National Health Accounts:

NHA

Country Policy Brief

February 2005

Rwanda National Health Accounts 2002:
Informing Health Financing Decisions

By revealing who pays for what in a health system, NHA helps countries and donors to answer policy-related questions such as: Is the current mix of curative and preventive care optimal? Is the financing burden on households fair? Will new disease-specific initiatives divert resources needed elsewhere in the health system? Will national funding suffice if donors depart? This policy brief looks at the NHA experience of Rwanda.

Many low- and middle-income countries are facing increasing pressure to expand health care services to combat a growing burden of disease. In this environment, making sound policy decisions requires rigorous information about health system financing. In addition, many new donor initiatives require financial information and tracking. This policy brief describes how one country, Rwanda, is using National Health Accounts (NHA) to contribute to policy decisions. It highlights the findings of the country's second round of NHA, which estimates expenditures on overall health care expenditures, HIV/AIDS-related health care, and reproductive health care; makes comparisons with first-round findings; and discusses policy implications of the findings. A more extensive review of Rwanda's NHA estimations is in a longer technical report. (Republic of Rwanda, Ministry of Health, February 2005)

Background

NHA

National Health Accounts is an internationally recognized tool for measuring a nation's health expenditures in a comprehensive manner – it includes public, private, and donor sectors. Four basic two-dimensional tables track the flow of funds and show who pays for health care (financing sources), who allocates and manages health care funds (financing agents), and where the funds go, by end user (providers) and use (services, or functions). The ultimate goal is to provide policymakers with information that will assist them to make sound policy decisions and avert potentially adverse options.

NHA in Rwanda

In 1998, Rwanda was one of the first countries in East and Southern Africa to conduct a "general" NHA of all health care expenditures; the exercise included a specialized HIV/AIDS expenditure review, or "subanalysis." The findings, which showed a low government fiscal contribution to health care, proved influential in the policy process – the Ministry of Health (MOH) used the information to lobby and ultimately attain additional financing from the government budget. Between 1998 and 2002, the share of total government expenditure on health rose from 2.5 percent to 6.1 percent.

To continue strengthening its evidenced-based policy planning, the government of Rwanda decided to institutionalize NHA, i.e., incorporate NHA into the health information system and implement NHAs on a regular basis. To this end, NHA HIV/AIDS data tables were incorporated into the National

Development Indicators book, an important step in making NHA part of the policy-making process, and a second round of NHA was initiated in 2003 with principal technical and financial support from the United States Agency for International Development (USAID) through the Partners for Health Reform*plus* project. Belgian Technical Cooperation assisted in financing local costs and the government of Rwanda contributed staff and additional financial resources to the initiative. To further its institutionalization of NHA, the government took the lead in learning about and implementing every step of the data collection, analysis, and reporting process.

To address two health issues of particular concern to the government, this second round of NHA again included an HIV/AIDS subanalysis, and it added a reproductive health (RH) subanalysis. This was the first time that reproductive health was included in an NHA as a key component. The second round focused on data for fiscal year 2002 but also tracked 2000 data, with an aim to do trend analysis.

Objectives of Rwanda NHA 2002

Rwandan stakeholders enumerated many uses of NHA estimates, the major of which are summarized here:

- Assist policymakers in setting health care policy priorities such as improvement of the health system performance and equity in the distribution of care
- Enable the tracking of health expenditure trends useful for health care monitoring and evaluation purposes. In particular it will provide baseline data for the monitoring of HIV/AIDS resource flows and impacts required by new donor mechanisms such as the Global Fund to Fight AIDS, Tuberculosis, and Malaria (Global Fund), and the U.S. President's Emergency Plan for AIDS Relief (Emergency Plan, also known as PEPFAR)
- Institutionalize the NHA process through the involvement of local players in all facets of the process

Methodology

The NHA estimation was implemented by Rwanda's NHA technical team, which is housed in the Ministry of Health and comprises technocrats who, as the name of the team implies, do the technical work; and the multi-sectoral Steering Committee, a group of influential policymakers who do overall guidance of the process, including ensuring the NHA's policy relevance, reviewing data collection surveys, facilitating the technical team's access to data, and helping disseminate findings in a way that is understandable and useful to policymakers.

Data for NHA was collected and analyzed in accordance with international guidelines (World Health Organization, World Bank, and U.S. Agency for International Development, 2003). This entailed a comprehensive review of available data sources or secondary data sources. Data gaps were identified and filled through primary data collection, by way of surveys of the following entities: provincial-level offices of the Department of Health, Gender, and Social Affairs, health districts, insurance schemes and companies, donors, implementing agencies, employers, pharmacies, hospitals, health centers, private practitioners, and people living with HIV/AIDS (PLWHA). Survey questions probed organizations' overall health resources and expenditures, including spending on HIV/AIDS and reproductive health services where applicable. The PLWHA survey queried PLWHA about their use of and expenditures on HIV/AIDS-related health care. Data collection, particularly from public entities, was coordinated by the central-level technical team but – to expand NHA institutionalization and understanding of the need for fiscal information for better planning and budgeting – conducted by all levels of the health care system, particularly by provincial and district health officials. Efforts were made to validate each estimate with multiple sources of information. The central technical team subsequently oversaw data entry, cleaning, and analysis, and report writing.

