# User Fees Policy and Equitable Access to Health Care Services in **Low- and Middle-Income Countries** - with the Case of Madagascar

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Institute for International Cooperation

# **Japan International Cooperation Agency**

# User Fees Policy and Equitable Access to Health Care Services in Low- and Middle-Income Countries - with the Case of Madagascar

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September 2006

Institute for International Cooperation Japan International Cooperation Agency

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### 開発途上国の受療者の費用負担制度(User-fees policy)と 保健医療サービスへの公正な(Equitable)アクセス - マダガスカルの事例とともに -

#### 和文要約

#### 調査の目的

人口増加、HIV/AIDSの流行、急速な社会変化などによる保健医療需要の増大に対応するため、多くの開発途上国で、保健医療サービスのユーザーフィー(受療者の費用負担)が導入されてきた。ユーザーフィーは、財源不足と不均衡な資源配分に悩む開発途上国で、保健医療システムの維持とサービスの質の向上に必要な財源を確保し、より多くの人々が質の高い保健医療サービスにアクセスできるようになることを目指している。しかし、ユーザーフィーがすべての人々に一律に課されると、低所得層は家族の罹患に高額な医療費を負担しなくてはならず、さらに困窮状態へと陥る可能性がある。このため、開発途上国でのユーザーフィー制度の導入には、低所得層の費用負担を軽減し、サービスの利用を低下させることなく、保健医療セクターの収益を上げるにはどうすればよいか、という課題が伴う。

本研究は、これまでの開発途上国でのユーザーフィー制度導入と低所得層の費用負担軽減スキームの経験をレビューするとともに、2004年1月、マダガスカルで新しく導入された保健センターレベルでのユーザーフィー制度とEquity Fundの実施状況を検証し、開発途上国でのユーザーフィー制度と低所得層の費用負担軽減スキームの効果的な実施について、政策上の示唆と国際協力の可能性を検討することを目的としている。

#### 過去の経験のレビュー

深刻な保健医療財政難と保健医療サービス需要の増大を背景に、ユーザーフィー制度は1980年代、多くの開発途上国で導入された。当時、保健医療サービス需要は価格弾力性が比較的低いと考えられ、ユーザーフィーの導入は、保健医療サービスの利用を減少させることなく、保健医療施設での収益を高めると論じられた。さらに、ユーザーフィーによる収益が、保健医療サービスの質の向上に利用されれば、サービス需要は増加するだろうと予想された。また、低所得層の費用負担を免除するとともに、ユーザーフィーによる収益を低所得層が多く利用するサービスに配分することにより、保健医療への公正なアクセス確保が可能になると考えられた。。

これまでの調査・研究、文献レビューによると、開発途上国でのユーザーフィー制度が、 保健医療施設の利用、 保健医療サービスの質、 収益、 低所得層の保健医療サービスへのアクセスに与えたインパクトは、おおむね次のとおりにまとめられる。

保健医療施設の利用 - 調査・研究の結果にばらつきはあるが<sup>4</sup>、複数の研究が、ユーザーフィーの導入に伴い、保健医療サービスの利用が減少傾向にあることを示している<sup>5</sup>。

保健医療サービスの質 - いくつかの事例で、ユーザーフィーによる収益が、サービスの質の

<sup>&</sup>lt;sup>1</sup> McPake (1993); McPake, Hanson et al. (1993); Reddy and Vandemoortele (1996); Save the Children (2005)

<sup>&</sup>lt;sup>2</sup> Griffin (1988)

<sup>&</sup>lt;sup>3</sup> Akin, Birdsall et al. (1987); Griffin (1988); Shaw and Griffin (1995)

<sup>&</sup>lt;sup>4</sup> Preker and Soucat (2005)

<sup>&</sup>lt;sup>5</sup> Mbugua, Bloom et al. (1995); Blas and Limbambala (2001); Kipp, Kamugisha et al. (2001)

向上に再投資され、医療サービスの利用が増加したことが報告されているが<sup>6</sup>、概して一般的ではない。

ユーザーフィーによる収益 - ユーザーフィーによる収益 (純利益)は、制度の管理・運営費により幅がある。平均で、保健医療セクターの経常予算の 5 ~ 10% と概算される。

低所得層の保健医療サービスへのアクセス - 複数の調査・研究が、ユーザーフィーの導入が、低所得層の保健医療サービスの利用低下を招く可能性を指摘している<sup>9</sup>。保健医療サービス需要に関する最近の研究は、価格弾力性が、低所得層間で高いことを示している<sup>10</sup>。

ユーザーフィー制度のもとでの低所得層の費用負担軽減スキームについて、信頼性の高い実証研究は限られているが、複数の調査・研究において、これらのスキームの多くが、公正な保健医療サービスへのアクセスを確保するために、効果的に機能していないことを報告している11。また、これらのスキームは、管理・運営費が高く、プログラム予算の4分の1を費やす事例もみられた12。低所得層の費用負担軽減スキームが期待された成果を上げていないことについて、次のような要因が考えられる13。

低所得層(受益者)を正確に特定することが難しい。

低所得層の間で、費用軽減スキームについての認知度が低い。

受益者の選定基準と費用免除手続きが透明性を欠いている。

保健医療サービスのプロバイダーである医療従事者が、費用を免除することに前向きではない。

低所得層が、社会的偏見により、免除を受けることをためらう場合がある。

一方、近年「Equity Funds」の設置などいくつかのタイプのスキームが、低所得層の費用負担を効果的に緩和し、保健医療へのアクセスを高めた事例が報告されている<sup>14</sup>。

これまで、開発途上国でのユーザーフィー制度の経験について、いくつもの調査・研究が行われてきた。多くの調査・研究が、制度のインパクトや成果に重点を置いている一方、同制度が実際にどのように実施され、なぜ多くの場合、期待された成果を上げていないのかなど、ユーザーフィー制度の実施に関する「どのように」「なぜ」という疑問に直接的に取り組んだ研究はごくわずかである。また、ユーザーフィー制度の導入が、地方の保健行政官や保健医療従事者など、サービス供給側のさまざまなアクターの行動にどのような変化をもたらしたかについて、これまであまり注目されてこなかった。

#### マダガスカルの事例

マダガスカル政府は、2003年10月、新しいユーザーフィースキーム「FANOME (Financement pour l'Approvissionnement Non-stop en Médicaments)」を制定した。FANOMEは、公立の保

<sup>9</sup> Reddy and Vandemoortele (1996); Bitran and Giedion (2003); Save the Children (2005)

<sup>&</sup>lt;sup>6</sup> Litvack and Bodart (1993); Nolan and Turbat (1995); Chawla and Ellis (2000)

<sup>&</sup>lt;sup>7</sup> McPake (1993); McPake, Hanson et al. (1993)

<sup>&</sup>lt;sup>8</sup> Gilson (1997)

<sup>&</sup>lt;sup>10</sup> Gertler and Gaag (1990); Sauerborn, Nougtara et al. (1994)

Gilson and Mills (1995); Reddy and Vandemoortele (1996); Gilson, Kalyalya et al. (2000); Gilson, Kalyalya et al. (2001); Chaudhury, Hammer et al. (2003); World Health Organization (2003)

<sup>&</sup>lt;sup>12</sup> Grosh (1994); Reddy and Vandemoortele (1996)

<sup>&</sup>lt;sup>13</sup> Reddy and Vandemoortele (1996)

<sup>&</sup>lt;sup>14</sup> Jacobs and Price; Hardeman, Van Damme et al. (2004)

健センター (Centre de Santé de Base: CSB) で、薬剤費を患者から徴収するシステムである。 同制度は、次の3点を目的としている。

CSBで、薬剤の持続的な在庫供給を確実にするために必要な財源を確保する。

すべての人々、特に低所得層の、保健医療へのアクセスを改善する。

地方分権と透明性を高めるため、住民参加を促進する。

上記 の目的を満たすため、同制度は、各CSBに「Equity Fund」を設置し、低所得層の保健医療サービスのアクセスを改善するようデザインされている。有資格者として選定された低所得者は、CSBでの薬剤費が免除され、Equity Fundがこれらの薬剤費を負担する仕組みである。Equity Fundの主な財源は、CSBの薬剤販売による収益の一部である。上記 の住民参加を促すため、CSBでは、住民管理による薬局(Pharmacie à Gestion Communautaire: PhaGeCom)が設置され、薬剤による収益とEquity Fundは、住民の代表者からなる管理・運営委員会(Comité de Gestion: CoGe)が、責任を負っている。

実施から2年以上たつが、FANOMEとEquity Fundに関し、確かで詳細なモニタリング情報が限定されており、同制度の成果やインパクトについて結論を出すのは時期尚早である。

しかし、現時点で入手可能なモニタリングデータと、関係者とのインタビューから得られた情報は、FANOMEとEquity Fundの実施に関し、検討を要する課題がいくつもあることを示唆している。これらの課題を概括すると次のとおりである。

地域(またはCSB)によって、制度実施の進度に大きな隔たりがある。

地域 (またはCSB)によって、薬剤販売による収益の額に大きな格差が生じている。

現在まで、Equity Fundによる薬剤費免除を受けられる有資格者が非常に少ない。

費用免除の有資格者の選定に複雑な問題が生じている。

Equity Fundのメカニズム維持に必要な財源確保に不安が残る。

モニタリングデータの入手可能性が、地域(CSB)によって大きく異なる。

FANOMEとEquity Fundが、財源確保と公正なアクセスの点で効果的に機能するためには、制度実施の過程で生じたこれらの問題の要因を深く検証する必要がある。

#### 国際協力とJICAの役割

開発途上国の政府は、国の保健医療システムの維持に必要な財源をどのように確保するかについての課題に取り組み続けている。過去の経験の中には、開発途上国でのユーザーフィー制度の導入に注意を喚起するものも多い。一方で、政府予算を保健医療サービスの提供に望ましいよう再編成することがすぐには実現不可能な場合、開発途上国政府は、増加し続ける保健医療サービスの需要を充足し、保健医療システムを維持する財源確保の実用的な手段として、ユーザーフィーの導入を検討せざるを得ない可能性がある。問題は、ともすれば相反しかねない2つの政策目標・保健医療サービスの維持に必要な財源の確保と公正なアクセスの確保・を達成するために、ユーザーフィー制度と低所得層の費用負担軽減スキームを、どのようにすれば効果的に実施できるかということにある。

この課題の解決に向けて、二国間ドナーや国際機関、NGOが貢献し得る協力を、 知識への 貢献、 制度実施への貢献、 政策議論への貢献と、3タイプに分けて検討した。

#### 知識への貢献

過去の経験のレビューは、次のテーマに関する研究が少ないことを明示している。

ユーザーフィー制度と低所得層の費用負担軽減スキームが、現場でどのように実施されているか、また、なぜ、これらのスキームの多くが期待された成果を上げていないか。

ユーザーフィー制度と低所得層の費用負担軽減スキームの導入が、地方の保健行政官や、医療従事者など、サービス供給側のアクターの行動にどのように影響を与えているか。

これらの領域での調査・研究結果は、知識の蓄積に貢献するだけでなく、開発途上国の政府、 国際協力のパートナー機関が、制度デザインと実施プロセスを検討する上で、有益なデータ・情 報を提供し得る。

JICAは、調査・研究に関連するさまざまなタイプのスキームを利用し、これらの領域で質の高い調査・研究を支援することが可能と考えられる。また、技術協力を通じて、ユーザーフィー制度のもとで、さまざまなタイプの費用免除スキームやリスクシェアスキームを試験的に実施し、実証研究と組み合わせて、これらのスキームの実施プロセスと成果を綿密に検証することも可能である。知識への貢献に関する支援では、調査・研究結果を、幅広く関係者・関係機関と共有できるよう、コミュニケーションの方法についても熟考することが重要である。

#### 既存制度の実施強化への貢献

マダガスカルでのユーザーフィー制度と低所得層の費用負担軽減スキームの検証は、制度実施の現場で種々の問題が発生していることを示し、制度実施をより堅固なものにするため、実施過程でさらなるインプットが必要となっていることを明示している。

例えば、districtレベルなど、制度実施の現場で、次のような形態の協力は、既存制度の実施プロセス強化に貢献すると考えられる。

制度実施関係者へのトレーニングの提供 - 保健行政官、医療従事者、コミュニティからの参加者などを対象に、制度を効果的に実施するために必要な技術・技能に関するトレーニングを提供する。

制度の認知度を高めるための広報・啓発活動 - 制度の目的、内容、メカニズムについて、住民の知識と理解を深めることができるよう、コミュニケーションツールや広報戦略を関係者とともに開発し、提供する。

制度の成果と効果を測るため、適切な調査デザインと手法を用い、モニタリングと評価を実施する。

上記領域に関する協力は、保健医療ファイナンシングに直接、間接的に取り組む「技術協力」 を通して可能と考えられる。

#### 制度策定に関する議論への貢献

調査・研究および制度実施強化への協力から得られる知識・経験は、新しい制度の策定や、既 存制度の軌道修正に活用されるべきであり、これは、中央政府レベルや、二国間ドナー、国際機 関の間で、種々の政策議論への継続的な参加を通して実現可能である。

## **Abbreviations**

Abbreviations <b>(略語)</b>	Outline explanation (概要)
CHD	Centre Hospitalier de District: 県病院
CoGe	Comité de Gestion:運営・管理委員会
CoSan	Comité de Santé:保健・衛生委員会
CSB	Centre de Santé de Base:保健センター
EEEFS	Enquête sur l'Efficience et Equité des Formations Sanitaires : 保健・医療施設の効率性と公正なサービス提供に関する調査
EPI	Enlarged Program of Immunization:予防接種
FANOME	Financement pour l'Approvissionnement Non-stop en Médicaments
INSTAT	Institut National de la Statistique:国家統計局
MINSAN-PF	Ministére de la Santé et du Planning Familial:保健家族計画省
PFU	Participation Financiére des Usagers: 医療費自己負担
PhaGDis	Pharmacie de Gros de District: 県薬局
PhaGeCom	Pharmacie à Gestion Communautaire: 住民薬局
RUMER	Registre d'Utilisation des Médicaments et des Recettes:薬剤販売記録
SSD	Service de Santé de District: 県保健局
ТВ	Tuberculosis: 結核

#### 1. Introduction

#### 1-1 Background

Providing all people with access to basic health services is one of the fundamental challenges faced by governments worldwide. This problem is critical in lower income countries where health systems struggle with scarce and inequitably distributed resources. User fees which involve partial or complete payment for health services by health consumers is one of the policy options that many developing countries have implemented in order to generate funding to meet the increasing demand for health care services. User fees are theoretically expected to help lower income countries solve the problems faced by the health sector by generating revenue to improve health service provision.

When combined with fee exemption measures for the poor, user fee policies are also expected to achieve equity gains. Several empirical studies, however, indicate that user fees are likely to result in deterioration in the utilization of health care services, particularly among the poor. Financial resources recovered from user fees appear to be relatively low, resulting in limited resources available to improve health service delivery and provide benefits for the poor. This evidence poses a fundamental dilemma for lower income countries in determining how to effectively implement user fees policies without producing unintended outcomes.

In January 2004, Madagascar instituted a new user fees policy that recovers costs from medicine sales at public health centres. The policy creates "Equity Funds" at public health centres which are used to provide free medicines to the poor. After one and a half years of operation, the policy has confronted several challenges in generating revenue and providing equitable assistance.

In the light of challenges faced by low- and middle-income countries in the implementation of user fees policies for health care, this report aims to review the past experience of user fees policies in low- and middle-income countries and to assess the present performance of user fees policies and accompanying fee exemption measures for the poor in Madagascar in order to develop policy implications to inform effective implementation of user fees policies and accompanying fee exemption measures for the poor in low- and middle-income countries.

