SURINAME

HEALTH SECTOR ASSESSMENT

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The report provides background information and analysis to assist the IDB in the development of its country strategy for Suriname. Its primary focus is on health financing and human resources, considered priority areas by the IDB and the Government of Suriname.

Regional Operations Department 3
Social Programs Division 3

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GLOSSARY

ASIH	Albert Schweitzer Institute for Humanities
ASSURIA	Insurance Company
AZP	Academic Hospital Paramaribo
AZV	General Health Insurance (State)
BGVS	Surinamese National Drug Company
BOG	Bureau of Public Health
GLICO	Life Insurance Company
JTV	Youth Dental Care
LPI	Lands Psychiatric Institution
MOH	Ministry of Health
MSA	Ministry of Social Affairs
PAHO	Pan American Health Organization
SELF RELIANCE	Care Insurance Company
RGD	Regional Health Service
RKZ	Roman Catholic Hospital (Saint Vincentius)
‘Slh	‘sLands Hospital
SRC	(Medical) Specialist Registered Committee
SURALCO	Suriname Aluminum Company
SZF	State Health Insurance Fund
SZN	Nikerie Hospital
VMS	Medical Association Suriname

FOREWORD

Since this report was prepared, the health sector has come under unprecedented financial strain. In 1998 and the first seven months of 1999, the government accrued large payments arrears to the State Health Insurance Fund (SZF) and to certain health providers. The government arrears to the SZF have had a “knock on” effect and have prevented the SZF from making full and finally payments to doctors, hospitals and pharmacies. The paralysis of the health sector payments system has led to both a curtailment of service provisions and to attempts to increase user fees. The Medical Mission, which serves the interior, planned to shut down its services in the interior at the end of July 1999. Hospitals have begun to consider closing peripheral activities, such as training institutes. At the same time, user fees have been increased. In June 1999, the SZF revised prescription prices tenfold from Sf 100 to Sf 1,000 (approximately US$1). Notwithstanding this measure, in July 1999 patients began to pay the full cost of prescriptions because the SZF had accrued such large arrears to pharmacies. Doctors also raised user charges, even on low-income persons.

The crisis in the health sector payments system underscores the need to introduce reforms along the lines recommended in the study. A solution to the payments crisis urgently needs to be found. This notwithstanding, the crisis offers an opportunity to put in place reforms that will ensure the financial sustainability of the health sector not only for the short term but also for the medium and long term.

EXECUTIVE SUMMARY

The Surinamese health sector begins the challenge of reform unencumbered by many of the obstacles faced by other countries in Latin America and the Caribbean. In Suriname, there is a higher degree of separation between financing and provision of services which makes it possible to introduce initiatives to improve efficiency and control costs. The health insurance institution for government workers is exclusively a payer; it is not also a health service provider as in many countries in the region. Public hospitals operate with a reasonable degree of autonomy and have some control over revenues and expenditures. A process of decentralizing primary health services on the coast has also begun.

On the other hand, close ties with Holland have created high expectations in the population about quality of care and access to technology and high cost procedures. The large percentage of the population in the civil service, and the poor and near poor, expect almost completely free access to a comprehensive package of health services which includes the opportunity to be transferred to Holland for procedures not available in Suriname. Powerful labor unions have effectively negotiated a similarly generous package of benefits for employees of private firms that are covered by collective bargaining agreements. These forces will make it difficult to introduce reforms that reduce the package of benefits or increase payments by consumers.

Another major challenge is that the association of specialists holds a high degree of power to interfere with proposals to alter reimbursement mechanisms for doctors and hospitals. The current provider reimbursement system is essentially fee-for-service with few budgetary controls. Shifting the emphasis from secondary to primary care by changing incentives faced by general practitioners and consumers has the potential to reduce costs, improve efficiency, and increase the quality of care. If Suriname does not alter the payment system, introduce budgetary controls, and change the structure of the delivery system to place controls on utilization, we can expect the health sector to consume a growing portion of national income over time.

The State Health Insurance Fund (SZF) and the Ministry of Social Affairs (MSA), payers for 77% of the population, function as passive payers rather than entities that pool and manage insurance risk. They do not have the power to change payment policies, nor do they have the institutional capacity to monitor the billing and referral practices of the providers they reimburse. It is likely that there are economies of scale to be realized by merging the public payers into one entity.

The Ministry of Health (MOH) has limited institutional capacity to function as health sector leader. Low salaries in the civil service make it hard to attract qualified personnel that possess the skills to set health sector policy. Even if qualified people could be recruited, the health information needed to set policy and monitor the sector is not functioning. Improving the health management information system and recruiting and/or training qualified staff will be critical to effectively implement health sector reform.

This study assesses the health sector in Suriname, with the goal of assisting policy makers to develop a better understanding of problems and to propose a range of solutions. This summary

presents the analytical framework used to assess the health sector, reviews major findings, and presents key recommendations.

ANALYTICAL FRAMEWORK

This study focuses on the complex inter-relationships between the major actors in the health sector: policy leaders, consumers, providers, and payers. This market-oriented framework was chosen because the health system in Suriname is comprised of relatively autonomous providers and institutions, both private and public. Emphasis is placed on the way hospitals, individual providers, and consumers respond to the incentives they face and the resulting implications for equity, efficiency, and cost escalation.

FINDINGS

1. The MOH lacks the institutional capacity, the skilled staff, and a functioning health management information system to assume the role of health sector leader.

2. The major public payer, the SZF, does not possess the institutional capacity nor information systems needed to assume the role of active purchaser, rather than passive payer, and is not currently prepared to assume the position of single payer for Suriname.

3. Almost the entire population has some form of health insurance coverage that protects against financial risk and ensures that there will be minimal, if any, financial barriers to access. This feature will also make it extremely difficult to convince the population to pay more, to have less choice, or to accept a smaller benefits package.

4. It appears that most of the population has adequate access to primary care services, including the poor and residents of the sparsely populated interior, though most people must travel to Paramaribo for hospital services.

5. Major causes of death and morbidity patterns suggest that Suriname has the problems of both low income and developed countries. The available epidemiological information suggests that the immunization program should be strengthened, maternal and child health services improved, and targeted campaigns aimed at controlling the spread of infectious diseases should be launched. Health prevention and promotion campaigns have the potential to reduce death and injury from accidents and violence.

6. There is a functioning safety net for the poor through MSA. There is evidence, however, that the means testing process is not functioning adequately. As a result, some people who can afford to pay are receiving subsidized care.

7. There are inadequate linkages between primary care and secondary care services. General practitioners do not follow their patients through the system to ensure continuity of care. Only the Medical Mission has achieved this integration.

8. General practitioners are not utilized efficiently, a result of the payment system and standards of clinical practice.

9. The payment system generates weak incentives to provide care efficiently or to make optimal resource allocation decisions.

10. Suriname has an insufficient supply of specialists. This is an acute problem in Nickerie.

11. There is evidence of much waste and inefficiency in the system as seen by over-consumption of drugs and long average length of stay in hospitals.

RECOMMENDATIONS

Within the existing political context, some of the changes suggested would have to emerge from a broader process of reforms based on consensus among different groups of stakeholders. Recommendations are categorized into two groups: changes to national policy and institutional capacity building.

Policy Changes

1. *Introduce changes in the payment system that will rationalize the way health services are provided and utilized in Suriname.* Introduce consumer copayments for outpatient services; compensate general practitioners with a combination of fixed monthly payments and additional fees for each consultation to control referrals and encourage improved primary care; pay specialists fee-for-service for office consultations but part of the fee should come in the form of a direct consumer copayment that is larger than the copayment for G.P. consultations; move away from fixed daily fee payments to hospitals. A "package payment" system would improve efficiency and reduce length of stay. Introduce drug copayments that give incentives to choose generic drugs over name brands and help rationalize drug consumption.

2. *Improve the means testing process of the MSA to determine the poor and near poor.* The process of means-testing needs to be improved to both ensure that those in need continue to have access to subsidized care and to limit abuses of the system.

3. *Impose firm budget constraints on public payers.* The open-ended nature of public financing for health imposes no cap on the level of potential spending. Public payers know that if they run out of funds in the middle of the year, they can ask the Ministry of Finance for more, and more will come. This loose funding environment does not force payers to find ways to function within a budget that has limits. The result is that payers have weak incentives to control billing abuse and to develop payment mechanisms to control costs and improve efficiency.

4. Consider merging the health payment function of the MSA with the SZF. There are likely economies of scale and improved accountability to be realized by merging the hospital payment operations of the two public payers.

5. *Define a basic package of benefits to be provided by the public payers*. In the future, if Suriname faces a fixed budget for health, some hard choices may have to be made about what services to include and exclude in the benefits package. A comprehensive study of the burden of disease in Suriname would help to determine what should be included in a more restricted benefits package.

6. *Invest in health promotion and prevention*. There are likely to be significant returns from a health education campaign aimed at improving maternal and child health, and reducing injuries from accidents and violence.

7. Improve the process of drug procurement and distribution.

Institutional Capacity Building

1. *Restructure the MOH to become an effective policy leader.* The current organizational structure of the MOH does not lend itself to long term sector wide planning. Recommendations include: contract an expert in organizational theory to suggest reorganization of the Ministry so that it can effectively assume the new functions that will be needed in the future reformed system.

2. *Develop the planning capabilities of the MOH*. The MOH will not be able to function as an effective health policy leader without a staff of qualified and motivated experts in public health, economics, statistics, and management. Recommendations include: targeted in-country training courses for policy makers, site visits to other countries implementing similar reforms, and longer training programs abroad coupled with other reforms which allow the MOH to retain trained personnel.

3. *Improve the Information System of the MOH*. Emphasis should be placed on improving the epidemiological surveillance financial burden of health care. The MOH also needs information about the services that are being produced by the individual system. In addition, the MOH needs information about household utilization patterns, insurance coverage, and providers and hospitals and at what cost. Development of a health management information system for the MOH will be vital to the success of any chosen reform.

4. I*mprove the Institutional Capacity of the SZF*. In order for the SZF to be transformed into an active purchaser of health services, its organizational structure and staff skills will have to change. Recommendations include: contract an expert in organizational theory to suggest reorganization of the SZF so that it can effectively assume the new functions that will be needed in the future reformed system.

5. Improve the information system of the SZF and the MSA.

6. Improve hospital cost accounting systems and medical record systems.

1. ANALYTICAL FRAMEWORK

In order to understand the complex linkages in any health sector it is necessary to understand the behavior of the three main groups: consumers, providers, and payers. It is also important to assess the relative power of the government to implement policy changes. A comprehensive understanding of the dynamics of the inter-relationships among all the relevant actors is critical to the formation of solutions to health sector problems. For this reason, the analytical framework used concentrates on the incentives faced by each of the main groups. Emphasis is placed on the way hospitals, individual providers, and consumers respond to the incentives they face and the resulting implications for equity, efficiency, and cost escalation. This focus is necessary because the Surinamese health sector is comprised of relatively autonomous providers and institutions, even though many are part of the public sector. Using this analytical framework, this section will present a road map for the report.