General NHA Findings

Total health expenditure (THE) in Rwanda decreased in nominal terms from RWF 31.7 billion in 1998 to RWF 28.5 billion in 2000, but then increased substantially to RWF 33.3 billion in 2002 (Table 1). The importance of funding for health from private (particularly firms) and public sources increased over the period, as donor funding declined. In particular, increased government expenditure on health helped to fill the gap left by donors.

Overall 2002 findings (including HIV/AIDS and RH subanalyses) provide for several interesting observations: households are the principal financing source of the health system. As Figure 1 shows, private sources (which are mainly households) constitute the principal financier of health care spending. The next largest contributor is donors; they largely allocate their funds to HIV/AIDS and RH services, and this raises the question about how much funding is available for other major causes of morbidity and mortality, such as malaria and tuberculosis. Public entities' contributions to HIV/AIDS and reproductive health are relatively low, averaging 2.3 percent of THE. (In fact, households contribute more to these services than do public financiers.) This raises concern about dependence on donor contributions and, thus, long-term sustainability of HIV/AIDS and RH programs.

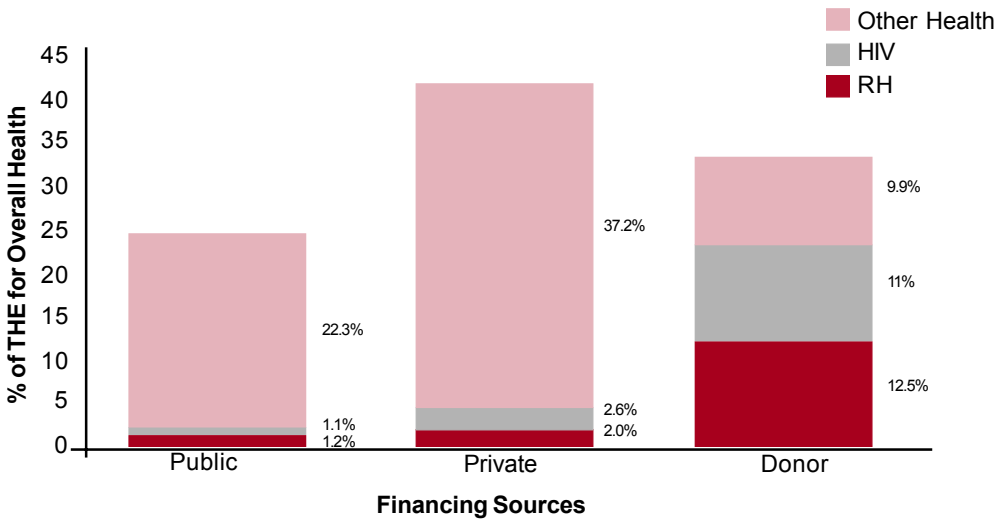
The main financing agents (managers of health resources) are households, whose out-of-pocket payments finance the largest portion of total health spending (25 percent), followed by implementing agencies (mostly nongovernmental organizations [NGOs]) (20 percent), and the Ministry of Health (17 percent). The 20 percent that

Table 1: Summary of General NHA Findings, Rwanda, 1998–2002

	1998	2000	2002
Total population	7.9 million	7.7 million	8.1 million
Exchange rate US$ 1 = RWF	317	393	475
Total nominal gross domestic product (GDP)	RWF 631.7 billion (US$ 2 billion)	RWF 705 billion (US$ 1.8 billion)	RWF 815.8 billion* (US$ 1.7 billion)
Total GoR expenditure and net lending	RWF 117.4 billion (US$ 370.4 million)	RWF 150.5 billion (US$ 382.6 million)	RWF 135 billion (US$ 284.1 million)
Total health expenditures (THE)	RWF 31.7 billion (US$ 99.9 million)	RWF 28.5 billion (US$ 72.5 million)	RWF 33.3 billion (US$ 70.1 million)
Total per capita health expenditure	RWF 4,019 (US$ 12.68)	3,710 RWF (US$ 9.43)	RWF 4,096 (US$ 8.62)
Total health expenditures as % of nominal GDP			
% GoR total expenditure spent on health care	5.0%	4.0%	4.0%
Financing sources (as % of THE)	2.5%	4.7%	6.1%
Public (including public firms)	9.9%	18%	24.7%
Private (including private firms)	39.6%	30%	41.8%
Donor	50.5%	52%	33.4%
Household spending			
Total household spending as % of THE	33%	26%	31%
Out-of-pocket spending as % of THE	32.5%	25%	25%
Out-of-pocket spending per capita	RWF 1,307 (US$4.12)	RWF 919 (US$ 2.34)	RWF 1,011 (US$2.13)
Provider (end user) distribution (as % of THE)			
Public facilities	66%	69%	55.6%
Govt-assisted not-for-profit facilities	10%	7%	24.8%
Private facilities	24%	19%*	19.6%

