 years	458/2,537 18%	510/2,672 19%
>50 years	239/686 34.8%	239/688 34.7%
TOTAL	1,032	1,068

As expected, the proportion of sick people is higher for the brackets <5 and >50 than for the other age brackets. There is no difference between both samples.

3.1.6 Distribution of sick people by sex

	FF (N=1,033)	**CR** (N=1,069)
Men	426 (41.2%)	396 (37%)
Women	607 (58.8%)	673 (63%)
Sex ratio (F/H)	1.4	1.6

There is a higher percentage of sick women in both samples. There is no difference in the sex ratio between the two samples.

3.2 Gravity of illness and type of treatment

3.2.1 Gravity of illness

	FF			CR		
Gravity	N	%	95% CI	N	%	95% CI
Serious	315	30.5	(25.6-35.3)	391	36.6	(31.3-41.7)
Less serious	718	69.5	(64.6-74.3)	678	63.4	(58.2-68.6)
Total	1,033	100		1,069	100	

The proportion of sick people who felt their illness to be serious is similar in both samples.

3.2.2 Gravity of illness by sex

FF

	Men	Women
Serious	122 (28.6%)	193 (31.7%)
Less serious	304 (71.3%)	414 (68.2%)
Total	426 (100%)	607 (100%)

Perception of the gravity of illness is similar for both sexes in the FF sample.

CR

	Men	Women
Serious	134 (33.8%)	257 (38.1%)
Less serious	262 (66.1%)	416 (61.8%)
Total	396 (100%)	673 (100%)

Perception of the gravity of the illness is similar for both sexes in the CR sample.

In both samples, perception of gravity of illness is similar for both sexes.

3.2.3 Gravity by age bracket

FF

Age bracket	Gravity (% of sick people who felt their illness was serious)
0-4	41 (22.7%)
5-14	38 (24.5%)
15-50	144 (31.4%)
50+	92 (38.4%)

The proportion of sick people who felt their illness was serious increases with age.

CR

Age bracket	Gravity (% of sick people who felt their illness was serious)
0-4	53 (30.1%)
5-14	37 (25.8%)
15-50	200 (39.2%)
50+	101 (42.2%)

The proportion of sick people who felt their illness was serious increases with age except in the 5-14 age bracket.

Perception of gravity of illness by age bracket is similar in the two samples.

3.2.4 Type of treatment

	FF			CR		
Type of treatment	N	%	95% CI	N	%	95% CI
Traditional products	92	8.9	{6.6-11.3}	99	9.3	{7.3-11.2}
Modern medicine	688	66.6	(60.4-72.8)	601	56.2	(51.6-60.8)
Traditional products and modern medicine	213	20.6	(15.6-25.6)	332	31.1	(25.9-36.2)
Without medication	40	3.9	(2.2-5.6)	37	3.5	(2.3-4.7)
Total	1,033	100		1,069	100	

In Sample FF the majority of sick people took modern medicine. 20% of the sick people took a combination of modern medicine and traditional products. Less than 9% took traditional products only and less than 4% had no form of treatment.

In Sample CR, the majority of sick people took modern medicine. 31% of the sick people took a combination of modern medicine and traditional products. Less than 10% took traditional products only and less than 4% had no form of treatment.

Comparison

66% of the sick people took modern medicine in Sample FF against 56% in Sample CR. This difference is at the limit of statistical significance. The proportion of sick people taking a combination of traditional products and modern medicine is larger in Sample CR than in FF: 31% against 20%. This difference is at the limit of statistic significance.

Considering the relative risk, the sick people of Sample FF are 1.2 times more likely to take modern medicine than the sick people of Sample CR (CI 1.05-1.34).

3.2.5 Type of treatment according to the gravity experienced

	FF N=315		**CR** N=391	
Type of treatment	N	%	N	%
Traditional products	16	17.4 (8.7-26.1)	30	30.3 (20-40.6)
Modern medicine	214	31.1 (25.5-36.7)	211	35.1 (30.1-40.1)
Traditional products and modern medicine	78	36.6 (31.3-42.0)	134	40.4 (32.5-48.2)
Without medication	7	17.5 (5.6-29.4)	16	43.2 (23.8-62.7)

30% of the people who felt seriously ill took traditional products in Sample CR against 17% in Sample FF. 43% of the people who considered themselves to be seriously ill took no medication in Sample CR against 17% in Sample FF. These differences are not statistically significant.

3.3 Type of illness (as perceived by the interviewee)

Type of illness	**FF**		**CR**	
	N	%	N	%
Malaria/Fever	492	47.6	478	44.7
Diarrhoea	38	3.7	33	3.1
Respiratory conditions	124	12	131	12.2
Complicated childbirth	4	0.4	7	0.7
Problems of the central nervous system	46	4	55	5.1

Skin problems	41	3.9	44	4.1
Heart problems	95	9.1	84	7.8
Digestive problems	61	5.9	73	6.8
Gynaecological problems	19	1.8	13	1.2
Dental problems	3	0.2	6	0.5
Eye problems	13	1.2	12	1.1
Trauma	6	0.6	5	0.4
Supernatural diseases	7	0.6	9	0.8
Other	84	8.4	119	11.1
Total	1,033	100	1,069	100

In both samples, the majority of sick people said they had malaria or fever. Morbidity perceived is similar in both samples.

3.3.1 Gravity by type of illness

Malaria

	FF		**CR**	
	N	%	N	%
Serious	105	21.3	110	23
Less serious	387	78.7	368	77
Total	492	100	478	100

The proportion of sick people who considered their malaria to be serious is similar in the two samples.

IV. ACCESS TO CARE

4.1 Consultation

We defined consultation as any approach towards a person outside the family in relation to an episode of illness.

4.1.1 On the total number of patients

	FF		**CR**	
Consulted:	N	%	N	%
No	140	13.6	113	10.6
Yes	893	86.4	956	89.4
Total	1,033	100	1,069	100

In Sample FF, 86.4% of the population had a consultation. In Sample CR, 89.4% of the population had a consultation. The difference between the samples is not significant.

4.1.2 Among those regarding themselves as seriously ill

	FF		**CR**	
Consulted:	N	%	N	%
No	18	5.7	31	7.9
Yes	297	94.3	360	92.1
Total	315	100	391	100

In Sample FF, 94.3% of the people regarding themselves as seriously ill had a consultation. In Sample CR, 92.1% of the people regarding themselves as seriously ill had a consultation. The difference between the two samples is not significant.

4.1.3 Reasons for not seeking a consultation

	FF		CR	
Reasons for not seeking a consultation	N	%	N	%
Not sufficiently ill	46	32.9	29	25.7
Lack of money	65	46.4 (33.6-59.2)	68	60.2 (49.2-71.1)
Lack of confidence	4	2.9	0	0
Transport problems	2	1.4	0	0
HC closed	3	2.1	2	1.8
Home care	7	5	1	0.9
Medicines already at home/ gift of the family	4	2.8	4	3.5
HC card lost	3	2.1	3	2.6
Other	6	4.2	6	5.3
Total	140	100	113	100

There is a difference between the two groups in terms of the percentage of patients who did not consult for financial reasons. In Sample FF, the percentage is 46% and in Sample CR it is 60%. The difference is not statistically significant. The second most cited reason for not having a consultation is "illness not serious enough".

4.2 Primary care received

4.2.1 Place of consultation

'Selected HC' means the nearest identified HC within a radius of 5km.

	FF			CR		
Place of consultation	N	%	95% CI	N	%	95% CI
Selected HC	694	77.7	(72.5-82.8)	378	39.5	(31.8-47.2)
Other HC	38	4.3	(2.2-6.3)	258	26.9	(18.3-35.6)
Hospital	102	11.4	(7.4-15.3)	99	10.3	(6.9-13.7)
Other	59	6.6	(3.4-9.7)	221	23.1	(18.8-27.4)
Total	893	100		956	100	

In Sample FF, 78% of the sick people went to the HC closest to home. 4% consulted in another HC, 11% went straight to hospital and 6.6% to a non-official structure. Of these 6.6%, 2.4% consulted a traditional healer or hougan (voodoo priest), 1.3% received home care, 0.3% went to the pharmacy and 2.5% went to the medicine seller.

In Sample CR, 39% of the sick people went to the HC closest to home. 27% consulted in another HC, 10% went straight to hospital and 23.1% to a non-official structure. Of these 23.1%, 3.9% consulted a traditional healer or hougan, 5.8% received home care, 1.5% went to the pharmacy and 12% went to the medicine seller.

Comparison

Among all sick people seeking a consultation, the percentage of people attending the nearest HC is two times higher in Sample FF than in Sample CR (78% et 39% respectively).

27% of the sick people in Sample CR consulted in another HC against 4% in Sample FF.

23% of the sick people in Sample CR went to a non-official structure against 7% in Sample FF.

These differences are significant.

2.5% (0.8-4.1) of the sick people in Sample FF went to a medicine seller against 12% (9.7-14.3) in Sample CR.

This difference is significant.

In both samples, an identical percentage of people went straight to hospital.

4.2.2 Reasons for not attending the nearest HC

Of the people attending an official structure (HC or hospital) other than the closest HC

	FF			**CR**		
Reasons for not attending the nearest HC	N	%	95% CI	N	%	95% CI
Lack of money	3	2.2	(0-5.5)	100	28	(13.5-42.5)
Not sufficiently ill	0	0	0	0	0	0
Too seriously ill	31	23	(13.5-32.7)	52	14.5	(7.4-21.6)
Lack of confidence	16	11.9	(6.4-17.4)	82	22.9	(16.4-29.5)
Type of care is not offered by HC	33	25.2	(9.9-39.2)	57	15.9	(7.5-24.3)
HC closed, HC personnel absent	16	11.9	(6.4-17.4)	15	4.2	(1.2-7.1)
Lack of transport/ HC too far away	4	3	(0-6.4)	16	4.4	(0-9.8)
HC has no medicines	4	3	(0-7.5)	1	0.2	(0-0.8)
Other	27	20.1	(10.2-30)	34	9.5	(6-13)
Total	134*	100		357	100	

* 6 missing data

In Sample FF, the main reasons for not attending the nearest HC are: the type of care needed is unavailable (25%) illness too serious (23%), lack of confidence in the HC (12%), HC is closed (12%).

In the category 'other', the following reasons are given: person works in the hospital (12), waste of time, person is travelling, appointment at the hospital, medical file lost.

In Sample CR, the two main reasons for not attending the nearest HC are: lack of money (28%) and lack of confidence in the HC (23%).

In the category 'other', the following reasons are given: habit, the possibility of being transferred to a hospital, person is travelling, waste of time, appointment at the hospital.

Comparison

In Sample FF, 2.2% chose to go to a health structure other than the one closest to home because of lack of money. In Sample CR, it is 28%. This difference is significant.
Lack of confidence was cited twice as often in Sample CR than in Sample FF.

On the other hand, a closed HC or the absence of employees was cited three times more often in the Sample FF. These differences are at the limit of statistical significance.

Of the people attending an HC other than the closest one

	FF			**CR**		
Reasons for not attending the nearest HC	N	%	95% CI	N	%	95% CI
Lack of money	3	7.8	(0-18.2)	97	37.5	(19.8-55.3)
Not sufficiently ill	0	0	0	0	0	0
Too seriously ill	1	2.6	(0-7.9)	18	7	(1.9-11.9)
Lack of confidence	11	28.9	(14.9-42.9)	73	28.2	(20.3-36.2)
Specific type of care is not offered by HC	4	10.5	(0-24.4)	16	6.2	(1.0-11.3)
HC closed, HC personnel absent	3	7.9	(0-18.4)	12	4.6	(0.9-8.3)
Lack of transport/ HC too far away	3	7.9	(0-19.4)	15	5.8	(0-12.8)
HC has no medicines	4	10.5	(0-24.4)	0	0	0
Other	9*	23.7	(10.2-37.1)	27*	15.5	(5.4-15.4)
Total	38	100		258	100	

Looking at the patients who went to an HC other than the one closest to home, the main reasons cited in Sample FF were lack of confidence (29%) and unavailability of medicines or type of care sought (10%). Lack of money was only cited in 8% of cases.

In the category 'other', the following reasons are given: discouragement, travel, vaccination card lost.

In Sample CR, it is the lack of money (37%) followed by the lack of confidence (28%) that are the most-cited reasons.

In the category 'other', the following reasons are given: habit, waste of time, possibility of further referral, travel.

<u>Comparison</u>

If we consider only the people who went to an HC other than the selected HC, we can see that lack of money was given as a reason in 37% of the cases in Sample CR compared to 8% in Sample FF. This difference is significant. There is a high proportion of 'lack of confidence' responses, which is similar in both groups.

If, from among the people who went to another HC, we look only at those who left the closest HC in the cost-recovery system for one in a flat-fee system (N=116), we see that 60% did so for financial reasons.

If we look only at the patients who left the flat-fee system for the cost-recovery system (N=28), the main reason, cited by 32%, of patients is lack of confidence.

Of people going straight to a hospital

In Sample FF, 31% considered that they were too seriously ill and 30% considered that a specific type of treatment was not offered by the HC.

In Sample CR, 41% considered that they were too seriously ill and 34% considered that a specific type of treatment was not offered by the HC.

Comparison

In both samples, we observe a similarly high proportion of patients consulting going directly to a hospital. The reasons given are the same in both groups.

Of people attending non-official structures

	FF			**CR**		
Reasons for not attending the nearest HC	N	%	95% CI	N	%	95% CI
Lack of money	23	38.9	(28.7-51.1)	109	49.3	(40.8-57.8)
Not seriously ill and treated at home	18	30.5	(17.6-43.3)	44	19.9	(13.2-26.5)
Lack of confidence	6	10.3	(2.1-18.1)	17	7.7	(4.2-11)
Type of care not offered by HC	4	6.8	(0.3-13.2)	21	9.5	(4.8-14.1)
HC closed, HC personnel absent	0	0	0	7	3.2	(1.1-5.2)
Lack of transport/ HC too far away	4	6.8	(0-15)	1	0.5	(0-1.3)
HC has no medicines	0	0	0	0	0	0
Other	4*	6.8	(1.3-12.1)	22*	10	(5.4-14.4)
Total	59	100		221	100	

In Sample FF, the two main reasons for attending a non-official structure are lack of money, in 39% of cases, and the illness not being serious enough, 30%.

In the category 'other', the reasons are: waste of time and person is travelling.

In Sample CR, the two main reasons for attending a non-official structure are lack of money, in 49% of cases, and the illness not being serious enough, 20%.

In the category 'other', the reasons are: waste of time, person travelling, vaccination card lost and habit.

Comparison

In Sample CR, practically every second person cited financial reasons for not attending the nearest HC. This is 38% in Sample FF. However, this difference is not significant.

4.2.3 Overnight stay

The question about overnight stays was only put to people who were sick and who chose to attend an official health structure.

Type of tariff	N	Overnight stay at closest HC	Overnight stay in another HC	Overnight stay in a hospital	Total	95% CI
FF	834	4	0	36	40 (4%)	(3-6.6)
CR	735	4	9	31	44 (5.9%)	(3.8-8.2)

A similar proportion of patients was hospitalised in each group. The majority of them were hospitalised in a hospital.

4.2.4 Treatment prescribed and received

The following data was calculated for patients who had a consultation in the nearest HC:

FF: N=694
CR: N=378

4.2.4.1 Laboratory

FF: Six out of eight HCs have a lab (75%)
CR: Five out of nine HCs have a lab (55%)

	FF			**CR**		
Laboratory tests	N	%	95% CI	N	%	95% CI
Prescribed	35	5	(3.6-6.5)	54	14	(8.4-20.2)
Actually performed	31	88.5	(79.0-98.1)	52	96.2	(89.0-103.6)

In the flat-fee HCs, 5% of the patients received a prescription for a lab test and 88% of the prescribed test were performed.

In the cost-recovery HCs, 14% of the patients received a prescription for a lab test and 96% of the prescribed tests were performed.

Comparison

Significantly more tests were prescribed in Sample CR (although there are more labs in Sample FF). The percentage of tests performed is similar for both groups.

Reasons the tests were not performed:

In Sample FF four tests were not performed because in three cases there was no lab, and in one case the test was not available. In Sample CR two tests were not performed: in one case there was a lack of money and in the other case a lack of confidence in the HC personnel.