The report first presents a discussion of the funding environment. To arrive at an estimate of the amount Suriname spends on health and of the relative importance of the public payers and the private sector, budgets of the public funders are presented along with an exercise to estimate total private spending. The role of the MOH is described and its institutional capacity is assessed.

Next, a discussion of consumers that includes who pays for health services, how benefits are negotiated, and a brief description of mortality and morbidity patterns is presented. Incentives faced by consumers to consult physicians and to consume drugs are also examined.

The health care delivery system is then described with a focus on the structure of the system as well as on each type of provider. First, primary care services are discussed, followed by outpatient specialist care and inpatient hospital services. The focus of analysis is on the ways care is rationed and on whether providers have incentives to provide appropriate care. The specific challenges faced by the Nickerie Hospital are introduced and suggested solutions are proposed. An assessment of whether Suriname has a sufficient number of hospitals and doctors is offered as well as a description of how health care professionals are trained. The role of the Surinamese National Drug Company (BGVS) in the purchase and distribution of drugs is analyzed, as well as the contribution of its practices to overall health care costs.

The discussion on payers includes an analysis of incentives in the payment system and associated problems. In Suriname, there are five categories of payers: the MSA for the poor and near-poor; the SZF for civil servants and some voluntary enrollees; private firms that self-insure by directly paying for health services for their employees and dependents; private insurance; and private out-of-pocket payments. The rate setting process is discussed, and benefits packages offered by the different payers are described and compared. Details about the mechanisms used by both private and public hospitals to compensate doctors are presented in Section 8.

Section 9 combines analysis from previous parts of the report to assess the impact of incentives in the reimbursement system and the predicted impact on health sector costs over time. Empirical evidence is presented to demonstrate that the methods used by the SZF to reimburse hospitals,

combined with payments from hospitals to doctors, results in SZF patients having the longest average length of stay among all payers.

A section that summarizes the overall conclusions of the report is presented, along with evaluations of two of the reform proposals that are currently under discussion in Suriname. The final section offers recommendations for future activities.

2. OVERVIEW OF THE SURINAMESE HEALTH SECTOR

This section will present an overview of the health sector in Suriname. The major institutions that provide and pay for health services will be introduced to help the reader navigate throughout the sections of the report. The body of the report provides more detailed descriptions of these institutions and analyses of the interactions among consumers, providers, payers, and policy leaders. Figure 1 depicts the distribution of the population by type of payer and the provider options they face. This figure will be referred to again in the body of the report in discussions about payment mechanisms and associated incentives.

The three major types of payers in Suriname include:

- The SZF: The SZF pays for a comprehensive package of health benefits for approximately 35% of the population that includes civil servants and a small number of people who choose to voluntarily enroll. The fund is financed with a combination of wage tax contributions, subsidies from general tax revenue, and voluntary premiums. Access to the comprehensive benefits package by government workers is viewed as an advantage of government employment and is a major factor limiting the exodus of civil servants to the private sector.

- The Ministry of Social Affairs (MSA): The MSA has the responsibility of certifying the poor and near-poor, approximately 42% of the population, and ensuring that the disadvantaged population has access to state subsidized health care services. The MSA is also a payer for hospital services for this population.

- Private Firms and Private Health Insurance: Most employees of private firms that are covered by collective bargaining agreements and their families, estimated to represent approximately 20% of the population, receive health coverage through their employer. The majority of private firms choose to self-insure rather than purchase health insurance from insurance companies or the SZF. Firms perceive that self-insurance gives greater control over utilization and, therefore, over costs.

The following provider groups deliver primary health care services:

- Government Run Vertical Programs: There are government vertical programs for the entire population, regardless of payer, for family planning, youth dental care, leprosy, sexually transmitted diseases, immunizations, contagious diseases such as malaria, and public health.

- Regional Health Service (RGD): RGD clinics are public primary care facilities, staffed by general doctors and health practitioners, to provide primary care services to residents of Suriname's coast. The poor and near-poor, certified by the MSA, are major users of RGD services. SZF enrollees also may choose an RGD doctor as their general practitioner.

- Medical Mission: The Medical Mission is constituted by a **group** of religious NGOs, funded by the government, that provides health services to residents of Suriname's interior.

FIGURE 1

- Private General Practitioners: The majority of G.P.s in **Suriname** are in private practice and serve people that are covered by the SZF, private firms, and self-paying patients.

- Employee Run Clinics: The country's large firms have **developed** primary care clinics on site to be used by employees and their families.

- The majority of specialists provide outpatient consultations in the outpatient polyclinics that are attached to the nation's public and private hospitals. Inpatient hospital care is provided by five hospitals; three are public, and two are private.

3. OVERVIEW OF THE FUNDING ENVIRONMENT

Macroeconomic developments in the 1990s – particularly volatile exchange rates and an episode of high inflation from 1993-1995 – have had important impacts on the health sector. The exchange rate between the Surinamese gilder and the US dollar increased from the artificially supported official rate of Sf 1.8 to the dollar in 1993 to approximately Sf 400 to the US$ in 1996[1]. Because the health sector imports almost all inputs except for labor, this adjustment of the exchange rate has profoundly increased health sector expenditures. The growing gap between expenditures and income in the health sector has set the stage for a future financial crisis.

The average annual inflation rate was 368.5% in 1994, 235.5% in 1995, and -0.8% in 1996. The high degree of uncertainty about prices made accurate budgeting by hospitals or public payers impossible. Private insurance companies were forced to stop offering health insurance policies because it was difficult to accurately project premiums.

Traditionally, Dutch Treaty Funds (approximately US$2 billion) that were granted to Suriname in 1975 as part of the settlement associated with independence have underpinned health sector provision. These funds are to be used to help in economic development. They are also used to maintain the safety net for the Surinamese people by financing deficits in social programs. While these funds have protected the population during times of macroeconomic instability, they have also minimized the urgency for the government to make hard resource allocation decisions.

3.1 Government Budgeting Process

In theory, public health facilities are self supporting. In practice, the government has a history of covering deficits, both directly and indirectly by increasing funding to the public payers: the SZF and the MSA. This has become more necessary in times when the currency has fluctuated widely and inflation is high. In these unpredictable times, the planned budget has been inadequate to cover rising health care costs. While it has been necessary to find a mechanism to cover unplanned costs, the practice of not holding the MOH, the public payers, and the facilities accountable for remaining within their budget guidelines generates an environment with weak incentives to increase efficiency or control costs.

3.2 Tax Revenue

Individuals pay income taxes; firms pay profit taxes; importers pay import taxes; and a tourist tax is imposed on hotel bills. Currently there are excise taxes in place for spirits and beer. It is interesting to note that individual and firm profit taxes are currently paid based on a "self-assessment" system. Individuals and firms are expected to appear at commercial banks or at the Tax Office every three months to pay taxes on self-reported income. There are investigators to uncover tax evaders and the penalty for under-reporting is double the correct tax rate. The Ministry of Finance claims that compliance is surprisingly good. All these forms of tax revenue are channeled into one fund at the Treasury of the Ministry of Finance.

[1] Fong, Lie Hon, Report on Health Sector Reform in Suriname, August 1995, p. 6.

In addition, civil servants pay a 4% wage tax to the SZF, which the Ministry of Finance matches with a contribution equivalent to 5% of the workers' wage. These funds flow directly to the SZF.

3.3 Government Budget Allocation Between Sectors

In the previous March of the year being budgeted, the Treasury proposes a preliminary distribution of forecasted funds between sectors. There are no legal or constitutional guidelines that pre-determine the way the total budget is allocated between sectors which, in theory, gives the Treasury complete flexibility regarding the allocation of funds between sectors. In practice, however, the coming year budget allocation is closely determined by the previous years' distribution.

The MOF sends a letter to each ministry with the proposed budget amount and guidelines for the ministry to use to prepare their upcoming budgets. In May, each ministry proposes a detailed budget to the Treasury. Inspectors for each ministry, that are employed by the Treasury, review the proposed budgets and make revisions. When there are disagreements about inter-sectoral allocations, the Council of Ministers meets to collectively determine the allocations.

On the first working day of October, the National Assembly receives the proposed budget for the coming year with the goal of approving it by December 31. In reality, the approval process lasts as long as 14 months. The budget for 1995 was not approved until December 1995, when the year was just about over.

Implications for the health sector of this slow approval process are that there are no firm budget constraints. Since budgets are approved after the spending period is over, ministries are not held accountable for effectively managing their spending. The funding environment generates weak incentives to improve efficiency or to control costs.

3.4 Health Spending Aggregates

Spending by public payers is estimated to account for approximately 4.4% of GDP in 1996. Of this total, half represents spending by the SZF, 30% by the MOH, and 20% by the MSA. This distribution is presented in Table 3.1. When estimates of private spending are added, Suriname spends roughly 6.6% of GDP on health. This figure is relatively high for a country at Suriname's level of development. In contrast, in 1990 Guyana devoted 5.5% of GDP to health and Trinidad and Tobago 4.4%.[2]

Per capita public spending on health in 1996 was roughly US$67 per person and combined public and private spending will total approximately US$101 per person, as presented in Tables 3.1 and 3.2. These figures are imperfect estimations that make use of the information that is currently available. Suriname would benefit from completing the compilation of its National Health Accounts. Information on private household spending could be generated by incorporating health-spending questions into the household surveys that are fielded by the General Bureau of Statistics.

[2] IADB and PAHO, 1996, *Caribbean Regional Health Study*, p. 177.

Table 3.1 1996 Projected Health Expenditures by Public Payers (Sf)

Public payer	1996 budgeted expenditure	Percent of total public health spending by public payers
MOH	3,250,755,000	30%
SZF	5,422,560,900	50%
MSA	2,180,694,618	20%
TOTAL	10,854,010,518	100%
Per capita public health spending (population = 405,957)	26,737 Sf (US$67)	

Table 3.2 1996 Projected Private Spending (Sf)

Nickerie (inpatient hospital)*	71,297,324
St. Vicentius (inpatient hospital)*	1,477,140,000
‘s Lands (inpatient hospital)*	167,122,570
AZP (inpatient hospital)**	293,143,551
Diakonnessen (inpatient hospital)**	36,935,792
ESTIMATED PRIVATE SPENDING ***	2,045,639,237
TOTAL HEALTH SPENDING	16,382,765,213
Per capita total health spending	40,356 Sf (US$101)

* Actual private income received by hospitals during the first six months of 1996 was doubled to project total 1996 income.