#### 1-2 Outline

This report has the following specific objectives:

Review the literature regarding the past experience of user fees policies in low- and middle-income countries;

Review the literature regarding equitable access to health care services under user fees policies in low- and middle-income countries;

Examine the current implementation status of the Equity Fund in Madagascar as an example of accompanying protection measures for the poor within the scope of a user fees policy for health care; and

Draw implications for international development cooperation concerning user fees related issues in the health sector.

Regarding the case of Madagascar, data was collected in Antananarivo and Mahajanga province between November 2005 and February 2006. Policy level information was obtained through interviews and discussions with government institutions, donor agencies and NGOs, while health facility and district level data was gathered through field visit to Mahajanga province and interviews with local health officials in the province.

The report is composed of eight sections. The first four sections discuss user fees policies in low- and middle-income countries based on the literature review. After the introduction, Section 2 discusses the background to the introduction of user fees policies in low- and middle-income countries. Section 3 discusses the empirical evidence of those policies by looking at the impact on health utilization, cost recovery, quality of health care services and health care access among the poor. Section 4 highlights the issue of equitable access to health care services within the scope of user fees policies.

The following three sections illustrate the newly introduced user fees policies and accompanying exemption measures in Madagascar. Section 5 describes the contents and structure of the new user fees policy (Financement pour l'Approvissionnement Non-stop en Médicaments: FANOME) and the accompanying protection measures for the indigent (equity fund).

Section 6 discusses the implementation status of FANOME and equity fund by looking at the monitoring data of Boeny region, Mahajanga province. Section 7 illustrates other user financing schemes including various pilot initiatives and research activities supported by donors and NGOs in Madagascar.

Based on the literature review and the review of recent experiences of user fees policy with accompanying exemption measures for the poor in Madagascar, the last section discusses the implications for international development cooperation concerning user fees for and equitable access to health care.

#### 2. User fees policies in low- and middle-income countries

#### 2-1 Background to the introduction of user fees in developing countries

User fees policies were introduced in many developing countries in the context of severe problems financing health services which occurred in the 1980s¹. At this time, government health budgets declined in real terms in response to severe macro-economic problems caused by global economic recession which impacted severely on economies in developing countries. Economic constriction was accompanied by increased demands on health services due to high population growth rates, rapid social change and the HIV/AIDS pandemic. As a consequence, severe pressures were brought to bear on health sector infrastructure resulting in health workers failing to receive salaries on a regular basis, drug supplies being insecure for substantial periods, and long lists of equipment and vehicles awaiting repair. In an effort to narrow the gaps between the demand for and supply of health care services in the public sector, user fees were introduced as a health policy response in many developing countries².

#### 2-2 Theoretical basis to the introduction of user fees

In 1987, an influential document published by the World Bank promoted the introduction of user fees in developing countries<sup>3</sup>. In the same year, the Bamako Initiative was announced at a meeting of African Ministers of Health, sponsored by WHO (World Health Organization) and UNICEF (United Nations Children's Fund) to stimulate community financing schemes. Proponents of user fees assume that people are able and willing to pay for health care<sup>4</sup> arguing that the demand for health care services is relatively price inelastic and that the introduction of user fees would increase revenue with little changes in health care utilization<sup>5</sup>. Additional revenue generated may improve health care quality which, in turn will increase demand for services. It is also argued that user fees can achieve equity gains when the scheme is combined with fee exemption mechanisms and when revenues raised are allocated to addressing the benefits of the poor<sup>6</sup>.

<sup>&</sup>lt;sup>1</sup> McPake (1993); McPake, Hanson et al. (1993)

<sup>&</sup>lt;sup>2</sup> McPake (1993); McPake, Hanson et al. (1993); Reddy and Vandemoortele (1996); Save the Children (2005)

<sup>&</sup>lt;sup>3</sup> Akin, Birdsall et al. (1987)

<sup>4</sup> Griffin (1988)

<sup>5</sup> Ibid

<sup>&</sup>lt;sup>6</sup> Akin, Birdsall et al. (1987); Griffin (1988); Shaw and Griffin (1995)

#### 3. Evidence from the experience

#### 3-1 Impact

A considerable number of reviews and empirical studies on user fees in low- and middle-income settings suggest the following impacts of user fees in terms of utilization, quality of services, cost recovery and access among the poor (*Please see the table on Annex 1 which summarizes review of selected literature on user fees and other health financing schemes*).

#### 3-1-1 Utilization

Evidence about the impact of user fees on utilization is somewhat mixed<sup>7</sup>, although several studies suggest that overall utilization is likely to fall in response to the introduction of fee charging or an increase in price<sup>8</sup>.

#### 3-1-2 Quality of services

When fees are reinvested into improvements in service quality, utilization can increase in user fees systems. There is documentation that this has occurred in a number of cases<sup>9</sup>, although it is relatively uncommon. In some systems, user fee revenues are not even retained within the health sector, but are diverted to fund other expenditure<sup>10</sup>. User fees can also encourage over-prescription of drugs to boost revenue from drug sales<sup>11</sup>.

#### 3-1-3 Cost recovery

While user charges raise gross revenue in the majority of cases, net revenue, or cost recovery levels vary widely depending on the administrative costs required to collect the fees<sup>12</sup>. Evidence suggests that resources recovered from user financing seem to be relatively low, and are limited to a small proportion of recurrent costs<sup>13</sup> averaging from 5 to 10 % of recurrent budgets for health care<sup>14</sup>. This low level of financial return, in turn affects the amount of resources available for quality improvements and benefits for the poor.

#### 3-1-4 Access among the poor

There is a growing body of literature suggesting that user fees may adversely affect the poor, with a likely result that a reduction in the utilization of services will occur<sup>15</sup>. Furthermore, the literature indicates that user fees systems show significant inequalities in access to health care services<sup>16</sup>. Early studies on the demand for health services, which attempted to measure elasticity of demand with respect to a number of factors such as price and income, found that the 'economic' variables of price and income were

<sup>&</sup>lt;sup>7</sup> Preker and Soucat (2005)

<sup>&</sup>lt;sup>8</sup> Mbugua, Bloom et al. (1995); Blas and Limbambala (2001); Kipp, Kamugisha et al. (2001)

<sup>&</sup>lt;sup>9</sup> Litvack and Bodart (1993); Nolan and Turbat (1995); Chawla and Ellis (2000)

<sup>&</sup>lt;sup>10</sup> Laterveer, Munga et al. (2004)

<sup>&</sup>lt;sup>11</sup> McPake, Hanson et al. (1993)

<sup>&</sup>lt;sup>12</sup> McPake (1993); McPake, Hanson et al. (1993).

<sup>&</sup>lt;sup>13</sup> Reddy and Vandemoortele (1996); World Health Organization (2003); Save the Children (2005)

<sup>14</sup> Gilson (1997)

<sup>&</sup>lt;sup>15</sup> Reddy and Vandemoortele (1996); Bitran and Giedion (2003); Save the Children (2005)

<sup>&</sup>lt;sup>16</sup> Newbrander, Collins et al. (2000)

insignificant influences<sup>17</sup>.

However, more recent empirical studies using more sophisticated theoretical models and econometric specifications have shown that price elasticity could be substantially higher for the poor in that the poor respond to price rises with reductions in access<sup>18</sup>.

#### 3-2 The factors that influence effectiveness of user fees policies

Apart from research incorporating impact analyses into their methodologies, there have been very few studies that tried to examine the process of user fees systems implementation. Amongst these, only a limited number attempted to identify the factors that have impacted on effective performance of user financing systems. Gilson (1997), reviewing the experience in Africa, identified three key factors as critical to the successful implementation of user fee systems: (i) strong and consistent leadership from the central government; (ii) obtaining and using the relevant information necessary to solve technical problems and to develop policy options; and (iii) the development and maintenance of consensus among the key stakeholders<sup>19</sup>. The findings from this African study have some similarity to those found in an in-depth analysis of the Low Income Card (LIC) scheme in Thailand. Five key elements to success were identified by this research: (i) a balance between central guidance and local decision-making, (ii) the inclusion of a range of interest groups in local decision-making, (iii) the establishment of clear income criteria with some flexibility in practice, (iv) linking the exemption mechanism to perceived service quality improvements in order to promote the use of the exemption mechanism, and (v) careful planning for implementation<sup>20</sup>.

Regarding the constraints of user fee systems, a five-country study conducted in Kenya, Guinea, Tanzania, Ecuador and Indonesia which aimed to determine the effectiveness of protection mechanisms, identified three key reasons for why these systems do not work well for the poor. These include: (i) inadequate public information about protection mechanisms; (ii) inefficiencies in the fee collection systems; and (iii) the difficulty in managing the balance between the competing objectives of revenue generation and securing equity<sup>21</sup>. Equity impacts are a key factor in determining the effectiveness of user fee policies, and a three-country study conducted in Benin, Kenya and Zambia identified the factors that explain the pattern of equity impacts of community financing activities within and across the countries. The study illustrated the critical importance of leadership and strategy in the effective implementation of policy change also indicating that managing such changes required both political skills, to develop and mobilize support, and technical skills, to inform and guide the reform process<sup>22</sup>.

Some studies concerning health sector reform have paid attention to the effect of front-line workers behavior in the policy implementation process with a number of studies focussing on different aspects of this area. A study on street-level bureaucracy<sup>23</sup> in South Africa showed that while nurses supported the

<sup>&</sup>lt;sup>17</sup> Heller (1982); Akin, Griffin et al. (1985)

<sup>&</sup>lt;sup>18</sup> Gertler and Gaag (1990); Sauerborn, Nougtara et al. (1994)

<sup>19</sup> Gilson (1997)

<sup>&</sup>lt;sup>20</sup> Gilson, Rauyajin et al. (1998)

<sup>&</sup>lt;sup>21</sup> Newbrander, Collins et al. (2000)

<sup>&</sup>lt;sup>22</sup> Gilson, Kalyalya et al. (2001)

<sup>&</sup>lt;sup>23</sup> Street-level-bureaucrats refer to public service workers who interact directly with citizens in the course of their jobs, and who have substantial discretion in the execution of their work. Public service agencies that employ a significant number of street-level bureaucrats in proportion to their work force are called *street-level bureaucracies* (Lipsky 1980).

broad policy principles in free care policy, implementation of the policy had significant negative professional and personal consequences for them<sup>24</sup>. A study on informal activities of health workers, such as informal charging and drug leakage, revealed that these activities impacted on quality and accessibility of services at public health facilities<sup>25</sup>. A study that examined the impact of health sector reform on health workers motivation, using Franco et al.'s model of health worker motivation determinants<sup>26</sup> showed that decentralization induced reform weakened workers' positions as professionals and hindered facility-based 'survival strategies' that helped them get by on poor salaries<sup>27</sup>. Also consistent with supplier side factors, a study on trust indicates that respectful treatment within the patient, provider, health worker and employer relationship is necessary for, and integral to, patient-provider trust<sup>28</sup>.

<sup>&</sup>lt;sup>24</sup> Walker and Gilson (2004)

<sup>&</sup>lt;sup>25</sup> McPake, Asiimwe et al. (1999)

<sup>&</sup>lt;sup>26</sup> Franco, Bennett et al. (2002)

<sup>&</sup>lt;sup>27</sup> Kyaddondo and Whyte (2003)

<sup>&</sup>lt;sup>28</sup> Gilson, Palmer et al. (In press)

#### 4. User fees and equity

#### 4-1 The rationale for equity in user fees systems

Requiring individuals to contribute to a part of their health care costs through payment of user fees can, in practice, work against equity because care may become rationed based on individuals' ability to pay. Thus, the risk in introducing user fees is that the poor and vulnerable, who have less ability to pay, may be limited or prevented from accessing health services they need based on their financial circumstances<sup>29</sup>.

In the context of health services, equity prevails when individual's consumption is in accordance with need and financing is in accordance with ability to pay. Equitable financing holds when those with equal ability to pay make equal payments for basic health care (horizontal equity in financing) and those with greater ability to pay make higher payments (vertical equity in financing). Payments include direct and indirect taxes, payments to social security and insurance (mainly for health care), prepayments for health care, and all out-of-pocket payments for services<sup>30</sup>.

Theoretically, user fees help promote equity through the distribution of financial resources from rich to poor people (Figure 4-1). Rising demand for health care is associated with increases in income levels<sup>31</sup> in that people who are better-off are more able and willing to pay for health services. With the introduction of user fees, wealthier people have to pay for services they demand and are more able to afford. The revenues from user fees can then be pooled and used to benefit the poor by protecting them from the costs of using health services and improvements in health care programmes and facilities targeted to the poor<sup>32</sup>. Evidence from studies on equity impacts of community financing activities and a review of health sector reform suggest, however, that protecting the poor from the burden of payment in many cases has failed under user fees policy<sup>33</sup>.

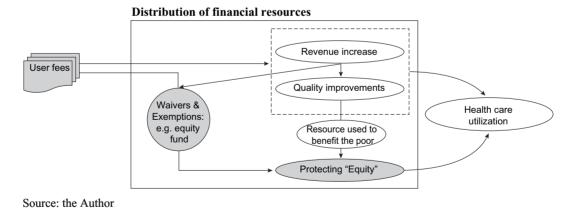


Figure 4-1 Mechanism of user fees and equity gains

<sup>&</sup>lt;sup>29</sup> Gilson, Palmer et al. (In press)

<sup>30</sup> Wagstaff and Van Doorslaer (1993)

<sup>&</sup>lt;sup>31</sup> Gertler and Gaag (1990); Shaw and Griffin (1995)

<sup>&</sup>lt;sup>32</sup> Akin, Birdsall et al. (1987); Shaw and Griffin (1995)

<sup>33</sup> Gilson and Mills (1995); Gilson, Kalyalya et al. (2000); Gilson, Kalyalya et al. (2001)

#### 4-2 Protection measures for the poor

It is argued that user fees can achieve equity gains when the scheme is combined with exemption mechanisms<sup>34</sup>. In economic theory, demand for normal goods by the non-poor is higher than demand by the poor. At any given price, the non-poor would demand higher quantities of goods and services than the poor. Thus, with a flat fee the poor will be at a relative disadvantage because they will demand a lower quantity. If the rich could be charged a higher price while a sufficiently lower fee is charged to the poor, then the quantities of services demanded by the poor would theoretically be equal to those of the non-poor. In this manner, user fees combined with a system of sliding fees such as fee exemptions could mitigate the negative effect on utilization by the poor at the same time as increasing revenue, which could eventually be used to target public subsidies to the poor and to reduce the leakage of subsidies to the non-poor.

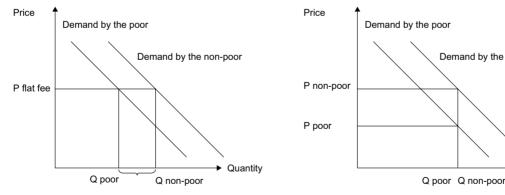
Protection systems for the poor, such as fee exemptions, work through targeting and identifying of those who will or will not be eligible for a given social program<sup>35</sup>. There are three main types of targeting mechanisms; (i) direct targeting, (ii) characteristic targeting and (iii) self-targeting<sup>36</sup>. Direct targeting is the provision of free or reduced-price benefits to people who cannot pay because of their low income. Often some form of means testing is used to determine how much people can afford to pay. Means testing can be done by using actual information on income and wealth or using proxy information. Characteristic targeting is the provision of free or reduced-price benefits to people with certain attributes, special circumstances, or special needs regardless of income level. This form of targeting may cover some of the poor but does not directly target the poor for benefits. Self-targeting involves an individual's self-selection for participation (or not) in a program.