* Estimated at the *Rwanda Debt Relief* workshop, 2004

Figure 1. Financing Sources for Health Care (including HIV/AIDS and Reproductive Health Care), Rwanda, 2002



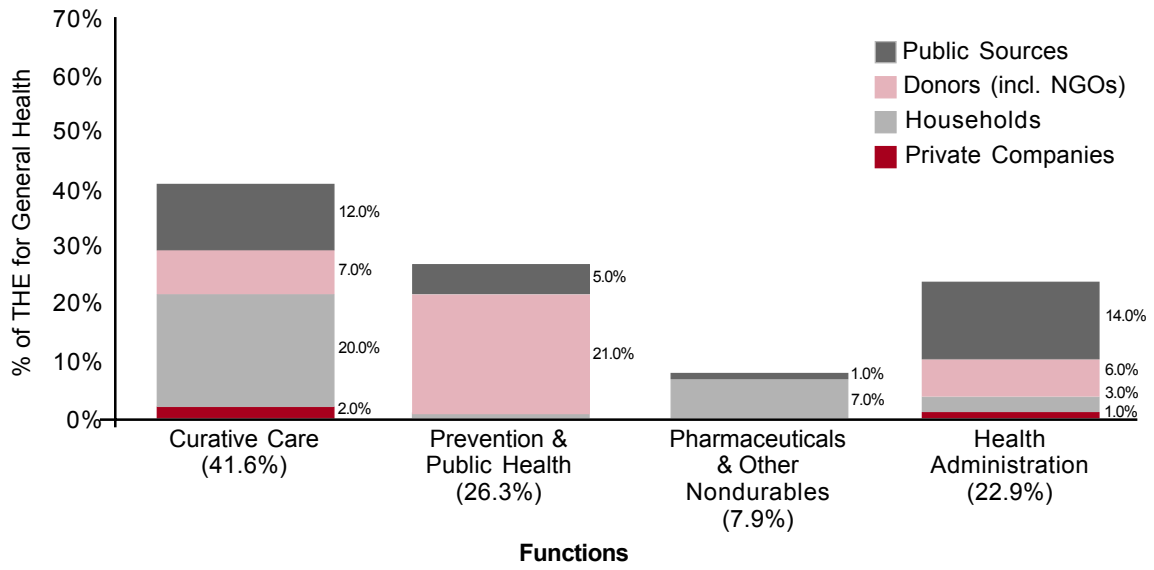
flows through local implementing agencies is a marked shift from the 1 percent observed in the 1998 estimates. Also playing a much larger role at the financing agent level are insurance schemes, which accounted for 24 percent of all health expenditure management in 2002, in contrast to less than 0.5 percent in 1998. This expanded role of insurance schemes may be helping to alleviate the financial burden on household out-of-pocket spending, which has dropped considerably, from 33 percent of THE in 1998 to 25 percent in 2002.

After being channeled through financing agents, funds are used to finance health care providers. NHA estimates for 2002 show a continuing preference for spending at public hospitals (15 percent of THE) followed by public health centers (7 percent of THE). However, only slightly less than spending for services at public health centers is spending at private clinics (6 percent of THE), reflecting the increasing role of the private system in overall health care delivery.

Among health care functions, curative care services consume the largest proportion of THE, 41 percent. Prevention and public health programs account for 26 percent, administration for 23 percent. This pattern of THE distribution differs markedly from that of the two subanalyses estimations, where, as will be seen below, prevention and public health is the principal consumer of funds and a much smaller percentage is spent on curative care.

Figure 2 tracks the flow of funds from functions (end uses) back to their financing sources. Notable is that households cover nearly half of all curative care expenditures (despite a decrease in their relative contribution to THE from 1998 to 2002). The government contributes appreciably more to curative care than to prevention and public health, unlike the pattern that will be seen in the subanalyses. Donors financing is largely for prevention and far less for curative care and administration, a pattern that will repeat in the subanalyses.

Figure 2. Financing Sources of Health Care



* Sources contributing less than 0.5% to any given function are not included in the figure.