** Actual 1995 private income received by hospitals was deflated using the 1996 inflation rate of -0.8%.

*** 37% of the budget of the SZF is dedicated to reimbursement for inpatient hospital visits. The other 63% pays for outpatient services, lab tests, and drugs. The ratio derived from SZF expenditure patterns is applied to hospital income from private sources to derive an estimate of total private spending. (Total private spending= (sum of private spending on inpatient hospital services / .37)). Of course, this method assumes that private spending patterns match the SZF.

Average spending for each person covered by the SZF is approximately US$94 as compared to average public spending for the poor and near poor of approximately US$46 (includes RGD, Medical Mission, and MSA budget). These differences raise questions about the equity of public spending on health services. Equity questions are particularly at issue since more than half of the SZF budget is financed with general tax revenues rather than wage tax contributions from the civil servants who are the direct beneficiaries.

Despite economic hardships, Suriname was able to continue to offer a comprehensive benefits package, which was partially financed by Dutch Treaty Funds targeted specifically to maintaining the social safety net. These figures should be interpreted with caution, however, since they are only predicted values for 1996.[3]

[3] 1996 budgets were used because this was the most comprehensive information provided by relevant institutions.

4. MINISTRY OF HEALTH

The MOH is responsible for formulating and setting the stage for the implementation of health sector policy in Suriname. To perform this sorely needed function, the Ministry needs to have a functioning management and decision making structure, a qualified staff of analysts, and an adequate health management information system. The Ministry does not currently have the staff nor the information needed to properly monitor the health sector nor to set policy. A more effective organizational structure could be implemented that would enable senior ministry staff to focus on system wide priorities rather than the day-to-day problems that currently consume them.

4.1 Organizational Structure

The divisions that make up the MOH include: Administration, Personnel, Finance, Planning, Legal Division, Bureau of Public Health (BOG), Psychiatric Hospital, and Dermatology Service. Directors of each division report to the Director of Health who, in turn, reports to the Minister. This reporting structure makes it extremely difficult for the Director of Health to focus on anything but the most immediate issues. She is often consumed with tasks such as locating drugs when the BGVS is out of inventory. More effective organizational structures may free the time of the Director of Health to focus on system wide issues.

An organizational chart developed by the MOH (see Figure 2) clearly demonstrates, through the use of a broken line, that the public hospitals and public primary care networks (RGD, Medical Mission, Youth Dental Service) are not under the direct control of the Ministry. These public health providing institutions are included in the same box as the BGVS, the SZF and the Nursing School (COVAB). The MOH is responsible for approving the proposed budgets of these semi-autonomous organizations, but it does not have direct control.

In contrast, this organizational chart portrays the public Psychiatric Hospital and Dermatological Service as under the MOH's direct control (through the use of a solid line), in addition to the Department of Planning, BOG, and the Legal Division. Other entities that are influenced by the Ministry, but not under its direct control, include: the Medical Committee; the entity responsible for protecting consumers from physician malpractice; the entity that establishes and monitors nursing practices, and the entity that establishes standards for the labeling and storage of medicine. The BOG, as a division of the MOH, has direct responsibility for public health programs, pharmaceutical inspection, and the inspection of food and food handling. The BOG is also responsible for collecting and analyzing epidemiological information.

The Pan American Health Organization (PAHO) is currently working with the MOH to restructure the BOG. The goals of the reorganization include improving the quality and allocation of staff, procedures, and the work environment. PAHO is focusing on improving the epidemiological surveillance system and on improving the management and administrative skills of staff.

FIGURE 2

4.2 Human Resource Needs

Excluding the Psychiatric Hospital and Dermatology Service, the Ministry has approximately 460 employees. The majority of employees work in the BOG (400) , which includes disease surveillance, environmental health, health education, and food and drug inspection. *The Planning Department is seriously under-staffed with only one employee.*

There is agreement among senior MOH staff that there is an urgent need for qualified professional staff. The MOH finds it difficult to recruit and retain skilled people because wages and working conditions in the private sector are much more attractive. There is a shortage of professionals in the MOH with the background needed to develop policy. Individuals trained in economics, public health, epidemiology, management, and statistics are sorely needed.

4.3 Information System Needs

The epidemiological surveillance system maintained by the BOG is barely functioning. Information is reported but is not systematically compiled and is not consistent. Much information exists on many separate pieces of paper and forms but is not compiled in a way that can be used by policy makers. One of the goals of the PAHO technical assistance would be to design standardized forms and to improve the functioning of the epidemiological surveillance system.

Birth and cause of death information come from a birth and death registration system. The MOH receives regular reports about health conditions in the interior of Suriname from the Medical Mission through their sentinel disease surveillance system, based on WHO recommendations (see section on the Medical Mission). Vertical programs such as malaria prevention and family planning each have their own reporting system and information is regularly reported to the MOH.

A sentinel reporting system that was established by the BOG in twenty public health centers throughout the country is not currently functioning as well as it did in the past. The BOG believes that there is much under-reporting by health workers in the sentinel stations. The shortage of qualified personnel in the BOG to collect and process information has contributed to the deterioration of the reporting system.

Part of the restructuring of the RGD will include the installation of a comprehensive health information system to enable central management of the RGD to monitor conditions in the newly decentralized facilities (see section on the RGD). There are no clear plans to integrate this system into the health information system of the BOG.

To perform its role as policy setter and monitor, the Ministry has a need for information in addition to disease surveillance. To monitor financial access to care, the MOH needs accurate information on insurance coverage of the population. To monitor the efficiency of service delivery, the MOH needs information on the costs of services and levels of production by type of provider. Information is needed from hospitals, primary care facilities, vertical programs, the State Insurance System, the BGVS, private health insurance companies, and private employers that provide and pay for employee care directly.

4.4 Ministry of Health Budget

The largest portion of the MOH budget, 62.8%, is allocated to subsidize public semi-autonomous facilities and NGOs. This is really a pass through of funds from general tax revenues to each institution. Note that there is a marked reduction in funds allocated to public hospitals from 1995 to 1996. MOH funds to public hospitals are primarily used to finance capital investment and to compensate hospitals when there is an increase in the civil servant pay scale. Another 13% of the budget funds the Psychiatric Hospital which also has its own administration, but is under the control of the MOH. Of the direct MOH Budget of approximately US$1.9 million, around 8.9% is dedicated to administration and planning. The BOG represents 68.9% of the MOH's direct budget. In comparison, the 1996 projected budget of the SZF is over US$13 million and the largest public hospital, the AZP, had 1995 revenues of over US$4.7 million.

TABLE 4.1 Ministry of Health Budget (Direct and Indirect)

	1995 Actual Expenditures (thousands of Sf)	1996 Budget (thousands of Sf)
General department costs	45,365	69,91
Subsidy, contributions, and other Department costs (Table 4.2)	1,830,939	2,041,4
Inspection and planning	126,195	82,55
Bureau of Public Health	228,911	541,9
Dermatological service	53,959	29,82
Psychiatric Hospital	268,775	422,5
National Council of Drug Enforcement		173
TOTAL	**2,554,144**	**3,188,**
Total in US$	**6,385**	**7,97**

Table 4.2 Subsidies and Contributions of the Minister of Health (thousands of Sf)

	1995 Actual	1996 Budget
Medical Mission	248,716	400,000
Youth Dental Service	185,035	230,600
COVAB (nursing school)	25,391	49,800
White Yellow Cross (NGO)	30	125
Green Cross (NGO)	30	50
Association Diakonessen District Work (NGO)	--	--
Kidney Institution (NGO)	50	150
Expenditures for leprosy patients	13	2,950
Gratuity to public functionaries	4,167	8,750
RGD	338,633	521,000
‘s Lands Hospital	251,031	191,467
Academic Hospital	701,176	552,000
Nickerie Hospital	76,667	27,325
Premium contributions for MOH employees	--	57,209
TOTAL	**1,830,939**	**2,041,426**

4.5 Assessment

It will be difficult for the MOH to take a proactive leadership role in setting health sector policy without the information, financial resources, or human resources needed for planning. On the other hand, in contrast to other countries in Latin America and the Caribbean, the Surinamese MOH has the advantage of having minor responsibilities for direct provision of health services. The separation between financing and provision of services places the MOH in a good position to perform the much needed policy setting and monitoring functions. What is needed are skilled professionals with training in economics, planning, and public health. In addition, the MOH must be ready to demonstrate the political commitment to make difficult decisions that may be unpopular with powerful interest groups.

5. CONSUMERS

To understand any health care system, it is important to examine the role of the consumers. This section will begin with an overview of the population distribution of Suriname and a description of employment and poverty status. This leads directly into a discussion of insurance coverage of Surinamese consumers, which is directly related to employment and poverty status. Consumer out of pocket payments for health services are also included. The section concludes with a presentation of the epidemiological profile of Surinamese residents and implications for health sector priorities.

5.1 Population Distribution

Approximately 88% of the population of Suriname, estimated to be 405,957 in 1995, live on the Atlantic coast. The population in the interior is primarily Amerindians and descendents of runaway slaves, called (maroons). The ethnic composition of the population is: Hindustani (33%), Creoles (35%), Javanese (16%), Maroons (10%), Amerindians (3%), Europeans, Chinese, and others (3%)[4] The population of the capital city is about 192,000 and the population of the country's second city, Nieuw Nickerie, slightly exceeds 8,000. It has been estimated that between 200,000 and 300,000 people from Suriname are living abroad, primarily in the Netherlands. Suriname has suffered from the loss of skilled people through the "brain drain" resulting from emigration. Part of the shortage of medical specialists is blamed on the fact that Surinamese doctors who are trained in Holland are eligible to practice medicine there and often choose to do so.

5.2 Employment and Income

Inflation and economic stagnation have caused increasing imbalances in income distribution among the population. The number of formal sector jobs fell 14% between 1982 and 1991. In the same period, the number of government jobs increased 17%.[5] There are no reliable data to indicate the proportion of the economically active that are unemployed, but estimates range from 14% to 33%.[6] One parent households, the majority headed by women, are more affected by poverty than two parent households. Female unemployment is higher than male and their average earnings are lower.[7]

5.3 Insurance Coverage

Approximately 35.4% of the population of Suriname, or 143,886[8] people, have health insurance coverage through the SZF. This includes the 45% of the labor force employed in the government (or approximately 22% of the total population) as well as the spouses and dependents of civil servants. Of all SZF enrollees, 9,973 are non-civil servants that voluntarily enroll. The MSA provides

[4] 1996 South American Handbook, p. 1465.

[5] PAHO, Health Conditions in the Americas, 1994, p. 400.

[6] IBID, p. 400.

[7] IBID, p. 401.