Protection measures for the poor in user fees systems include two types of exemptions: one is based on direct targeting and the other based on characteristic targeting<sup>37</sup>. The former is a right conferred to an individual that entitles him or her to obtain health services at certain health facilities at no direct charge or

Figure 4-2 Difference in quantity demanded between poor and non-poor with flat-fees (Left) and equal quantity demanded between poor and non-poor with sliding fees (Right)

Demand by the non-poor

Quantity



Source: Bitran and Giedion (2003)

<sup>&</sup>lt;sup>34</sup> Akin, Birdsall et al. (1987); Griffin (1988); Shaw and Griffin (1995)

<sup>35</sup> Grosh (1994)

<sup>&</sup>lt;sup>36</sup> Newbrander, Collins et al. (2000)

<sup>&</sup>lt;sup>37</sup> Newbrander, Collins et al. (2000); Bitran and Giedion (2003)

at a reduced price. By reducing the out-of-pocket cost of care to beneficiaries, it seeks to improve both equity in access and equity in financing of health services. For the latter, exemptions are associated with certain services. The purpose of this type of exemption is to promote the consumption of specific health services, including those whose benefits are under-valued by the population, those that have externalities, or those that are pure public goods.

#### 4-3 Experiences of implementing protection measures for the poor

Actual success in protecting the poor through fee exemption measures appear to be limited. Exemption schemes do not appear to have performed well in many cases<sup>38</sup> and can be costly to administer, in some cases absorbing up to a quarter of total programme resources<sup>39</sup>. In other cases, exemptions have not been implemented systematically<sup>40</sup>. An impact study of a fee-waiver program for basic medical services in Armenia reported a disproportionate decrease in health care service utilization among beneficiaries under the fee-waiver program<sup>41</sup>. The experience in Benin, Kenya and Zambia indicated that little focus was given to the issue of absolute affordability through effective exemption mechanisms to protect the poorest and that community decision-making bodies were rarely seen as effectively representing the interests of any group including the poorest<sup>42</sup>.

Several reasons can be attributed to the failure of such measures to protect the poor. The limited evidence indicates that exemption schemes have not worked well due to: (i) difficulties in accurately identifying the poor, (ii) limited awareness of exemption schemes among the poor, (iii) lack of transparent exemption criteria and procedures which create high transaction costs and uncertainty for those seeking exemptions, (iv) reluctance on the part of providers to grant exemptions in part because of the lack of incentive for them to do so, and (v) reluctance on the part of the poor to seek exemptions because of social stigma<sup>43</sup>.

A review of seven countries' experiences with various types of fee exemptions indicates that those which have carefully designed and implemented exemption systems have had much greater success in terms of benefits than countries that have improvised such systems. Other critical issues include: inclusion of a financing system that compensates service providers, widespread dissemination of information among potential beneficiaries, financial support to poor patients for non-fee costs of care, and clear criteria for the granting of waivers or exemptions<sup>44</sup>.

Recently, there have been some promising experiences reporting that some forms of exemptions such as the establishment of equity funds may effectively improve the access to health care among the poor by reducing their financial burden<sup>45</sup>. Evaluation of Health Equity Fund experiences in Cambodia indicated success in protecting the poor from financial burden. A Health Equity Fund identifies the poor and pays

<sup>&</sup>lt;sup>38</sup> Gilson and Mills (1995); Reddy and Vandemoortele (1996); Gilson, Kalyalya et al. (2000); Gilson, Kalyalya et al. (2001); Chaudhury, Hammer et al. (2003); World Health Organization (2003)

<sup>&</sup>lt;sup>39</sup> Grosh (1994); Reddy and Vandemoortele (1996)

<sup>40</sup> Nolan and Turbat (1995)

<sup>&</sup>lt;sup>41</sup> Chaudhury, Hammer et al. (2003)

<sup>&</sup>lt;sup>42</sup> Gilson, Kalyalya et al. (2000)

<sup>&</sup>lt;sup>43</sup> Reddy and Vandemoortele (1996)

<sup>&</sup>lt;sup>44</sup> Bitran and Giedion (2003)

<sup>&</sup>lt;sup>45</sup> Jacobs and Price; Hardeman, Van Damme et al. (2004)

user fees incurred while accessing health providers on their behalf. One of the main features of the Health Equity Fund is the entrusting of fund management and identification of beneficiaries to a "third-party" who are not health facility staff. Failure of many conventional exemption schemes have been caused in part by the reluctance on the provider side to grant exemptions because of the lack of incentives for them to do so<sup>46</sup>. Where health facility staff hold responsibility for the management of the fund in granting exemptions, they face a conflict of interest between granting exemptions and raising income since exempted patients cause monetary loss of revenue for facilities already under financial stress. Separating the authority and funding from health facility staff in the Health Equity Fund scheme avoids the perversion of incentives that exist in conventional schemes. Studies assessing the impact of Health Equity Funds in Cambodia reported that the Fund effectively improved financial access for the poor and that it was cost-effective, with minimal leakage to the non-poor<sup>47</sup>.

<sup>&</sup>lt;sup>46</sup> Reddy and Vandemoortele (1996); Newbrander, Collins et al. (2000); Hardeman, Van Damme et al. (2004)

<sup>&</sup>lt;sup>47</sup> Jacobs and Price; Hardeman, Van Damme et al. (2004); Messen (2005)

#### 5. User fees and health equity funds in Madagascar

#### 5-1 User fees policies in Madagascar - Background

User fees policies for health care provision in Madagascar have undergone a number of significant changes over the last few years. In 1998, uniform user fees (Participation Financière des Usagers: PFU) were instituted at all levels of public health care provision until 2002 when the government announced their suspension. During the period that PFU were charged, the revenue generated made a significant contribution to financing public health providers' operational expenditure<sup>48</sup>, accounting for 40.4% of the operational budget on average for Centre Hospitalier de District (CHD) and 36.9% for Centre de Santé de Base (CSB)<sup>49</sup>. Moreover, PFU enabled generic essential drugs (Médicament Essentiel Générique: MEG) to be more readily available at CSB at accessible prices<sup>50</sup>. Despite these significant contributions, several studies indicate that the introduction of PFU imposed a barrier to low-income populations' access to health and medical services at both the primary health provider and referral hospital levels<sup>51</sup>.

In the first half of 2002, Madagascar had undergone political crisis due to a dispute regarding the outcome of the presidential election. After the new government took office, the "suspension" of PFU was announced at the end of July 2002 in order to address the decrease in the utilization of public health services caused by increasing poverty that had occurred during the political crisis. The suspension affected almost all user fees including pharmaceutical charges at the CSB level, consultation fees and in-patient accommodation expenses for certain payment categories of patients were exempted. However, fees for remaining services, consumables and pharmaceuticals were still charged to patients of public referral hospitals. Although the suspension of PFU was unevenly implemented<sup>52</sup>, after it came into effect public health care providers experienced a significant increase in utilization, especially among the poor<sup>53</sup>. Accompanying this, the provision of medicines free of charge led to an irrational increase in MEG consumption at CSB, resulting in the exhaustion of medicine stocks in a short period. The lack of income generated from the recovery of medicine costs also made it difficult for the CSB to efficiently manage medicine stocks.

# 5-2 New user fees policy and protection measures for the poor - Financement pour l'Approvisionnement Non-stop en Médicaments (FANOME) and the Equity Fund

At the end of 2003, the Government of Madagascar decided to reinstate a cost-recovery system for medicines at the CSB level (FANOME). After a transitional period between October and December 2003, FANOME became fully effective in January 2004 in all peripheral health facilities, i.e. CSB. FANOME differs from the PFU as it requires each CSB to establish an equity fund in order to reduce the financial burden on the poor.

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<sup>&</sup>lt;sup>48</sup> The operational expenditure referred here excludes personnel costs.

<sup>&</sup>lt;sup>49</sup> Ministere de la Santé et du Planning Familial (2004)

<sup>&</sup>lt;sup>50</sup> Institut National de la Statistique (2001)

<sup>&</sup>lt;sup>51</sup> Ministere de la Santé et du Planning Familial (2004)

<sup>&</sup>lt;sup>52</sup> Programme ILO Cornell University (2003)

<sup>53</sup> Ibid.

#### 5-2-1 Overall mechanism

The Ministry of Health and Family Planning instituted "FANOME", the new user financing scheme, on 14 October 2003 with the issuing of ministerial decree No. 2003/1040. This decree was followed by inter-ministerial decree No. 5228/2004 on 11 March 2004 which lays down the managerial mechanisms and announces the creation of the community pharmacy (Pharmacie à Gestion Communautaire: PhaGeCom) and the scheme management committee (Comité de Gestion: CoGe).

FANOME charges patients for medicines purchased at the CSB. The user financing policy aims to:

Ensure sufficient financial resources for securing sustainable supplies of medicine stocks at local level public health facilities;

Improve access of the whole population to health care, especially for the poor; and

Promote community participation in accordance with the principles of decentralization and transparency.

FANOME charges patients for: (i) medicines for curative care, (ii) consumables used in medical treatment and (iii) drugs used in childbirth. Medicines charged under FANOME must be included in the national list of the essential drugs. There are some medicines for curative and preventive care that are not charged for under FANOME. Curative care medications provided free of charge include: (i) medicines for infectious diseases including TB and leprosy, (ii) medicines for epidemics including plague and cholera, and (iii) medicines for endemic diseases including bilharzias and filariasis. Preventive care provided free include: (i) anti-tetanus vaccinations for mothers, (ii) vaccination included in EPI, and (iii) vitamin A supplements for children.

The principle of FANOME is "mutual aid for health (l'entraide pour la Santé)". Based on this principle, FANOME is designed to create an "equity fund" at each CSB to improve access to health care for the poor. Those who are listed as indigent are exempted from paying for medicines at CSB and the equity fund reimburses the community pharmacy with the medicinal costs incurred by the indigent. The major financial source for the equity fund comes from part of the sales revenue of medicines sold at the CSB.

#### 5-2-2 Actors in FANOME and their roles

#### (1) Comité de Santé (CoSan)

Each CSB must have one CoSan, a health committee which consists of representatives from the local Fokontany<sup>54</sup>. The committee is responsible for planning health related activities in the community. If the commune has more than one CSB, all the CoSans collectively form a Comité de Santé de la Commune; if the commune has only one CSB, this single CoSan also serves as the Comité de Santé de la Commune.

#### (2) Comité de Gestion (CoGe)

CoGe is the management committee of FANOME. It is responsible for the hands-on management of medicine and the use of the revenues generated by FANOME. CoGe consists of: (i) two representatives from the community to serve as president and treasurer, (ii) one representative from the commune (local official) as an advisor, and (iii) one representative from a health facility (CSB) as an advisor.

<sup>&</sup>lt;sup>54</sup> Fokontany is the smallest administrative unit below the commune and district.

Members of CoGe are appointed in a predetermined way: (i) the President and Treasurer come from CoSan and are officially elected at the general meeting of CoSan, (ii) an adviser from the commune is appointed by the mayor, and (iii) an adviser from the health sector is the head of CSB. The tenure of the CoGe member is two years and the mandate is renewable.

The functions of CoGe in implementing FANOME include: (i) reception of medicines, (ii) management of out-of-date or damaged medicine, (iii) planning of authorized expenditure, (iv) fixing the percentage of budget allocation from the sales revenue of medicine to each category (apart from the fixed rate of expenditure), (v) reporting of monthly financial statements to the commune and Service de Santé de District (SSD), (vi) reporting on the operation of PhaGeCom to CoSan meetings, (vii) setting the pharmacy dispenser's salary rate, (viii) managing the financial accounts of PhaGeCom and the equity fund, and (ix) six monthly activity and budget planning.

CoGe holds a monthly meeting for monitoring the management of FANOME. During the monthly meeting, the members review the financial status of PhaGeCom and the equity fund and the stock of medicines at the CSB (PhaGeCom).

#### (3) Mayor of the Commune

The mayor's role in FANOME includes: (i) supporting the operation of FANOME by recruiting a pharmacy dispenser and providing him/her with salary from the communal budget, (ii) ensuring the safety of health facilities and PhaGeCom by recruiting a guard and providing him/her with a salary from the communal budget, (iii) organizing social mobilization activities for the equity fund, and (iv) monitoring the adequate use of income generated from the sales of medicines.

In addition, the mayor is also responsible for holding a general meeting of CoSan for the election of CoGe members (every 2 years), nomination of one member of CoGe and appointment of the auditor from amongst local officials, participation in monitoring of FANOME, and validation of the list of indigent.

#### (4) Pharmacy Dispenser

The person who sells medicines at the pharmacy in the CSB (PhaGeCom) is recruited and compensated by the commune. He/she is placed under supervision of the head of the CSB. The major responsibilities of this position are: (i) the sales of medicines, (ii) placing of orders for medicinal supplies in consultation with the head of CSB and the President of CoGe, (iii) recording sales revenues and medicine stocks on the monitoring record form (Registre d'Utilisation des Médicaments et des Recettes: RUMER), (iv) keeping sales revenues before handing them over to the treasurer, (v) posting the price list of medicines at the pharmacy, and (vi) checking whether indigent patients who present at the pharmacy are registered on the indigent list.

#### (5) Prescriber

The medical personnel authorized to fill prescriptions at the CSB is the prescriber. Medicines prescribed by him/her must be included on the national list of essential drugs. He/she is required to provide patients with the necessary explanation for taking the medicines prescribed. He/she assists in drafting FANOME monitoring reports.

#### (6) Patients

Patients receive prescriptions during medical consultations and then purchase the medicines at the community pharmacy at the CSB (PhaGeCom). They are expected to check if the bill for the medicine is consistent with the price list posted at the pharmacy.

#### (7) Guard

This person is responsible for safety at the CSB and the community pharmacy and is recruited and compensated by the commune. He/she is placed under the supervision of the head of CSB.

#### 5-2-3 Financial flow and management

The source of funds for PhaGeCom mainly comes from the sales revenues of medicine. The sales revenues are handed over to the treasurer, by the dispenser, at regular time periods and the funds are then deposited in a bank account created by every CSB. The major purchasing done by PhaGeCom including the obtaining of medicinal supplies are paid for through this bank account.

The revenues generated by FANOME are managed by CoGe under the regular monitoring conducted by the commune and the district health office (SSD). Priorities are given to the following use of medicine sales revenue:

Supply of medicinal stocks (106/135 of the revenue to be allocated);

Freight expenses of the medicines;

Transportation costs in relation to FANOME activities;

Purchase of office supplies and management tools;

Purchase of consumable used for preventive care;

Contribution to the equity fund (3/135 of the revenue to be allocated);

Reserve of funds to accommodate for possible rises in medicine prices;

Allowances to the President and Treasure of CoGe; and

Improvement of the health facility environment.

Allocation of funds to each of these categories is to be determined by CoGe, except for the fixed rate set for the allocation to medicinal supplies and the equity fund. The transportation charges can be fixed as a lump sum. Allowances for the President and Treasurer of CoGe are to be fixed in the form of a percentage and these decisions are left to CoGe members. When the revenue from PhaGeCom is small, the commune is expected to contribute to the compensation for President and Treasurer.

#### 5-2-4 Procurement and management of medicines

CSB procures medicines from Pharmacie de Gros de District (PhaGDis) by placing an order at

PhaGDis

Pharmacie de gros
PhaGeCom
PhaGeCom
Pharmacie de détail
PhaGeCom
PhaGeCom

Figure 5-1 Flow of the procurement of medicines

Source: Ministere de la Santé et du Planning Familial (2004)

regularly determined time periods. Medicines from PhaGDis (medicine stocks) are stored in the "Pharmacie de gros PhaGeCom" located in the CSB and then delivered to "Pharmacie de détail PhaGeCom", also located in CSB, where the dispenser sells medicines to patients. Medicines sold at CSB ("Pharmacie de détail PhaGeCom") are those exclusively prescribed by the CSB Prescriber.

Medicines are sold to PhaGeCom at PhaGDis with a 6% profit margin added to the SALAMA price plus packaging costs.

At the CSB (Pharmacie de détail PhaGeCom), medicines are currently sold to patients with a margin of 35% on the SALAMA price. These prices are fixed at the national level and no modification is allowed except in cases with particular instruction by Ministére de la Santé et du Planning Familial (MINSAN-PF).