4.2.4.2 Treatments

Complete treatments

	FF			**CR**		
Treatment	N	%	95% CI	N	%	95% CI
Prescribed	686	98.8	(98.2-99.5)	366	96.8	(93.9-99.7)
Received completely	673	98.1	(97.0-99.2)	348	95.1	(93.3-96.9)
Received completely at the selected HC	670	97.6	(96.4-98.3)	341	93.1	(89.8-96.5)

FF: in 99% of the cases, treatment is prescribed. 98% of the patients received a complete course of treatment from the selected HC.

CR: in 97% of the cases, treatment is prescribed. 93% of the patients received a complete course of treatment from the selected HC.

Comparison

The percentage of prescribed treatments is similar for both groups. The differences between the treatments received completely or not at all are at the limit of significance: we observe that the percentage of complete treatments in the nearest HC is lower for Sample CR than for Sample FF.

Incomplete treatment

	FF			**CR**		
	N	%	95% CI	N	%	95% CI
Received partially	12	1.7	(0.7-2.73)	17	4.6	(2.75-6.5)
Reasons						
Lack of money	2	16.6	(0-37.3)	6	35.2	(13.8-56.7)
HC has no medicines	10	83.3	(62.6-100)	10	58.8	(36.4-81.1)
Medicines not available elsewhere	0	0		1	5.8	(0-17.6)

FF: 2% of the patients received an incomplete course of treatment.
CR: 5% of the patients received an incomplete course of treatment.

Treatment not received

	FF			**CR**		
	N	%	95% CI	N	%	95% CI
Treatment not received	1	0.1	(0-0.4)	1	0.2	(0-0.7)
Reasons						
Lack of money	0	0		0	0	
HC has no medicines	1	100		1	100	
Medicines not available elsewhere	0	0		0	0	

In both systems, less than 1% of the patients did not receive any of the treatment that was prescribed.

Comparison

In Sample CR, almost 5% of patients do not have access to a complete course of treatment, compared to under 2% in Sample FF. This difference is at the limit of significance.

In both groups, the main reason for not obtaining full treatment is the unavailability of medicines at the HC. The second reason is the lack of money. This reason is cited two times more often in Sample CR (35%) than in Sample FF (16%). The difference is not statistically significant.

Only one person in each sample does not receive the prescribed treatment at all.

Summary[34]

The following table summarises the percentage of patients (from among those who considered a consultation necessary) who have access to a consultation and who receive complete treatment at the nearest HC.

Access at the closest HC

	FF			**CR**		
Access to complete treatment	N	%	95% CI	N	%	95% CI
Yes	670	68.9	(63.5-74.2)	341	33.3	(26.3-40.2)
No	302	31.1	(25.7-36.4)	683	66.7	(59.7-73.6)
Total	972	100		1,024	100	

[34] See Annex 5 for these two tables.

The percentage of patients who have access to a consultation and who receive a complete course of treatment in the HC closest to home is two times higher in Sample FF than in Sample CR. This difference is statistically significant.

Access at an HC that belongs to a system

We put together the numbers of people who went to a flat-fee structure and those went to a cost-recovery structure, even if the structure they attended was not the one closest to home.

	FF			**CR**		
Access to complete treatment	N	%	95% CI	N	%	95% CI
Yes	678	69.8	(64.6-75)	457	44.7	(37.9-51.5)
No	293	30.1	(24.9-35.3)	564	55.2	(48.4-62)
Total	971	100		1021	100	

Even if we consider access by system and not by closest HC, we observe a difference of 25% between access in the flat-fee system and access in the cost-recovery system. This difference is statistically significant.

4.3 Prices of care or related to care

4.3.1 Prices paid by the people who attended the selected HC

FF: N=694
CR: N=378

4.3.1.1 Total price

Percentage of free consultation

	FF			**CR**		
	N	%	95% CI	N	%	95% CI
Paid	684	99.1	(98.4-99.9)	359	98.9%	(97.9-99.9)
Not paid	6	0.9	(0.1-0.6)	4	1.1%	(0.1-2.1)
Total	690*	100		363**	100%	

* 4 missing data
**15 missing data

FF: The percentage of free consultations is less than 1%. 99% of the patients paid for care. Of 684 paying patients, 682 said that they paid for the entire treatment.

CR: The percentage of free consultations is less than 1%. 99% of the patients paid for care. Of 359 paying patients, 352 said that they paid for the entire treatment.

Comparison

In both groups, nearly 100% of the patients said that they paid for care. There is no significant difference between the two samples.

Total price paid

	FF	**CR**
Average price	20.1 (19.1-21.2)	111 (98-123)
Median price	19	100
Range	4-140	10-455

FF: the average price for a consultation is 20 gourdes.
CR: the average price for a consultation 111 gourdes.

Comparison

The average price for a consultation in Sample CR is five times higher than in Sample FF. The median price for a consultation in Sample CR is five times higher than in Sample FF. These differences are significant.

4.3.1.2 Prices of laboratory tests in the health centres

N: number of tests performed
FF: N=31
CR: N=52

Percentage of free tests (*or included in the flat fee*)

	FF		**CR**	
	N	%	N	%
Paid tests	2	6.9 (2.1-15.9)	32	88.9 (78.2-99.5)
Free tests	27	93.1 (84.1-102.1)	4	11.1 (0.5-21.8)
Total	29*	100	36**	100

*2 missing data
**16 missing data

FF: 93% of the tests performed were free to the patient (as they were included in the flat fee). Only two out of 31 patients said that they paid for tests (7%).

CR: 11% of the tests performed were free to the patient. In 89% of cases, patients paid for tests.

The differences between the two samples are statistically significant.

Prices of tests where patients had to pay (in gourdes)

FF: Only two people paid for tests. The price was 30 gourdes. One person said that he/she paid the entire price. The other person paid part of the price.

CR: Of 32 patients who paid, all said that they paid for the entire test. The average price of a test was 41 gourdes.

Average price	41 (22.8-59.1)
Median price	32.5
Range	10-100

4.3.1.3 Price of treatments in the health centres

(N: patients for whom treatment was prescribed at the selected HC and who received all the medicines in that HC)

FF: N=670
CR: N=341

Percentage of paid/free treatment

	FF		**CR**	
	N	%	N	%
Paid treatment	2	0.3 (0.3-0.9)	279	87.2 (78.7-95.7)
Free treatment	664	99.7 (99.1-100.3)	41	18.8 (4.3-21.3)
Total	666*	100	320**	100

*4 missing data
**21 missing data

FF: only two patients paid for treatment. **In 99.7% of cases the cost of treatment is included in the flat-fee price.**

CR: 87% of the patients paid for treatment. Of 279 paid treatments, 277 cases said that they paid for the whole treatment.

Percentage of the paid treatment is statistically different between the two groups and reflect the difference in the tariff systems.

Price of treatment

FF: The two paying patients gave 10 gourdes for treatment.

CR:

Average price	109.1 (95.2-123.0)
Median price	100
Range	10-340

4.3.1.4 Synthesis of prices in the selected HC

		FF	**CR**
		N = 682	N = 352
Total cost of care	Average price Median price Range	20 (19.1-21.2) 19 4 –140	111 (98-123) 100 10- 455
		N =1	N = 32
Cost of laboratory tests	Average price Median price Range	30 30	41 (22.8-59.1) 32.5 10-100
		N= 2	N=277
Cost of treatment	Average price Median price Range	10 10	109.1 (95.2-123) 100 10-340

The average total price is five times higher in Sample CR than in Sample FF. It is difficult to compare the prices of laboratory tests and treatment due to the low number of paying patients in the flat-fee system. This shows that in centres that apply a flat fee, that fee does include lab tests and treatment.

4.3.2 Price paid by the people who attended a hospital

		FF	CR
		N=86	N=91
Total price of care	Average price Median price Range	110.4 (52.9-168) 50 10-2,000	132.7 (78.2-187.1) 41 10-1,400

Looking at the total cost of care in hospital, there is no difference between the two samples. Most patients go to the same hospital, the HAS. It is the only reference hospital in the CHU.

Patients who stayed overnight at hospital and those who did not:

FF:

		With overnight stay	Without overnight stay
		N=31	N=55
Total cost of care	Average price Median price Range	216 (64-368) 50 10-2,000	51 (40-62) 40 10-295

Patients who stay overnight pay significantly more than patients who do not.

We also see that the price paid at the hospital by a patient who does not stay overnight (51 gourdes) is higher than the price of a consultation in the selected FF HC (20 gourdes).

CR:

		With overnight stay	Without overnight stay
		N=31	N=60
Total cost of care	Average price Median price Range	286 (144-428) 60 15-1,400	53 (33-73) 36.5 10-322

Patients who stay at least one night pay significantly more than those who do not stay overnight at hospital.

The price paid by a patient who does not stay overnight at the hospital (53 gourdes) is half the price of a consultation in the selected HC in the CR sample (111 gourdes). This difference is significant.

4.3.3 Price paid at non-official structures

		FF	CR
Total cost	Average price Median price Range	156 (0-313) 25 3-3,000	446 (36-856) 30 3-35,000
		N=39	N=178

Comparing the averages, there is no difference between the prices paid in both samples. The extremely high value of 35,000 has been verified. It was the price paid for home care provided by a private doctor.

4.3.4 Recap: price according to the place of consultation[35]

Comparison between selected HCs, other HCs, hospitals and non-official structures

FF:

Total cost	Selected HC N=682	Other HC N=32		Hospital N=86		Non-official structures N=39
		CR N=24	FF N=8	With overnight stay N=31	Without overnight stay N=55	
Average price Median price Range	20 (19-21) 19 4 –140	305 (0-678) 75 15-4,750	25 (19-30) 25 15-32	216 (64-368) 50 10-2,000	51 (40-62) 40 10-295	156 (0-313) 25 3-3,000

The price paid at selected HCs is lower than the price paid at a hospital, with or without overnight stay.

In other CR HCs, the average price of a consultation is 112 gourdes (52-172), if the extreme value is removed (4,750). This is significantly higher than in the closest FF HC.

The average price for a stay overnight in a hospital is 122 gourdes (58-186) if the extreme values are removed (N=29).

The average price of a consultation in a non-official structure is 82 gourdes (9-154), if the extreme value of 3,000 is removed (N=38). The average price is higher than in the selected HC, although the difference is not significant, the range of the prices in the non-official structures is quite wide.

CR:

Total cost	Selected HC N=352	Other HC N=243		Hospital N=91		Non-official structures N=178
		FF N=112	CR N=131	With overnight stay N=31	Without overnight stay N=60	
Average price Median price Range	111 (98-124) 100 10- 455	65 (28-102) 30 10-1,500	137 (96-179) 100 10-1,560	286 (144-428) 60 15-1,400	53 (33-73) 36 10-322	446 (36-856) 30 3-35,000

The price paid at the selected HC is higher than the price paid at another FF HC. The price paid at the selected HC is higher than the price paid at a hospital without overnight stay.

The average price of a consultation in another CR HC is 126 gourdes (89-164), if the extreme value of 1,560 is removed (N=130). This is comparable to the price at the nearest CR HC.

The average price of a consultation in another FF HC is 52 gourdes (30-74), if the extreme value is removed. The difference between the average price in the selected HC and another FF HC is significant.

The average price of a consultation in a non-official structure is 97 gourdes (60-134), if the extreme values are removed. The average price is lower than in the selected HC, although the difference is not significant.

[35] See overview diagrams in Annex 6.

4.3.5 Additional costs

4.3.5.1 For patients who attended the nearest HC

Additional costs are indirect costs related to a consultation: expenditure for transport or food.

Proportion of patients with additional costs

FF: 411/694 = 59.2% (51.1-67.3)
CR: 236/378 = 62.4% (51.9-72.9)

Distribution of additional costs

	FF		**CR**	
Type of cost	N	%	N	%
Transport	107	26 (11-40.2)	172	72.8 (61.2-84.4)
Food	395	96.3 (92.6-100)	177	75 (67.2-82.7)
Total	410*		236	

*1 missing data

FF: 26% of the patients have additional costs for transport and 96% of the patients have additional costs for food.

CR: 73% have additional costs for transport and 75% have additional costs for food.

Comparison

A higher percentage of patients from Sample CR declare spending money on transport. A higher percentage of patients from Sample FF declare spending money on food. The differences are significant.

Costs

	FF	**CR**
Average cost	38.7 (32.4-45)	50.2 (38.2-62.3)
Median cost	25	35
Range	1- 500	1-1,130

There is no difference between the amount of costs in the two samples.

The additional costs are 39 gourdes ($1) on average for Sample FF and 50 gourdes on average for Sample CR ($1.30).

4.3.5.2 Patients who leave one system for another

This section looks at patients who do not attend the nearest HC but consult in another HC, applying the other payment system.

FF: patients who leave the flat-fee system for the cost-recovery system
CR: patients who leave the cost-recovery system for the flat-fee system

Proportion of patients with additional costs

FF: 22/28 = 78.6% (63.7-93.4)
CR: 90/116 = 77.6% (69.8-85.4)

Types of costs

FF: 68.2% of the patients have additional costs for transport and 77.3% for food.
CR: 47.7% have additional costs for transport and 86.6% for food.

Costs

	FF	**CR**
Average cost	48.7 (29.5-67.7)	76.7 (35.1-118.4)
Median cost	40	30
Range	5-120	3-1,000

The additional costs for the patients consulting in another HC (of the other system) are higher than for patients attending the selected HC (see point 4.3.5.1). The differences are not significant. The samples are comparable on this point.

4.3.5.3 For patients attending the hospital

Proportion of additional costs

FF: 85/102 = 83.3% (69.1-97.5)
CR: 98/99 = 99% (97-100.9)

Distribution of additional costs

FF: 73% of the patients declare having additional costs for transport and 93% for food.
CR: 99% declare having additional costs for transport and 89% for food.

Costs

	FF	**CR**
Average costs	299.4 (177.2-421.5)	239.7 (163.3-316.1)
Median costs	100	100
Range	0-2,880	20-2,500

In both samples, the additional costs for patients attending a hospital are higher than for patients consulting in a HC. These differences are significant.

The proportion of patients with additional costs is also higher. This difference is significant in the CR sample.

4.3.6 Synthesis of costs for an episode of illness (average individual costs paid at a structure and average additional costs)[36]

For patients attending the selected HC

	FF	**CR**
Average costs	43 (38-48)	143 (124-162)
Median costs	30	120
Range	4-590	10-1,230

When the costs paid at a structure and additional costs are added together, the cost of an episode of illness is three times higher for Sample CR than for Sample FF.

[36] See overview diagrams in Annex 7.

For patients attending another HC

FF:

	Other CR HC N=24	Other FF HC N=8
Average cost	339 (0-720)	30 (22-37)
Median cost	105	32
Range	15-4,750	19-46

CR:

	Other FF HC N=112	Other CR HC N=131
Average cost	117 (53-182)	217 (147-288)
Median cost	55	160
Range	15-2,500	25-2,000

For patients attending a hospital

	FF N=86		**CR** N=91	
	With overnight stay N=31	Without overnight stay N=55	With overnight stay N=31	Without overnight stay N=60
Average cost	843 (558-1,129)	134 (99-170)	760 (519-1,000)	172 (143-202)
Median cost	400	40	500	130
Range	50-3,630	15-550	50-2575	45-770

4.3.7 Source of the money spent on healthcare

We asked the interviewees if they had been able to pay from their savings, or if they had taken other measures such as selling goods, land or harvest, going into debt (by working for someone else, borrowing, owing money to the HC) or receiving external aid.

Among the patients attending the selected HC

	FF			**CR**		
Financial means	N	%	CI	N	%	CI
Savings	272	39.6	(32.1-47.2)	138	36.8	(29.6-44)
Sale	197	28.7	(23-34.4)	89	23.7	(15.8-31.7)
Debt	132	19.2	(13.8-24.7)	87	23.2	(18-28.4)
Aid	86	12.5	(9.3-15.7)	61	16.3	(12.8-19.8)
Total	687*	100		375**	100	

*7 missing data
**3 missing data

There is no difference between the two groups in terms of families' financial means for raising money.

Considering sale of assets and debt as mechanisms for impoverishment:

In Sample FF 48% of the interviewed families have recourse to a mechanism of impoverishment to pay for healthcare. In Sample CR, it is 47%.

4.4 Exemption system

In Sample FF, the proportion of patients who say they are entitled to a reduction of healthcare costs is 32/1,030, or 3.1%.