[8] As of July 1996, source: SZF

coverage for approximately 41.9% of the population, or 170,000. This figure includes people in the interior of Suriname that receive primary care services through the Medical Mission. The country's large employers also pay for health care for their employees. Estimates are that an additional 20.1% of the population is covered in this way[9] . Another small percentage purchase private insurance and the rest of the population is forced to either pay out of pocket or get charity care. The degree of multiple coverage in families is not known. If there is little overlap in coverage, only a small percentage of the Surinamese population is without health coverage.

5.4 Consumer Copayments

The majority of consumers provide almost no out of pocket payments for health services. Access to essentially free services can be expected to result in excessive utilization. Rather than considering the true cost of services, consumers make the decision to consult a doctor based on a price to them of zero. More rational use of health services would be encouraged if copayments were introduced for services for which demand was relatively more elastic.[10] Copayments should be set to encourage rational utilization of care, not to pose as a financial barrier to access. In Suriname, many consumers pay small copayments for drugs, but outpatient visits are essentially free, at least officially.

Civil servants contribute 4% of their wages to the SZF which is matched by high government subsidies. The only out of pocket payments imposed on civil servants and their dependents for health services is a Sf 100 (US$.25) copayment for drugs. Those covered by private firms have similarly generous plans. The poor and near poor that are certified by the MSA pay small copayments for drugs and for each day they stay in the hospital. Table 5.1 categorizes copayments for consumers covered by public payers.

Table 5.1 Consumer Copayments

	SZF	MSA
G.P.	0	0
Specialists	0	0
Days in the Hospital	0	poor pay Sf 200 (US$.50) per day near poor pay Sf 600 (US$1.50) per day
Medicine	Sf 100 (US$.25)	poor pay Sf 75 (US$.19) near poor pay Sf 150 (US$.38)

[9] The General Bureau of Statistics finds from a regional household survey that average family size in Paramaribo is 4.5. The estimated population covered by private employers is estimated by multiplying average family size by the number of employees covered by collective bargaining agreements as reported in the Statistical Yearbook 1995 of Suriname, p. 41. The population covered by private employers may even be higher if family size is closer to 5.5, as estimated by Minister of Health Khodabaks.

[10] Emergency surgery is an example of an extremely inelastic service, while cosmetic surgery is an example of a more elastic service. Dental care and ambulatory care visits are usually viewed as more demand elastic than surgeries.

5.5 Labor Unions

The majority of formal sector workers in Suriname are organized into labor unions that negotiate collective bargaining agreements with employers. These agreements include a provision that the employer must provide health coverage for employees and dependents. In 1993, 18,097 workers were employed by enterprises that had collective bargaining agreements. Covered industries include: agriculture, mining, manufacturing, electricity, gas, water, construction, trade, restaurants, hotels, transportation, communications, financial institutions, community and social services.

5.6 Epidemiological Profile

Life expectancy at birth in Suriname, male and female combined, has increased from 56 in the early 1950's to 70.3 in the 1990-1995 period. Life expectancy for women is approximately 5 years longer than for men.[11] Crude birth rates have dropped from 43.8 per thousand to 25.3 during the same period and infant mortality rates have declined from 89 per thousand live births to 28 in the 1990's.[12] A source reports infant mortality rates of 20.9 in 1990.[13] Fertility rates are also reported to have declined from 134 per thousand women of child-bearing age in 1985 to 106 per thousand in 1991.

Major causes of death in Suriname include the prime killers in developed countries: hypertension and stroke, as well as major causes of death in less developed countries: gastro-enteritis, pneumonia, and influenza. Table 5.2 displays the ten major causes of death for the period 1990-1992 as reported from the death registration system. This is the most recent information available from the BOG and is a clear indication that the epidemiological surveillance system is not functioning as well as it should.

Table 5.2 Major Causes of Death 1990-1992

Hypertension	1229	18.7%
Malignant Neoplasms	599	9.1%
Cardiovascular Disease	544	8.3%
Trauma	539	8.2%
Diseases Occurring in the Perinatal Period	500	7.6%
Gastro-Enteritus	285	4.3%
Diabetes Mellitus	232	3.5%
Pneumonia and Influenza	160	2.4%
Chronic Respiratory Conditions	142	2.2%
TOTAL	**4,230**	**64%**

Source: Bureau of Public Health.

[11] Informe BID, CELADE, Suriname: Caracterización Demográfica y su Impacto Sobre los Servicios Sociales, Mayo 1995, cuadro 1.2.

[12] Ibid.

[13] PAHO, Health Conditions in the Americas, 1994, p. 402.

The most important cause of death for children under five years was intestinal infectious diseases. For the years 1988-1990, the mortality rate due to diarrhea for children under one year old was 5.7 children per thousand. The mean mortality rate for children between age one and four due to gastroenteritus was 23.3 per 100,000.[14] In the period 1988-1990, accidents caused most deaths among children aged 1-14.

Though recent figures are not available, malnutrition was on the rise in the late 1980's and early 1990's. Indications of malnutrition include primary school surveys that showed that 12%-18% of sampled first graders displayed a weight-for-height ratio that indicated malnutrition in the late 1980's.[15] More recent information is not available. There was also evidence of regional differences in rates of malnutrition, between neighborhoods within Paramaribo, and between rural regions in the interior.

Major causes of death among adolescents and adults include accidents and suicide. Targeted public education campaigns aimed at improving road safety and community mental health outreach services could help to reduce these preventable deaths. Ingestion of agricultural chemicals (pesticides) is an important cause of accidental deaths and is also used to commit suicide.[16]

There has been a marked decline in the number of deaths due to complications from pregnancy. Accompanying this improvement is a reduction in the fertility rate from 6.56 per woman of childbearing age in the 1960's to 2.68 in the 1990's.[17] The use of contraceptives was 85.7% among married women, and 44.4% among engaged women.

Table 5.3 displays the prevalence of communicable diseases that are monitored throughout the world. AIDS and sexually transmitted diseases are growing problems. Tropical diseases such as malaria and dengue are also increasing in number. In response to an alarming increase in malaria, the Minister of Health is launching a malaria prevention campaign. This is as example of a case where effective information about public health problems enables the MOH to craft a solution.

In 1976, when the Expanded Program on Immunization began, children under one year old were vaccinated against diptheria, pertussis, tetanus, and poliomyelitis. The measles vaccine was added in 1980 after a measles epidemic. Since the war in the interior, there has been a reported decline in vaccination coverage, but reliable statistics are not currently available for this indicator.

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[14] Ibid.

[15] Ibid, p. 403.

[16] Conversation with Nickerie Hospital representatives, 11/96.

[17] Informe BID, CELADE, Suriname: Caracterización Demográfica y su Impacto Sobre los Servicios Sociales, Mayo 1995, cuadro 1.2.

Table 5.3. Communicable Diseases

Communicable Diseases	1995	1996 (January through September)
Under international surveillance:		
AIDS	N/A	63
Malaria	6,615	3496
Influenza Like Syndrome	16,287	13,959
Subject to international regulation:		
Tuberculosis	72	27
Diphtheria	0	0
Whooping cough	0	0
Tetanus (excl. neonatal)	2	2
Poliomyelitis	13 (s)	1 (3)
Measles	11 (s)	14 (s)
Mumps	863	114
Rubella	16 (s)	9 (s)
Tetanus neonatorum	0	1
Diseases of regional interest:		
Typhoid fever	6	1 (s), 3
Meningoccal infection	0	0
Dengue	124 (s)	496 (s)
Viral encephalitis	1 (s)	0
Foodborne illnesses	12	14
Gastroenteritis (< 5 years)	3,143	2,367
Viral hepatitis	3	30
Rabies	0	0
Syphilis	138	157
Gonococcal infections	1,498	1,061
Leptospirosis	129 (s)	125 (s)
Acute hemorrhagic conjunctivitis	0	0

Source: Bureau of Public Health.
(s) = suspected, not confirmed.

6. PROVIDERS

This section will describe each of the providers that were introduced in Figure 1. The analysis will include some discussion of the population served by each type of provider, the incentives they face, and the ways that pieces of the delivery system are interconnected through required referrals. The special challenges faced by the Nickerie Hospital are also discussed. The Youth Dental Service, the Psychiatric Hospital, and the BGVS are part of this section because they contribute to the supply of services available to Surinamese consumers. For this same reason, referrals abroad for procedures not available in Suriname are also included. The physician training process and the shortage of qualified specialists concludes the discussion.

6.1 Delivery System Overview

The Surinamese people receive medical services from an array of public and private health care providers. Residents of the Atlantic coast, approximately 90% of the population, can receive primary care services from public RGD clinics, from private doctors, or from salaried general practitioners hired by private employers to serve employees and their families. They can also receive hospital care from public or private hospitals and consult specialists in private practice or employed by public hospitals. People who live in the interior receive primary services through clinics run by the Medical Mission and use the private Diakonnessen hospital.

People who are certified by the MSA are entitled to free primary care services at RGD clinics, though there are reports that RGD doctors sometimes charge extra fees. Those covered by the MSA are also required to have a signed referral form from a general practitioner to see a specialist. The specialist is then authorized to refer MSA-covered patients for hospitalization. The majority of MSA covered patients who live on the coast use public hospitals, though the MSA will reimburse private, as well as public, hospitals for MSA patient care.

The Medical Mission serves the approximately 40,000 Surinamese residents that live in the interior of the country. Primary care services are provided through a network of health centers that are staffed by health workers. Public health doctors are consulted for difficult cases. Patients that need hospitalization are transported to Paramaribo and receive care in the private Diakonessen hospital.

Civil servants and those who voluntarily choose to enroll in the SZF must register with the RGD doctor or private general practitioner of their choice. If the general practitioner treats the patient, the G.P. will refer the patient to a specialist. G.P.s can also prescribe drugs and order lab tests and x-rays. A referral is needed from a specialist for admission to the hospital for all non-emergencies. SZF covered patients are entitled to receive hospital care from both public and private hospitals.

The country's large employers, such as the bauxite companies, employ general doctors for employee care. Employees and their families are required to consult the firm's own clinic before gaining referrals to specialists or the hospital. Other private employers require employees to choose a contracted general practitioner from a limited list. Referrals are required to see specialists or to gain admittance into the hospital. Private health insurance plans use a similar structure to manage care. Private firms and health insurance plans refer to both private and public hospitals.

Surinamese citizens that have medical conditions that cannot be treated inside Suriname are entitled to be sent abroad for treatment if there is a high probability of complete recovery. This benefit is available to all citizens, regardless of insurance coverage, and is funded through the Dutch Treaty Funds. All referrals are currently to Holland but the MOH is investigating the possibility of sending patients to other countries in the region.

The public psychiatric hospital is available to serve the entire population of Suriname, regardless of payer. Hospitalization is provided for people with the following problems: substance abuse, homelessness, elderly long term care, childhood mental illness, people under observation by the criminal justice system, and chronic mental illness. In addition, a day treatment program is run for 40-day patients.