HIV/AIDS Subanalysis Findings

With adult HIV prevalence at approximately 5.1 percent (nearly 200,000 HIV-positive adults) (UNAIDS, 2004) and per capita gross domestic product less than US$300, the AIDS epidemic presents an enormous challenge to Rwanda's health system in particular and to its development prospects in general. The poverty, exacerbated by the war and genocide of 1994, makes the impact of HIV/AIDS particularly severe for vulnerable populations such as orphans, child-headed households, victims of rape, and widows (U.N. Development Programme [UNDP], 2004)

Recognizing the threat of the epidemic, the government of Rwanda committed to stabilizing the spread of HIV during the period 2002 to 2006 (Republic of Rwanda, Office of the President and National AIDS Control Commission, January 2003). Donors have joined this fight and in 2003 Rwanda received funding from the Global Fund and the U.S. Emergency Plan. In order to design appropriate policy responses to the epidemic and to monitor progress toward program targets (including those specified by the Global Fund and Emergency Plan), comprehensive information on HIV/AIDS spending is essential.

Table 2 presents summary statistics from the HIV/AIDS subanalysis for 2000 and 2002.[1] Total spending on HIV/AIDS-related health care has risen, from RWF 2.2 billion (US$ 5.6 million) in 2000 to RWF 4.7 billion (US$ 9.9 million) in 2002. This represents an increased percentage of overall health spending allocated to HIV/AIDS – from 8 percent in 2000 to 15 percent in 2002. The increase is largely attributable to steep donor increases in HIV support, both absolutely and percentage-wise (from 49 percent to 75 percent).[2] The same period saw the burden of overall HIV/AIDS financing borne by

[1] Changes in methods for calculating HIV prevalence and other methodological approaches made it difficult to compare 2002 HIV estimates with 1998 estimates.

[2] These estimates precede the even larger disbursements of Global Fund and Emergency Fund monies in 2003. The share of donor financing for HIV/AIDS will continue to rise for 2003 and 2004.

Table 2: Summary of HIV/AIDS Subanalysis Findings, Rwanda, 2000–2002		
Indicators	**2000**	**2002**
HIV seroprevalence rate (adults)	5.1% (est.)	5.1% *
Number of PLWHA	200,000 (est.)**	199,279
Total health expenditure (THE) – general NHA	RWF 28.5 billion (US$ 72.5 million)	RWF 33.3 billion (US$ 70.1 million)
Total HIV/AIDS expenditure – HIV/AIDS subanalysis	RWF 2.2 billion (US$ 5.6 million)	RWF 4.9 billion (US$ 10.3 million)
% of THE allocated to HIV/AIDS	8%	15%
General out-of-pocket spending per inhabitant	919 RWF ($2.34)	1,011 RWF ($2.13)
HIV/AIDS out-of-pocket spending per PLWHA	4,125 RWF ($10.49)	3,605 RWF ($7.59)
Total HIV/AIDS spending as % of GDP (in current prices)	0.3%	1%
Financing sources for HIV/AIDS care		
Public	8%	9%
Private (total)	43%	17%
Of which households account for	*41%*	*16%*
Donors	49%	75%
Providers of HIV/AIDS care (as % of THE for HIV/AIDS)		
Public providers (total)	33%	16%
Hospitals	*24%*	*11%*
Health centers	*9%*	*5%*
Private for-profit providers (total)	9%	3%
Hospitals	*8%*	*2%*
Health centers	*1%*	*1%*
Government-assisted not-for-profit providers (total)	5%	3%
Hospitals	*2.6%*	*1%*
Health centers	*2.8%*	*2%*
Private pharmacies	7%	3%
Provision and administration of public health programs	46%	66%
General health care administration and insurance for HIV/AIDS	0%	9%
Function (as % of THE for HIV/AIDS)		
Preventive and public health programs	46%	66%
Curative care	48%	23%
Inpatient	*14%*	*7%*
Outpatient	*34%*	*15%*
Administration	0%	9%
Pharmaceuticals purchased at independent pharmacies	7%	3%

* UNAIDS, 2004
** Based on total population estimates that were derived prior to the 2002 census

households decrease in percentage terms, from 41 percent in 2000 to 16 percent in 2002. This sizeable drop is due in part to the steep decline of antiretroviral (ARV) drug costs over this period.

Donors are the primary financing source of HIV/AIDS health care. More than one-third of their health expenditure in Rwanda is HIV/AIDS related; this represents about three-quarters of all HIV/AIDS spending

in Rwanda. As noted above, households contribute 16 percent. The government share is 9 percent, which has been relatively stable since 1998 and represents only 5 percent of public health funds. Unlike what was seen in the general NHA, non-household private contributions (e.g., through insurance mechanisms) to finance HIV/AIDS expenditures are negligible (1 percent in 2002).