#### 5-2-5 Monitoring, supervision and audit

CoGe is responsible for monthly monitoring and carries out the following activities:

Inventory of the medicines at CSB (PhaGeCom);

Review of the revenues and expenditures;

Review of the bank account; and

Reporting on the financial statement.

Supervision must be carried out whenever a problem arises in relation to FANOME implementation. The head of CSB is the first person to be involved with the supervision. SSD is required to perform supervision on regular bases. Regional health office (Direction Régionale de la Santé et du Planning Familial: DRSPF) and MINSAN-PF are also expected to carry out regular supervision. Points to be investigated during supervision are:

Security of medicines and funds;

Management of medicines and funds;

Filling in of management records;

Classification of supporting documents;

Posting the price list of medicines at pharmacy;

Payment for medicine purchase PhaGeCom at Non-Equity Fund **CSB** Beneficiaries Medicine Contribution from medicine sales Costs of medicine revenue Free medicine for the Equity Fund Beneficiary patients **Equity Fund Equity Fund** Beneficiaries

Figure 5-2 Outline of the FANOME & Equity Fund mechanism

Source: the Author

Budgeting and use of the sales revenue of the medicines; and Degree of participation of all actors.

The head of CSB conducts daily supervision by checking the recording of the RUMER and the storage of medicines at PhaGeCom. He/she also carries out supervision of Pharmacie de gros PhaGeCom management and FANOME financial management at least once a month.

A quarterly audit is carried out by an auditor who is elected from CoSan. The quarterly audit mainly focuses on the financial status and medicine stocks held by PhaGeCom. An annual audit is performed by the commune and local health officials. Points to be checked at audits include:

Stock of medicines at Pharmacie de gros PhaGeCom - amounts of medicines delivered to CSB and those remained at Pharmacie de gros PhaGeCom;

Stock of medicines at Pharmacie de détail PhaGeCom - amounts of medicines delivered to Pharmacie de détail PhaGeCom, sales revenue recorded in RUMER and stock of medicine available at Pharmacie de détail PhaGeCom; and

Financial flow - sales revenue handed to the treasurer, amount of money deposited to the bank account by the treasurer, expenditures and balance.

#### 5-3 The equity fund under FANOME

#### 5-3-1 Overall mechanism

As FANOME emphasizes the philosophy "mutual assistance for health", an equity fund is instituted at every CSB as a part of FANOME implementation as an instrument to ensure indigent people's access to health care services through the provision of medicines free of charge.

#### **Box 5-1 The Equity Fund**

#### Financial sources:

- 3/135 from the sales revenue of medicines at CSB;
- Other sources: subsidy, donation and collection of funds by the Commune.

#### Financial management:

- Opening a bank account for the equity fund by CoGe;
- Co-signatories are the treasurer of the CoGe and a representative from the Commune to CoGe;
- The check book is held by Treasurer and a record book is kept by Representative of the Commune for monitoring the account.

#### How it works:

- The flow of the "bons de soins" (voucher of medicines for the indigent) After consultation with an indigent patient, the prescriber fills in a voucher called "bons de soins". The dispenser keeps two copies one for dispersing the medicine and the other for refunding the cost from the equity fund.
- Refund for the voucher Based on the details of the voucher "bons de soins", the total price for the medicine delivered to the indigent patient is deposited into the PhaGeCom bank account from the equity fund account.

#### Notes:

- Other use of the fund The equity fund can be used for emergency cases.
- Handling donations If donations are received in the form of medicine, the value is calculated on the bases of SALAMA prices and recorded as additional funds to the equity fund. Medicines are kept and used as PhaGeCom stock.

#### 5-3-2 Targeting the eligible population

If the commune has not yet developed its own system for identifying the indigent<sup>55</sup>, the SSD, head of the CSB, and representatives from the Ministry of Population discuss and determine the numbers of indigent and the commune creates the list of indigent.

Establishing the list of the indigent is left primarily to the responsibility of the lowest administrative unit "Fokontany". The number of beneficiaries is to be determined by the commune in discussion with local health officials as the amount of funds available for the equity fund depends on the sales revenue of medicines at the CSB and mobilization of local resources in the commune. The list of indigent is to be reviewed at least once a year.

The list of the poor, once officially approved, must be available at the office of the commune and the Fokontany. In addition, two copies are kept in the CSB - one for the prescriber and the other for the dispenser to confirm the eligibility of the indigent patients when they provide consultations or deliver medicines. Those listed as indigent are to be provided either with a card or notebook for identification and are required to show the ID upon consultation at the CSB. The free medicines are provided only if the name of the person appears on the list of the indigent.

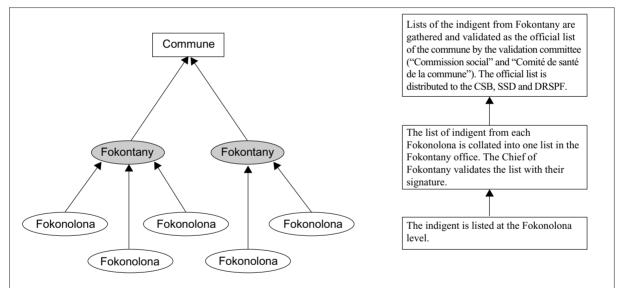


Figure 5-3 Indigent identification process

- Identification of the indigent is left up to the Fokontany (see above flowchart); the CSB is not involved in the identification process.
- The list of indigent is to be revised at least once a year.
- The validated list can be reviewed by the commune, the Fokontany and CSB.
- The prescriber and dispenser must keep the list for checking the eligibility upon consultation of and delivery of medicine to indigent patients.
- Before starting the identification of the indigent, the SSD, head of CSB, and representatives from the Ministry of Population are required to organize a meeting with the commune to discuss the identification process and criteria.
- MINSAN-PF suggested the following criteria for the identification. The eligible person has to comply with at least four of the six conditions. That they have: (i) no shelter, (ii) no source of income, (iii) no one to take care of them, (iv) have a serious chronic illness; (v) are older than 60 or younger than 18; and (vi) have a family size of more than 6.

Source: Ministere de la Santé et du Planning Familial (2004)

<sup>55</sup> There are some communes that have an existing list of indigent for charity and other uses.

#### 5-3-3 Financial sources

The main source of finances for the equity fund is from the revenue of medicines sold at the CSB's PhaGeCom. The commune, in collaboration with CoGe and CoSan, can supplement the fund by organizing fund raising activities. Subsidies from the central government, provinces and communes may also be made available.

#### 5-3-4 Management of the equity fund

#### (1) Opening of a bank account for the equity fund

CoGe is required to open a bank account for facilitating the operations of the equity fund. The account is co-signed by the commune CoGe representative and the treasurer. Monthly monitoring of the bank account is carried out by CoGe.

#### (2) "Bon de soins" or the voucher for health care of the indigent

Those who are listed as indigent can obtain free medicines at the CSB. The tool for administering this at the CSB is the "bon de soins", voucher of care for the indigent.

At registration before consultation, two copies of the voucher are handed to the indigent patient. After consultation, the prescriber fills in the voucher with the reference number of the indigent patient and details of the prescription. At the PhaGeCom, the dispenser supplies the medicines free of charge to the indigent patient as detailed in the "bon de soins" which has been signed by the prescriber. The dispenser keeps two copies of the voucher in order to:

Keep a record of medicines delivered to indigent patients; and

The treasurer to use for reimbursement from the equity fund.

The details of the voucher are transferred into the record book "carnet de bon de soins" in order to monitor the utilization of the equity fund by the beneficiaries.

#### (3) Procedures of refunding "bon de soins"

A bank check from the equity fund account is prepared for the amount indicated in the "bon de soins" and deposited in the PhaGeCom account. The two co-signatories for the equity fund bank account prepare the monthly financial report and submit it to CoGe, which in turn, reports to the commune through the CoGe President.

#### 5-3-5 Other uses of the equity fund

If the commune considers it necessary and possible, the equity fund can be also used for emergency cases. The commune can decide this additional use of equity funds and the decision must be recorded with the signature of Mayor.

#### 6. Current implementation status of FANOME and the Equity Fund

#### - the case of Boeni Region, Mahajanga province

Section 6 examines the current implementation status of FANOME through examination of the case of Boeny Region, Mahajanga province. Mahajanga province is located in the north-western part of Madagascar with a population of approximately 1,850,000 people. Regarding the overall implementation of FANOME, the province is characterized by relatively high payments to indigent patients from the equity fund, while cost recovery from the medicine sales is fairly low compared to other provinces<sup>56</sup>.

#### 6-1 Performance outcomes

This sub-section examines the implementation status of FANOME and the Equity Fund by looking at district and CSB level monitoring data. As described in Section 5, the FANOME monitoring system requires the preparation of a monitoring record form (RUMER) which is submitted to the SSD every month. Among 4 regions in Mahajanga province - Betsiboka, Boeny, Melaky, and Sofia, the district and CSB level information for this report was taken from Boeny Region for the year 2005.

Table 6-1 summarizes the present status regarding the progress of FANOME in Boeny region. Figure 6-1 and 6-2 supplement Table 6-1 in showing the proportion of listed indigent to the population and the funds available at the Equity Fund per listed indigent, respectively.

Regarding the organizational setting-up of FANOME and Equity Fund, most CSBs in the region have organized CoSan and CoGe, while in Ambato-Boeny and Mahajanga II, there are some CSB which have not yet set up the organizational structure to operate and manage the user fees scheme.

The proportion of listed indigent (Equity Fund beneficiaries) to the population is 1.36% on average in the region, ranging from 0.23% to 2.93% (Figure 6-1). Ambato-Boeny, Marovoay, Mahajanga II reports a higher proportion of Equity Fund beneficiaries to the population, 2.9%, 1.9% and 1.5% respectively. It should be noted, however, that all districts of Marovoay and a part of Ambato-Boeny are catchments of the Marovoay CHD II Equity Fund (see next section) which employs a different procedure for identifying the indigent - an ecumenical religious organization organized at each commune is responsible for the list. This fact might have influenced the greater number of indigents listed in both districts.

The proportion of indigents among those who have accessed CSB is 5% on average in the region, differing from 1% to 19% (Table 6-1). Compared to the proportion of the listed indigent to the population in Ambato-Boeny, Mahajanga I and Mahajanga II, the Equity Funds are relatively well utilized by the beneficiaries. In contrast, in Mitsinjo and Soalala, the proportion of indigents among those who have accessed CSB is below the proportion of the listed indigent to the population, which may indicate underutilization of the Equity Funds in those districts.

Funds available at the Equity Fund per listed indigent varies among SSD, ranging from 210 Ariary (0.1 US\$) to 2,163 Ariary (1 US\$) (Figure 6-2). On the other hand, the average cost for the medicine per prescription for the Equity Fund beneficiaries is 2,800 Ariary in the region; costs range from 1,200 to 11,000 Ariary.

<sup>&</sup>lt;sup>56</sup> Service de la Participation Communauteir, Direction de Developpement des Districts Sanitaires, Ministre de la Santé et du Planning Familial (MINSAN-PF).

Average costs per prescription illustrate that costs for the medicine for the non-beneficiaries are relatively lower than those of the Equity Fund beneficiaries (Table 6-1). One hypothesis is that the Equity Fund beneficiaries who are vulnerable in the society might have a tendency to seek health services at health facility only when the illness gets severe and for this reason the medicinal costs for the treatment might become more expensive. There could also be some other reasons why a medical doctors or paramedics prescribe higher priced medicines to the indigent. Further study is needed to investigate what factors are influencing this phenomenon.

Table 6-1 Implementation status of FANOME and Equity Fund in Boeny Region, 2nd semester of 2005

	Structure			Indicator						
SSD	No. of Indigent	CoSan	CoGe	Funds (Ar 10,000)			Indigent CMO (A		Ar 1,000)	Don
330				Bank	Cash	EF	utilization rate	General	Indigent	Pop <sup>n</sup>
Ambato-B	3,473	16/19	16/19	1,580	534	867	0.04	1.5	1.7	118,598
Marovoay	2,600	17/17	17/17	875	212	546	0.02	1.2	1.2	135,962
Mahajanga I	1,482	6/6	6/6	2,670	n/a	910	0.04	1.3	1.8	147,866
Mahajanga II	781	12/13	12/13	2,290	227	1,690	0.19	0.85	1.3	51,000
Mitsinjo	338	10/10	10/10	1,290	n/a	136	0.00	1.1	0	58,209
Soalala	70	9/9	9/9	11.7	1,000	45.9	0.01	2	11	29,903

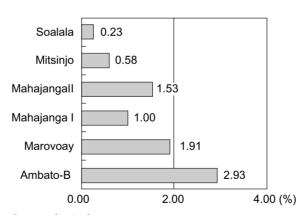
No. of indigent: Those who listed as a beneficiary of the Equity Fund CMO (Coût Moyen des Ordonnances) : Average cost per prescription

CoSan: Comité de Santé CoGe: Comité de Gestion

Indigents' utilization rate: Proportion of indigents among those who have accessed to CSB

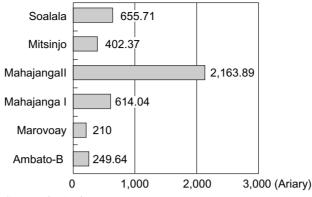
Source: DRSPF Boeny Region

Figure 6-1 Listed indigents as a proportion of the population



Source: the Author

Figure 6-2 Funds available at Equity Fund per listed indigent



Source: the Author

Table 6-2 describes the monthly average of FANOME revenue provided by each CSB in the Boeny Region in 2005 - both from direct payment from general patients and payments from the Equity Fund which consists of the reimbursement for the medicine provided to the Equity Fund beneficiaries. The amount of the revenue differs considerably both among SSD and CSB. The factors that might explain the wide range of gaps in generating FANOME revenue, as indicated by interviews with SSD and CSB from different areas in the region, include differences in population size and socio-economic status in the catchments, geographical conditions in accessing the CSB and availability of substitute health services.

More revenue from cost recovery does not necessarily mean that more indigents have benefited from the Equity Fund in the CSB. In fact, there are a large number of CSB which generate revenues from the FANOME scheme but have not benefited Equity Fund beneficiaries. Interviews with DRSPF and SSD informed us that the system for charging user fees for medicines at CSB was smoothly reinstated in the regions as the mechanism was rather similar to the former 'user financing scheme (PFU)'. In contrast, the setting up of the equity fund was moving rather slowly. The main reason for the delay is in the submitting of lists of eligible indigents by each commune. Difficulties and confusion appears to exist in making the lists of indigents eligible for the equity fund. Social stigma in being labeled as poor, insufficient information in the community on the benefits of the equity fund, and favoritism in the identification process were pointed out as some of the factors which have delayed the process of developing the list of indigents.