In principle, Suriname provides basic dental services free of charge to the entire population, from birth to age 18, through a publicly funded service called the Youth Dental Service (YDS). Services are available in approximately 30 locations: in the central facility in Paramaribo, and in some RGD clinics. The current regional distribution of services, however, does not afford access to the entire population.

Suriname has an adequate supply of general practitioners, which are trained in the country, but there are indications that the country faces a shortage of specialists. This shortage is more severe in Nickerie than in Paramaribo.

The BGVS purchases drugs in bulk for the entire country on the international market. In addition, a small number of drugs and supplies are produced inside Suriname at the BGVS facility.

6.2 Primary Care Services

6.2.1 The Regional Health Care System

The RGD provides public primary care services to the Surinamese population that lives in the more densely populated coast. The poor and near poor that have been certified by the MSA access RGD clinics for care. In addition, SZF enrollees may choose an RGD doctor as their general practitioner. At the time of this study, the RGD was in the process of restructuring into an organization that will be self-supporting and essentially independent. This restructuring also accompanies other changes that make it difficult to get an accurate picture of the RGD today.

The RGD categorizes facilities into three levels. Health centers have a delivery room, lab, pharmacy, and some beds for short admissions. They are staffed with two doctors, one midwife, and district nurses. Health clinics may have one or two beds for observation but are essentially for ambulatory curative and preventive care. Health posts provide basic primary care services to small communities. RGD management was not able to provide an accurate number of each type of facility because the categorization is changing and some facilities are being upgraded. Currently, the RGD employs 55 physicians, 25 assistant physicians, and 14 midwives.

The RGD provides primary care to at least 32% of the population.[18] It would be worthwhile to know the number of SZF enrollees that choose an RGD doctor as their G.P. This would be an indication of the way the population that has a choice perceives the quality of services at RGD clinics. There is no institutionalized mechanism to ensure that RGD general doctors follow their patients through the delivery system from primary care, to specialist, to the hospital. It is likely that patients could benefit if the system encouraged general doctors to coordinate and integrate care.

The RGD is in the process of selecting an outside firm to help restructure services so that the RGD can compete with the private sector. Proposals are being considered from Ernst and Young, Coopers and Lybrand, and ProPlan. The goal of the restructuring is to improve the quality of services by decentralizing decision-making and responsibility, involving community participation, changing incentives for doctors, and improving management information systems. Total funding includes Sf 1.5 billion and dg2.1 billion from Holland.

Currently, management of the RGD is highly centralized. Part of the goal of the hoped for decentralization is to transfer budgetary responsibility to coordinators of each of the eight regions. The function of central management will be transformed into system oversight, monitoring programs, and designing policy. Members of the community will sit on local Boards of each RGD facility and will be responsible for making local policy decisions. Communities will also be expected to contribute additional funds for investment or other community resources (ex-volunteer labor to paint) with a goal of helping communities take ownership of their health services, rather than viewing the RGD as a government entitlement.

Doctors will be offered a new form of payment. In the current system, doctors earn income from: salaries from the government; contracts with the SZF where they receive a monthly capitation payment (Sf 420) for each SZF insured person that chooses the RGD doctor as their G.P.; and they see some private patients. In the restructured RGD system, doctors will be offered a somewhat higher monthly salary if they agree to share a portion of the fees they collect with their RGD facility. The proposal currently on the table is that doctors keep half and the other half goes to the RGD. These additional funds will be used by RGD management for investments to improve the facilities. Doctors who find this payment system unacceptable can choose to leave the RGD. Because there is no shortage of general practitioners in Suriname, the RGD feels confident that it will be able to keep doctors under this new payment policy.

The RGD receives funding from the MOH and the MSA. From these funds, salaries and operating expenses of RGD facilities must be covered. RGD management was reluctant to provide details of resource allocation information because of the large changes that are occurring at the RGD. In 1996, the MSA contributed Sf 173,13,755 to the RGD. The MOH subsidy to the RGD in 1995 was Sf 338,634,000. The 1996-budgeted subsidy from the MOH is Sf 521,000,000, a 54% increase, partially intended to cover the reorganization and installation of a new information system.
Information about the salaries of RGD doctors, and comparisons to the earnings of other general practitioners, was not collected. In addition to the RGD salary, RGD doctors can earn SZF capitation payments for each covered person that chooses them. These funds flow directly from the

[18]Approximately 130,000 MSA covered patients are entitled to receive services from the RGD. In addition, SZF enrollees and some private paying patients consult RGD doctors.

SZF to the individual RGD doctor; they are not part of the RGD budget. As was described above, RGD management intends to alter doctor compensation so that part of SZF capitation payments can be used by RGD facilities for maintenance and investment.

RGD doctors are paid a fixed salary to treat the poor that is not tied to performance or productivity. In addition, RGD doctors have the opportunity to supplement their earnings by attracting SZF enrollees and, therefore, earning monthly SZF capitation payments. These payments are the equivalent of US$13 per enrollee per year. Since salaries are not tied in any way to the number of poor patients seen, RGD doctors have clear incentives to prefer to attract SZF patients over MSA patients. In addition, RGD doctors have incentives to over refer both the MSA covered population and SZF enrollees to specialists in order to reduce their workload. Incentives to over refer MSA patients may be less strong than among SZF enrollees in cases where the general practitioner charges the poor unofficial additional fees for ambulatory care. The extent of this practice has not been measured and the potential adverse financial impact on the poor has also not been examined.

6.2.2 Medical Mission

The Medical Mission is a cooperation of three religious organizations that jointly provide medical services to the people living in the sparsely populated interior of Suriname. Funding for services provided by the Medical Mission comes from the Surinamese government. Primary care services are part of the budget of the MOH and hospitalization is covered by the MSA. The Medical Mission is controlled by a Board of Directors that has representatives of each religious organization. The Diakonessen Hospital carries out management and operations, which is also the referral hospital used by people in the interior.

Currently, the Medical Mission provides primary care services to the approximately 40,000 people of Suriname that live in the interior through 46 health centers. Health centers are staffed by health assistants that are members of the communities they serve. These health assistants are trained through a three-year program that was jointly developed by the Medical Mission, the MOH, and the nursing school of Suriname, COVAB. In addition to one health assistant at each health center, the Medical Mission employs four general practitioners that specialize in public health.

Each health center is equipped with a radio to be used to contact the Diakonessen hospital in Paramaribo in case of an emergency, and to contact one of the four doctors in cases that the health worker handles. These doctors see approximately 10-15% of all patients covered by the Medical Mission. Patients are transported by plane or boat to Paramaribo when necessary.

Health conditions in the interior are monitored through an information system that collects weekly health statistics from each health assistant by radio. Health assistants are trained to appreciate the importance of an effective disease surveillance system and provided with periodic reports so that they
recognize the importance of the weekly information they submit. The Medical Mission will soon complete implementation of a patient registration system.
In 1995, the MOH contributed Sf 275,754,000 to the Medical Mission and 1996 budgeted expenditures were Sf 400,000,000. MOH subsidies cover rural primary care operations and transportation to Paramaribo for hospitalization. Inpatient care at the Diakonessen Hospital is

funded by the MSA. Total 1996 MSA budgeted funds for the Diakonessen hospital was Sf 312,854,050. While these funds include both Medical Mission and other MSA covered patients, the vast majority of poor patients in the Diakonessen Hospital are from the interior.

The people living in the interior of Suriname appear to have good access to health care through the system established by the Medical Mission. Care is provided free so that there are no financial barriers. Representatives of the Medical Mission believe that no village of reasonable size is without access to a health center and that a plane or boat is sent to bring a patient to the hospital within 24 hours of contact by radio. The Medical Mission has developed a system that links preventive and primary care with curative and hospital based care. This system is a sharp contrast to non-integrated vertical delivery systems provided by the RGD and unlinked hospitals to the residents of the Surinamese coast.

While the Medical Mission is a model of an integrated delivery system that has advantages over the fragmented delivery system available to other Surinamese residents, the model cannot necessarily be replicated. Moreover, average length of stay in the Diakonessen referral hospital for Medical Mission patients is extremely long. This can be explained by the following variables: residents of the interior must often wait many days for transportation back to their villages; residents of the interior often have no family in Paramaribo that can care for them while they recover; and the hospital is reimbursed a flat daily fee from the MSA for each day a patient is in the hospital, regardless of length of stay. More discussion of hospital payment incentives is included in later sections of this report.

6.2.3 Primary Care Services for SZF Enrollees

Civil servants and those who voluntarily choose to enroll in the SZF must register with the RGD doctor or private general practitioner of their choice. Enrollees are required to consult their general practitioner before seeing a specialist. If the general practitioner treats the patient, the G.P. will refer the patient to a specialist. G.P.s can also prescribe drugs and order lab tests and x-rays. The SZF pays G.P.s (private or RGD) a fixed monthly capitation payment for each covered person that enrolls with the G.P. G.P.s receive the same payment whether they see every registered enrollee or they see no one. G.P.s have strong incentives to over refer to specialists for two reasons: referrals to specialists imply less work for the G.P., and gaining a reputation for not restricting referrals to specialists may attract enrollees.

6.2.4 Primary Care Services for Employees of Private Firms

The country's large employers, such as the bauxite companies, employ general doctors for employee care. Private firms who employ general practitioners require employees and their families to consult the firm's own clinic before gaining referrals to specialists or the hospital. One would predict that the salaried doctors employed by private firms are more effective at restricting unnecessary referrals because private firms face budgetary restrictions. Salaried medical directors can be held accountable for containing costs. For example, Suriname Aluminum Company (SURALCO) recognized that the costs of referring employees and dependents to ophthalmologists for eye tests justified developing the capacity to provide ophthalmology services in house.

Other private employers require employees to choose a contracted general practitioner from a limited list. Referrals are required to see specialists or to gain admittance into the hospital. A similar structure to manage care is used by private health insurance plans. These mechanisms offer some minimal control over referrals if doctors fear they might lose the contract if they display a history of excessive referring.

6.3 Specialist Outpatient Care

Specialists provide outpatient consultations through private offices and through the outpatient clinics at both private and public hospitals. Specialist services for the poor and near poor covered by the MSA are provided in public hospital clinics free of charge. Doctors are expected to treat this population in exchange for their civil servant salary. In contrast, specialists charge private payers and the SZF fees for consultations and procedures.

6.4 Inpatient Hospital Care

Hospital care is delivered by five hospitals; four in Paramaribo and one in Nickerie. Three hospitals are public, and two are private non-profit. These hospitals have a total of 1308 beds. In addition, there is one 275-bed psychiatric hospital in Paramaribo that serves the entire country.