In Sample CR, the proportion of patients who say they are entitled to a reduction is 13/1,069, or 1.2%.

Type of reduction

In Sample FF, of 32 people with the right to a reduction, 31 are employed by the health structure or have a family member who is employed there. One patient is covered by his school's health insurance policy.

In Sample CR, 11 of 13 people who said that they did not have to pay if they attended the HC are employed by the health structure or have a family member who is employed there. (The remaining two people were: a traditional 'leaf-doctor' recognised by HAS and a 'non-specified' case.)

In both groups, nobody declared holding a special card for the destitute. There is no price reduction available based on vulnerability.

V. SOCIO-ECONOMIC CONDITIONS

5.1 Vulnerability

We defined nine criteria for 'vulnerability':

Criterion 1: single woman head of household with dependent children
Criterion 2: single woman head of household without dependent children
Criterion 3: child (under 18) head of household with no outside assistance
Criterion 4: elderly person (over 55), alone or with dependents
Criterion 5: person without land (property ownership)
Criterion 6: person without access to land
Criterion 7: displaced person
Criterion 8: disabled person dependent on family
Criterion 9: chronically sick person dependent on family.

5.1.1 Proportion of vulnerable households

Based on the whole sample of households with ill members

FF:

66.5% of the households interviewed say that they meet at least one of the criteria for vulnerability (685/1,030).

CR:

66.3% of the households say that they meet at least one of the criteria (706/1,069).

5.1.2 Type of vulnerability

	FF N=685		**CR** N=706	
Type of vulnerability	N (%)		N (%)	
Single woman head of household	229	33.4	228	32.1
Elderly head of household	152	22.1	173	24.4
Child head of household	45	6.5	58	8.1
Household without land	373	54.4	405	57.1
Household without land or access to land	416	60.7	457	64.4
Displaced family	52	7.5	35	4.9
Disabled person dependent on family	75	10.9	99	13.9
Chronically sick person dependent on family	113	16.4	132	18.6
Handicapped and chronically sick person dependent on family	176	25.6	201	28.3

The proportion of vulnerable people among all households is identical in the two groups. Type of vulnerability is also comparable in both samples.

Looking separately at place of consultation, the proportion of vulnerable people is exactly the same for both groups. There is no significant difference concerning the type of vulnerability.

5.2 Weekly expenditure and income of families in gourdes (38 gourdes=$1)

5.2.1 Expenditure

Based on the whole sample

	FF		**CR**	
Expenditure	Average Median Range	1,031 (893.2-1,168.9) 800 50-10,500	Average Median Range	1,170.5 (1,066.7-1,274.2) 1,000 2-7,500
	N=1,022*		N=1,065**	

*11 missing data
**4 missing data

Weekly household expenditure is similar in the two samples.

In Sample FF, average expenditure per person per day is 32.6 gourdes (27.6-37.6).
In Sample CR, average expenditure per person per day is 42.2 gourdes (36.6-47.8).

We note a difference between the groups which is at the limit of statistical significance. Individual expenditure is lower in Sample FF. This could be due to the fact that hill clusters are concentrated in Sample FF only.

5.2.2 Income

Based on the whole sample

	FF		**CR**	
Income	Average Median Range	978.2 gourdes (749.1-1,162.3) 600 20-35,000	Average Median Range	984.4 (862-1,106.7) 700 30-15,000
	N = 1,027*		N =1,059**	

*6 missing data
**10 missing data

There is no difference between the average income of the households in the two groups.

In Sample FF, the average income per person per day is 30.5 gourdes (23.7-37.2). In Sample CR, the average income per person per day is 35.8 gourdes (28.8-42.9).

In both groups, the average income per person per day is between 5 and 20% less than $1.

5.2.3 Percentage of families below the poverty threshold

Households living on less than $1 per person per day ($1=38 gourdes)

	Frequency	%
FF	827	80.4
CR	833	79

Households on less than $0.50 per person per day ($0.50=19 gourdes)

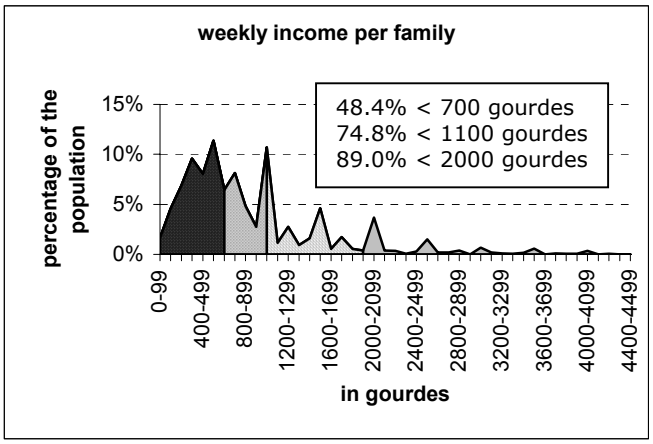
	Frequency	%
FF	544	51.6
CR	480	56.5

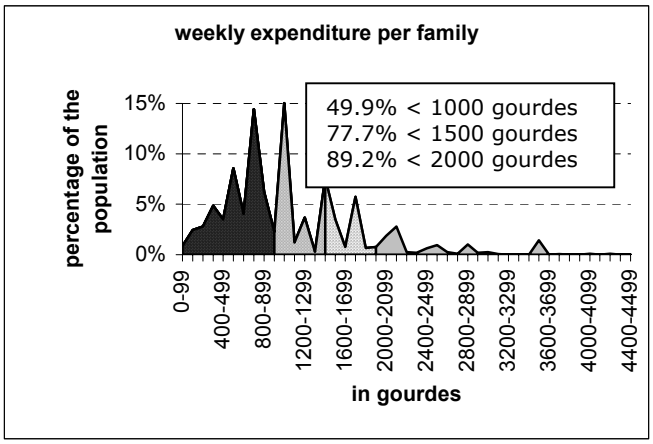
Households below the national poverty threshold (for rural districts this is 1,952 gourdes/person/year or 5.3 gourdes/person/day)[37]

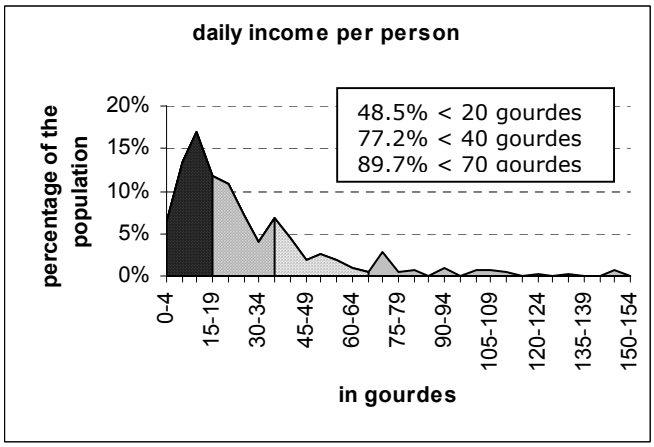
	Frequency	%
FF	79	7.8
CR	49	4.6

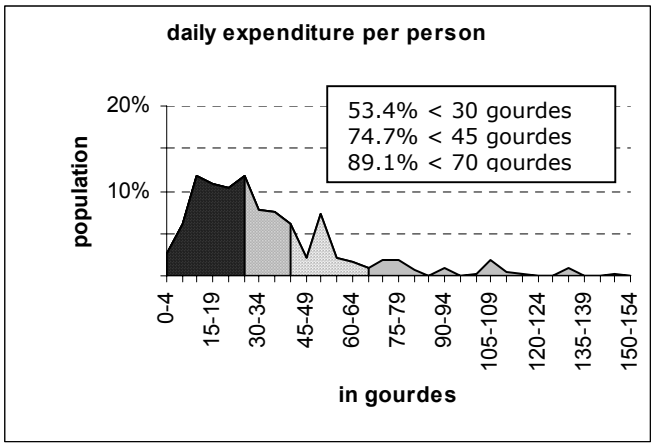
[37] This threshold is defined in the *Plan stratégique national pour la réforme du secteur de la santé*, Ministry of Public Health and Population, n.d.

5.2.4 Distribution of incomes per bracket for both groups









	The hills		Not in the hills	
Income	Average Median Range	521.7 (428.7-614.6) 420 50-2,100	Average Median Range	1,082.9 (881-1,284.6) 700 20-35,000
	N=189		N=825	

The average income of families living in the hills is half that of families living outside the hills. These differences are significant.

5.3 Money from abroad

In Sample FF, 8.8% (91/1,031) of the households said they had received money from a family member or friend living abroad in the last three months.

In Sample CR, the figure is 7.8% (84/1,069).

Amounts received

	FF (N=1,031)	**CR** (N=1,069)
Average	3,805.4 (2,864.7-4,746.1)	3,597.9 (2,791.7-4,404.1)
Median	2,100	1,937.5
Range	150-42,000	100-15,000

FF: 60.4% (55/91) of families received money for healthcare.

CR: 38% (32/84) of families received money for healthcare.

Amounts received for healthcare

	FF (N=55)	**CR** (N=32)
Average	647.9 (357.2-938.5)	736.7 (422-1,051.3)
Median	350	400
Range	10-7,000	100-4,000

There is no difference between the two groups on amounts received from abroad.

5.4 Other indicators

Economic indicators

In Sample FF, 70.3% (725/1,031) of the interviewees consider themselves poor or very poor.

In Sample CR the figure is 74.4% (796/1,069).

Looking at the data from both groups together, among the households regarding themselves as very poor or completely destitute, we see that 90% are vulnerable. This proportion is significantly higher than among other economic categories.

Types of houses and home ownership

FF:

76.5% (789/1,031) of the households live in an adobe house (or adobe and brick) with a corrugated iron roof. 6% (62/1,031) of the households live in a adobe house or a wooden hut covered with straw. One household lives in a temporary shelter.

82.1% (847/1,031) of the households live in a house they own. The number of rooms in the houses varies from 1 to 15.

CR:

84.6% (905/1,069) of the households live in an adobe house (adobe and brick) with a corrugated iron roof. 3.6% (39/1,069) of the households live in a adobe house or a wooden hut covered with straw. One household lives in a temporary shelter.

75.8% (811/1069) of the households live in a house they own. The number of rooms in the houses varies from 1 to 17.

Comparison

There is no difference in types of houses and home ownership between the two groups.

Types of goods

In the survey, we asked if people owned the following items: a bed, a bicycle, a radio, a motorcycle and a car.

In Sample FF, 7.3% (76/1,031) of the households do not own any of these goods. In Sample CR the figure is 4.9% (53/1,067). The rest of the households own at least one of the items.

There is no difference between the two groups.

Types of animals

In Sample FF, 20.8% (16-25.5) of the households do not own any animals and 79.1% of the households own at least one animal.

In Sample CR, 28.3% (23.5-33.1) of the households do not own any animals and 71.6% of the households own at least one animal.

In the two groups together, the proportion of vulnerable persons in the households without animals (80.3%) is significantly higher than in households with at least one animal (61%).

Land ownership

FF:

37.9% (391/1,031) of the households do not own land at the moment of the survey.
51.8% (534/1,031) of the households own cultivated land for providing food for the family.
10.2% (106/1,031), of the households own land which brings in profit.

CR:

39.2% (419/1,069) of the households do not own land at the moment of the survey.
47.2% (505/1,069) of the households own cultivated land for providing food for the family.
13.5% (145/1,069) of the households own land which brings in profit.

In the two groups together, the proportion of vulnerable persons in the households without land (99%) is significantly higher than in households with land (45.6%).

Comparison

The socio-economic indicators of the two groups are comparable.

VI. SOCIO-ECONOMIC CONDITIONS AND ACCESS TO CARE

6.1 Total price of consultation in relation to average and median income

Below we compare price of consultation with weekly income (calculated for the selected HC). The consultation price/income ratio was obtained by calculating the percentage of healthcare costs relative to each household's weekly income. The results presented below are the average and median ratios of the individual percentages.

Price of consultation compared with weekly income

	FF	**CR**
% Average	4.8% (3.8-5.8)	17.8% (14.6-21.1)
% Median	3.2%	11%
Range	0.1-75%	0-200%

In Sample FF, the average price of a consultation represents 5% of the average weekly income of a family. This expenditure amounts to 18% of the average weekly income of a family in Sample CR; 4 times higher than in Sample FF. These differences are significant.

The price of consultation compared with daily income

	FF	**CR**
% Average	177% (134.3-219.7)	626.5% (498.9-754)
% Median	110%	388%
Range	0-2,360%	0-1,150%

In Sample FF, the average price of a consultation represents slightly less than two days of income of a daily worker. In Sample CR, the average price of a consultation represents more than six days of income of a daily worker; nearly a week's wages. These differences are significant.

Considering the average income of the poorest quintile, the average price of a consultation represents six days' income for a daily worker in Sample FF (585.7%) and more than 20 days in Sample CR. (2,109%). These differences are significant.

6.2 Total price of consultation in relation to average and median expenditure

Price of consultation compared with expenditure per family per week

	FF	**CR**
% Average	3.4% (2.6-4.3)	12.4% (10.4-14.4)
% Median	2.4%	8.3%
Range	0.2-33.3%	0-200%

In Sample FF, the average price of a consultation represents 3% of the average weekly expenditure of a family. The figure is 12% for a family in group CR; four times higher than in Sample FF. These differences are significant.

Price of consultation compared with expenditure per person per day

	FF	**CR**
% Average	126.5 (91.6-161.4)	430.6% (352.4-508.8)
% Median	80%	291.7%
Range	10-1,890%	0-8,365%

In Sample FF, the average price of a consultation is slightly higher than individual daily expenditure. In Sample CR, the average price of a consultation is more than four days of individual expenditure, three times higher than in Sample FF. These differences are significant.

The average price of a consultation compared to the income of a family or a person is three to four times higher in the cost-recovery system than in the flat-fee system. If we look at these prices in relation to the expenditure rather than the income of a family, which could be underestimated, the differences are still significant.

6.3 Total cost of an episode of illness in relation to average and median income

The cost of an episode of illness (costs paid at the selected HC and additional costs) compared with income per person per day

	FF	CR
% Average	333.1% (266.7-399.6)	813% (626-999)
% Median	175%	490%
Range	0-5,130%	4.1-16,800%

In Sample FF, the average cost of an episode of illness represents more than three days of work. In Sample CR, the average cost represents more than eight days of work. These differences are significant.

The cost of an episode of illness compared with expenditure per person per day

	FF	CR
% Average	236.3% (266.7-399.6)	562.7% (439.8-685.5)
% Median	140%	373.3%
Range	10-3,920%	5.6-1,015.8%

In Sample FF, the average cost of an episode of illness represents more than two days of individual expenditure. In Sample CR, the average cost is more than five days of individual expenditure. These differences are significant.

Additional costs related to a consultation increase the healthcare burden on the incomes of families and individuals.

6.4 Socio-economic conditions and impoverishment

6.4.1 Income and mechanisms of impoverishment

Income of families having recourse to mechanisms of impoverishment compared to income of families who do not have recourse to such mechanisms

Average income	FF	CR
Households with recourse to impoverishment mechanism	787.2 (650.7-923.7)	827.2 (728-926.3)
Households without recourse to impoverishment mechanism	1203.6 (901.8-1,505.3)	1241.7 (1,037.9-1,445.6)

In both samples, the poorest households have recourse to mechanisms of impoverishment. In Sample CR, the difference between the income of households having recourse to such mechanisms and the income of those who do not is significant.

The phenomenon of impoverishment affects the poorest households most, especially in the cost-recovery system.

PART IV DISCUSSION AND ANALYSIS OF THE RESULTS

I. POSSIBLE BIAS

1.1 Bias from the selection and the limitations of the study

Population less than 5km from HC

We limited the survey to people living less than 5km from a health centre, in order to focus on financial accessibility of care rather than other problems of access, such as geography.

People who live further away from a health centre could have difficulty with transport. Also, as they are far from a centre of economic activity, where a health structure is generally located, they could have even greater poverty-related problems.

This limitation of the study could have led to an under-estimation of the levels of poverty and financial exclusion from access to healthcare. This is especially the case in the hills where isolation is sometimes extreme.

Period of the study

The survey was carried out during December 2004. From what we know, harvesting takes place throughout the entire year in the surveyed region, particularly on the plain. Therefore, seasonality would not have influenced availability of cash in the households.