Local implementing agencies such as NGOs serve as financing agents for the largest share of HIV/AIDS funding (57 percent), due to the fact that most of the large donor contributions are channeled through these organizations (RWF 2.76 billion, or 76 percent, of donor-contributed RWF 3.66 billion in 2002). Public financing agents manage 24 percent, divided roughly equally among the National AIDS Control Commission, the MOH, and decentralized entities of the public health system. This predominance of local implementing agencies and public agents differs from what was seen in the general NHA, where household out-of-pocket payments were the largest financing agent. It also is a change from what was documented in 2000, when the MOH received a greater proportion of donor financing (35 percent).

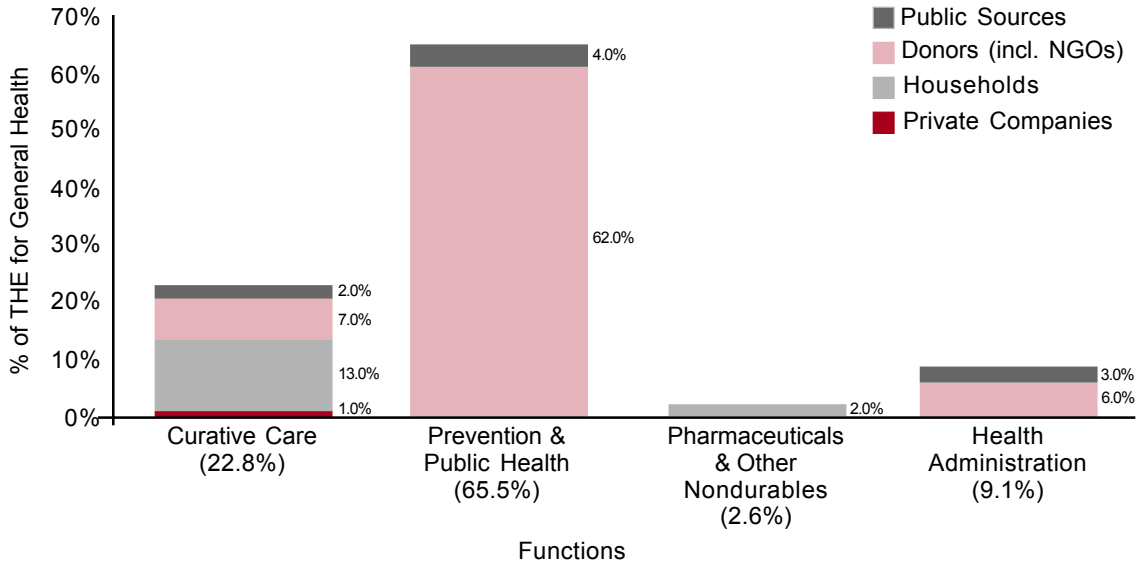
Public providers are the principal consumers of HIV/AIDS funding, public hospitals at 11 percent and public health centers at 5 percent. Private clinics and hospitals are end users of very little HIV spending (3 percent in total), unlike their share of general health spending. The share of HIV/AIDS spending at government-assisted not-for-profit facilities also amounts to 3 percent.

In terms of end uses, prevention and public health programs consumed a sizeable share (66 percent) of THE for HIV/AIDS (in contrast to general NHA). Curative care (including ARV treatment) accounts for only 23 percent (15 percent for outpatient care and 7 percent for inpatient care). More than half of curative care (54 percent) is financed by household out-of-pocket payments, in addition to what they spend on pharmaceuticals purchased at independent pharmacies/shops.

Figure 3 summarizes the distribution of the funds that flow between financing sources and end uses.

The subanalysis also looked specifically at the out-of-pocket costs for curative care by people living with HIV/AIDS and by the general population. PLWHA spend

Figure 3: Financing Sources of Reproductive Health Care by Function, Rwanda, 2002*



* Sources contributing less than 0.5% to any given function are not included in the figure.

4.6 times more than the general population for inpatient care and 4.1 times more for outpatient care. The burden on households to pay for care should be examined closely as 2.5 percent of the Rwandan population account for a sizeable 7 percent of all household health expenditures. This burden sometimes forces people to sell belongings; moreover, there is gender disparity in this burden. The PLWHA survey found that while 12 percent of men had to sell some of their possessions to pay for outpatient care, more than 22 percent of women had to do so. In terms of support to PLWHA, family or friends assist with the majority of financing, followed by health insurance, churches/religious congregations, and local NGOs. One of the issues this raises is whether or not the government and donor emphasis of spending is an optimal mix of curative and preventive care.