In theory, certified poor Surinamese who are covered by the MSA should have equal access to both private and public hospitals. In practice, a smaller percentage of private hospital patients come from the MSA than in public hospitals. Since public and private hospitals receive the same payment from the MSA for the poor, the significant difference in patient mix between the public and private hospitals in Paramaribo must be at least partially explained by differences in admitting practices. These differences in admitting practices are partly driven by the fact that the MSA does not compensate specialists in private hospitals for outpatient consultations. MSA patients are encouraged to go to specialists in public hospitals that earn their civil servant salary by providing free outpatient services to MSA covered patients. One would expect that admissions often result from non-emergency outpatient visits. The section on payers presents a detailed analysis of incentives in the payment system that would be expected to drive these results. There are also reports that private hospitals request extra payments from MSA patients that can pay which may cause MSA covered patients to choose public hospitals where inpatient care is delivered for only a small copayment.

Occupancy rates in Surinamese hospitals range from a low of 42% in Nickerie to 57% in the AZP and 62% in the Diakonessen Hospital (see Table 6.1). These occupancy rates are low by any standard and provide a clear indication that Suriname has an excess supply of hospital beds. Once a patient is admitted to the hospital, it appears that they remain for too many days. Average length of stay in Surinamese hospitals in 1995 was 9.1 days, which is longer than in any other Caribbean country (Table 6.2).

Table 6.1 Percentage of Hospital Admissions by Type of Payer and Related Indicators (1995)

	Academic Hospital (public)	's Lands Hospital (public)	Nikerie Hospital (public)	Diakonessen Hospital (private npo)	St. Vincentius Hospital (private npo)
MSA	46%	67%	58%	24%	5%
SZF	20%	15%	20%	38%	39%
Private	34%	18%	22%	37%	56%
Total number of admissions	8,598	7,894	1,819	6,207	4,728
Average length of stay (days)	9.9	7.9	6.7	8.9	9.8
Average occupancy rate	57%	56%	42%	62%	48%
Number of beds	408	303	80	230	287

Source: Survey of hospital production and finance, November 1996.

Table 6.2. Average Length of Hospital Stay for Selected Caribbean Countries

Country	Length of Stay (days	Occupancy Rate (%)
Suriname 1995	9.1	57.2
Suriname 1993*	9.9	68.8
St. Kitts and Nevis*	8.7	49.3
Grenada*	8.4.	45.8
Bahamas*	7.7	83.7
Barbados*	7.7	73.7
Jamaica*	6.0	71.8
St. Vincent and Grenadines*	6.0	67.9
Dominica*	5.9	88.9
St. Lucia*	5.1	57.7
Trinidad and Tobago*	4.3	70.7

Source: **Caribbean Regional Health Study*, Inter-American Development Bank, Pan American Health Organization/
World Health Organization, May 1996, p. 76.

6.4.1 Hospital Autonomy

Public hospitals in Suriname function with a great deal of autonomy, especially when compared to those in Latin America and the Caribbean. Hospitals have both administrative and medical staff in top positions which puts them in a strong position to respond to payment system changes. Because hospitals have been billing the different payers on a fee-for-service basis, rudimentary accounting systems are in place. The major constraint that confronts public hospitals is that they are accountable for raising enough revenue to cover the civil service salaries of their employees. Private hospitals have more flexibility to hire and fire. Both private and public hospitals, however, face the same tariff structures from the SZF, MSA, and private payers. Public hospitals are also required to

serve the poor, while it appears from admission statistics that private hospitals are effectively limiting admissions of MSA covered patients.

6.4.2 Hospital Expenditures

The proportion of total recurrent expenditures in public hospitals devoted to personnel costs range from 33.8% in the public 's Lands hospital to 43.8% in the Diakonessen hospital[19]. In Latin America and the Caribbean, it is not unusual to observe as much as 70% of total expenditures being devoted to personnel costs. This leaves few funds for capital investment, maintenance, and other operating costs. In comparison, Suriname is in a relatively advantageous position. Expenditures for medical supplies and medicines represent approximately one third of hospital expenditures. The final third covers operating costs which includes items such as utilities, maintenance, food service, and cleaning.

6.4.3 Hospital Income

Table 6.3 displays the breakdown of sources of recurrent income for public hospitals. Private hospitals did not provide comprehensive income information for this report. Table 6.4 reports funds available for capital investment. For inpatient services, it is clear that the public payers are extremely important sources of revenue to public hospitals. It is interesting to note that the AZP receives 25.7% of its income from reimbursement for medicines and medical supplies and an additional 9% comes from laboratory services. The AZP is the only institution that provided this breakdown. It is not clear how comprehensive and reliable this hospital self reported income is. One potential area for discrepancy is the difference between subsidies reported by the MOH to each public hospital and government funds received as reported by each hospital. This points once again to the need for improved information for decision making.

Table 6.3 Distribution of Income Sources for Surinamese Public Hospitals (1995)

Payer	's Lands Hospital	Academic Hospital	Nickerie Hospital
SZF	18.0%	16.5%	38.1%
MSA	46.5%	25.9%	34.4%
Private	10.5%	14.9%	27.5%
Other:			
Laboratory	--	9.0%	--
Emergency room	--	2.3%	--
Medicines	--	25.7%	--
Other	--	6.5%	--
Other total (includes transfers from the MOH)	25.0%	42.6%	N/A
Total Income (Sf)	1,002,560,292	1,896,084,016	124,510,745
US$	2,506,400	4,740,210	311,277

Source: Self-reported by hospitals for this report.

[19]Reports of income and expenditures, 1995, collected for this report.

Table 6.4 Funds for Capital Investment (1995 total)

	Government	Donations	Total
‘s Lands Hospital	Sf 88,800,000	0	Sf 88,800,000
Academic Hospital*	N/A	N/A	N/A
Nickerie Hospital	76,667,180	0	Sf 6,667,180
Diakonessen Hospital	0	150,000 dg	150,000 dg
St. Vincentius Hospital	300,000 dg	50,000 dg	350,000 dg

Source: Self-reported by hospitals for this report. dg= dutch gilder,
* AZP did not provide completed information but did report that the excess of revenue over expenditures of 131,122,415 in 1995 was used for capital investments. In addition, the AZP is expecting donations from Japan in excess of 10 million US$ for additional capital investment.

There is a high probability that the AZP will receive over ten million dollars worth of aid from Japan to purchase medical equipment. The potential for this additional equipment to fuel health sector inflation is quite serious because there are few controls on the use of expensive technology. Currently, hospitals submit bills to payers for lab tests and medicines with the expectation that they will be reimbursed fee-for-service. There are no controls on utilization through monitoring or through incentives in the payment system.

The lack of incentives for providers, hospitals, or consumers to limit the consumption of medicines has created a situation where hospitals are earning as much as 25% of their income from the sale of medicine. The practice is for hospitals to add a 35% markup to the price they pay the BGVS to purchase drugs which makes drug sales an important revenue item.

6.4.4 Assessment of the problems of Nickerie Hospital

The public hospital in Nickerie, designed to serve the population living in the region close to Nieuw Nickerie, was recently renovated with the support of an IDB loan. The hospital has found it extremely difficult to attract and keep specialists. Because the population knows that the hospital has few specialists, they choose to travel to Paramaribo when hospital services are needed. To find a solution to this problem, the Albert Schweitzer Institute was contracted to arrange for visiting specialists from other countries. In addition, some specialists are presently in training overseas and the Minister has recently traveled to Holland to try to find a solution.

It is clear that specialists prefer to work in Paramaribo hospitals because they can earn higher incomes and many prefer to live in the city. As long as the demand for specialist exceeds the supply[20], the potential to earn will be better in Paramaribo. Specialists earn more in Paramaribo for the following reasons: the volume of patients is higher; there is a larger percentage of SZF covered patients; and there are more private payers. Comparison of hospital revenue sources shows that Nickerie receives 34.4% of its revenue from the MSA and the MSA represents 58% of all hospital

[20] This does not necessarily imply that there is a shortage of specialists. Changing the structure of the delivery system so that general practitioners are utilized more effectively may reduce the need for specialists.

admissions. When comparing Nickerie to the other public hospitals, the AZP earns only 26% of its revenue from the MSA and the 's Lands hospital earns 46%.

MSA patients are less attractive to specialists because there is no potential (at least officially) to charge additional fees. The specialists' civil servant salary is supposed to compensate for serving the poor. On the other hand, specialists can bill the SZF for every outpatient visit and procedure provided to an SZF covered patient. Hospitals also pay specialists a portion of the SZF "all in" daily hospital fee. Specialists can earn even more from private payers as they are directly compensated for performing operations as well as for consultations and outpatient procedures. These income-enhancing opportunities are more limited in Nickerie than in Paramaribo.

As of this writing, ferry service is scheduled to begin between Guyana and Nickerie. Nickerie hospital management is cautiously optimistic that this improved transportation will bring people from Guyana who might be willing to pay for hospital services out-of-pocket. There is general agreement that the quality of care is better in Suriname than in Guyana. This improved ferry service may contribute to solving Nickerie's problems by increasing the volume of patients.

It will be difficult, however, for the hospital to earn a reputation among the Guyanese for having high quality care without a staff of specialists. The management of the Nickerie hospital is also convinced that the hospital must maintain a stable staff of specialists for a while to build a reputation for offering quality care. This is important among the Surinamese population as well as among the Guyanese.

More creative solutions are needed during the interim period while Surinamese specialists are being trained abroad. Of course, these solutions fall short of the optimal solution which is to have Dutch speaking specialists who are willing to build their careers in Nickerie. The Surinamese people will have to decide which solutions are tolerable by considering the trade-offs.

One possibility is to extend the age a civil servant who is a physician can work until beyond age 60. This may attract retired physicians from Paramaribo or from Holland. Another possibility is to transport groups of specialists from Paramaribo regularly, according to a dependable schedule. Funds would be needed to ensure that specialists are compensated for the income lost by not being able to practice in Paramaribo during those times. Other solutions involve attracting physicians from non-Dutch speaking countries who are willing to build their careers in Suriname. The SRC has appropriate concerns about the quality of training from medical schools in many countries which causes them to be reluctant to admit some doctors. Perhaps short residency training in an approved setting could ensure quality and fill in any gaps in skills and knowledge.

6.5 Psychiatric Hospital

The public psychiatric hospital is a 275 bed facility that provides services for people with problems that include: substance abuse, homelessness, elderly long term care, childhood mental illness, people under observation by the criminal justice system, and chronic mental illness. In addition, a day treatment program is run for 40-day patients. All this is done with a staff of three psychiatrists, two general practitioners, and 129 nurses that range from nursing assistants to those with specialized training in psychiatry and geriatrics. The need for more trained psychiatrists is reflected in Table 6.7

that shows an estimated shortage of six psychiatrists, even after the one that is abroad finishes training. There is also a serious need for nurses that are trained to work with people with psychiatric problems and the elderly.

The psychiatric hospital is completely publicly funded. The projected 1996 budget was Sf 422,560,000 (US$1,056,400), 13% of the MOH's budget.