1.2 Bias from the answers given by households

Cultural and social bias in the replies

The population of the region does not know MSF very well. This, and the international character of the NGO could have led to reticence in the replies given by the population. However, only a few households declined to answer the questions.

We sometimes observed that people were reluctant to talk to us about their consultations in non-official structures and especially with traditional healers (médecin feuille) and voodoo priests. As a result, the attendance rate outside official structures could be underestimated.

The formulation of certain questions concerning the socio-economic status of the family could have offended heads of households. In many households, we observed that it was difficult for them to talk about their income and their goods.

Economic context

The majority of the households do not have a fixed income. The amount of revenue, often from agriculture, depends on the seasons and the climatic conditions. When it was impossible for the surveyors to find out an average weekly income, the calculations were based on the week preceding the visit of the surveyors. This could have led to distortion of the calculation of average incomes.

Taboos about certain diseases and causes of mortality

We asked if there was a chronically sick family member in the household. We observed that people were reluctant to talk about diseases like Aids or TB. Some people (particularly in the hills) said they had heard about Aids but they did not know much about it. Therefore, the vulnerability figures for chronic illness could be underestimations.

With regard to the morbidity, it is important to remember that we asked people about their perception of their illness. The morbidity figures are not based on medical diagnosis but on perceptions of the surveyed households. This should be taken into consideration in the interpretation of the results.

With regard to causes of mortality, especially maternal mortality, we think that this could have been underestimated in the survey. It is possible that people did not mention such cases in their family, out of shame. We are aware of other ways to measure this type of mortality, but we did not use them within the framework of this survey.

Respondents in the family

We found that women were generally better informed about the family's expenditure than men. On the other hand the men were better able to answer questions about income than the women, who did no income-generating work outside the family. However, the questions were mostly answered by women, so income estimates could be slightly undervalued.

II. INTERPRETATION OF THE RESULTS

2.1 Comparability of the samples

Both survey samples were selected in the zone of the CHU of PRVL. Both samples are fully comparable in terms of the following points:

For the surveyed households

- Household composition (distribution by age and average number in each family)
- Mortality (crude rate and children under five)
- Specific mortality

For families with at least one sick member during the preceding three months

- Proportion of families with sick members
- Composition of families with sick members (distribution by age and average number in each family)
- Distribution of sick people by age bracket and by sex
- Proportion of sick people by age bracket
- Mortality: crude rate and children under five
- Gravity of the illness (by age and by sex)
- Morbidity
- Consultation rate and reasons for not seeking a consultation
- Hospitalisation rate
- Means for receiving money for healthcare
- Vulnerability
- Weekly household expenditure
- Weekly household income
- Other socio-economic indicators: economic category, types of houses, home ownership, possession of animals and goods.
- Proportion of households receiving money from abroad.

The samples are fully comparable on all points. Therefore differences between the samples could not be due to characteristics of the surveyed population.

We observed differences between the samples in terms of the following points:

- Type of treatment (at the limit of statistical significance)
- Place of consultation

- Reasons for not attending the nearest HC
- Prescription of laboratory tests
- Rate of complete treatment
- Access to care (as defined under terminology)
- Price paid at the selected structures
- Price of treatments in the selected structures
- Ratio of consultation cost to income, and to expenditure, of families and of individuals
- Types of additional costs.

These differences can be interpreted in function of the payment systems and are not due to characteristics of the population.

2.2 Interpretation of the principal variables

MORTALITY

Rates observed in the CHU:

In a high-income population, the mortality rate is 0.3/10,000/day. In the population of a country experiencing stable development, the mortality rate is around 0.5/10,000/day. In an emergency context, it is generally accepted that the situation remains under control if the global mortality rate for the population does not exceed 1/10,000/day.

The crude mortality rates that we found in our samples are 0.5/10,000/day for Sample FF and 0.7/10,000/day for Sample CR. These results are slightly above the threshold expected in countries undergoing stable development.

The crude mortality rates for children under five are 0.6/10,000/day for Sample FF and 1.5/10,000/day for Sample CR. These rates are under the thresholds for alarm. The observed rate for Sample CR is two times higher than for Sample FF. However, this difference is not statistically significant.

Despite the silent emergency in Haiti the mortality seems to be under control in the CHU.

We should remember that the surveyed region is 'relatively well off' in economic terms and in terms of available services. This is mainly because of the presence of the HAS, which provides easy access to a reference hospital for the whole 'in-district' population. There are also food safety, health education and nutrition education programmes.

We suppose that rates measured in other regions could be more alarming than those observed in the CHU of PRVL.

We can compare these figures to the indicators of the World Bank. The crude mortality rate given for 2002 is 14 per 1,000 inhabitants per year. According to our figures, the crude mortality rate is 18.2 per 1,000 inhabitants per year for Sample FF (10.9-25.6) and 25.5 per 1,000 per year for Sample CR (18.2-36.5). There is no difference between the observed rates.

EXCLUSION

Exclusion from consultation and treatment was observed in both samples: 8% of people do not have access to any type of treatment when they are sick and wish to seek treatment.

Among these persons 75% do not have access to any consultation in Sample FF and 85% in Sample CR. This is mainly due to financial reasons.

The total observed rate of exclusion is less than our hypothesis of 20% exclusion in rural areas. However, these numbers have to be interpreted cautiously.

- These numbers are of exclusion observed within a 5km radius of a health centre. We assume that the exclusion is higher beyond this radius. Additional costs, especially transport, are probably higher outside the 5km radius. These costs would be an additional financial burden for families. Particularly in isolated regions like the hills, geographic and financial obstacles could lead to further exclusion.

- The total exclusion rate is relatively low thanks to alternatives available in the CHU of PRVL. Given the existence of different tariff systems within a limited radius, we see that if a sick person cannot attend the nearest HC due to financial reasons, he or she can still go to another structure with a different tariff system or to a non-official structure. In regions where alternatives are non-existent or less accessible, there are probably higher rates of exclusion.

- As the departement of Artibonite is relatively prosperous, there is probably a higher exclusion rate in other regions.

■ ACCESS

The differences between the two samples are very noticeable and confirm our initial hypothesis: the flat-fee system allows better financial accessibility to healthcare than the cost-recovery system.

<u>In the cost-recovery system</u>:

Two-thirds of the population do not have access to primary healthcare in the cost-recovery system.[38]

- **The cost-recovery system forces two out of three people to seek primary healthcare somewhere else.**

- 27% of patients living less than 5km from a structure with a cost-recovery system prefer to go to another HC for primary healthcare, even if this HC is further away from home. For 37% of this group, the choice is based on financial reasons. For 28%, the choice to travel further is motivated by a lack of confidence in the local structure.

- Looking only at the patients who leave the nearest CR HC for a FF HC (12%), 60% of them do so for financial reasons.

- 23% of patients go to a non-official structure, 50% of them because of lack of money.

- 10% of patients go straight to hospital.

The cost-recovery system forces patients to travel and to seek alternatives to the health structure closest to home. This affects two out of three people. Cost is the main reason that households have to find alternatives.

It is not acceptable that two out of three people are forced to seek alternatives when there is a health centre less than 5km away from their home.

[38] Remember that we define 'access to care' in the following terms: a person has access if, during the last episode of illness, he or she obtained a complete course of treatment at the health centre closest to home.

- **The search for alternatives to the system adds to the costs of patients who have to travel.**

Seeking alternatives brings additional costs – time, transport and food – when a patient has to travel to a structure that is more than 5km from home.

We observed that the additional costs for patients who go to another structure are higher than for patients who go to the nearest HC[39]. In the CR sample, the additional costs for patients leaving a CR HC for a FF HC are on average 76 gourdes ($2) compared to 50 gourdes ($1.30) for patients using the nearest HC.

- **The cost-recovery system could be encouraging patients to seek alternatives that are harmful to their health and to public health.**

12% of patients go to a medicine seller.

During the study, we observed that where the closest HC applies cost-recovery, 12% of patients go to a medicine seller instead of to a health centre. Only 2% of patients go to a medicine seller if the nearest HC applies the flat-fee system. 65% of patients say that they go to a medicine seller for financial reasons.

This situation could be harmful to the patient's health and the health system in general, because it could give rise to resistance to certain treatments due to the doubtful quality of unregulated medicines.

5% of the patients receive incomplete treatment.

In the cost-recovery system, 5% of patients receive only a part of the prescribed medicines or no medicines at all. The main reason is the unavailability of the medicines. In 35% of cases, the treatment is incomplete for financial reasons. This situation could also be harmful to the patient's health.

<u>In the flat-fee system</u>:

Two-thirds of the population has access to healthcare.

Data from the flat-fee system is less alarming. A third of the population does not have access to healthcare in the flat-fee system.

- 69% of patients receive a complete course of treatment in the HC closest to home. Access is two times higher than in the cost-recovery system.
- Only 4% of patients look for alternatives in another HC (8% for financial reasons).
- 7% go to a non-official structure (40% for financial reasons).
- 11% go directly to a hospital.
- 2% receive incomplete treatment.

These figures are much lower than those observed in the cost-recovery system.

In the flat-fee system, two out of three patients receive complete treatment in the nearest structure, compared to one out of three in the cost-recovery system.

[39] Although these differences are observed in the samples, they are not statistically significant, see section 4.3.5.2.

The numbers show that there is better financial accessibility in the flat-fee system. However, interpretation of the results has to take into account the context and the presence of NGOs in the CHU of PRVL. Six out of eight structures with the flat-fee system in the CHU are managed by HAS. The foundation has been working in this area for 40 years. The accessibility results are certainly linked to the people's confidence in this institution.

A network of health agents and increasing community participation have considerably improved the likelihood that people will go to the health centre when they get sick. Also, the flat-fee system is effective because 99% of patients interviewed say that treatment is included in the fee.

The prices charged match the advertised prices and we found that patients are well informed on prices in the flat-fee system. The rate of accessibility could be higher in the flat-fee system in the CHU of PRVL than in other regions applying the flat-fee system.

■ COST OF TREATMENT

Treatment costs are five times higher in the cost-recovery system than in the flat-fee system.

The average price of a consultation is 111 gourdes in the cost-recovery system and 20 gourdes in the flat-fee system. The price of a consultation in a HC applying the cost-recovery system is higher than in the reference hospital without an overnight stay.

The flat-fee system is the most affordable system in the CHU. It is less expensive than CR HCs and less expensive than the hospital.

The cost of a consultation is equivalent to income from six working days in the cost-recovery system and less than two working days in the flat-fee system.

The additional costs for a consultation comes on top of this amount: transport and food. The total costs of an illness is equivalent to income from three working days in the flat-fee system and more than eight days in the cost-recovery system.

Although there is not a lot of literature on this subject, some researchers find that the level of tariffication becomes a deterrent when it costs more than two days' income[40].

If we take into account the average income of the poorest people, the average price of a consultation represents an income of more than 20 working days. This could be considered catastrophic healthcare expenditure for the poorest households[41].

Recourse to extreme measures to pay for consultations

Within the cost-recovery system, a large number of patients who paid for a consultation did so by using a coping mechanism that drew them deeper into poverty. 50% of patients' households paid for healthcare by incurring a debt, by selling a possession (livestock, part of the present of future harvest, or a piece of land) or by taking additional work, generally paid labour at someone else's farm. This means that by drawing on what they produce, their assets or their productive capacity, these households risk being in a worse situation at the next episode of illness, and being unable to pay essential household costs.

[40] *Evaluer la viabilité des centres de santé, Guide Méthodologique,* Bruno Galland et al, 1997.
[41] This phenomenon of poverty related to health expenditure is known as 'catastrophic health expenditure', see Xu Ke et al, *Household catastrophic expenditure: a multi country analysis,* Lancet, 2003, vol. 362, 111.

The presence of several sick people in the same household at the same time, or a chronic illness, makes paying for healthcare even more onerous. This situation also reduces the human capital necessary for the creation of income.

Within the flat-fee system, the number of households forced to find extreme solutions is also close to 50%. This shows that even with tariffs of around 20 gourdes, patients have to resort to mechanisms that draw them deeper into poverty.

The study also shows that it is the families with the lowest incomes who are forced to resort to mechanisms of impoverishment.

The phenomenon of impoverishment most affects those who are already the poorest.

SOCIO-ECONOMIC SITUATION

The whole population is living in extreme poverty and healthcare expenses aggravate people's precarious situation even further.

➢ Income and expenditure

Weekly income is extremely low: 80% of the surveyed population are living under the international threshold of extreme poverty, which is $1 per person per day. 50% of the population lives on less than $0.50.

These results do not support the assertion in the 2004 national policy paper on millennium development goals: "the Budget and household consumption surveys (1986-1987, 1999-2000) seem to indicate that the proportion of people living under the poverty threshold is decreasing. Nevertheless, this decrease should be confirmed by more recent and focused surveys"[42].

The majority of the households in the surveyed area are living one day at time with unreliable income sources: working for someone else (not always available), cultivating the land (dependant on seasons and the climatic conditions), small business where possible, craft work that brings in very little considering the hours worked. Some families are not strong enough to work and depend on help from others.

In the study, most families did not have fixed incomes. Many households declared consuming on credit. The families were also badly affected by the inflation of 2003 and 2004. A large majority of families told us that "today, everything is expensive".

In the isolated regions, especially in the hills, a large number of households live on a subsistence economy and with limited circulation of cash. The study revealed that the average income of a family living in the hills is half as much as elsewhere. These families find it particularly difficult to pay healthcare costs; they need special attention because of their difficult financial and geographical situation.

➢ Money from abroad

In both samples, less than 10% of the households receive money from a family member or friend living abroad. 5% of the surveyed households in Sample FF say they receive money for healthcare. The figure is 3% in Sample CR.

[42] *Une Vision commune du développement humain durable, Rapport National 2004 OMD,* Government of Haiti and the United Nations in Haiti, June 2004, 12.

Transfers of money from abroad are limited in the rural areas, especially for healthcare. It seems that this is an irregular source of income and that large amounts are sent home for funerals rather than for healthcare.

EXEMPTION

There is no system of protection for the needy.

We observed that at least two-thirds of the households in both samples meet at least one of the criteria for vulnerability.

One-parent households represent 20% of the surveyed population and families without land or without access to land make up 40%. Our results do not confirm the assertion in the 2004 report on the millennium development goals (MDG) that "even the poorest households have access to land".

Under both tariffication systems, 99% of patients paid for healthcare during their last episode of illness. Among those interviewed, 3% of Sample FF said they received a reduction at the HC. The figure is 1% for Sample CR[43].

None of the exemptions are linked to the vulnerability of the patient. In the households we visited, nobody declared holding an 'indigence card' or document assuring access to care for reasons of destitution.

In both samples, the majority of health structures declare granting free healthcare to two or three patients a month, identified on a case by case basis.

During the study, we met extremely needy people who were not going to an HC because they did not have the money. We also met people who has been referred to an hospital and were not able to go hospital due to lack of money. These people said that they were not going to a health structure because they do not want to be refused at the door, "if you do not have money in Haiti you better stay at home and die," they said.

The system for identifying needy individuals does not guarantee access to care for the poorest. They are not able to pay for transport and risk being refused at the door of HC due to lack of money. This system is based on who you know and the goodwill of the health worker, and this is not sufficient to assure access to health for all who need it.

A pre-identification system at community level could have a better impact on those who currently cannot access healthcare. The community system already well developed by an organisation like HAS in the CHU of PRVL could be helpful in this sense and could be used by all the partners. Such a system could include money for transport.

However, considering the large number of vulnerable people among the population (two-thirds), the most important question is about the cost and effectiveness of such a approach in comparison to free healthcare.

[43] In practice, we observed in different contexts that the most expensive system, which was therefore the least accessible is also, paradoxically, the systems which granted the fewest exemptions.

PART V CONCLUSIONS AND RECOMMENDATIONS

I . CONCLUSIONS

The CHU of Petite Rivière, Verretes and La Chapelle: alarming results on access to healthcare

Two-thirds of the population do not have access to health in a zone where the health structures apply cost-recovery.

8% of the population have no access to any kind of medical consultation. 60% of patients have to travel far for healthcare instead of attending the nearest health structure.

The cost-recovery policy impedes two-thirds of the population from accessing primary healthcare. This goes against the stated objectives of the MSPP's policy. Financial problems are the principal reasons depriving the population of access to healthcare. The policy pushes patients towards the informal sector, primarily towards medicine sellers, which is risky for the patients and for public health.