Table 6-2 Utilization of FANOME and Equity Fund, monthly average in 2005

	Direct payment		Payment from the		No. of	Population in the	Distance				
CSB	from patients*		Equity Fund*		EFB / No.			Urban /			
OOD	No. of	Amount	No. of	Amount	of	catchments	from SSD	Rural			
	patients		EFB	/ tinoditt	patients	Catominents					
Mahajanga I (data available at all 6 CSB)											
Tanambao-S	1,093	4,690	43	214.00	0.039	19,020	5	Urban			
Amborovy	176	1,140	2	14.20	0.009	5,020	7	Urban			
Mahavoky	793	5,810	8	78.20	0.010	n/a	n/a	Urban			
Antanimasaja	230	923	2	7.95	0.010	5,108	3	Urban			
Tsararano	379	1,780	14	123.00	0.036	19,693	2	Urban			
Mahabibo	1,814	12,300	11	93.80	0.006	73,091	0	Urban			
Mahajanga II (data	available a	t 11 out o	f 12 CSB)								
Ambalabe	n/a	264	0	0.00	n/a	3,026	97	Rural			
Ambalakida	n/a	46	0	0.00	n/a	3,007	30	Rural			
Antanambao M	63	316	0	0.00	0.000	3,388	60	Rural			
Andranoboka	n/a	337	0	0.00	n/a	3,609	125	Rural			
Bekobay	301	1,260	3	4.43	0.009	5,514	98	Rural			
Belobaka	204	960	11	86.20	0.054	8,817	10	Rural			
Betsako	n/a	1,030	5	42.70	n/a	5,216	50	Rural			
Boanamary	n/a	121	n/a	1.89	n/a	5,856	45	Rural			
Ambodimanga	304	183	4	2.73	0.013	3,935	145	Rural			
Tsarazazamandimby	n/a	297	0	0.00	n/a	1,205	130	Rural			
Mitsinjo M/no	84	302	0	0.00	0.000	1,155	80	Rural			
Mitsinjo (data availa						,					
Ambarimaninga	304	120	0	0.00	0.000	3,500	120	Rural			
Antseza	235	171	0	0.00	0.000	3,700	63	Rural			
Antsakoamanera	165	79	0	0.00	0.000	1,500	50	Rural			
Antongomena-B	168	129	0	0.00	0.000	2,000	40	Rural			
Mitsinjo	598	506	0	0.00	0.000	4,500	0	Urban			
Matsakabanja	422	531	0	0.00	0.000	13,000	25	Rural			
Antongomena Bevary	330	368	0	0.00	0.000	4,000	25	Rural			
Bekipay	150	100	0	0.00	0.000	4,800	60	Rural			
Katsepy	147	77	0	0.00	0.000	5,120	65	Rural			
Sankoany	75	49	0	0.00	0.000	2,100	70	Rural			
Tsiandrarafa	345	95	0	0.00	0.000	1,000	60	Rural			
Soalala (data availal			3)			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Soalala	237	534	3	11.60	0.014	27,149	0	Urban			
Amboroka	88	53	0	0.00	0.000	2,049	20	Rural			
Antsakoamileka	116	100	0	0.00	0.000	841	30	Rural			
Andranomavo	112	113	0	0.13	0.001	3,357	83	Rural			
Vilanandro	68	212	0	0.18	0.002	2,984	63	Rural			
Ambohipaky	180	224	0	0.00	0.000	2,415	93	Rural			
Ambatolafia	n/a	172	0	0.00	n/a	1,518	80	Rural			
Maroaboaly	n/a	79	0	0.00	n/a	638	60	Rural			
Ambato Boeny (no			0	0.00	117 4		30	- North			
Marovoay (data available at 3 out of 18 CSB)											
Ankaboka	49	20	0	0.00	0.000	6,010	56	Rural			
Bemaharivo	119	68	1	0.29	0.005	8,789	57	Rural			
Maroala	228	218	2	3.34	0.003	3,901	32	Rural			
Iviaioaia	220	210	2	J.J4	0.000	3,501	52	ituiai			

Amount: 1,000 Ariary

Source : Service de la Participation Communauteir, Direction de Developpement des Districts Sanitaires, Ministre de la Santé et du Planning Familial (MINSAN-PF)

<sup>\*</sup> Figures indicate the monthly average.

#### 6-2 Some issues concerning the FANOME and Equity Fund implementation

Despite more than two years of operation, valid and detailed data and information on performance and impact of FANOME and the Equity Fund is rather limited. It is, therefore, still premature to make definitive conclusions about the performance of the policy. However, a descriptive summary of the data presented, together with information obtained through the field interviews, suggests that there are some pertinent issues that need close consideration concerning the implementation of FANOME and Equity Fund.

#### 6-2-1 Variations in the performance of FANOME and Equity Fund

The scheme monitoring data of Boeny Region in 2005 suggests that there are mainly three types of variation in the performance of FANOME and Equity Funds in terms of drug sales revenue and utilization of the Equity Fund by the beneficiaries. Those three variations are:

An Equity Fund which shows good performance both in terms of revenue from drug sales and utilization:

An Equity Fund with better performance in revenue from drug sales and with poor performance in utilization; and

An Equity Fund with poor performance both in drug sales revenue and utilization.

Many of the CSB in Boeny region fall into the second performance group.

#### 6-2-2 Revenues from sales of medicine

Gaps were observed in the amount of FANOME revenue raised among CSB within a district and between different districts. Field interviews have pointed out some factors which may have influenced these gaps: (i) the size of the population which the CSB covers, (ii) economic status of people in the catchment areas, (iii) geographical conditions in accessing CSB, and (iv) availability of substitute health services and people's preferences in accessing them.

#### 6-2-3 Issues concerning the Equity Fund

Wide variations were observed in the implementing status of the equity fund - some CSB have demonstrated constant progress, some have larger funds but have not benefited many beneficiaries, and some have not yet prepared to start operation. The factors which determine these variations have not yet been thoroughly explored.

The numbers of the eligible indigents identified so far is rather small - 1.36% of the population in Boeny Region. Madagascar is a country which has one of the lowest income levels with a poverty incidence rate of 73.6% in 2003 (poverty intensity 40.8%). The government has set a target of providing 80% of indigents with access to health care services in accordance with the Poverty Reduction Strategy Paper (PRSP). Further issues need to be examined including how to benefit a larger number of the low income population within the existing policy scheme (FANOME and the equity fund) and what kind of complementary system can be developed to strengthen the existing scheme.

The most difficult part of implementing the equity fund seems to be the listing of eligible indigents. Field interviews pointed to a number of factors which may have affected the identification process: (i) social stigma in being labeled as poor, (ii) insufficient information on the benefits of the equity fund and

#### (iii) favoritism in the identification process.

Financial resources appear to be another critical issue concerning the mechanism of the equity fund. The FANOME guidelines state that the major source of income is 3/135 of medicine sales. The equity fund is allowed to receive donations and subsidies and to conduct income generating activities. There is no regular subsidy fixed from either the central and local government. The monitoring record of FANOME and the Equity Fund demonstrates that funds available at Equity Fund per beneficiary are much lower than the average cost for medicine per prescription. This mechanism may affect the identification process of the indigent. During field interviews, some CSB indicated that the commune tries to balance or rather minimize the number of indigents listed in order for them to fit within the estimated sales revenue of medicine at CSB.

#### 6-2-4 Monitoring and information

Availability of monitoring data also differs considerably from one district to another. Field observations suggest that the factors influencing this gap include the skill capacity of the staff and the physical infrastructure at the SSD. The provision of training activities for monitoring, recording and accounting appears to be indispensable in order to avoid confusions with and the misunderstanding of monitoring indicators and forms.

#### 7. Other related activities in Madagascar

In addition to the equity fund associated with the new cost-recovery system introduced by MINSAN-PF, both government and non-government organizations have initiated or been piloting various types of exemption mechanisms or risk-sharing schemes for health care. A piloting of a community based health insurance scheme has been in progress at the CHD II in Itaosy with WHO support. CHD II Marovoay has recently instituted an equity fund with the assistance of Gesellschaft für Technische Zusammenarbeit (GTZ). Some NGOs such as Sahan' Asa Hampandrosoana ny Ambanivohitra (SAHA) are experimenting with a community based health insurance scheme within a specific geographical area. Some micro-finance institutions have also set up certain forms of credit for health care services such as hospitalization.

#### 7-1 Community-based insurance in CHD II Itaosy (in collaboration with WHO)

#### 7-1-1 Context and objectives

Despite the fact that introduction of the uniform user fee system (PFU) has led to increased utilization and better supply of medicines at CSB, the overall utilization is still low - reaching 45% at its highest peak in the PFU period (1998-2002). Furthermore, the charging of user fees has imposed a barrier on lower income households' access to health care services. In addition, parallel financing practices (under the table charges) existed over the period of PFU, which made it even more difficult for the poor to access health care services. Due to this situation, WHO undertook a number of studies on health financing in Madagascar and came to the conclusion that alternative user financing schemes might be needed to complement the direct payment system. In relation to this, a project piloting a community based insurance scheme was designed and implemented in 2003 based on the CHD II in Itaosy with the support of WHO. The pilot project aims to improve access to quality health care through the establishment of community based health insurance.

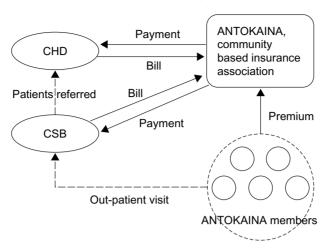
#### 7-1-2 Contents and structure

ANTOKAINA, a community based insurance association was created to implement the scheme. The association has an office in CHD II in Itaosy and covers two communes, Itaosy and Bemasoandro.

To become a member of the association, each household pays a premium of 5,000 Ariary per year. After receiving four consultations whose costs are totally reimbursed by the insurance, the member has to buy an additional "moderator ticket" costing 300 Ariary for each subsequent consultation. Upon enrolment, each household is required to submit an ID card, a residence certificate from Fokontany, two photos of each family member, and the annual premium. Members have to be a residence of one of the two communes that the insurance association covers.

Upon becoming ill, (i) the member goes to the association and receives a guarantee form, (ii) after consultation with the doctor at the CSB/CHD, the doctor fills in the form with the price of services/ medicines received, (iii) the member leaves half of the form with the doctor and takes the other half to the association, and (iv) the association settles the payment at the CSB/CHD according to the details on the form the members has brought. All patients have to visit the CSB for consultation, before being referred to CHD in the case of severe illness. Insurance covers the costs of medicines prescribed at CSB and CHD and

Figure 7-1 Mechanism of the community based insurance in Itaosy CHD II



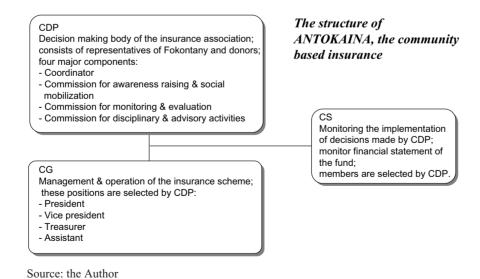
Source: the Author

health service costs including consultation, radiology and laboratory examination<sup>57</sup>.

ANTOKAINA consists of three committees: Comité de développement du prépaiement de la commune ou du district (CDP), Comité de surveillance (CS) and Comité de gestion (CG). CDP is the decision making body that operates the insurance scheme. The CDP is composed of three committees with different functions, a committee for: (i) awareness raising and social mobilization, (ii) monitoring and evaluation, (iii) disciplinary and advisory activities. The coordinator is selected from the community to monitor the activities of CDP. The CS is responsible for monitoring the activities of the association to ensure that all decisions made by CDP are carried out. It also examines the financial status of the association. The CG is the operating and management body of the insurance scheme. It is composed of a president, vice president, treasurer and assistant who are elected at the assembly of CDP.

Financial sources for ANTOKAINA come from the annual premium paid by member and financial

Figure 7-2 The structure of ANTOKAINA



<sup>&</sup>lt;sup>57</sup> Under FANOME, consultation is free of charge at CSB and after the suspension of PFU, accommodation for in-patients are not charged to patients at CHD.

Table 7-1 Use of CHD II by members of the community based health insurance scheme in 2004

Month	Mate	rnity	Onorotion	De	ntistry	Post-natal	I litro cound	V	In-	Conquitation
Month	Child-Birth	In-patient	Operation	Care	Extraction	consultation	Ultra-sound	X-ray	patient	Consultation
January	6	0	0	0	6	2	0	0	2	1
February	3	1	3	4	9	0	0	0	0	9
March	1	1	4	8	19	0	1	0	3	11
April	3	1	1	27	19	2	0	2	1	11
May	2	1	2	14	6	0	1	2	1	15
June	6	2	0	14	17	0	1	2	4	10
July	1	0	3	15	11	0	2	4	2	15
August	3	2	3	4	39	0	0	1	0	9
September	2	2	3	17	12	1	3	5	1	11
October	4	4	2	9	8	0	2	2	5	15
November	6	1	0	11	15	0	2	6	0	14
December	4	1	1	7	7	0	3	0	4	11
Total	41	16	22	130	168	5	15	24	24	132

Source: ANTOKAINA

support/donations from various organizations. The major use of funds are the reimbursement of members health care costs, salaries of two CG members who look after the day to day running of the office, a payment incentive for the CDP coordinator and other expenses necessary for the operation of the insurance fund.

The association has a quarterly meeting with chief doctors at the CHD and CSB and the SSD médecin inspecteur to discuss the quality of care that members have received and complaints made; and, the association also gives members hygiene education.

# 7-1-3 Current status of implementation

As of February 2005, there are 513 member households (1,836 individual beneficiaries) in the community insurance scheme. The project is targeting to register 2,000 member households in order to secure the financial sustainability of the scheme. There are some constraints observed in recruiting members: (i) the benefit of the insurance scheme to the community is not very clear, (ii) perceived uncertainty in becoming ill, and (iii) becoming a member requires two photos of each family member, which can cost higher than the premium<sup>58</sup>. In October 2005 ANTOKAINA will celebrate its two-year anniversary since starting operation and will renew the CG member due to their completion of term.

# 7-2 Willingness-to-Pay (WTP) study for community based health insurance<sup>59</sup>

## 7-2-1 Context and objectives

Financing health care in developing countries often relies on a number of methods, each having benefits and drawbacks. This study tries to examine the potential contribution of a community health insurance system towards increased access to health services in Madagascar and was undertaken with using the data from EEEFS. Its findings rely on the data provided in the analysis of the contingent valuation question from the use exit survey and the random household surveys to value the potential of a community based insurance scheme.

<sup>58</sup> The information on the constraints was based on the interviews with CG of ANTOKAINA and WHO Madagascar.

<sup>&</sup>lt;sup>59</sup> Minten, Over et al. (2004)

#### 7-2-2 Methods

A Willingness-to-Pay question was formulated in order to evaluate the community's potential acceptance to pay for a community based insurance scheme. To introduce the scenario, households participating in the survey were asked if they had ever heard about the insurance scheme and if somebody in the household was a member of such a scheme. If they have not heard of the scheme, then the scheme was explained and the possibility to join was offered. "Community based health insurance" in this study refers to a scheme in which community members pool resources to share the financial costs of health care. In such a system, the community itself would collect and manage the premiums. A short and a long model were developed to evaluate the importance of the covariates in assessing the willingness of the community to contribute. The short model was estimated as a simple function of an intercept and natural log of the bid level, while for the long model, the x vector included the covariates. The regressions were estimated using the Huber/White/sandwich estimator of variance in place of the traditional calculation.

# 7-2-3 Study results

The study results show there is potential demand for community based insurance as a significant number of people are willing to participate in such a scheme; regression analysis indicates, however, that the extreme poor are less willing or able to contribute.

Determinants of the Willingness-to-Pay for insurance were also analyzed:

**Price of health care**: WTP for community insurance is highly responsive to price - a price increase from 50 to 250 Ariary per member would reduce the percentage of households willing to pay for the insurance from 75% to about 44%.

**Poverty**: The results illustrate the importance of poverty related variables on the probability in accepting the insurance scheme - in the case of the household moving from the lowest poverty category to the highest, the probability of joining the scheme would increase by 13%.

Composition of the households: Larger size households are much less likely to contribute to an insurance scheme; the larger the percentage of economically active persons in the household, the higher the likelihood that they refuse to contribute.

*Current health practices*: The higher the percentage of household members who currently have their health care costs reimbursed by their employer the less likely they would be to contribute to the insurance scheme; current users of health facilities are less likely to join; and, households that are not aware of the suspension of user fees are less likely to join.