Reproductive Health Subanalysis Findings

Reproductive health is a critical issue in Rwanda. The country has one of the highest maternal mortality ratios (MMRs) in the East and Southern Africa (ESA) region (1,071 per 100,000 live births), one of lowest rates of contraceptive prevalence in the region, and a relatively high number of births per woman of reproductive age (UNDP, 2003). The war and genocide dramatically and adversely impacted health status, and the country has struggled to regain pre-1994 levels. While some RH indicators have improved since the time of the genocide (e.g., MMR improved to the aforementioned 1,071 per 100,000 from 2,300 per 100,000 in 1994) (World Bank, 2003), they are still worse than 1991 rates.

The government of Rwanda and the donor community recognize that reproductive health is a critical issue to overall development and have set targets in a number of programs to improve the RH status of women. For example, one of the eight Millennium Development Goals outlined by the United Nations is to reduce MMR by 75 percent by 2015. In addition, the government has included reproductive health as a priority in its country Poverty Reduction Strategy Paper with the similar goal of reducing MMR by increasing the number of assisted deliveries from 30 percent to 60 percent of all deliveries. The government has also specified in its strategic plan a goal of increasing contraceptive prevalence from 4 percent to 20 percent.

Table 3 summarizes major NHA RH subanalysis findings. Total RH expenditures were RWF 5.2 billion (just under US$11 million), or RWF 2,524 (US$5.31) per woman of reproductive age. RH care accounts for 16 percent of overall health expenditures and is targeted to essentially 25 percent of the population, namely women of reproductive age.

Donors provide most financing for RH services (80 percent), followed by 12 percent from private financing sources (mainly households), and 8 percent from the government. As with HIV/AIDS, the donor contribution to reproductive health represents more than one-third of all donor health funds going to Rwanda. Public spending as a proportion of overall public health expenditures is low, only 4 percent, raising concerns about whether the government is spending enough to achieve its high priority policy goals of improving RH indicators.

Unlike the general NHA and the HIV/AIDS subanalysis, the principal financing agents for RH expenditures are public entities, which manage 52 percent of THE for reproductive health followed by implementing agencies/NGOs (36 percent), and households via out-of-pocket spending (10 percent). This prominent government role is attributable to donor reliance on government infrastructure to channel the majority (approximately 55 percent) of its RH funding.

Expenditures on providers of RH curative care are equally distributed at public (9 percent of THE for RH) and private providers (also 9 percent).

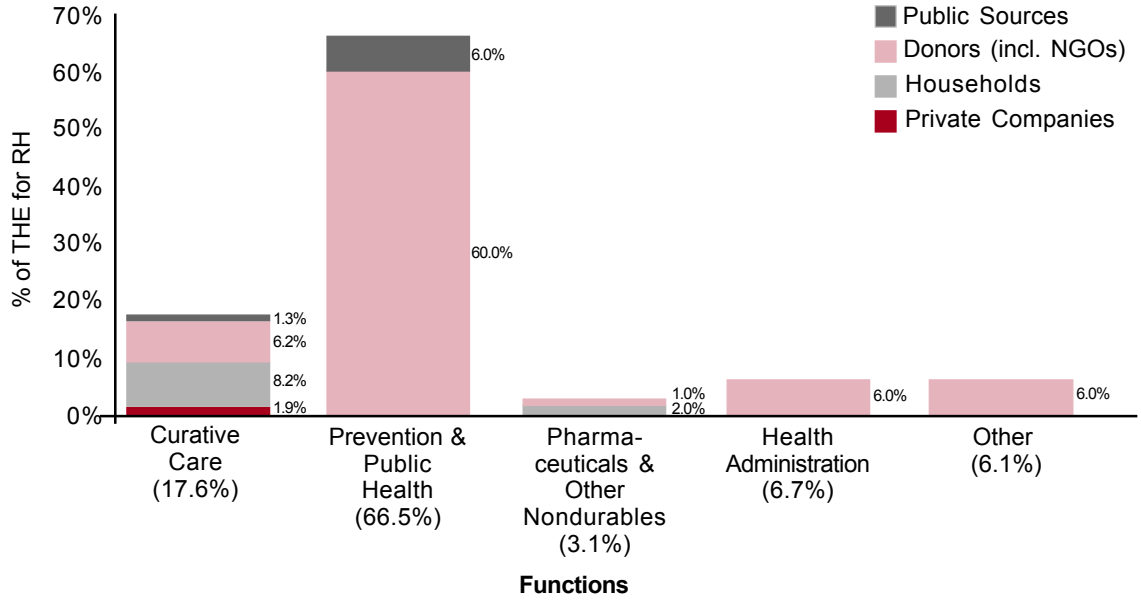
Similar to HIV/AIDS functions, curative care accounts for 18 percent of RH resources while prevention and public health programs consume 66 percent (Figure 4). Also as with HIV/AIDS, curative care for RH services is financed principally by households (close to half of curative care expenditures) whereas donors finance most prevention and public health programs.