More than 50% of the households surveyed have recourse to extreme solutions for paying primary healthcare. This study also shows that the families forced to resort to coping mechanisms are the ones with the lowest incomes. Therefore, the presence of a chronically ill member of the family, hospitalisation or an epidemic could represent catastrophic health expenditure for these households.

Despite the fact that 80% of the surveyed households are living below the international threshold of extreme poverty (less than $1 per person per day) and two-thirds meet at least one of the criteria of vulnerability, under the cost-recovery system the costs of healthcare is borne entirely by the patients.

A consultation in a first-line structure costs 111 gourdes in the cost-recovery system ($2.90). This is an enormous burden for families, who have to give up other basic expenditures (food, education, clothes) for treatment. The average price of a consultation in the cost-recovery system is equivalent to six days' income. The average price of a consultation in the flat-fee system is 20 gourdes, or two days' income.

Additional costs for food or transport related to a consultation should not be underestimated. These costs eat into the family's healthcare budget. With the additional expenses, the total cost of an episode of illness represents eight days' income in the cost-recovery system and three days in the flat-fee system.

For the poorest 20%, the average cost of a consultation is equivalent to 20 days of work.

Paradoxically, no exemption system exists to protect the most vulnerable or the poorest families. The human price of the cost-recovery policy should not be underestimated.

Implications of the results for other regions

The results apply to areas within a 5km radius of health structures in the CHU of PRVL. We assume that it is even more difficult for people living outside the 5km radius to have access to healthcare. The exclusion rate could be higher. Accessibility is difficult for a population already vulnerable due to their distance from the closest centres of economic activity, generally situated around health structures.

Furthermore, outside the CHU in the zones without alternatives to cost-recovery, we assume that the percentage of total exclusion would be much higher.

We also assume that patients tend towards the informal sector, with harmful consequences for their health.

As the CHU of PRVL is a economically privileged area, we assume that accessibility figures would be lower in other rural areas outside the CHU.

Access to care for all requires appropriate means

The health budget of Haiti allows for less than the $34/inhabitant/year recommended by the WHO. The MSPP's budget for health is mainly for salaries and running costs, especially at central level.

Ensuring access to care for all in rural areas and especially for the most vulnerable people requires additional means. An increase in absolute terms and an adjustment of the public budget is necessary. The essential expenditure required for health cannot be covered only by the national budget, which is at present very limited.

It is in the responsibility of donors to mobilise additional funds for health and to ensure that these funds benefit patients directly.

At the international donors' conference held in Washington in July 2004, donor countries proposed a budget of more than $1bn: 60% in the form of donations and the rest in loans. The interim cooperation framework (CCI) estimated the health needs to be 4,857m gourdes ($128m). Among the priorities identified by the CCI was "improvement of the financial access to care for the population in general and the vulnerable groups in particular". Yet, there are no concrete measures aimed at decreasing the financial expenses for the patient. Without third-party financing of the recurring expenses necessary for care, financial access for patients will not improve.

It seems that the current financial contributions are concentrated at central level, for example in administrative support. Not enough priority is given to healthcare in rural areas, to the subsidising of essential medicines and running costs, in particular the salaries of personnel.

II . RECOMMENDATIONS

In view of the results of the survey conducted in the CHU of PRVL and experience gained in the field at St Marc and Petite Rivière, MSF observes that the cost-recovery system excludes a large part of the population.

The flat-fee system studied within the framework of this survey remains an exception at national level, as are some other initiatives. In limited areas, access to healthcare in flat-fee system is two times higher than in the cost-recovery system. Nevertheless, the flat-fee system is not the most appropriate option for the context, because one-third of the population served by a flat-fee healthcare system do not have access to healthcare. As there are so few instances of flat-fee systems, organisations that offer them are forced to implement discriminatory tariffication for 'out of zone' patients.

Given the precarious state in which the Haitian population is living today, exclusion is unacceptable. Actors working in the field of health must realise just how serious this situation is and draw conclusions for their fields of activity.

The problem of financial access must be seriously reconsidered in the current context of lack of financial resources for the public health system. Access to healthcare should be available to all, including the most vulnerable people.

Access to healthcare in Haiti:
a responsibility for national and international health actors and
a policy that requires re-thinking

A. In the CHU of PRVL

- Free essential healthcare

In the CHU, discussions with partners working in the health domain have been started with the aim of quickly improving the population's access to care.

Given the gravity of the situation – poverty and exclusion from essential healthcare – MSF is committed to working towards free healthcare.

We believe that the only policy that can ensure access is one with subsidies for the system with the objective of removing direct financial obstacles to healthcare. There will always be indirect financial obstacles and other types of obstacles, but the financial burden to households will be reduced.

For several years, MSF has supported structures that apply cost-recovery, in St Marc and Petite Rivière. Our experience and the survey show that we supported a system that was not accessible to the population. As a humanitarian organisation, we have an obligation to improve access to healthcare by reorienting our support to structures such that it really provides benefit to patients.

We call on the health actors in the CHU to immediately apply the strategy outlined below with the support of the donors:

- Donor support for actors working on access to care for the population

We hope that actors will see the seriousness of the exclusion identified by this survey and will be able to draw conclusions that will help define their programmes.

Particularly in the CHU of PRVL, we know that actors using a flat-fee system are considering increasing patients' contributions due to their own budgeting problems. This study can contribute to the awareness that increasing tariffs will mean increased exclusion, and it is the poorest who will be the victims.

We hope that with the assistance of donors, health partners will be able to continue their commitment to improving access to care for the population and **at very least** maintain current levels of activity[44].

- Special attention for vulnerable people

We also hope to draw attention to vulnerable groups: the poorest households, single-parent households and people who live in the hills. For these groups, reduction of the financial burden must be a priority.

For the people living in the hills, in addition to the problems of financial access, we observed difficult geographical access. Outreach activities should be organised. Additional support could be brought to these remote areas where valuable health initiatives already exist[45].

[44] We refer especially to the HAS system which has been there for 40 years and faces financial difficulties today.
[45]Community initiatives supported by Interaid at Pérodin and Médor, and by a Swiss association in Chenau, an area bordering on the CHU. The inhabitants of Chenau are in a particularly alarming situation: due to the way the CHU area is drawn, they are considered out of area and have to go to Marchand Dessalines for referals, whereas it is

B. Outside the CHU

The alarming results obtained in the district of Petite Rivière suggest that there may be an even more worrying situation in other less 'privileged' regions of the country and where alternatives to cost recovery do not exist. An evaluation of financial access to care at national level is needed.

- Additional surveys are necessary:

- in other poorer regions and where fewer alternatives are available; we think that the problems of access in such places are underestimated
- in urban areas
- for hospital or specialised care
- for chronic diseases
- for maternal care.

- Adjusting cost of care

These surveys must be carried out with the aim of reappraising the financial burden for the population and adjusting the strategy of healthcare costs in Haiti. Specific attention should be given to:

- chronic illness
- childbirth and maternal care
- hospital care
- epidemics or conflict situations.

We recommend:

- Supplying essential care in a largely subsidised way

Given the precarious state in which Haitians live today, we think that it is in the responsibility of the Ministry of Public Health and Population to improve the coverage of the public health system. This system should be largely subsidised in order to remove the financial burden from the people.

- Increasing the financing of health services

The financing of health services must be increased, especially for recurring costs. We recommend the financing of essential medicines and personnel. This additional funding should allow the system to:

- replace the revenue currently coming from patient payments
- increase the capacity to respond to the needs of the population.

- Priorities for health actors and donors:

- Financial support for the poorest patients and patients living outside urban areas

- Real protection of poor and vulnerable groups:

  Even though the vulnerable stratum of the population requires closer attention, there is no system that ensures access to care for these people. For the poorest families, health expenditure is huge relative to their incomes and to family and individual

---

easier for them to get to Petite Rivière or Verretes. As they are considered out of area, they cannot afford the CHU's fees.

expenditure. It is the government and health actors' responsibility to protect the most vulnerable and the poorest groups. There are two levels to protection in terms of health services:
    - protection of access to essential care
    - protection against the impoverishing effects of healthcare expenditure.

- A change to the current policy of financial contribution given the results of the survey.

We encourage the operational partners and donors to support the establishment of a free subsidised system that ensures access to care for as many people as possible.

Since the population is not able to bear the costs of healthcare, another way of financing must be found.

Until now, donors, within a interim cooperation framework, have not released funds to address these problems.

For actors involved in the millennium development goals, we hope that this study will contribute to awareness of the gravity of the situation. Indeed, among the MDG, several goals are about better health and are strongly influenced by the access to care. In particular:

- MDG 4: Reduce child mortality
- MDG 5: Improve maternal health
- MDG 6: Combat HIV-Aids, malaria and other diseases

The means necessary to ensure these objectives have not yet been deployed: these goals will remain as inaccessible as care is for the population if the third-party funding necessary for primary healthcare is not regarded as a real priority.

ANNEXES

ANNEX 1: Population figures of the UCS of PRVL

Available data from the HAS database
(based on a census by health agents)

Administrative divisions	HAS data
Verretes Commune	**133203**
1st section Liancourt	33673
2nd section Belanger	29732
3rd section Guillaume Moge	12023
4th section Desarmes	26225
5th section Bastien	19452
6th section Terre Nette	12098
La Chapelle Commune	**25578**
City of La Chapelle	2111
1st section Martineau	10663
2nd section Bossous	12804
Petite Rivière Commune	**163684**
City	15269
Savane Bourg neighbourhood	5810
1st section Bas Coursin I	45113
2nd section bas Coursin II	13415
3rd section Labady	23505
4th section Savane à Roche	18131
5th section Pérodin	19875
6th section Médor	22566
TOTAL 3 DISTRICTS	**322465**

ANNEX 2: HEALTH STRUCTURES LISTED IN THE UCS OF PRVL

The information in these files was collected from the personnel working in the health structures.

Structures applying the flat-fee system

I. Bastien dispensary

Location:
Verrètes, 5th section
Milieu:
Mountains and rural
Type of unit:
Dispensary
Services offered by the unit:
Opening hours: Monday to Friday, 7am to 5pm
General consultation, ANC, FP, minor surgery, laboratory, vaccination, health education
Unit managed by: HAS
Supported by: HAS
Personnel of unit:
2 assistants et 3 assistant's aides
Payment system:
Flat fee system HAS (for structures supported by HAS)
All-inclusive care (except injections: 10G)
Laboratory tests included (except pregnancy test: 45G)
Exemption system:
Persons receiving free care: no charge, health agents, matrons
Average number of patients exempted from paying/month: a few people per month
Average number of patients incurring a CDS debt/month: a few people per month
Frequentation:
Number of curative consultation/month: +- 2000 consultations/month
Other general comments:
Several mobile clinics starting at Bastien

II. Deschapelles health centre

LOCATION:
Verretes/2nd communal section
MILIEU:
Plain/rural
Type of unit:
Centre without bed
Services offered by the unit:
Opening hours: Monday - Friday
From 7 till 5h.
Services: general consultation , ANC, FP, vaccination, laboratory , small level surgery, dressing.
Unit managed by: HAS
Supported by: HAS
Personnel of unit:
1 doctor
1 nurse
4 assistants
5 assistant helpers
Payment system:
Flat fee system HAS (for structures supported by HAS).
Exemption system:
Average number of patients incurring a debt/month: no debt
Average number of patients being exempted from paying care/month: only a few patients
Identification of vulnerable people: individually.
Frequentation:
Average number of curative consultation/month: +- 2000 consultations/month
Other general comments:
Several mobile clinics starting of Deschapelles.

III. Deslandes dispensary

Location:
Petite Rivière
4th communal section
Milieu:
Plain/rural
Type of unit:
Dispensary with bed (just one bed for the maternity) .
Services offered by unit:
Opening hours: Monday - Friday
from 7 till 5h, maternity 7days per week
Services: general consultation, ANC, FP , laboratory, small level surgery, vaccination , health education, PMTCT and VCT.
Unit managed by: HAS
Supported by: HAS
Personnel of unit:
3 assistants + 2 assistant helper .
Payment system:
Flat fee system HAS (for structures supported by HAS) .
Exemption system:
Persons receiving free care: no charge, health agents, matrons.
Average number of patients incurring a debt/month: 4 to 5
Average number of patients being exempted from paying care/month: 4 to 5
Frequentation:
Average number of curative consultations/month: 1200 à 1300 consultations/month
Other general comments:
Several mobile clinics starting at Deslandes

IV. Gabriel dispensary

Locaion
Verretes 4th section
Milieu:
Mountainous and rural
Type of unit:
Dispensary
Services offered by unit:
Opening hours: Monday – Friday
From 7 till 5h
Services: consultation, ANC, FP, small level surgery, laboratory, vaccination .
Unit managed by: HAS
Supported by: HAS
Personnel of unit:
1 nurse
1 physician extender
Payment system:
Flat fee system HAS (for structures supported by HAS): 19 G
All included except injections à 10 G .
Tests included (except pregnancy test 45 G)
Exemption system:
Persons receiving free care: no charge, health agents, matrons.
Average number of patients incurring a debt/month: extremely rare
Average number of patients being exempted from paying care/month: 5 to 6
Frequentation:
Average number of curative consultations/month: 400 à 500 consultations/month
+ 500 consultations/month for the mobile clinics .
Other general comment:
Mobile Clinics starting at Gabriel:

V. Liancourt dispensary

Location:
Verretes 1st communal section
Milieu:
Plain and rural
Type of unit:
Dispensary without bed
Services offered by unit:
Opening hours: Monday - Friday
From 7 till 5h; maternity 7 days per week
Services: consultation, ANC, FP, small level surgery, laboratory, vaccination, health education .
Unit managed by: HAS
Supported by: HAS
Personnel of unit:
1 doctor
2 nurses
7 assistants
Payment system:
Flat fee system HAS (for structures supported by HAS)
Exemption system:
Persons receiving free care: no charge, health agents, matrons.
Average number of patients incurring a debt/month: 4 to 5
Average number of patients being exempted from paying care/month: 4 to 5
Frequentation:
Average number of curative consultations/month: 3500 consultations/month
Other general comment:
Mobile Clinics starting at Liancourt:

VI. Pérodin dispensary

Location:
Petite Rivière 5 th section
Milieu:
Mountainous and rural
Type of unit:
Dispensary
Services offered by unit:
Opening hours: Monday - Friday:
From 8 - the last patient
Services: consultation, ANC, FP, small level surgery, vaccination, nutrition.
Unit managed by: Board of management composed of members of the population
Supported by: Interaid pays the salaries of the assistants working in the health centre; rehabilitation of an part of the building; until December 2003 a fixed subsidy system was given to the members of the board of management (5500G/month), since January no subsidy system within the aim to give autonomy to the structures
Personnel of unit:
2 assistants
Payment system:
Flat fee 25 gourds
Exemption system:
No exemption system, there are no subsidies….Everybody has to pay otherwise the system will collapse.
Frequentation:
Average number of curative consultations/month: 825 consultations/month
Average number consultation for < 5 years: 89/month

VII. Plassac dispensary

Location:
Petite Rivière 5th section
Milieu:
Plain and rural
Type of unit:
Dispensary
Services offered by unit:
Opening hours: Monday - Friday
From 7 till 5h
Services: consultation, ANC, FP, small level surgery, laboratory, vaccination , health education.
Unit managed by: HAS
Supported by: HAS
Personnel of unit:
3 nurses
3 assistants
Payment system:
Flat fee system HAS (for structures supported by HAS): 19 G
All included except injections à 10 G .
Tests included (except pregnancy test à 45 G)
Exemption system:
Persons receiving free care: no charge, health agents, matrons.
Average number of patients incurring a debt/month: some patients
Average number of patients being exempted from paying care/month: some patients
Frequentation:
Average number of curative consultations/month: 1500 à 2000 consultations/month; only for the dispensary
+ 500 consultations/month for the mobile clinics .
Other general comment:
Mobile Clinics starting at Plassac:

VIII. Medor dispensary

Location:
Petite Rivière 6th section
Milieu:
Mountainous and rural
Type of unit:
Dispensary
Services offered by unit:
Opening hours: Monday - Friday:
From 7h30 till 1h
Services: consultation, ANC, FP, small level surgery, laboratory, vaccination, dental care, nutrition.
Unit managed by: Interaid and the Community. Interaid pays the two salaries of the assistants.
Personnel of unit:
2 assistants
1 pharmacist, health agents
Payment system:
Flat fee 25 G, same system as at Pérodin,
Exemption system:
Average number of patients incurring a debt/month: none
Average number of patients being exempted from paying care/month: 10/month
Identification of vulnerable people: no formal system
Frequentation:
Average number of curative consultations/month: 700 à 800 consultations/month
+ 500 consultations/month for the mobile clinics .