# 7-3 The Equity Fund at CHD II Marovoay (in collaboration with GTZ)

## 7-3-1 Context and objectives

FANOME introduced an equity fund at the CSB level as a protective measure for the poor to access health care services. The equity fund, however, has covered a limited number of the population and has not yet integrated any mechanism to cover hospital care. CHD II in Morovoay has suffered from under-utilization and late-use of hospitals by people in the catchment areas - hospital records show that the majority of hospital deaths occur within 48 hours of admission. Although a number of constraints limit access to hospital care including geographical difficulties in traveling to the hospital and people's preferences for alternative medicines, financial factors appear to be critical, particularly for lower income

Reimbursement Equity **BEFE** CHD Fund Bill Management Patients AS **Patients** Indigent via IP **UDAC** Monitoring GOAD CSB Patients visit Indigent via IA

Figure 7-3 Mechanism of the Equity Fund in the CHD II Marovoay

Source: the Author

groups. In consideration of this situation, CHD II in Marovoay, with cooperation from GTZ-KfW, decided to institute the equity fund as a support measure. The objective of the equity fund is thus, to alleviate financial barriers for low income populations in accessing health care services through the provision of medical goods and services free of charge.

#### 7-3-2 Contents and structure

The CHD II equity fund in Marovoay covers the districts of Marovoay and Amboto Boeni with an approximate population of 300,000 people. The fund covers: (i) all medical expenses for eligible patients at the CHD, (ii) their food while being hospitalized and (iii) return trip costs for the patients and one accompanying person attending the hospital.

The equity fund employs two different procedures for identifying eligible indigents - active identification (Identification Activates: IA) and passive identification (Identification Passivates: IP). Active identification aims at identifying the most vulnerable households, estimated at roughly 5% of the population. Various religious groups serving in the area formed a group (Groupe œcuménique d'Assistance aux Démunis: GOAD) to draw up a list of indigent households for each commune using a list of indicative criteria. The lists of indigents from all communes are submitted to the CHD II Marovoay and CSB in the covering area to facilitate the referral system between health service providers.

Passive identification tries to identify patients who have not been identified through active identification but who have revealed an inability to pay for medical costs upon visiting the hospital. This relates to the 15% at the lowest income quintile of the population including those who suffer from temporary/seasonal poverty. Identification of eligibility is undertaken by the assistantes sociale (AS) at the hospital during the admission of the patient through a semi-structured interview. All women who require emergency obstetric care, no matter what their socio-economic status, are financed by the equity fund.

UDAC, a local NGO, is responsible for monitoring the quality of the identification, both active and passive, by visiting those who are on the list of indigent or who are exempted from paying for hospital care via passive identification. They are also working on creating a list of criteria to identify indigents based on empirical observations of the characteristics which are commonly shared by recipients of the equity fund.

This list will be used as a tool for future identification of eligible indigents for the equity fund.

Those identified through active identification, upon becoming ill, first visit the CSB and if they need hospital care, will be referred to the CHD II. In order to travel to the hospital, GOAD provides transportation costs. At the hospital, the assistantes sociale receive the indigent patients to confirm whether they are on the list and then the patients are given treatment. In the case of passive identification, those who visit the hospital, either referred or self-referred, and who present as not being able to pay for the hospital care will be sent to the assistantes sociale. After the semi-structured interview, if they are identified as an eligible indigent, they receive treatment free of charge and their transportation costs are refunded.

The preparatory study calculated that 750 patients and 120 women in need of emergency obstetric care would profit from the equity fund at the estimated cost of 293 million FMG in the first year<sup>60</sup>. The equity fund is supported by a co-financing scheme whose budget was 196 million for medical expenses (provided by KfW), 36 million for food and transportation expenses (made up from the hospital budget from the central government and local funding), 30 million for administrative expenses (provided by KfW) and 30 million for monitoring and research expenses (provided by GTZ). Approximately 90% of the budget is currently supported by external funding, either from KfW or GTZ. The project, however, has been exploring some possible options in which the central government and local funding sources gradually take over the financing of the scheme.

The equity fund has introduced a fixed pricing scheme for treatment of beneficiaries. The simpler accounting procedure of this scheme is expected to assist the management of the equity fund. It is also expected to assist medical staff in making more rational clinical and therapeutic decisions at the hospital.

The equity fund is managed by the Bureau Exécutif du Fonds d'Equité (BEFE) which meets every month. BEFE consists of a SSD médecin inspecteur, a GTZ-KfW technical advisor, a representative from each religious organization, a representative of the CoSan de District and representative from the Direction Provinciale de la Population. BEFE is responsible for the approval of expenditure, monitoring the number of recipients treated, and developing strategic decisions for the operation of the equity fund.

The equity fund also incorporates a system of providing financial incentives for hospital staff in order to facilitate greater interest in the equity fund. The financial sources of the incentives are 10% of the fixed price for medical services and 25% of the 35% profit margin of medicinal costs.

# 7-3-3 Current status of implementation

The equity fund started on 27 January 2005 and has received 113 beneficiaries as of October 2005. There are three major challenges for the scheme. Firstly, in dealing with seasonal poverty, the equity fund has also started a credit scheme on a trial basis, which may lead to further consideration of a pre-payment scheme. Secondly, a referral network needs to be established between the CHD II and CHU in Mahajanga to transfer indigent patients to the higher level of hospital care, and lastly, sustainable financial sources need to be found for the continuation of the equity fund.

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# 8. Issues concerning user fees policy and accompanying protection measures for the poor, and the contribution of international cooperation agencies

# 8-1 Implications from examination of the experience to date

Ballooning health care costs have forced governments in low- and middle-income countries to impose user fees for health care services - partial or full payments for health care services by health consumers. User fees policy is promoted as a response to scarce and inequitably distributed resources and is intended to generate revenue that can be used to improve health services. User fees, if applied indiscriminately, have the potential to impose catastrophic costs on low income households at a time when they are most vulnerable - when a household member is sick. This can drive households into, or further into, poverty. The policy challenge is therefore to implement user fees policy in such a way as to generate revenue without disadvantaging the poor.

Despite nearly two decades of international experience with health care user fees policy, information on performance and impact of user fees policy and accompanying fee exemption measures is rather limited<sup>61</sup>. Reliable evidence of the outcomes of the policy from different settings is sparse<sup>62</sup>. The review of available evidence in Section 2, 3 and 4 suggests, however, that the conditions in which user fees of health care services will improve health service effectiveness, efficiency and equity are more difficult to satisfy than has previously been thought. Several studies on the impact of user fees on health care service utilization and demand indicate that user fees are likely to result in deterioration in the utilization of health care services, particularly among the poor. Several studies on measures to exempt the poor from paying for health care services indicate that many measures do not seem to have performed effectively in securing equitable access to health care services.

As previously mentioned, however, governments in low- and middle-income countries continue to struggle with the question of how best to finance their health care systems. Severe resource constraints may necessitate policy makers to consider user fees as one pragmatic measure to meet the increasing demand for health care services, particularly when restructuring government budgets in favor of health care services will not be immediately feasible. Under such conditions, the challenge is how best to implement user fees policy along with accompanying protection measures for the poor in such a way as to achieve two conflicting policy objectives - financial viability and equity gains.

There are large gaps in knowledge in the area regarding user fees policy implementation. Whilst a considerable number of studies have been conducted on user fees systems, there are very few that directly try to address the "how" and "why" questions of user fees policy implementation, such as how user fees schemes are actually implemented and why many of them have not produced the outcomes expected. While many studies have focused on analysis of the demand side of the implementation process, less attention has been paid to how introduction of user fees systems influences the behavior of various actors on the supply side, such as health administrators and front-line service providers.

Examination of the experience of user fees policy and accompanying fee exemption measures for the

<sup>61</sup> Reddy and Vandemoortele (1996)

<sup>62</sup> Palmer, Mueller et al. (2004)

poor in Madagascar suggests a number of contentious issues concerning policy implementation. Problems identified include: wide variations in the progress of policy implementation in different geographical areas; large gaps in the amount of drug sales revenue between health centers in the same district and between different districts; small numbers of the eligible beneficiaries identified so far; intricate problems in the listing of eligible indigents; and financial uncertainty concerning the mechanism of the equity fund. Further investigation is necessary to determine the factors influencing these issues in order to reorient the policy to produce effective outcomes.

There is a need for studies that attempt to examine the implementation process of user fees policy and fee exemption measures for the poor and to identify the problems and issues that arise in the implementation process and the policy outcomes. The implications drawn from such studies will inform policy makers and international policy debates on user fees policy, in particular regarding effective and equitable implementation of user fees policy for health care systems and services.

# 8-2 Potential areas for international cooperation and the role of Japan International Cooperation Agency (JICA)

Despite nearly two decades of international interest in health care financing issues, governments in low- and middle-income countries continue to face problems regarding how to finance health care systems with scarce and inequitably distributed resources. Though past experience may indicate caution in introducing the policy, user fees may be one pragmatic instrument for policy makers to consider to generate resources to finance health care services. In such cases, the question is how best to implement the user fees policy in such a way as to maximize efficiency gains, minimize equity losses, and ensure equity for those accessing health services. To this effect, there is a scope for contributions and participation from international cooperation agencies.

Focusing on policy implementation issues, there may be three different types of contributions that international cooperation can take part in regarding user fees policy and accompanying fee exemption measures for the poor in low-and middle-income countries. These include contribution to knowledge, contribution to policy implementation, and contribution to policy debate.

# 8-2-1 Contribution to knowledge

A review of literature reveals that studies on the following topics are scarce:

How user fees schemes with accompanying protection measures for the poor are actually implemented and why many of them have not produced the expected outcomes; and

How the introduction of user fees systems and protection measures for the poor have influenced the behavior of various actors on the supply side of the implementation process, such as health administrators and front-line service providers.

Assisting in the accumulation of these studies will contribute to narrowing knowledge gaps and building an evidence base. Policy implications drawn from these studies will feed policy debate on user fees policy among policy makers and international partners concerned with effective policy implementation.

Contribution to knowledge in the above areas through the conducting of a research programme or through collaborative research with JICA are a couple of options. Much research that has been conducted

so far regarding health financing issues remains small scale, with findings of restricted applicability<sup>63</sup>. There is also an absence of well designed large scale evaluations on the effect of alternative financing interventions and a multitude of case studies offering descriptions of specific experiences but with little methodological rigor<sup>64</sup>. Good quality research conducted using sound methodology on the above issues will contribute to increasing knowledge on financing health care systems that can be useful to policy makers in low- and middle-income countries who are facing questions on how to finance effective, efficient and equitable health care services.

Secondly, contribution to narrowing the knowledge gap is possible via "technical assistance" through piloting various types of fee exemption measures and risk-sharing schemes within the scope of user fees policy. This will allow examination of the implementation process of those schemes as well as their performance outcomes in particular settings and help determine possible relationships between outcomes and factors that arise in implantation process. It is indispensable that feed-back of the pilot project be shared with policy makers and all other related actors so that the results of the pilot project conducted in one particular setting can be synthesized with other related pilot activities and thus contribute to national level policy formation and re-orientation of existing policy.

# 8-2-2 Contributions to strengthening existing policy implementation at district levels and below

Examination of the two-years of experience of user fees policy and fee exemption measures in Madagascar suggests that there are a variety of problematic issues that had arisen at the policy implementation level indicating that further input is needed in the process to make the policy implementation more robust.

The following forms of assistance, for instance, at the level where policy is actually implemented may contribute to strengthening the implementation process of the existing policy:

Providing training for policy implementers, such as health administrators, health service providers and community participants by providing necessary skills in order to implement the policy effectively;

Providing information on and communication about the policy for people to be aware of and better understand the policy objectives and contents; and

Conducting monitoring and evaluation of the policy to assess the policy performance and effectiveness.

The provision of assistance in these areas may be possible through "technical assistance" that both directly and indirectly addresses health financing issues. For instance, a technical assistance project that intends to improve the district health care delivery system may contain health financing as one aspect of project activities to secure sustainable resources to finance health care services as well as to alleviate financial burden from low income households in accessing services. When the government introduces user fees policy with accompanying protection measures for the poor, the existence of the technical assistance project at district level where the policy implementation takes place, can assist through the provision of training for the necessary skills regarding policy implementation, develop communication tools and

64 Ibid.

<sup>63</sup> Ibid.

strategies to disseminate the policy objectives and mechanism, and improve monitoring systems of policy performance.

# 8-2-3 Contribution to the debate on policy formation

Knowledge gained from research conducted as well in assistance with actual implementation of the policy should assist policy makers and managers by contributing to the formation of new policies and evaluation of the implementation process of existing policies. This will be realized through participating in various forms of policy debates which may take place in central government and among bilateral and multilateral donor agencies.

When JICA provides assistance for studies and/or actual implementation of user fees policies, results of those activities should be well disseminated. Efforts should be made to make reports and results available to the wider public in various forms such as publication in international journals, presentation at public forums, and communication through the use of internet tools.

During the ongoing process of the technical assistance or research project, constant communication with policy makers and partner organizations, through the provision of feed-back of activities or the holding of regular meetings for discussion, is indispensable for study results or project experience to find a receptive audience. In doing so, project activities in a particular setting can also avoid being isolated from related activities and the surrounding policy environment and, together with other related projects and programs, can contribute to feeding the policy debate at the national level. In order to facilitate participation in policy debates, the allocation of a technical advisor within the line-ministry is suggested.

# Annex 1 Review of selected literature on user fees and other health financing schemes

Literature, study type	Payment type	Impact of health financing scheme
Moses 1992 (Moses, Manji et al. (1992)) Kenya Before and after	User fees National policy introduced in 1989. Outpatient registration fees were removed in 1990.	<ul> <li>• No evidence of an increase in attendance over the course of the user-charge period among either men or women: during the user-charge period, monthly attendance of men decreased to 40% of that before fees were levied; for women, monthly attendance during the user-charge period was reduced significantly to 65% of the pre-user-charge level; mean monthly attendance by women rose in the post-user-charge period to 22% above the pre-user-charge level.</li> </ul>
Litvack 1993 (Litvack and Bodart (1993)) Cameroon Controlled before and after	User fees (revolving drug fund) Initiated in 1991 in two provinces.	Utilization  • Probability of using the health center increased significantly for people in the "treatment" areas compared to those in the "control" areas.  Quality of services  • Travel and time costs involved in seeking alternative sources of care are high; when good quality drugs became available at the local health center, the fee charged for care and treatment represented an effective reduction in the price of care and thus utilization rose.  Access among the poor  • Probability of the poorest quintile seeking care increased at a rate proportionately greater than the rest of the population. Since the poor are most responsive to price changes, they appear to be benefiting from local availability of drugs more than others.
McPake 1993a (McPake, Hanson et al. (1993)) Burundi, Guinea, Kenya, Nigeria, Uganda Case study	Drug revolving fund (Bamako Initiative programs) Kenya: the first Bamako Initiative projects began in 1989. Guinea: EPI/PHC/Essential Drugs Project predates the formal launch of the Bamako Initiative in 1987. Nigeria: The Nigerian National Primary Health Care Program launched in 1987 with a component of the drug revolving fund, followed by the Bamako Initiative project in 1989. Burundi: Drug revolving fund began in 1991. Uganda: User fees preparation underway in 1989-1990.	<ul> <li>Quality of services</li> <li>The quality of services included in the Initiative's activities (drug availability) in the five countries was highly variable.</li> <li>The community's perceptions of quality (perceived quality) appear that on the whole the Initiative is at least capable of achieving improvements. However, it was more difficult to determine whether perceptions of the trends in quality were related to the Initiative's activities directly.</li> <li>There is a need to ensure against over-prescription and commercialization and to ensure that incentives for utilizing the most appropriate levels of care are maintained (prescribing habits).</li> <li>Cost recovery</li> <li>Although success in raising substantial revenues has been mixed, in some countries, substantial funds have been generated and used to achieve real improvements in health services.</li> <li>Access among the poor</li> <li>Price structures used by the Initiative need to consider the access of marginalized groups.</li> <li>Others</li> <li>In most cases, the Initiative's activities provide a service which is cheaper when all costs to the household are taken into account, than was available before.</li> <li>'Environmental' characteristics were identified as instrumental factors for successful implementation of the Initiative. Those characteristics are: a tradition or not of 'free' services; the adequacy of current resource availability and immediately preceding the introduction of the Initiative; the existing stage and nature of decentralization within the country; and competition the Initiative's activities face with alternatives.</li> </ul>