Table 3: Summary of Reproductive Health Subanalysis Findings, Rwanda, 2002

General indicators	
Total RH expenditures	RWF 5.2 billion (US$11 million)*
RH expenditures per woman of reproductive age	RWF 2,524 (US$5.31)
RH expenditures as % of GDP	0.6%
RH expenditures as % of overall THE	16%
Financing sources of RH expenditures (as % of THE for RH)	
Public (incl. parastatals)	8%
Private	12%
Donor	80%
Household spending	
Total HH spending as % of THE for RH	10.6%
Out-of-pocket spending as % of THE for RH	10.0%
Out-of-pocket spending per woman of reproductive age	RWF 253 (US$0.53)
Provider distribution (as % of THE for RH)	
Public providers (total)**	9%
Hospitals	*4.3%*
Health centers	*4.3%*
Private providers (total)	9%
Hospitals	*4.0%*
Clinics	*4.7%*
Independent pharmacies/shops/dispensaries	3%
Provision of prevention and public health programs	72%
Administration	3%
Other	5%
Functions (as % of THE for RH)	
Curative care	18%
Prevention and public health programs	66%
Pharmaceuticals and other non-durables	3%
Health administration	7%
Other	6%
RH-specific functional categories (as % of THE for RH)	
Maternal health services (curative care)	15%
Family planning	6%
Prevention and public health programs on maternal health and FP	66%
Administration	7%
Other	6%

* Exchange rate used for 2002 is 1US=475 RWF
** Due to difficulties in disaggregating expenditures between government-assisted not-for-profit facilities and public facilities, the RH subanalysis aggregates these two types of provider under the heading of “public” facilities.

Figure 4: Financing Sources of Reproductive Health Care by Function, Rwanda, 2002*



* Sources contributing less than 0.5% to any given function are not included in the figure.

Households also finance the largest proportion of RH pharmaceuticals and non-durables purchased at independent pharmacies/shops, which represent 2 percent of THE for RH. Donors finance the remainder. Donors also finance 90 percent of all expenditures on public health programs on maternal health and family planning (FP), such as information, education, and communication campaigns, behavior change communication activities, and the training of community health care workers and animators; public sources contribute the remaining 10 percent. Again, the sizeable emphasis on prevention versus curative care raises the issue as to whether this is an optimal mix.

When curative care and pharmaceuticals/nondurables are broken down in terms of RH-specific categories, maternal health services account for 15 percent of the THE for RH, FP consultations and commodities for 6 percent. This is a relatively low expenditure on maternal health services, and the government, in its goal to reduce maternal mortality, is examining ways to increase the number of facility-based deliveries. Currently, 73 percent of all births in Rwanda occur outside of health facilities; based on 2002 NHA estimates (RWF 3,603/US$7.59 per facility delivery), expenditures on this service would need to triple if all deliveries were to take place at facilities.

Six percent of all RH spending is on FP consultations and contraceptive commodities. Households and donors finance equal shares of the expenditures, despite the fact that all contraceptive commodities in Rwanda are donated or highly subsidized by donors, which channel their products through the Ministry of Health or implementing agencies. Though the ministry issues the commodities largely free-of-charge, households must pay the consultation fee. Implementing agencies/NGOs often distribute the commodities through social marketing, that is, the commodities are sold to providers, who resell the products to the consumer. Examining commodities by type, the subanalysis revealed that households contribute the

same amount as donors for injectables, and almost twice as much as donors for oral contraceptives.[3] As with other "end uses" discussed in this paper, this raises the issue of the financial burden borne by households and whether it contributes to low utilization.

Conclusion

Overall, the burden of health care financing in Rwanda is borne principally by households, followed by donors, and then by the government. Donors finance most expenditures (more than two-thirds) targeted to HIV/AIDS and reproductive health; in both cases, funds are directed largely at prevention and public health programs. The GOR contribution to overall health care goes more to curative care than to prevention; however, as with donor funding, the emphasis shifts toward prevention with respect to HIV/AIDS and RH care.

All three analyses – general NHA, HIV/AIDS, and RH – found that households finance more than the government, including approximately half of all curative care, raising concerns about the financial burden this situation places on households, particularly as 60 percent of the population is below the poverty line (Republic of Rwanda, MINECOFINE, Statistics department. 2002). More broadly, it raises questions about the equity, efficiency, and sustainability of health financing in Rwanda.

The government of Rwanda is committed to using these findings to enhance the evidence base of its policy decisions intended to strengthen the country's health system. It also is committed to institutionalizing the NHA process, so that estimates such as those presented in this report can be produced on a regular basis, with the resulting updates and trend data serving to continually support the achievement of the health system's strategic objectives.

[3] Donor transfers of products to NGOs or through the MOH largely financed the cost of condoms in 2002, which were distributed free-of-charge.