Structures applying the cost-recovery system

I. Charles Colimon medical centre

Location:
Petite Rivière, city centre.
Milieu:
Plain , city centre (semi-urban)
Type of unit:
CWB (centre with bed)
Services offered by unit:
Opening hours: -Days: 7J/7.
-Hours:24H/24
Services: consultation , ANC, FP, laboratory, small level surgery, vaccination, dental care, maternity .
Unit managed by: MSPP
Supported by: MSF
Personnel of unit:
Doctors: ……4……
Nurses: ……5……(+ 1 resident)
Assistants: ……10….
Payment system:
Flat fee for childbirth, prenatal consultation and family planning
Cost recovering for other types of care
Exemption system:
Average number of patients incurring a debt/month: not available
Average number of patients being exempted from paying care/month: 4 to 5/month; since July MSF takes care of the vulnerable people
Identification of vulnerable people: individually
Frequentation:
Average number of curative consultations/month 2000

II. Jean Denis dispensary

Location:
Petite Rivière, 1st section.
Milieu:
Plain and rural
Type of unit:
Dispensary
Services offered by unit:
Opening hours: -Days: Monday - Friday
-Hours: 8h - last patient
Services: consultation , ANC, FP, small level surgery, vaccination.
Unit managed by: MSPP
Supported by: MSF
Personnel of unit:
Assistants: ……2….
Payment system:
Since December, flat fee for prenatal consultation and family planning.
Cost recovering: 10G plus medicines
Exemption system:
Average number of patients incurring a debt/month: extremely rare
Average number of patients being exempted from paying care/month: sometimes; since July MSF takes care of the vulnerable people
Identification of vulnerable people: individually
Frequentation:
Average number of curative consultations/month: 1300/month

III. Ségur dispensary

Location:
Petite Rivière, 2nd section.
Milieu:
Plain and rural
Type of unit:
Dispensary
Services offered by unit:
Opening hours: -Days: Monday - Friday
-Hours: 8h – 17h
Services: consultation , ANC, FP, small level surgery, vaccination.
Unit managed by: MSPP
Supported by: MSF
Personnel of unit:
Assistants: ……2….
Payment system:
Since December, flat fee for prenatal consultation and family planning.
Cost recovering: 10G plus medicines
Exemption system:
Average number of patients incurring a debt/month: sometimes partial payment
Average number of patients being exempted from paying care/month: sometimes
Identification of vulnerable people: individually
Frequentation:
Average number of curative consultations/month: 400 to 500/month

IV. Dumasais Estimé Hospital

Location:
Commune of Verrets, city centre.
Milieu:
Semi urban
Type of unit:
Centre with bed
Services offered by unit:
Opening hours: -Days: Monday - Sundays
-Hours: 24/24H
Services: consultation , ANC, FP, small level surgery, laboratory.
Unit managed by: MSPP
Supported by: none
Personnel of unit:
Doctors: …….3..
Nurses: ……..1…
Assistants: ……6….
Payment system:
Cost recovering: 10G plus medicines
Exemption system:
Average number of patients incurring a debt/month: 0
Average number of patients being exempted from paying care/month: +- 5/ month
Identification of vulnerable people: no
Frequentation:
Average number of curative consultations/month: 350/month

V. La Chapelle health centre

Location:
Commune of La Chapelle, City Centre
Milieu:
Plain, semi-urban
Type of unit:
Centre without bed
Services offered by unit:
Opening hours: -Days: Monday - Friday
-Hours: 8h - last patients
Services: consultation , ANC, FP, small level surgery, vaccination, laboratory, dental care.
Unit managed by: SOE
Supported by: SOE
Personnel of unit:
Doctors:…….1…(not full time)
Assistants: ……4….
Payment system:
Flat fee 25 G, not included tests, antibiotics 25 G per unit
Exemption system:
Average number of patients incurring a debt/month: debt accepted
Average number of patients being exempt of paying for care/month: 5 to 10% do not pay
Identification of vulnerable people: not formal
Frequentation:
AVERAGE NUMBER OF CURATIVE CONSULTATIONS/MONTH: 900/MONTH
Other general comment:
Depending on the donation, the costs of antibiotics can vary

VI. Desarmes health centre

Location:
Verrets, 4th section
Milieu:
Plain, semi-urban
Type of unit:
Centre without bed
Services offered by unit:
Opening hours: -Days: Monday - Friday
-Hours: 8h - last patients
Services: consultation , ANC, FP, small level surgery, vaccination, laboratory, dental care.
Unit managed by: SOE
Supported by: SOE
Personnel of unit:
Doctors:…….1…(2 days per week)
Assistants: ……4….
Technician laboratory:…1
Dental assistant:…1
Payment system:
Flat fee 25 G, not included: tests, antibiotics, complete treatment
Exemption system:
Average number of patients incurring a debt/month: not available
Average number of patients being exempted from paying care/month: health agents, matrons.
Identification of vulnerable people: not formal
Frequentation:
AVERAGE NUMBER OF CURATIVE CONSULTATIONS/MONTH: 800/MONTH
Other general comment:
Depending on the available donations, the costs of a treatment is variable

VII. Savane à Roche dispensary

Location:
Petite Rivière, 4th section
Milieu:
Plain, rural
Type of unit:
Dispensary
Services offered by unit:
Opening hours: -Days: Monday - Friday
-Hours: 8h – 1h
Services: consultation , ANC.
Unit managed by: Caritas
Supported by: Caritas: payment of the personnel, initial stock and building
Personnel of unit:
Assistants: ……2….
Payment system:
Cost recovering system: 10 G for the consultation plus medicines per unit
Exemption system:
Not existing
Frequentation:
AVERAGE NUMBER OF CURATIVE CONSULTATIONS/MONTH: 60/MONTH

VIII. Marin dispensary

Location:
Verretes, 3rd section
Milieu:
Plain, semi-urban
Type of unit:
Dispensary
Services offered by unit:
Opening hours: -Days: Monday - Friday
-Hours: 8h – last patient
Services: consultation , ANC, FP, small level surgery, vaccination.
Unit managed by: Community
Supported by: At the start, the dispensary was supported by HAS: initial stock; now, it is managed by the community
Personnel of unit:
Assistant: ……1….
Assistant helper:….1…
Payment system:
Flat fee: 35 G, not included antibiotics, must be bought per unit
Exemption system:
Not existing
Frequentation:
Average number of curative consultations/month: 400 to 500/month

IX. Christant dispensary

Location:
Verretes, 4rd section
Milieu:
Rural, plain (at the start of the montains)
Type of unit:
Dispensary
Services offered by unit:
Opening hours: -Days: Monday - Friday
-Hours: 8h –
Services: consultation , family planning.
Unit managed by: Community
Supported by: At the start, the dispensary was supported by SOE: initial stock, managed + PALIH: initial IST
Personnel of unit:
Assistant: 1
Assistant's aide: 1
Payment system:
Flat fee: 25 G, including chloroquine, ibuprofen, paracetamol, other medicines must be bought per unit
Exemption system:
Average number of patients incurring a debt/month: some patients
Average number of patients being exempted from paying care/month: 5 to 10 persons
Identification of vulnerable people: individually
Frequentation:
Average number of curative consultations/month: 100 to 130/month

ANNEX 3

List of localities selected for the survey

FLAT FEE: 30 CLUSTERS	**CR: 30 CLUSTERS**
CALVAIRE	TOUCHE MOULIN
BELLEVUE	GARAPIN II
LABADY	MASSEAU
PLASSAC I	BOURG VERRETTES I
CATAMBE	BOURG VERRETTES II
TETE SOURCE	VAUDRE
MARSEILLE	BOURG LA CHAPELLE
HAUT CANNE	SURPRIS
PAYEN III	BOULIN
CASTRA I	JEANIN I
DEZELLE CASTRA	VEDRY
LIANCOURT	SEGUR
LIANCOURT	BENOIT III
LIANCOURT	PALMISTE I
COMON	DELONE
MASSICOT	BRIZARD
DROUETTE	COUTETE
MOREAU LIANCOURT II	MARIN
DESCHAPELLES VV	COUPOIS
DERR DESCHAPELLES	PR I
DODARD VB	LA VILLE II
DESJARDINS	SABANE BOURG I
ANGER II	PR II
DEMENE	PR III
DESLANDES I	SAVANE BOURG II
VINCENT	PR IV
GABRIEL	VALHEUREUX I
MEDOR	DEGRAVE
VEILLON	DESARMES
INGRAND	LAMOUR BANANE

ANNEX 4: HOUSEHOLD SURVEY QUESTIONNAIRE

Date:	…../…../…..	Health centre:	
Commune:		Team (names):	
Section		Cluster N°:	
		Family N°:	

I. HOUSEHOLD

1. Breakdown of the family by age bracket: *Include people who sleep and eat under the same roof at least 3 days a week*	0-4 years:……people, 5-14 years:……..people, 15-50 years:……. people, > 50 years…… people.
How many people live in the household?	TOTAL ……..…….. people

II. MORTALITY

2. Were there any deaths in the family in the past three months?	❑ Yes ❑ No ➔ Go to question 4

3. Description of the deaths:

	Age (month or year)	Cause ◊
1st death		
2nd death		
3rd death		
4th death		
5th death		
Total:		
Total under 5 years		

◊ Causes of death

1. Malaria/Fever
2. Respiratory condition (cough, …)
3. Diarrhoea
4. Malnutrition
5. Problem linked with giving birth
6. Violence
7. Other (specify) ……

III. MORBIDITY

4. Has a member of your family been ill over the past three months?
(include health problems linked to pregnancy/a normal delivery is not an illness)

❑ YES	❑ NO
Give the age of the person most recently ill …… (years/months) The sex of the person most recently ill □ Man □ Woman	End the questionnaire and go to another family

5. Does the family regard the health problem as:	❑ Serious ❑ Not serious

6. What type of illness is the person suffering from? Only one response (the main one)	❑ 1. Malaria/Fever ❑ 2. Diarrhoea ❑ 3. Respiratory condition ❑ 4. Complicated birth ❑ 5. Other (specify) ……
7. Were you treated? **……**	❑ 1. With traditional products? ❑ 2. With modern medicines? ❑ 3.With modern and traditional medicines? ❑ 4. Without medicines?
	❑

IV. ACCESS TO CARE

8. Did you see a doctor, nurse, healer or pharmacist for this episode of illness (somebody outside the family)?

❑ YES ⇓

Who exactly did you see?

❑ HC at: *(or mobile clinic depending on a HC)* ……. ⇓	❑ Other HC (or mobile clinic depending on a HC): …… or Hospital: …… ⇓	❑ Healer ❑ Ougan ❑ Home care (nurse, MD..) ❑ Pharmacist ❑ Medicine seller ❑ Other …… ⇓	
How much did you pay for care?	How much did you pay for care?	How much did you pay for care?	
❑ I paid …….. ❑ For the total ❑ In part ❑ I do not know ❑ I did not pay	❑ I paid …….. ❑ For the total ❑ In part ❑ I do not know ❑ I did not pay	❑ I paid …….. ❑ For the total ❑ In part ❑ I do not know ❑ Other:…… ❑ I did not pay	
⇓ Continue in "Care received" Section:V	⇓ Continue below	⇓ Continue below	

❑ NO ⇓

Why not?

❑ 1. Not seriously enough ill
❑ 2. Lack of money
❑ 3. Not enough confidence in the HC personnel
❑ 4. Lack of money/HC too far away
❑ 5. The HC has no medicines
❑ 6. The HC personnel is absent, HC closed
❑ 7. Security problem
❑ 8. Debt owed to the HC
❑ 9. Home care
❑ 10. Other ⇓

How much did you pay for care?

❑ I paid …….. ❑ For the total ❑ In part
❑ I do not know
❑ Other ……..
❑ I did not pay

⇓ Continue in "Socio-economic" Section:VI Page:5

Why not at the HC at …? *Several answers are possible* 1. Not seriously ill enough 2. Too ill 3. Lack of money 4. Not enough confidence in the HC care personnel 5. Lack of transport/HC too far away 6. HC has no medicines 7. The HC personnel is absent, HC is closed 8. Security problems 9. Debt owed to the HC 10. This type of care is not available 11. Other (specify) ……	**Why not at the HC at …?** *Several answers are possible* 1. Not seriously ill enough 2. Too ill 3. Lack of money 4. Not enough confidence in the HC care personnel 5. Lack of transport/HC too far away 6. HC has no medicines 7. The HC personnel is absent, HC is closed 8. Security problems 9. Debt owed to the HC 10. This type of care is not available 11. Other (specify) ……
⇓ Continue in Care received Section: V	⇓ Continue in Socio-economic Section:VI Page:5

V. PRIMARY CARE RECEIVED (!Only for care in the HC or in an hospital!)

9. Did you spend a night in the HC ?
- ❑ YES ➔ If yes, how many nights ? …….
- ❑ NO

10. Was a test prescribed? (samples: blood, urine, sputum or other)

- ❑ YES
- ❑ NO

Was this test performed?

- ❑ YES
- ❑ NO

How much have you paid for tests?

- ❑ I paid ……
- ❑ For the total
- ❑ In part
- ❑ I do not know
- ❑ I did not pay

Why not? (several replies possible…°)

- ❑ 1. Lack of money
- ❑ 2. No lab
- ❑ 3. Lab closed
- ❑ 4. Test not available
- ❑ 5. Other……..

Continue question 11

11. Were medicines prescribed?

- ❑ YES
- ❑ NO

⇓ Continue to question 13

12. Have you obtained the medicines prescribed?

- ❑ YES, all
- ❑ A part of the medicines
- ❑ NO, none

Where did you obtain the medicines?

- ❑ 1. Same HC
- ❑ 2. Other structure (HC/Hospital)
- ❑ 3. Pharmacy
- ❑ 4. Market/somebody selling medicines
- ❑ 5. Other (specify) ……..