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Literature, study type	Payment type	Impact of health financing scheme
McPake 1993b (McPake (1993)) Africa, Asia, Latin America Literature review	User fees	Utilization and quality of services  • The inability of the studies to explicitly model quality may be responsible for the generally insignificant results attached to price, if quality is positively related to price and the unmeasured quality-utilization relationship is also positive. This problem may be overcome if user-fees are used to improve the quality of services offered in the government facilities. It has been shown that it may be possible to avoid overall welfare losses in the health sector if revenues are re-invested. However, one study has shown that at least some revenues have not only failed to be re-invested into the system but have actually been allowed to shrink in a non-interest bearing account. This issue has been relatively neglected in reviews of user fee policy implementation but is clearly critical.  Cost recovery  • User charges will raise gross revenue in the majority of cases. However, net revenues will only be raised if the costs of administration of the system are not too high relative to its efficiency in collecting fees. Evidence suggests that the efficiency of fee collection is not generally high. Therefore, success in raising substantial revenue has not been marked. While a number of requirements of an effective administrative system can be identified, much of the problem has been attributed to administrative capacity and leadership commitment.  Access among the poor  • The policy is likely to have regressive implications which will not be easy to reverse using exemption
		policy. Although many studies have concluded that a policy of price discrimination by facility, geographical area and service is the most practical way of trying to counter the problem, this policy poses implementation difficulties.
Diop 1995 (Diop, Yazbeck et al. (1995))	User fees and Community based health insurance Pilot test carried out in 1989 by	Utilization  • Higher access for women, children, and the poor resulted from the tax plus fee method, than from the pure fee-for-service method.  Cost recovery
Niger Controlled before and after	Niger government on a fee-for- service financing mechanism and a local social financing mechanism, a tax plus fee-for- service.	Revenue generation per capita under the tax plus fee method was two times higher than under the fee-for-service method.
Gilson 1995 (Gilson, Russell et al. (1995)) Africa, Asia, Latin America Literature review	User fees, Targeting mechanism, and Exemption	Access among the poor  • Evidence of the effectiveness of targeting mechanisms to protect the poor in the health sector is relatively sparse and no study explicitly compares the effectiveness of direct and characteristic targeting. However, the evidence suggests that exemption practices are often ineffective.  • The ineffectiveness of characteristic targeting in promoting equity is most obviously illustrated by the eligibility of the non-poor for exemption.  • There are considerable informational, administrative, resource and socio-political constraints undermining the development of effective targeting mechanisms.

Literature, study type	Payment type	Impact of health financing scheme
Haddad 1995 (Haddad and Fournier (1995)) Zaire Before and after	User fees Pilot project (fee-for-service plus drug sales) in one health zone launched in 1982.	<ul> <li>Utilization</li> <li>The utilization of health services had diminished by close to 40% over 5 years (1987-1991) and 18-32% of this decrease is explained by cost.</li> <li>Quality of services</li> <li>The regular supply of drugs and the improvement in the technical quality of the services (technical qualification of the staff, allocation of microscopes, and renovation of the infrastructure) was not enough to compensate for the additional financial barriers created by the increased cost of services.</li> <li>On a local level, the interpersonal qualities displayed by some of the nurses sometimes helped to compensate for the negative effects of the costs, and even to increase the level of utilization of some health centers.</li> </ul>
Mbugua1995 (Mbugua, Bloom et al. (1995)) Kenya Before and after	User fees National policy introduced in 1989, Outpatient registration fees were removed in 1990.	Utilization  • Attendance at government fee-charging health facilities for both outpatient and inpatient care was lower during the period when full fees were charged. Outpatient attendances rose again when the registration fees were lifted.  • The study households reported lower levels of utilization of public hospitals and health centers when full fees were in force than during the period after the registration fees were lifted.  • The pattern of utilization by young children, who were exempted from fees, mirrored that of the rest of the population, suggesting that they were not fully protected from the adverse effects of fees.  Access among the poor  • The poorest households made much less use of the fee-charging government facilities than the better-off households.
Mwabu 1995 (Mwabu, Mwanzia et al. (1995)) Kenya Cross sectional	User fees National policy introduced in 1989. Outpatient registration fees were removed in 1990.	<ul> <li>Utilization</li> <li>During the period of cost-sharing in public clinics, attendance dropped by about 50%. This drop prompted the government to suspend fees for approximately 20 months.</li> <li>Over the 7 months after suspension of fees, attendance at government health centers increased by 41%. The suspension further caused a notable movement of patients from the private sector to government health facilities.</li> <li>Cost recovery and quality of services</li> <li>The revenue generated by user fees covered 2.4% of the recurrent health budget. Some 40% of the facilities did not spend the fee revenue they collected, mainly due to cumbersome procedures of expenditure approvals.</li> </ul>
Nolan 1995 (Nolan and Turbat (1995)) Sub-Saharan Africa <i>Literature review</i>	User fees	<ul> <li>Utilization</li> <li>In Sub-Saharan Africa, fees have been associated with declining utilization levels in enough cases to make this a real concern. Although it has not fully demonstrated that the fall in utilization has been concentrated among the poor, this is likely to have been the case.</li> <li>Quality of services</li> <li>It appears that cost recovery at the facility or community level has helped improve the drugs supply in a considerable number of projects across different countries.</li> <li>Cost recovery</li> <li>At the national level, user charges in public health facilities have in most cases raised only modest resources. A small number of countries are raising 5-10 % of their total recurrent expenditure, but most do not appear to</li> </ul>
		be approaching such levels.  Access among the poor  Both the research and policy literature and official policy statements focus on "protecting the poor" via exemptions or differential fees. What is meant by "the poor" is seldom made clear.

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Literature, study type	Payment type	Impact of health financing scheme
Collins 1996	User fees	Utilization
(Collins, Quick et	National policy introduced in	• The 1989 outpatient registration fee led to an average reduction in utilization of 27% at provincial
al. (1996))	1989, Outpatient registration	hospitals, 45% at district hospitals, and 33% at health centers.
Kenya	fees were re-introduction of an	• In contrast, phased introduction of the outpatient treatment fee beginning in 1992, combined with
Before and after	outpatient removed in 1990.	somewhat broader exemptions, was associated with much smaller decreases in outpatient utilization.
	Gradual treatment fee started in	· It is suggested that implementing user fees in phases by level of health facility is important to gain patient
	1992 and carried out in phases.	acceptance, to develop the requisite management systems, and to orient ministry staff to the new systems.
Reddy 1996 (Reddy	User financing for basic social	Utilization
and Vandemoortele	services.	• User financing can result in a sharp reduction in the utilization of services, particularly among the poor.
(1996))		Cost recovery
Africa, Asia, Latin		<ul> <li>The potential of user financing for resource mobilization should not be exaggerated.</li> </ul>
America		Access among the poor
Literature review		• Protecting the poor through price discrimination has proved extremely difficult in practice, and
		exemption schemes can be costly to administer.
		• Gender biases, seasonal variations and regional economic disparities can aggravate the effects of user
		financing on equity.
Gilson 1997	User fees	Utilization, quality of services, cost recovery and access among the poor
(Gilson (1997))		<ul> <li>When introduced by themselves, fees are unlikely to achieve equity, efficiency or sustainability</li> </ul>
Sub-Saharan Africa		objectives. They should, therefore, be seen as only one element in a broader health care financing
Literature review		package that should include some form of risk-sharing.
		Implementation and other issues
		· Achievement of equity, efficiency and, in particular, sustainability will require the implementation of
		complementary interventions to develop the skills, systems and mechanisms of accountability critical to
		ensure effective implementation.
		• There is a greater potential role for fees within hospitals rather than primary facilities.
N	Harristana	• The process of policy development and implementation is an important influence on effective implementation.
Nyonator 1999	User fees	Cost recovery and access among the poor
(Nyonator and	National policy instituted in 1985	• Health facilities in the Volta Region have achieved a kind of 'sustainable inequity', with fees enabling service
Kutzin (1999))	Revolving drug fund introduced	provision to continue, while concurrently preventing lower income populations from using these services.
Ghana	nationwide in 1992.	• The level of revenues being mobilized accounts for between two-thirds and four-fifths of the non-salary
Case study		operating budget of government health facilities.
		• Official exemptions are largely non-functional. Less than one in 1000 patient contacts were granted
		exemption in 1995. The failure of exemptions to function means that fees are preventing access for the
		poor, or are imposing significant financial hardships on this part of the population.

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Literature, study	Payment type	Impact of health financing scheme
type Chawla 2000		·
Chawla 2000 (Chawla and Ellis (2000)) Niger Controlled before and after	User fees and indirect insurance payments, both accompanied by quality improvement measures. Pilot study in 1993.	Utilization and quality of services  Despite an increase in formal user charges, the observed decline in rates of visits is statistically insignificant, suggesting the success of measures to improve quality* of health care in public facilities.  Four interventions implemented for quality changes: (i) improvement in drug availability; (ii) training of health personnel in the use of standard diagnosis and treatment protocols; (iii) strengthening management capacity; and (iv) improving supervisory and managerial capacity.  Striking increase observed in the probability of formal visits in the district with indirect payments.  Higher utilization of formal care, probably due to improvements in quality, outweighed the decrease in utilization that may have come about due to introduction of cost recovery, so that the net effect of the policy changes was an increase in utilization. Quality considerations appear to be important in ensuring the long-term success of cost sharing.
Gertler 2000	Cash transfer / incentive payment	Utilization
(Gertler (2000)) Mexico Randomized controlled trials	National program adopted in 1997.	<ul> <li>The cash transfer program significantly increased utilization of public health clinics for preventive care including prenatal care, child nutrition monitoring, and adult checkups.</li> <li>The program also lowered the number of inpatient hospitalization, which is consistent with the hypothesis that the program lowered the incidence of severe illness.</li> <li>There was no reduction in the utilization of private providers, suggesting that the increase in utilization at public clinics was not substituting public care for private care.</li> <li>A significant improvement in the health of both children and adults were observed.</li> </ul>
Gilson 2000	Community financing	Access among the poor
(Gilson, Kalyalya et al. (2000)) Benin, Kenya, Zambia Case study	Benin: National program implemented in late 1980s. Kenya: Introduced in late 1980s parallel to national policy of cost sharing. Zambia: Local payment mechanism introduced as a part of national reform program (decentralization to district management) launched in early 1990s.	<ul> <li>Across countries there was evidence of relative affordability gains in Benin and Kenya, but Kenyan gains were not sustained over time and no such gains were identified in Zambia.</li> <li>None of the three countries had given attention either to the issue of absolute affordability, through the implementation of effective exemption mechanisms to protect the poorest from financial burden, or to the establishment of community decision-making bodies that effectively represented the interests of all groups including the poorest.</li> <li>Although the Benin Bamako Initiative program might be judged as successful in terms of what appear to be its own equity objectives, the other two countries' schemes had clear equity problems even in these terms.</li> <li>The experience across countries highlights the unresolved question of whether equity is concerned with the greatest good for the greatest number or with promoting the interests of the most disadvantaged.</li> </ul>
Limbambala (2001)) Zambia Before and after	Introduced under the country's health sector reform (decentralization) from 1993 to 1997.	attendance for both hospitals and health centers; increases at health centers in measles vaccination, in admissions and in deliveries; a shift of caseload from hospitals to health centers for some key services.  Access among the poor  • User payment in poor populations leads to dramatic declines in utilization of services.  Other issues
	reform program (decentralization to district management) launched in early 1990s. User fees Introduced under the country's health sector reform (decentralization) from 1993 to	its own equity objectives, the other two countries' schemes had clear equity problems even in these terms.  • The experience across countries highlights the unresolved question of whether equity is concerned with the greatest good for the greatest number or with promoting the interests of the most disadvantaged.  Utilization  • Utilization patterns can be influenced by user-payment and decentralization: decrease in general attendance for both hospitals and health centers; increases at health centers in measles vaccination, in admissions and in deliveries; a shift of caseload from hospitals to health centers for some key services.  Access among the poor  • User payment in poor populations leads to dramatic declines in utilization of services.

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Literature, study type	Payment type	Impact of health financing scheme
Gilson 2001 (Gilson, Kalyalya et al. (2001)) Benin, Kenya, Zambia Case study	Community financing Benin: National program implemented in late 1980s. Kenya: Introduced in late 1980s parallel to national policy of cost sharing. Zambia: Local payment mechanism introduced as a part of national reform program (decentralization to district management) launched in early 1990s.	<ul> <li>Access among the poor and implementation (equity impact and underlying factors)</li> <li>The sustained relative affordability gains achieved in Benin emphasize the importance of ensuring that financing change is used as a policy lever for strengthening health service management in support of quality of care improvements.</li> <li>All countries failed in protecting the most poor from the burden of payments, benefiting this group preferentially and ensuring that their views were heard in decision-making.</li> <li>Tackling these problems requires an appropriate balance between central and local-level decision-making as well as the creation of local decision-making structures which have representation from civil society groups that can voice the needs of the most poor.</li> <li>Leadership, strategy and tactics are also always important in securing any kind of equity gain such as establishing equity goals to drive implementation.</li> </ul>
Kipp 2001 (Kipp, Kamugisha et al. (2001)) Uganda Before and after	User fees (community-based cost sharing) Developed and introduced in one district. Data collection undertaken in 1993.	<ul> <li>Utilization</li> <li>After the introduction of cost sharing, overall utilization of general outpatient services, assessed by combining the data from all the participating units, dropped.</li> <li>Utilization increased, however, in facilities located in remote areas, while it decreased in those located in urban or semi-urban areas.</li> <li>The increased utilization in remote facilities was considered to be largely attributable to health workers' incentive payments derived from cost-sharing revenues.</li> </ul>
Wilkinson 2001 (Wilkinson, Gouws et al. (2001)) South Africa Before and after	Removal of user fees National policy: user fees for children aged under 6 years and pregnant women removed in 1994; all user fees at all primary health care clinics abolished in 1997.	Utilization  • The removal of user fees improved access to curative services but this may have happened at the expense of some preventive services. Governments should remain vigilant about the effects of new health policies in order to ensure that objectives are being met.
Castano 2002 (Castano, Arbelaez et al. (2002)) Colombia Before and after	Social insurance National policy introduced in 1993.	Access among the poor  • There was a progressive impact of the reform (introduction of social insurance scheme) on out-of-pocket financing (user-fees) when household expenses are used to build the Kakwani index; however, due to issues of comparability between surveys used in the study, the findings are not conclusive.
Meuwissen 2002 (Meuwissen (2002)) Niger Case study	User fees (fee-for-service) Cost recovery scheme introduced as national policy in 1995 that allows each district to choose from two different schemes; (i) fee-for service and (ii) tax plus fee-for- service methods. Study district has chosen and introduced the fee-for-service method in 1997.	<ul> <li>Utilization, cost recovery, quality of services and implementation</li> <li>Discussed are the problems encountered in the functioning of the system, such as the unpredictability of the cost recovery rate, the drop in patients' attendance and the undermining effect of serious and regular shortages of essential generic drugs at the wholesale dealer.</li> <li>Further discussed are the supervision and control of the financial and drug administration and the participation of the population, which are identified as key areas of interest for sustainability of any cost recovery system.</li> </ul>