6.6 Youth Dental Service

Suriname provides basic dental services free of charge to the entire population, from birth to age 18, through a publicly funded service called the Youth Dental Service (YDS). Services are available in approximately 30 locations: in the central facility in Paramaribo, and in some RGD clinics. The central facility in Paramaribo both trains dental auxiliaries for the country and provides services to the target population. Dental auxiliaries can clean teeth, provide fillings and perform simple extractions.

Dental auxiliaries are paid a fixed salary that is determined by civil service guidelines. Approximately one half of the budget of the youth dental service is devoted to salaries (see Table 6.5). In 1993, 53,457 patients were served. If we assume that a similar number will be served in 1996 the average cost per patient will be approximately US$11. This seems high when compared to the monthly capitation payment received by general practitioners of US$1.10 per person. It is not possible to make an accurate assessment, however, of the value Suriname is getting from funding the YDS without performing a cost benefit analysis.

Table 6.5 1996 Budget for the Youth Dental Service in Sf

Personnel	111,379,316
Operating Costs	22,690,000
General Costs	13,010,000
Materials	91,086,500
Training	144,000
TOTAL	238,309,816 (US$595,775)

Currently, the YDS estimates that it is serving approximately one third of the target population of approximately 160,000 people aged 0-18.To increase coverage, the YDS is proposing that they offer yearly capitated packages for all children. The proposal is that the SZF and the MSA will pay in the range of Sf 8,000-10,000 per child for the benefits that can be provided by the dental auxiliaries. Private firms could also choose to purchase the package. The proposed rates would be likely to generate high profits for the YDS as revenue of Sf 8000 per person is almost twice the current average cost of services provided.

6.7 Referrals Abroad

Part of the Dutch Treaty Funds are used to send Surinamese citizens abroad for medical care. This is included in the section on service provision because the availability of services abroad is, in effect, an expansion of the delivery system; given the small size of the Surinamese population, the arrangement seems both clinically appropriate and cost-effective. Medical cases that are treated in Suriname are referred abroad if the case meets the following criteria: (1) the case is treatable; (2) a complete cure is expected; (3) it is not possible to provide treatment in Suriname; and (4) the patient is less than 70 years old. All referrals are currently to Holland but the MOH is investigating the possibility of sending patients to other countries in the region.

Recent evaluation of referrals abroad indicated that the bulk of cases are for treatment for cervical cancer and cardiac problems (see Table 6.6). In response, the MOH has developed two projects aimed at prevention and early detection. One Dutch funded project aims to increase the rate of cervical cancer screening. A public awareness campaign will be accompanied by increased services for women in RGD clinics, the Medical Mission and family planning clinics. The MOH expects to see an increase in cervical cancer rates in the first few years because of the expected increase in the rate of detection. The second project aims to improve cardiology diagnostic facilities. The plan is that Holland will send a cardiac surgery team to Suriname periodically to evaluate which patients can be treated in Suriname and which patients should be sent abroad.

Table 6.6 Cost of Referrals to Holland by Specialization (1995)

Specialization	Total Cost (US$)*	Percentage of total Expenditures abroad	Average Cost per patient**
Cardiology	563,175	37.5%	17,700
Gynecology	321,953	21.4%	11,924
Children's cardiology	214,403	14.3%	23,823
Pediatrics	76,523	5.1%	10,931
Urology	75,233	5.0%	12,539
Orthopedics	65,646	4.4%	10,941
General surgery	60,121	4.0%	12,024
Neurology	47,317	3.2%	9,463
Ear, nose, throat	46,038	3.1%	23,019
Internal medicine	27,697	1.8%	13,848
TOTAL	1,498,106		14,865

* Converted from Dutch Gilders, exchange rate: 1.75 Dutch Gilders to the US$.
** Cost of transportation to Holland is not included.
Source: Director of Health, MOH, Suriname.

When a hospital recommends that a patient be sent abroad, a Medical Committee of five physicians evaluates the case and either approves or denies the request. If a patient is approved for treatment abroad, the SZF manages the process through a liaison with a Dutch insurance company that makes all arrangements. In response to claims that some well positioned Surinamese were getting preferential treatment in the referral abroad process, a team from Holland was asked to critically evaluate the rules for referrals. The Dutch team found that the rules were adhered to and actually recommended that the rules be eased to allow treatment for more people.

6.8 Human Resources

6.8.1 Training Process

At the Faculty of Medicine in Paramaribo, it is possible to train to become a general practitioner, registered nurse, laboratory analyst, midwife, and assistant pharmacist. The nursing school, COVAB, trains general nurses and health workers in collaboration with the MOH and the Medical Mission. The YDS also trains dental assistants. General practitioners are required to have a year of clinical training before becoming certified to practice medicine. Specialists must receive at least part of their training abroad. Until recently, graduates of the Surinamese Medical School could be accepted into a specialist training program in Holland. After completing the training in Holland, these specialists were certified to practice their specialty in Holland as well as in Suriname. The difficult economic situation in Suriname in recent years caused many newly trained specialists to choose to remain in Holland. In response to this "brain drain" problem, the Specialist Association has changed specialist training to include partial on the job training in Suriname in apprenticeship with a senior specialist, and part in Holland. The number of years spent in Holland is no longer sufficient to certify Surinamese specialists to practice medicine there. In addition, policy makers are considering sending doctors to other countries in South America and the Caribbean for training, though language is perceived as a big obstacle.

6.8.2 Supply

There is general agreement in the health sector that Suriname has more than enough general practitioners but there is a shortage of specialists. Table 6.7 displays the distribution of specialists by discipline, the number of specialists currently in training, and the estimated need. These figures were prepared by Dr. A. Vrede, Dean of the Medical School, and a member of the board of SRC. The methodology used to arrive at the estimated number of needed specialists is not clear. One thing that is clear, however, is that the specialists form a strong interest group that has the power to block proposed changes in payment mechanisms or overall reform. Part of their power probably does arise from the fact that there are shortages.

It is also possible, however, that many of the cases treated by specialists could also be treated by general practitioners. The Minister of Health would like to implement health sector reforms that change incentives in the system so that general practitioners have incentives to restrict referrals to specialists to cases that are medically necessary. If this change could occur, it is possible that the estimate of the shortage of specialists would shrink.

In contrast to other Caribbean countries, Suriname does not have an overall shortage of doctors. However, comparative figures do not separate out general doctors and specialists. Table 6.8 shows this comparison.

Table 6.7 Doctors by Specialization

Specialization	Total practicing In Suriname	Total Training Abroad	Estimated Total Need	Anticipated Shortage *
Internal Medicine	15		16	1
Cardiology	2		3	1
Pulmonology	2	1	3	
Pediatrics	8		12	1
General Surgery	7	3	9	
Gynecology/Obstetrics	8	1	10	1
Anesthesiology	5	2	8	1
Orthopedics	3	1	4	
Opthamology	7		8	1
Ear, Nose, Throat	4		4	
Neurology	3		4	1
Psychiatry	3	1	10	6
Radiology	2	1	5	2
Urology	1	1	3	1
Total Specialists**	70	14	99	16
General Practitioners***	345			
Total Doctors	415			
Pharmacists***	17			
Dentists***	31			
Nurses and allied health workers	1,000			
Total Medical Practitioners	**1,948**			

* **A**ssumes that all specialists in training abroad will return to Suriname. **Source: Specialists Committee, Dr. Vrede, Dean of the Medical School. *** Source: Tjong A, Hung, *Overview of the Health Care in Suriname*, September 1996.4.

Table 6.8 Ratio of Physicians and Dentists per 10,000 Population. Comparison to Selected Caribbean Countries

Country (year)	Number of Physicians	Ratio	Number of Dentists	Ratio
Suriname (1996)	415	10.4	31	.78
Dominican Republic (1992)	11,130	14.9	1,898	2.54
Guyana (1992)	138	1.71	11	.14
Haiti (1992)	564	.83	81	.12
Jamaica (1992)	1,408	5.7	220	.89
Saint Kitts/Nevis (1992)	39	8.86	8	1.82
Saint Lucia (1992)	55	4.53	6	.5
Trinidad and Tobago	911	7.2	109	.86

Source: *Caribbean Regional Health Study*, Inter-American Development Bank, Pan-American Health Organization/

World Health Organization, May 1996, p. 99.National Drug Company (BGVS).

6.9 National Drug Company

The National Drug Company (BGVS) was established in 1983 to take advantage of lower prices that could be negotiated with international medical supply and drug companies by purchasing in bulk. In addition, BGVS was established to manufacture drugs that could be produced at lower cost in Suriname. Initially, BGVS purchased from the Essential Drug List developed by the WHO. Over time, some drugs were dropped and added to the list according to Surinamese local needs and preferences. BGVS is an independent, parastatal entity that receives its funding from the government but can make internal management and resource allocation decisions.

The BGVS is directed by a Board that is appointed by the Minister of Health and is comprised of seven people from the following organizations:

1. The Deputy director of the Surinamese Bank
2. Representative of the Pharmacists Association
3. Representative from the MOH
4. Representative from the BGVS workers union
5. Representative from the Medical Association
6. Representative from the MSA
7. Representative from the Ministry of Trade and Industry.

There are 85 people employed by BGVS in administration, manufacturing, and inventory control. Salaries are approximately double civil servant's salaries. The BGVS does not use financial incentives to stimulate innovation or to reward employees that improve efficiency or control costs.

In 1995, the Government of Holland created a new fund of dg12,000,000 for the BGVS that is designed to cover international drug and medical supplies purchases for four years (1995-1999). These funds are kept in Holland and disbursed directly to the international firm providing the drugs for Suriname. The BGVS must follow rules and guidelines for the procurement of medicine that include the following mechanisms:

1. Purchase if drugs are needed immediately.
2. Limited international bidding (maximum of dg500,000 per bid).
3. Open international bidding.
4. International shopping (most recent purchase price is used as reference).

Hospitals and pharmacies send requests for drugs and medical supplies to the BGVS sales department. If requested items are in stock, they are delivered within three days. If the items are not in inventory, the BGVS will encourage the hospital or pharmacy to borrow from other local facilities. A new supply is then ordered which can take from between two and four weeks. If the drug or medical supply is not available in Suriname, permission is granted to procure the items directly through importers with the caveat that the MOH pharmaceutical inspector must approve of the quality.

Approximately 75 drugs are manufactured in Suriname at the BGVS facility. These items were chosen in the mid-1980's as items that could be produced more cheaply, and with acceptable quality, than internationally procured substitutes. In 1994 another study verified that it was still cost-effective to produce the drugs in Suriname. The methodologies used in these studies are not clear. The results are suspect because the financial director and the director of manufacturing claim not to be able to separately cost each manufactured item.