Why did you not obtain the medicines prescribed? (several replies possible)

- ❑ 1. Lack of money
- ❑ 2. Medicines not available
- ❑ 3. Medicines not available elsewhere (pharmacy, market)
- ❑ 4. Other (specify)……

Why did you not obtain the medicines prescribed? (several replies possible)

- ❑ 1. Lack of money
- ❑ 2. Medicines not available
- ❑ 3. Medicines not available elsewhere (pharmacy, market)
- ❑ 4. Other (specify)……

How much did you pay for medicines?	How much did you pay for medicines?	⇓ *Continue to question 13*
❑ I paid ……... ❑ For the total ❑ In part ❑ I do not know ❑ I did not pay	❑ I paid ……... ❑ For the total ❑ In part ❑ I do not know ❑ I did not pay	

13. Were there other costs incurred in obtaining care? (transport, food,…..)	
❑ YES	❑ NO
What type of costs? ❑ 1. Transport ❑ 2. Food ❑ 3. Other:…….	
How much extra did you pay? ❑ I paid: …….	⇓ Continue to question 14

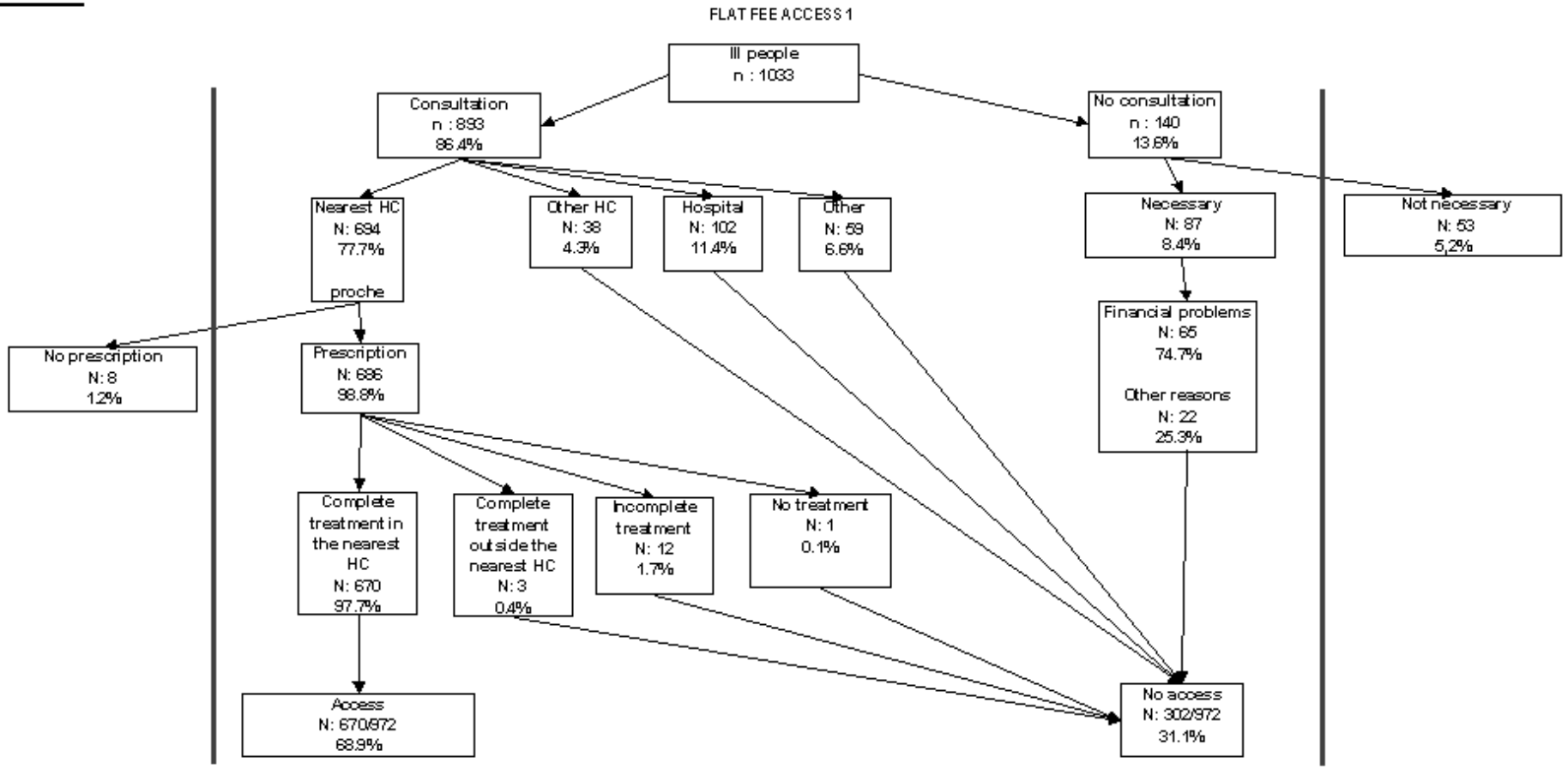
14. How did you obtain the money to pay for care? *Several replies are possible, so tick all them and circle the principal one (maximum 3 replies possible)*	❑ 1. Taken out of household savings ❑ 2. Cut back of expenditure (which: ……) ❑ 3. Sale of (a part of) the harvest (which product:……..) ❑ 4. Sale of cattle (which: ……) ❑ 5. Sale of a future harvest ❑ 6. Sale of a part of land ❑ 7. To put a good in pawn ❑ 8. To put a part of land in pawn ❑ 9. Extra work for somebody else as a labourer ❑ 10. Borrowed from somebody ❑ 11. Borrowed money with interest ❑ 12. Debt incurred at the HC ❑ 13. Money given by a member of the family or by a friend ❑ 14. Money given by a member of the family or by a friend living abroad ❑ 15. The care was free ❑ 16. Other (specify) ……

VI. SOCIO-ECONOMIC CONDITIONS

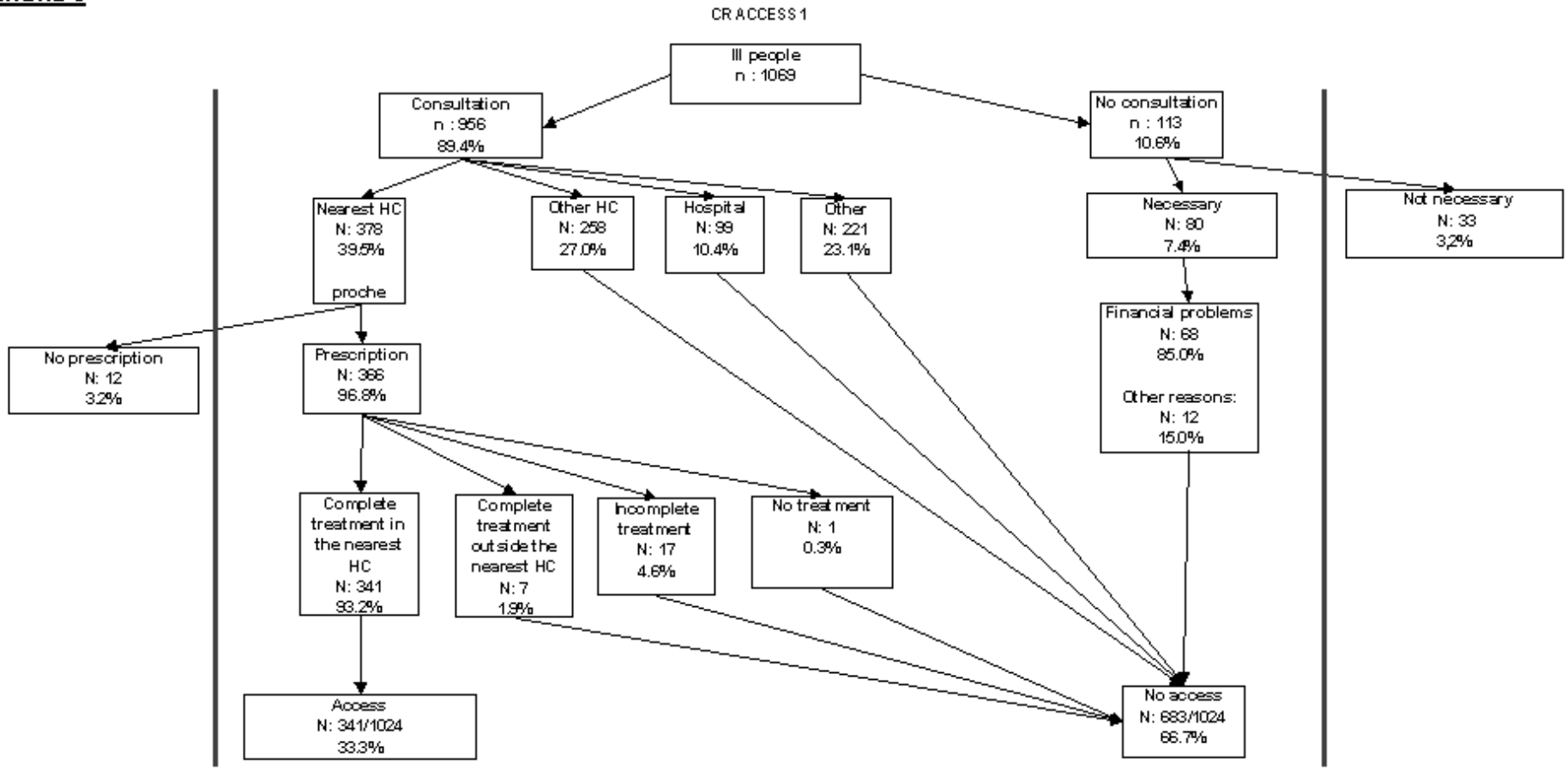
15. Do you have a paper giving you a reduction on the cost of care, or free care?	
❑ YES	❑ *NO*
If yes: ❑ 1. Health personnel ❑ 2. "Indigence card" ❑ 3. Other: ……	
16. Does the family present any of the following signs of vulnerability? *Read the replies and tick for each one*	*YES NO* 1. Female-headed household, with responsibility for children 2. Female-headed household, with no responsibility for children 3. Children (below 18 years) as head of the household with no outside assistance 4. Elderly person (over 55 years), isolated or with responsibility for children 5. Somebody without land 6. Somebody without access to land 7. Displaced 8. Handicapped person in the care of the family 9. Chronically ill person in the care of the family (AIDS, diabetes, cancer, tuberculosis)
17. In what socio-economic category would you place your household? *(only one reply)*	❑ 1. Requiring perpetual assistance ❑ 2. Very poor ❑ 3. Poor ❑ 4. Slightly well-off ❑ 5. Rich
18. What sort of house do you live in?	❑ 1. Hut ❑ 2. Adobe house ❑ 3. House made out of adobe bricks ❑ 4. House made out of burnt bricks ❑ 5. Provisional housings (sheeting, etc.) ❑ 6. Other
19. How many rooms does your house have?	……. Rooms
20. Concerning your house …	❑ 1. Owner ❑ 2. Tenant ❑ 3. Living with another family ❑ 4. Other (specify) ……..

21. Do you own a piece of land? *Read out the replies*	❑ 1. Yes, land cultivated for the household's survival ❑ 2. Yes, a large piece of land cultivated for profit ❑ 3. Yes, a large piece of land for profit, with labours employed ❑ 4. No
22. Do you own any of the following animals and how many?	❑ 1. Hens, etc. ❑ 2. Coat ❑ 3. Cow ❑ 4. Pig ❑ 5. Donkey, horse, mule ❑ 6. None
23. Do you own any of the following goods?	❑ 1. Bed ❑ 2. Bicycle ❑ 3. Radio ❑ 4. Motorcycle ❑ 5. Car/truck ❑ 6. None
24. How much money does the household spend per week? *(calculate together)*	❑ ……
25 How much money does the household earn per week? *(calculate together)*	❑ ……
26. During the last 3 months, did you receive money from a member of your family living abroad?	
❑ YES	❑ NO
If yes, please write the total amount: …….. Please write the total amount obtained for healthcare: …….	

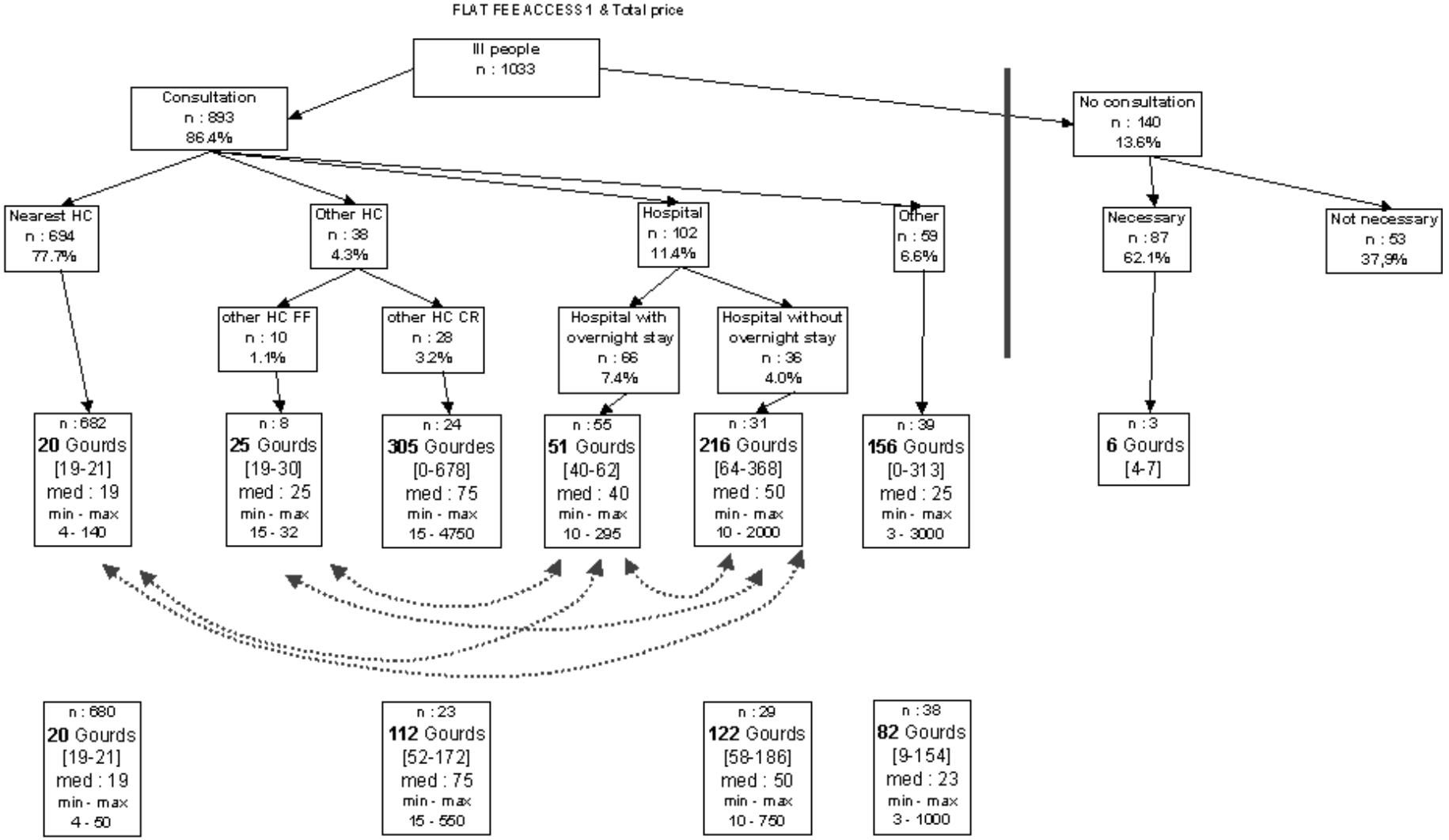
ANNEXE 5


FLAT FEE ACCESS 1
Ill people
n : 1033
Consultation
n : 893
86.4%
No consultation
n : 140
13.6%
Nearest HC
N: 694
77.7%
proche
Other HC
N: 38
4.3%
Hospital
N: 102
11.4%
Other
N: 59
6.6%
Necessary
N: 87
8.4%
Not necessary
N: 53
5,2%
No prescription
N: 8
1.2%
Prescription
N: 686
98.8%
Financial problems
N: 65
74.7%
Other reasons
N: 22
25.3%
Complete treatment in the nearest HC
N: 670
97.7%
Complete treatment outside the nearest HC
N: 3
0.4%
Incomplete treatment
N: 12
1.7%
No treatment
N: 1
0.1%
Access
N: 670/972
68.9%
No access
N: 302/972
31.1%