Bibliography

Foulon, G., Kagubare J. and A. Kalk. 2004. *Financement des systèmes de santé dans les provinces de BUTARE et de BYUMBA au Rwanda.* GTZ Santé au Rwanda/DED: Kigali, Rwanda

Nandakumar A.K. et al 2000. *Use of and expenditures on Outpatient Health Care by a Group of HIV+ Individuals in Rwanda.* Special Initiative Report 28. Bethesda, MD: Partnerships for health Reform Project, Abt Associates Inc.

Republic of Rwanda, Caisse Sociale (CSR). 2002. *Summary of CSR expenditures 2002.* Kigali.

Republic of Rwanda, Ministry of Economics and Finance (MINECOFIN). 2003. *Rwanda Development Indicators 2002.* Kigali.

Republic of Rwanda, MINECOFIN. 2003. *Executed recurrent budget (audited) 2002*. Kigali.

Republic of Rwanda, MINECOFIN. Nov. 2003. *Execution du budget de developpement, Gestion 2002.* Kigali: MINECOFIN-CEPEX.

Republic of Rwanda, MINECOFIN-Service National de Recensement. 2002. *Rapport Preliminaire du 3eme Recensement General de la Population*. Kigali.

Republic of Rwanda, MINECOFIN, Statistics Department. 2002. *Integrated Household Living Conditions Survey in Rwanda 2000-2001.* Kigali.

Republic of Rwanda, Ministry of Health (MoH). February 2005. Rwanda National Health Accounts 2002. Kigali.

Republic of Rwanda, MoH. 2004. *Health Sector Strategic Plan.* Presentation by Department of Planning to the Ministry of Health. October 2004. Kigali.

Republic of Rwanda, MoH-TRAC. 2003. *HIV sentinel surveillance among pregnant women attending antenatal clinics, Rwanda, 2002*. Kigali.

Republic of Rwanda, MoH. 2003. *Rapport Annuel 2002*. Kigali.

Republic of Rwanda, MoH. 2002. *Database on development partner interventions in the health sector 2002*. Kigali.

Republic of Rwanda, MoH. 2002. *Health Information System 2002*. Kigali.

Republic of Rwanda, MoH. 2001. *Demographic Health Survey 2000*. Kigali: ONAPO, ORC MACRO

Republic of Rwanda, MoH and National Population Office (ONAPO); and ORC Macro. 2003. *Rwanda Service Provision Assessment Survey 2001*. Calverton, Maryland: MoH, ONAPO, and ORC Macro.

Republic of Rwanda, Office of the President and National AIDS Control Commission. 2003. *National Plan for Monitoring and Evaluation of HIV/AIDS Programs (2002-2006)*. Kigali.

Republic of Rwanda, RAMA. 2002. *Summary of RAMA expenditures 2002*. Kigali.

Schneider, P. and T. Dmytraczenko. *Improving Access to Maternal Health Care through Insurance*. PHR*plus* Insights for Implementers, Issue #3. June 2003. Bethesda, MD: Partners for Health Reform*plus* Project, Abt Associates Inc.

Schneider, P., A.K. Nandakumar, D. Porignon, M. Bhawalkar, D. Butera, and C. Barnett. 2000. *Rwanda National Health Accounts 1998*. Technical Report No. 53. Bethesda, MD: Partnerships for Health Reform Project, Abt Associates Inc.

U.N. Development Programme (UNDP). 2004. *Millennium development goals; status report 2003*. Kigali.

UNDP. 2003. *Human Development Report 2003*. New York.

UNAIDS. 2004. *Report on the Global AIDS Epidemic*. Geneva.

US Agency for International Development, Deliver Project. 2003. *NEWVERN Information System 2002*.

World Bank. 2004. *World Development Indicators 2003* (Africa). www.worldbank.org/data/wdi2003/index.htm.

World Health Organization (WHO), World Bank, United States Agency for International Development. 2003. *Guide to producing national health accounts with special applications for low-income and middle-income countries*. Geneva, WHO.

World Health Organization. 2003. *The World Health Report 2002*. Geneva.

Abt Associates Inc.
4800 Montgomery Lane
Suite 600
Bethesda, MD 20814 USA
Tel: 301-913-0500
Fax: 301-652-3916
URL: www.PHRplus.org
E-mail:
PHR-InfoCenter@abtassoc.com

The PHR*plus* Project is funded by the U.S. Agency for International Development under contract no. HRN-C-00-00-00019-00 and implemented by Abt Associates Inc. and partners:
Development Associates, Inc.
Emory University Rollins School of Public Health
Philoxenia International Travel, Inc.
Program for Appropriate Technology in Health
SAG Corporation
Social Sectors Development Strategies, Inc.
Training Resources Group
Tulane University School of Public Health and Tropical Medicine
University Research Co., LLC