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Literature, study type	Payment type	Impact of health financing scheme
Mpuga 2002 (Mpuga (2002)) Uganda	Removal of user fees, National policy implemented in 2001.	Utilization and access among the poor  Administrative and household level data point to a significant improvement in access to services, much of which is by the poor.
Before and after		<ul> <li>Quality of services</li> <li>The improved access to services was not associated with improved outcomes (measured by "workdays lost due to sickness"), suggesting that better access was not accompanied by improvements in the quality of services, as is indeed supported by qualitative evidence and the fact that wealthy households seem to have opted out of public services.</li> <li>The fact that health outcomes have significantly worsened for orphans suggests that more than just eliminating fees is needed to improve health services for the poor and vulnerable.</li> </ul>
Dow 2003 (Dow and Schmeer (2003)) Costa Rica Before and after	Health insurance Introduced at national level in 1970s.	<ul> <li>Health impacts</li> <li>The study results show that insurance increases are strongly related to mortality decreases at the county level before controlling for other time-varying factors. However, after controlling for changes in other correlated maternal, household, and community characteristics, fixed effects models indicate that the insurance expansion could have explained only a small portion of the mortality change.</li> <li>These results question the proposition that health insurance can lead to large improvements in infant and child mortality, and that expanding insurance to the poor can substantially narrow socioeconomic differentials in mortality.</li> </ul>
Burnham 2004 (Burnham, Pariyo	Removal of user fees, National policy implemented in 2001.	• With the end of cost sharing, the mean monthly number of new visits increased by 53.3%, but among
et al. (2004)) Uganda Before and after		<ul> <li>children aged &lt;5 years the increase was 27.3%.</li> <li>Mean monthly re-attendances increased by 81.3% among children aged &lt;5 years and 24.3% among all people. Attendances for immunization, antenatal clinics, and family planning all increased, despite these services having always been free.</li> <li>Quality of services</li> <li>Health workers reported a decline in <i>morale</i>, and many health unit management committees no longer</li> </ul>
Deininger 2004 (Deininger and Mpuga (2004)) Uganda	Removal of user fees, National policy implemented in 2001.	met regularly.  Utilization and access among the poor  • The abolition of fees improved access and reduced the probability of sickness in a way that was particularly beneficial to the poor.  Quality of services
Before and after		<ul> <li>The challenge of maintaining service quality remains. This will require the establishment of a system to continuously monitor, publicize, and reward the quality of service delivery and client satisfaction.</li> </ul>

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Literature, study type	Payment type	Impact of health financing scheme
Ekman 2004 (Ekman(2004)) Africa, Asia Literature review	Community based insurance	Utilization and access among the poor  • There is strong evidence that community-based health insurance provides some financial protection by reducing out-of-pocket spending.  Quality of services
Literature review		There is weak or no evidence that schemes have an effect on the quality of care or the efficiency with which care is produced.  Cost recovery
		There is evidence of moderate strength that such schemes improve cost-recovery.
		Other issues  In absolute terms, the effects are small and schemes serve only a limited section of the population.  These types of community financing arrangements are, at best, complementary to other more effective systems of health financing.  Policy makers need to be better informed as to both the costs and the benefits of implementing various
		financing options. The current evidence base on community-based health insurance is mute on this point.
Hardeman 2004 (Hardeman, Van Damme policy, et al. (2004)) Cambodia Case study	Health equity funds under user fees Introduced in one district in 2000.	<ul> <li>Access among the poor</li> <li>The results of the study show that the Health Equity Fund effectively improves financial access for the poor, but that the poor continue to face many constraints for timely access.</li> <li>The Health Equity Fund as set up in Sotnikum was very cost-effective, with minimal leakage to non-poor.</li> <li>Health Equity Funds managed by a local non-governmental organization seem to constitute a promising channel for donors who want to invest in poverty reduction, though further research and experimentation are recommended in different contexts and with different set-ups.</li> </ul>
Morris 2004 (Morris, Olinto et al. (2004)) Brazil Cross sectional	Cash transfer / incentive payment National program launched in 2001.	Access among the poor  • Conditional cash transfers are a powerful tool for altering household behavior, including some that are quite resistant to more traditional approaches to behavior change. However, when designing programs based on cash transfers, it is important to ensure that the incentives embodied in the program design are truly those that were originally intended. The programs should do their utmost to avoid giving the impression that there might be benefits from having a child who does not grow at its maximum possible rate given the constraints of its household environment.
Morris 2004 (Morris, Flores et	Cash transfer / incentive payment Pilot program: baseline survey	Utilization and access among the poor  • The household-level intervention had a large impact on the reported coverage of antenatal care and well-child
al. (2004)) Honduras Randomized	undertaken in 2000; post- intervention survey in 2002.	check-ups. Childhood immunization series could thus be started more opportunely, and the coverage of growth monitoring was markedly increased. Measles and tetanus toxoid immunization were not affected. The trials transfer of resources to local health teams could not be implemented properly because of legal complications.
Randomized controlled		transfer of resources to local health teams could not be implemented properly because of legal complica Conditional payments to households increase the use and coverage of preventive health care interventions

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alth financing schemes luding: user fees; community sed insurance; national health urance; contracting health rvices; and conditional cash insfers.	Utilization and access among the poor  • The limited evidence available suggests, in general, that user fees deterred utilization.  • Prepayment or insurance schemes offered potential for improving access, but are very limited in scope.  • Conditional cash payments showed promise for improving uptake of interventions, but could also create a perverse incentive.  Other issues  • The largely African origin of the reports of user fees, and the evidence from Latin America on
	conditional cash transfers, demonstrate the importance of the context in which studies are done.
sh transfer / incentive payment	<ul> <li>There is a need for improved quality of research. Larger scale, upfront funding for evaluation of health financing initiatives is necessary to ensure an evidence base that corresponds to the importance of this issue for achieving development goals.</li> <li>Health impacts</li> </ul>
large-scale welfare program blied by federal government ce 1997.	<ul> <li>The conditional cash transfer program (Progresa) was associated with better growth in height among the poorest and younger infants.</li> <li>After 1 year, mean hemoglobin values were higher in the intervention group than in the crossover intervention group who had not yet received the benefits of the intervention. There were no differences in hemoglobin levels between the 2 groups at year 2 after both groups were receiving the intervention.</li> <li>The age-adjusted rate of anemia in 1999 was higher in the crossover intervention group than in the intervention group, whereas in 2000 the difference was not significant.</li> </ul>
moval of user fees tional policy removed user fees services provided to pregnant men and children under six 1994), and for all public primary re services (in 1996).	<ul> <li>The policy change led to significant increases in health care utilization levels, indicative of achievement in terms of its goal of enhancing access to care. However, in some areas, initial increases were not always maintained over time and increased curative care utilization appears to have crowded out preventive care use.</li> <li>Quality of services</li> <li>There are some signs that the policy unexpectedly contributed to a decline in <i>provider morale</i> and attitudes towards patients. Providers suggest that it increased workloads, undermining their working conditions and generating a situation where patients were abusing the free services available to them.</li> <li>Implementation</li> <li>Central-level planners cannot expect simple obedience from implementers, including front-line health workers, but must acknowledge the discretion these workers have in implementation. They are potentially both a resource for, and possible obstacle to, policy change. The legitimacy of a new policy must be recognized by the street-level bureaucrats ultimately responsible for its implementation. Implementation of new policies, as well as routine service delivery, must build up, and build on, the social resources available within the health system.</li> </ul>
mov tion ser mer	de-scale welfare program de by federal government 1997.  Val of user fees al policy removed user fees vices provided to pregnant and children under six and for all public primary

# Annex 2 Experience of a health equity fund in Cambodia

Data relating to one example of a health equity funds conducted in Cambodia is presented below. This summary of a study conducted by Hardeman, Van Damme et al. (2004) is presented in order to illustrate the detail of the policy mechanism as well as relevant context regarding implementation.

#### **Health Equity Fund in Sotnikum Operation District**

#### 1. National Context

#### Health sector reform in Cambodia

The Cambodian Ministry of Health (MoH) has been implementing a Health Coverage Plan since 1996. The Plan divides the country into 69 newly created Operational Districts, each covering a population of between 100,000 and 200,000 people. Each operational district consists of a network of health centers that provide basic health care for 10,000 to 12,000 people, one district hospital and a district health office. In 1997, the National Charter on Health Financing officially introduced user fees.

Structural constraints, however, prevent the Plan's realization in terms of accessibility and quality of care, and public health facilities remain under-utilized. A fundamental constraint is the extremely low salary of civil servants. Consequently, government health staff are forced into coping strategies, such as charging informal fees and diverting drugs, equipment and patients to their private practices<sup>65</sup>. Households are left to rely on private providers. Because of the unregulated health care market, household 'out-of-pocket' expenditure on health has become high and inequitable. Health expenditure is identified as a major cause of indebtedness and destitution among the rural poor<sup>66</sup>.

In this context, many multi-actor initiatives have tried to improve the quality and accessibility of public health care in rural areas. Several of them share common features: (i) the pursuit of a better performance from public facilities; (ii) the injection of external funding to improve staff income; and (iii) the utilization of performance contracts to establish higher accountability of staff<sup>67</sup>.

#### 2. Local context

# Sotnikum Operational District and its 'New Deal'

Sotnikum is located 30 km from Siem Reap town, with a population of 220,000. The Operational District is divided into 17 health areas, each of them having one health center. The district hospital provides a full package of activities including internal medicine, pediatrics, obstetrics-gynecology and surgery.

In Sotnikum, the Ministry of Health, Médecins sans Frontiéres (MSF) and UNICEF agreed in 1999 on a common approach at the district level. The entry point of the experiment is a 'New Deal' for the government health staff, who receive a better income in exchange for respecting official working hours and abiding by the new internal regulations, strictly forbidding any informal payments or prescriptions for private pharmacies. Contracts were made with all actors involved, and lump sum user fees were agreed upon to reduce patient's uncertainty about the cost of treatment. The approach immediately resulted in better staff motivation and higher user rates. In 2000, average monthly admissions to the hospital increased by 50% to 216, further increasing to 239 in 2001, and to over 300 in 2002<sup>cs</sup>.

#### 3. Mechanism of the Health Equity Fund in Sotnikum

The 'New Deal' increased the official rate of user fees, particularly at the district hospital level. The risk was that the poor would lack access to improved services. To allow the achievement of the two conflicting objectives by the hospital - financial viability and equity in access - MSF and UNICEF decided to introduce the Health Equity Fund, which operates as a 'third party payer' for patients who cannot afford to pay.

#### Management

MSF and UNICEF contracted out the management of the Health Equity Fund to a local NGO, Cambodia Family Development Services (CFDS) and, thus the Fund operates independently of the hospital. In September 2000, CFDS started with a single staff member based in an office in the hospital compound. In October 2001, a second staff member was hired to improve presence in the hospital, follow-up of supported patients and information sharing at the community level.

<sup>65</sup> Roenen et al. (1997); Killingsworth et al. (1999); McPake et al. (1999); Bloom et al. (2000); Van Lerberghe et al. (2002)

<sup>66</sup> Kassie (2000)

<sup>&</sup>lt;sup>67</sup> Van Damme et al. (2001); Meessen et al. (2002); Ministry of Health et al. (2002); Soeters and Griffiths (2003)

<sup>&</sup>lt;sup>68</sup> Van Damme et al. (2001); Meessen et al. (2002)

#### **Identification of beneficiaries**

The CFDS staff identifies poor patients in two different ways. First, the hospital admission staff refers patients arriving without enough money for the admission fee. Secondly, CFDS staff also try to identify poor patients in the hospital wards, who despite paying the admission fee, seem to lack food or basic items such as food utensils, mosquito nets or clothing. This second round of identification is necessary because most people borrow some money or sell productive assets before they go to the hospital, possibly incurring expenses beyond their ability to repay.

#### Indicators for eligibility

CFDS staff interview all patients identified by the above process to determine their ability to pay. Important indicators are food security, ownership of land and productive assets, housing, occupation, as well as household size and structure. Physical appearance, including clothing, also can give an indication of socio-economic status. The 'target group' of the Health Equity Fund consists of the extremely poor, as well as the poor who risk falling into extreme poverty. No fixed criteria for eligibility are used, as poverty has many dimensions that are difficult to measure, and flexibility is needed in order to provide assistance according to people's needs.

#### **Benefits**

The level of support is determined on a case-by-case basis, from partial payment of the admission fee to full coverage of the total cost of hospitalization, including transport, food and basic items. CFDS also carries out follow-up visits to villages to verify the adequacy of the targeting mechanism and to identify further needs.

#### Monitoring

The contracting parties, MSF and UNICEF, have been monitoring the activities of the Health Equity Fund through quantitative indicators to assess the adequacy of the targeting mechanism.

#### 4. Assessment by Hardeman, W., Van Damme, W. et al. (2004)

Hardeman, Van Damme et al. (2004) describes (i) the results of 2 years' functioning of the Health Equity Fund in Sotnikum, along with (ii) the results of an investigation in August 2001 into the constraints to equitable access to the district hospital - financial, geographical, informational and intra-household constraints - and the effects of the Health Equity Fund on these constraints.

# Utilization of the Health Equity Fund, and its targeting ability

The Health Equity Fund supported 16% of hospitalized patients, with minimal leakage to non-poor. Between 1st September 2000 and 30th September 2002, the Health Equity Fund supported 1,437 patients. Their numbers per month grew steadily from some 20 to over 100, while the number of non-supported patients increased on a lesser basis.

Regarding hospitalized patients, only one non-poor patient received financial support, whereas the Health Equity Fund supported nearly all of the extremely poor. The extremely poor, when they arrive at the hospital, have a better chance of being selected by the Health Equity Fund than the poor who risk falling into extreme poverty. However, the extremely poor also face severe difficulties in reaching the hospital. Therefore, improved financial access for poor patients arriving at the hospital does not yet guarantee equitable access to hospital care.

## Effectiveness of the Health Equity Fund on constraints to access

*Effects on financial constraints* - The poorest patients are most likely to be identified as unable to pay and receive the highest level of support from the Health Equity Fund. 87% of the extremely poor in the sample were identified and supported by the Health Equity Fund for 50% of their total expenditures.

Effects on geographical constraints - Relatively few patients (less than 6%) from within 5 km of the hospital were supported, and patients coming medium or long distances had much greater chances of benefiting from the Health Equity Fund. Thus, the Health Equity Fund reduces inequities in health expenditure in relation to distance. However, by itself it does not correct inequities in utilization resulting from geographical constraints to access. A well-functioning referral system is a prerequisite. This study did not assess how the referral system affected geographical constraints.

*Effects on informational constraints* - The Health Equity Fund did not actively promote its activities at community level or in the hospital. Consequently, among people who had not been to hospital, the existence of the Health Equity Fund was almost completely unknown. Also, of the hospitalized cases that had not been supported by the Health Equity Fund, after their return only 35% were aware of the presence of a Health Equity Fund at the hospital. Resulting inconsistency in

information about the Fund may continue to deter the poor from going to the hospital. Of the supported patients, only 12% were aware of the Health Equity Fund beforehand. Therefore, in most cases the Fund had not reduced uncertainty about access.

*Effects on intra-household constraints* - The Health Equity Fund has no specific provision for households with difficult access to the hospital because of age, gender, family size and structure. These households are more likely to be vulnerable and poor (e.g. headed by a female, many dependants). When a poor patient is hospitalized, the Health Equity Fund assists in the expenses in the hospital, but not at home, where family members may be left without someone to take care of them, and possibly short of food. Well-being of family members an important consideration whether or not to seek hospital care.

#### Cost of a Health Equity Fund

The total cost of the Health Equity Fund over the study period was US\$ 27,100 to support 1,437 patients. Of this amount, US\$ 16,260 was direct financial assistance (of which around 74% was hospital fees, 20% transport and 6% food and basic items). Per beneficiary, the average financial assistance was US\$ 11.32 and total cost US\$ 18.86. The cost for the NGO to manage the Health Equity Fund represented US \$ 10,840, or 40% of the total cost. This was mainly for staff salary and staff transport.

In 2001, the total running cost of the district hospital (staff, drugs, fuel, electricity, patient food, etc.) was US\$ 152,000, or US\$ 53 per hospital admission, of which 62% was funded by the state, 21% through users' fees and 17% by MSF and UNICEF. The total cost of the Health Equity Fund for one year was around US\$ 13,000, or 8.6% of hospital cost.

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