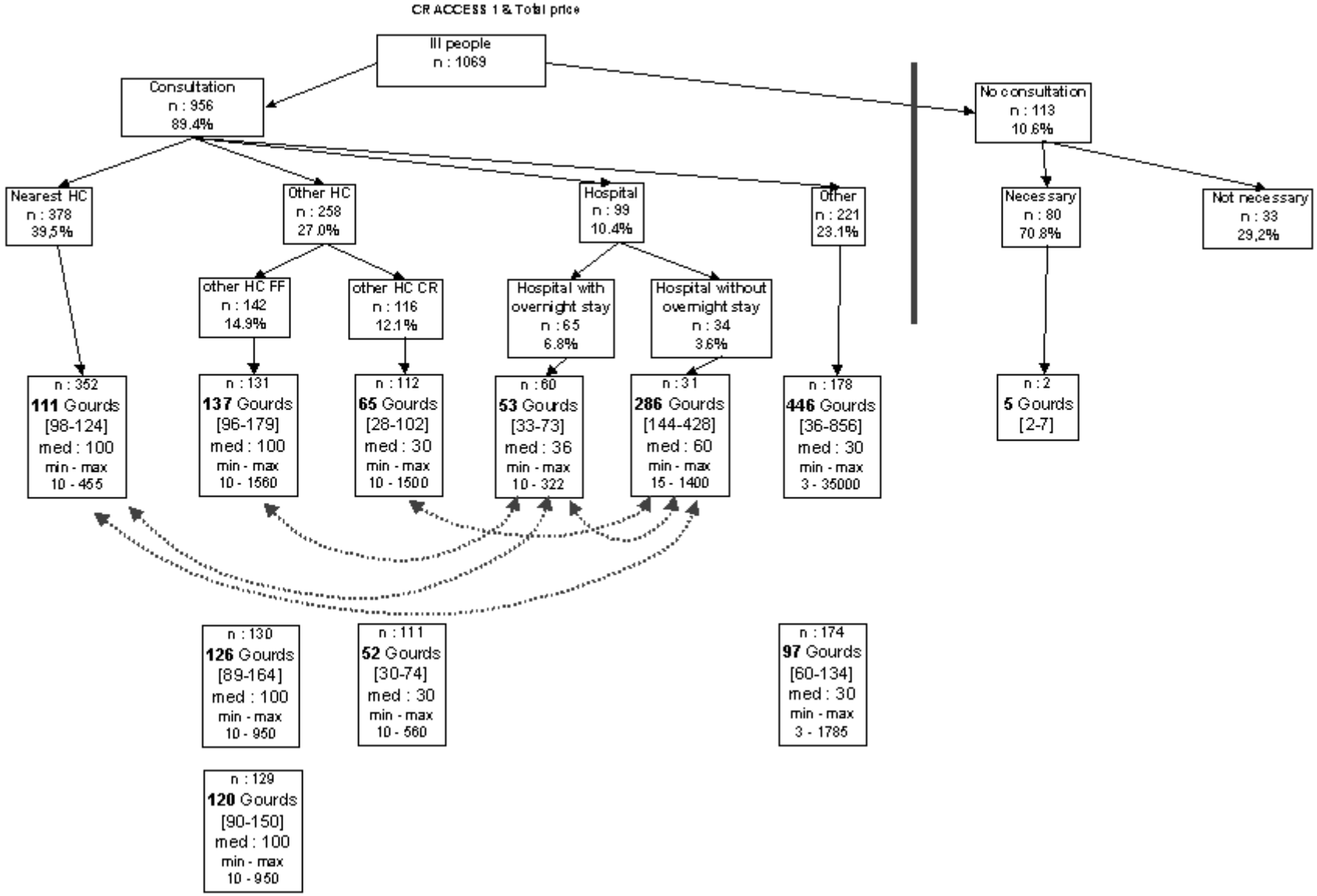
ANNEXE 5


CR ACCESS 1
Ill people
n : 1069
Consultation
n : 956
89.4%
No consultation
n : 113
10.6%
Nearest HC
N: 378
39.5%
proche
Other HC
N: 258
27.0%
Hospital
N: 99
10.4%
Other
N: 221
23.1%
Necessary
N: 80
7.4%
Not necessary
N: 33
3,2%
No prescription
N: 12
3.2%
Prescription
N: 366
96.8%
Financial problems
N: 68
85.0%
Other reasons:
N: 12
15.0%
Complete treatment in the nearest HC
N: 341
93.2%
Complete treatment outside the nearest HC
N: 7
1.9%
Incomplete treatment
N: 17
4.6%
No treatment
N: 1
0.3%
Access
N: 341/1024
33.3%
No access
N: 683/1024
66.7%

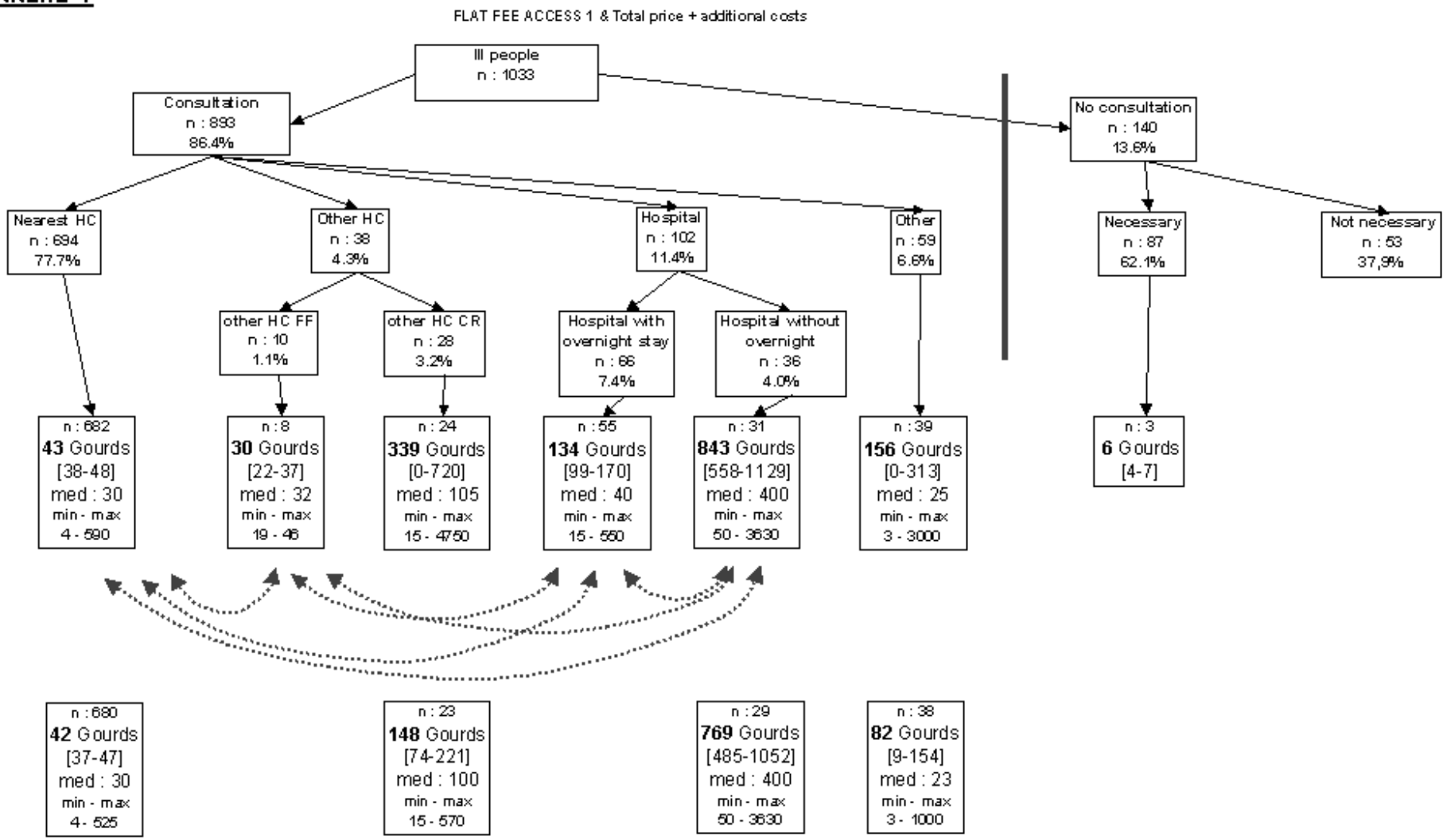
ANNEXE 6


FLAT FEE ACCESS 1 & Total price
Ill people
n : 1033
Consultation
n : 893
86.4%
No consultation
n : 140
13.6%
Nearest HC
n : 694
77.7%
Other HC
n : 38
4.3%
Hospital
n : 102
11.4%
Other
n : 59
6.6%
Necessary
n : 87
62.1%
Not necessary
n : 53
37,9%
other HC FF
n : 10
1.1%
other HC CR
n : 28
3.2%
Hospital with overnight stay
n : 66
7.4%
Hospital without overnight stay
n : 36
4.0%
n : 682
20 Gourds
[19-21]
med : 19
min - max
4 - 140
n : 8
25 Gourds
[19-30]
med : 25
min - max
15 - 32
n : 24
305 Gourdes
[0-678]
med : 75
min - max
15 - 4750
n : 55
51 Gourds
[40-62]
med : 40
min - max
10 - 295
n : 31
216 Gourds
[64-368]
med : 50
min - max
10 - 2000
n : 39
156 Gourds
[0-313]
med : 25
min - max
3 - 3000
n : 3
6 Gourds
[4-7]
n : 680
20 Gourds
[19-21]
med : 19
min - max
4 - 50
n : 23
112 Gourds
[52-172]
med : 75
min - max
15 - 550
n : 29
122 Gourds
[58-186]
med : 50
min - max
10 - 750
n : 38
82 Gourds
[9-154]
med : 23
min - max
3 - 1000

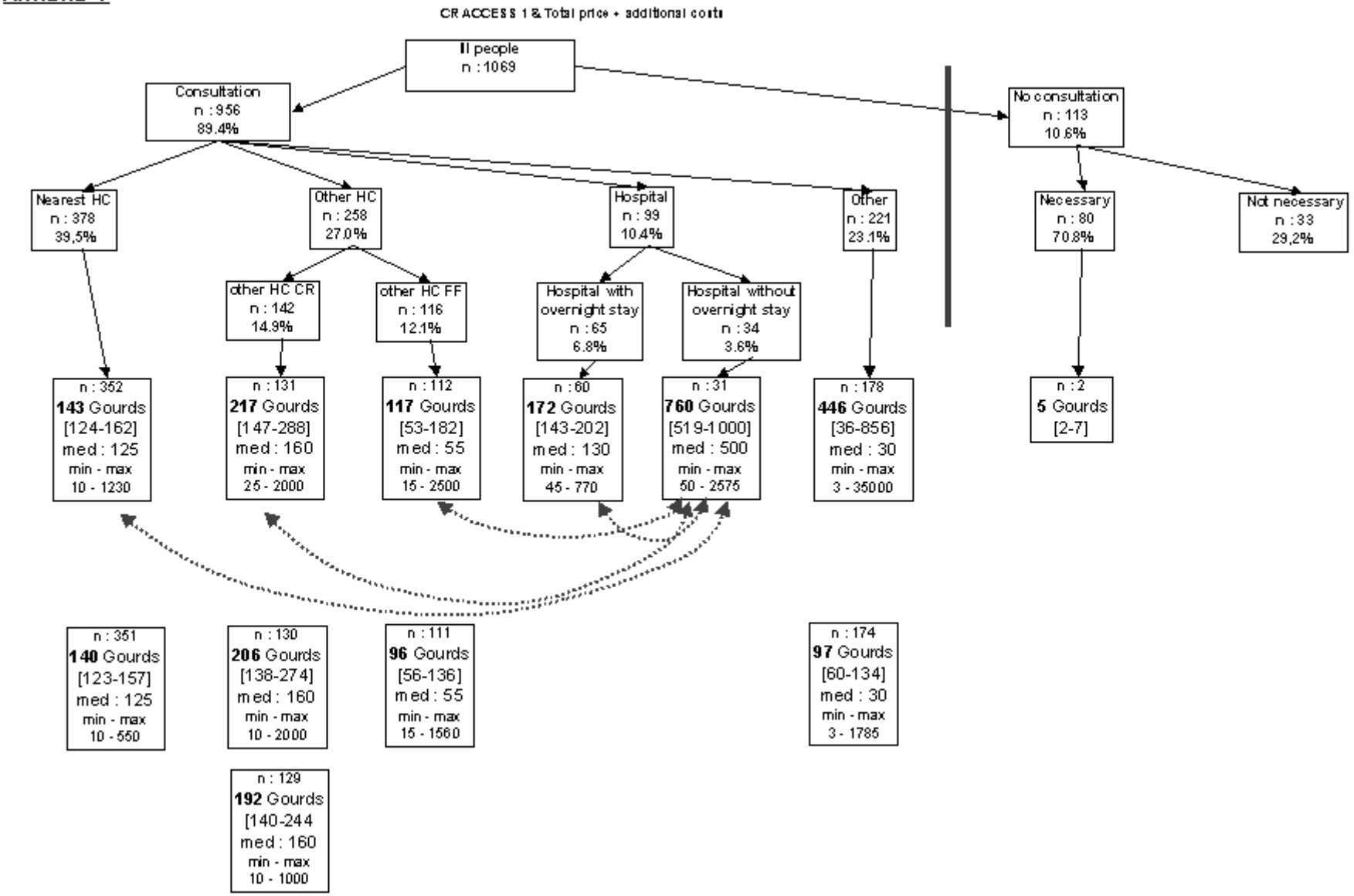
ANNEXE 6


CR ACCESS 1 & Total price
Ill people
n : 1069
Consultation
n : 956
89.4%
No consultation
n : 113
10.6%
Nearest HC
n : 378
39,5%
Other HC
n : 258
27.0%
Hospital
n : 99
10.4%
Other
n : 221
23.1%
Necessary
n : 80
70.8%
Not necessary
n : 33
29,2%
other HC FF
n : 142
14.9%
other HC CR
n : 116
12.1%
Hospital with overnight stay
n : 65
6.8%
Hospital without overnight stay
n : 34
3.6%
n : 352
111 Gourds
[98-124]
med : 100
min - max
10 - 455
n : 131
137 Gourds
[96-179]
med : 100
min - max
10 - 1560
n : 112
65 Gourds
[28-102]
med : 30
min - max
10 - 1500
n : 60
53 Gourds
[33-73]
med : 36
min - max
10 - 322
n : 31
286 Gourds
[144-428]
med : 60
min - max
15 - 1400
n : 178
446 Gourds
[36-856]
med : 30
min - max
3 - 35000
n : 2
5 Gourds
[2-7]
n : 130
126 Gourds
[89-164]
med : 100
min - max
10 - 950
n : 111
52 Gourds
[30-74]
med : 30
min - max
10 - 560
n : 174
97 Gourds
[60-134]
med : 30
min - max
3 - 1785
n : 129
120 Gourds
[90-150]
med : 100
min - max
10 - 950

ANNEXE 7


FLAT FEE ACCESS 1 & Total price + additional costs
Ill people
n : 1033
Consultation
n : 893
86.4%
No consultation
n : 140
13.6%
Nearest HC
n : 694
77.7%
Other HC
n : 38
4.3%
Hospital
n : 102
11.4%
Other
n : 59
6.6%
Necessary
n : 87
62.1%
Not necessary
n : 53
37,9%
other HC FF
n : 10
1.1%
other HC CR
n : 28
3.2%
Hospital with overnight stay
n : 66
7.4%
Hospital without overnight
n : 36
4.0%
n : 682
43 Gourds
[38-48]
med : 30
min - max
4 - 590
n : 8
30 Gourds
[22-37]
med : 32
min - max
19 - 46
n : 24
339 Gourds
[0-720]
med : 105
min - max
15 - 4750
n : 55
134 Gourds
[99-170]
med : 40
min - max
15 - 550
n : 31
843 Gourds
[558-1129]
med : 400
min - max
50 - 3630
n : 39
156 Gourds
[0-313]
med : 25
min - max
3 - 3000
n : 3
6 Gourds
[4-7]
n : 680
42 Gourds
[37-47]
med : 30
min - max
4 - 525
n : 23
148 Gourds
[74-221]
med : 100
min - max
15 - 570
n : 29
769 Gourds
[485-1052]
med : 400
min - max
50 - 3630
n : 38
82 Gourds
[9-154]
med : 23
min - max
3 - 1000

ANNEXE 7


CR ACCESS 1 & Total price + additional costs
II people
n : 1069
Consultation
n : 956
89.4%
No consultation
n : 113
10.6%
Nearest HC
n : 378
39,5%
Other HC
n : 258
27.0%
Hospital
n : 99
10.4%
Other
n : 221
23.1%
Necessary
n : 80
70.8%
Not necessary
n : 33
29,2%
other HC CR
n : 142
14.9%
other HC FF
n : 116
12.1%
Hospital with overnight stay
n : 65
6.8%
Hospital without overnight stay
n : 34
3.6%
n : 352
143 Gourds
[124-162]
med : 125
min - max
10 - 1230
n : 131
217 Gourds
[147-288]
med : 160
min - max
25 - 2000
n : 112
117 Gourds
[53-182]
med : 55
min - max
15 - 2500
n : 60
172 Gourds
[143-202]
med : 130
min - max
45 - 770
n : 31
760 Gourds
[519-1000]
med : 500
min - max
50 - 2575
n : 178
446 Gourds
[36-856]
med : 30
min - max
3 - 35000
n : 2
5 Gourds
[2-7]
n : 351
140 Gourds
[123-157]
med : 125
min - max
10 - 550
n : 130
206 Gourds
[138-274]
med : 160
min - max
10 - 2000
n : 111
96 Gourds
[56-136]
med : 55
min - max
15 - 1560
n : 174
97 Gourds
[60-134]
med : 30
min - max
3 - 1785
n : 129
192 Gourds
[140-244
med : 160
min - max
10 - 1000