How BGVS Prices Imported Drugs and Medical Supplies

The price paid by hospitals and pharmacies to buy imported drugs and supplies is determined by the following formula:

Price of imported drugs=
(per item cost paid by BGVS) +
(Surinamese import taxes) +
(BGVS operating costs which add 10% to the price) +
(a 22% mark-up to give profits to BGVS)

The price for locally produced drugs and supplies is determined by the following formula:

Price of locally produced drugs=
(per item cost of raw material inputs) +
(average manufacturing personnel costs) +
(average cost for operation of machines) +
(BGVS operating costs which add 10% to the price) +
(a 22% mark-up to give profits to BGVS)

In addition, hospitals and pharmacies add an additional 35% markup, which determines the price that is submitted to the SZF and the MSA for reimbursement.

The current system of drug procurement, distribution, and reimbursement incorporates no incentives to control costs. Employees of BGVS are not held accountable for managing inventory well. They are not rewarded for negotiating low prices with international suppliers and they get no financial rewards for improving the efficiency of the operations of BGVS. Consumers who are covered by SZF and the MSA pay a fixed copayment for prescriptions that is not a percentage of the actual price of the drug. Consumer copayments are extremely low and incorporate no incentive for consumers to question the total price of the prescribed item. Hospitals and pharmacies pass on all their costs to the MSA and the SZF. In addition, hospitals and pharmacies add an additional markup reported to be as much as 35%. This could even be expected to encourage hospitals to pressure their specialists to prescribe excessively. While the SZF and the MSA do work with budgets, in reality they face only soft budget constraints. The MOF has a history of approving budget increases when these institutions run out of funds. There are no incentives for doctors to control the number of prescriptions they write, no incentives for consumers to control demand, and no financial incentives to control prices or costs all along the line from procurement to final payer.

BGVS is required to deposit the local currency received from sales of drugs and supplies in an account at the Central Bank. This local currency is then supposed to be used by the MOH for capital improvements. Over the four year period of the Dutch financing, part of the profits (22% mark-up) earned by BGVS are supposed to be invested to develop the funding base to form a self-financed revolving drug fund by year five[21].

[21]Conversation with management of BGVS, November 1996.

7. PAYERS

As indicated in Figure 1, the Surinamese people obtain insurance coverage from a range of payers. This section will examine the major payers in more detail: the SZF, the MSA, private firms that self insure, private health insurance, and others that pay for health services such as automobile and workplace accident insurers. Payment policies established by the SZF largely determine payment practices of the other payers. This section will analyze the process of setting rates and compare the benefits packages offered by each payer.

7.1 State Health Insurance Fund

The State Health Insurance Fund (SZF) was established in 1981 to fund health care services for civil servants. Retired civil servants, currently approximately 10,000, are covered through the pension fund. Civil servants pay an obligatory wage tax of 4% which is matched with a contribution of 5% from the Ministry of Finance to receive health insurance coverage for their immediate family. In addition, general tax revenues heavily subsidize the insurance fund. Subsidies have become more and more necessary since local wages have not kept pace with the increasing costs of imported medicines, medical supplies and equipment. Salaries fell sharply until 1994 and, despite their increase in 1995 and 1996, in real terms they are far below the 1980s levels. At the same time, doctor and hospital rates have increased. In 1996, the SZF projects that they will be able to cover only 46% of their expected expenditures with income from premiums, as shown in Tables 7.1 and 7.2. The additional 54% of income will have to come from general tax revenues from the Ministry of Finance.

Table 7.1 State Health Insurance Fund Budgeted Expenditures (1996)

Cost Category	Amount (Sf)	Amount (US$)	Percentage of budget
Hospital	2,000,000,000	5,000,000	37%
Medicine	913,180,000	2,282,950	17%
General Practitioners	658,600,800	1,646,502	12%
Medical Specialists	906,624,000	2,266,560	17%
X-Ray	48,000,000	120,000	1%
Lab Tests	298,500,000	746,250	6%
Cost to cover high level professionals in civil service that are entitled to Class II hospital care	80,000,000	200,000	1%
Kidney Dialysis	46,500,000	116,250	1%
Other Medical Costs	51,382,000	128,455	1%
SZF operating costs	419,773,600	1,049,434	8%
TOTAL	**5,422,560,400**	**13,556,401**	**100%**

Source: SZF 1996 Budget.

Table 7.2 State Health Insurance Fund Expected Income (1996)

Income Category	Amount (Sf)	Amount (US$)	Percentage of total needed income
Premiums collected from civil servants (individual plus government contribution)	2,123,100,000	5,307,750	39%
Premiums from Voluntary Enrollees	260,000,000	650,000	5%
Premiums from Parastatal Organizations	47,869,000	119,673	1%
Doctor's premiums	6,000,000	15,000	0%
Other income	80,661,500	201,654	1%
TOTAL INCOME	2,517,630,500	6,294,077	46%
PROJECTED DEFICIT	2,904,930,400	7,262,326	54%

Source: SZF 1996 Budget.

The SZF functions as a passive payer, rather than an insurance fund that pools and manages risk. Management of the SZF is clearly aware of the problems and that changing incentives in the payment system could help to fix the problems. SZF management also appreciates the importance of having access to information on utilization by different population groups to be able to better predict and manage risk. Management would also like to be able to better monitor the billing practices of doctors.

The largest proportion of SZF expenditures, 37%, is dedicated to reimbursing hospitals for inpatient visits. Since reimbursement is per day, a reduction in the overall length of stay in Surinamese hospitals would greatly contribute to reducing health sector costs. Medicines represent 17% of total SZF expenditures. Reduction in the markup added by both the BGVS and hospitals could cut this expenditure almost in half. Adding consumer copayments that give incentives for consumers to consider the cost of the drugs they are consuming may help reduce drug expenditures even more.

Hospitals and physicians complain that the SZF is a very slow payer. The claim is that there is as much as a two-year delay in payment in some instances. The SZF also claims that physicians are slow to submit bills. When examining all budgets and actual expenditures in this report, it is important to realize that some expenditures that are posted in 1995 may actually cover services provided in an earlier year. Of course, this also implies that income received by hospitals in 1995 may be for services provided in an earlier year.

The SZF is overseen by a Board that has the responsibility of defining the general policies of the Fund. The Board has six members: the Director of the SZF, a representative from the MOH, a representative from the Union of Civil Service Workers, a representative from the Ministry of Finance, a representative from a confederation of Labor Unions that represent Surinamese workers, and a representative from the Ministry of Trade and Industry. Officially, the Board meets once per month. As designed, the SZF Board has to represent diverse interests in the country, which should protect the interests of the workers who receive health coverage. On the other hand, the representation of diverse interests may pose an obstacle to making some hard and potentially unpopular decisions that are driven by financial realities.

7.1.1 Voluntary Enrollees

Since 1989, non-civil servants and small firms can voluntarily enroll in the SZF by paying a monthly premium. As of 1996, 7% of enrollees or 9,973 individuals voluntarily enrolled in SZF. In 1996, an individual who voluntarily enrolls pays Sf 5,600 per month and a family pays Sf 10,000 per month.[22] Small firms who voluntary enroll pay Sf 10,000 per month for the employer and his family, and per month for each worker and their families. SZF charges firms a lower rate than individuals because members of firms represent lower insurance risks. The perceived lower insurance risk has two explanations: employees of firms are often screened through medical examinations before being hired and there is a lower probability of adverse selection. Adverse selection is more of a problem with individuals who voluntarily enroll as they more likely to enroll because they know they are in need of medical services.

An additional measure to minimize the financial impact of adverse selection on the SZF is that voluntary enrollees (both individual and members of firms) must wait three months for services and must pay the premium for three months up front. They can begin receiving health services only in the fourth month. In addition, any time a voluntary enrollee experiences a break in the payment of insurance premiums, they must endure the waiting period and pay three months up front once again. Enrollment Cards for the SZF display an expiration date that covers the enrollee up to the time when premiums are paid (most voluntary enrollees pay quarterly).

There is anecdotal evidence that physicians request extra payments from those who are voluntarily enrolled in the SZF. This perception probably contributes to the population's reluctance to voluntarily pay the premium.

7.1.2 State Health Insurance Fund Benefits Package

The package of benefits covered by the SZF is extremely comprehensive and includes preventive as well as curative service. [23] Civil servants and voluntary enrollees have access to the same package of benefits under the same terms. Preventive services include: prenatal and postnatal care, family planning services, pap smears done by a gynecologist, and medical examinations by G.P.s or specialists. The SZF does not cover preventive services that are provided to the entire population through government run vertical programs. Curative services include: maternity care, outpatient visits, dental surgery, drugs from the essential drug list if available at approved pharmacies, lab tests, x-rays, third class inpatient care, hospital provided rehabilitative care, eyeglasses and contact lenses, out-patient physiotherapy, and selected durable equipment such as a pacemaker. Not included in the package is: emergency care (subsidized by the government), ambulance service, home care, inpatient psychiatric care (provided free to all Surinamese residents by the government), basic and restorative dental care, psychological services, and long term care.

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[22] The definition of a family in Suriname includes the nuclear family and children up to age 21. Children who remain in university can be covered until age 27.

[23] Many in the health sector are under the mistaken impression that the benefits package of the SZF does not cover prevention. The perception is that the package covered by the Ministry of Social Affairs for the poor is more comprehensive.

The majority of services are, in theory, provided to SZF enrollees completely free of charge. Covered medicines have a copayment of Sf 100 (US$.25) and consumers share the cost of eyeglasses and contact lenses, physiotherapy, and some durable equipment. Consumers are not supposed to pay copayments for outpatient or inpatient services. In practice, physicians charge some consumers extra fees and consumers are forced to purchase drugs from private pharmacies when drugs are not available.

7.1.3 Rate Setting Process

Each year a team of health sector stakeholders is formed to negotiate tariffs for the coming year. This team includes the Director and representatives of the SZF, RGD, Specialists Association, Hospitals, General Practitioners and Pharmacists. High inflation rates in 1993 and 1994 caused the cost of health care to rise dramatically. The health sector was especially impacted because almost all medicines and medical supplies are imported. Before 1995, the rates the SZF paid G.P.s and specialists were established through a process of negotiation that was not based on fundamental cost information. In 1995, the Doctor's Association agreed with the SZF to contract an independent outside accountant to do a study of the actual practice costs of G.P.s and specialists to determine rates. Results were based on interviews of five specialists and five general practitioners. All parties agreed in advance that the rate determined by the accountant would be the reimbursement rate from the SZF. The Specialists Association believed that US$28 was the appropriate fee-for-service reimbursement for a consultation, while the cost as found by the accountant ended up being US$8.

The capitation rate for G.P.s was based on the assumption of 2000 registered patients per year. Total practice costs were divided by 2000 to arrive at the average cost per patient and to set the capitation payment of approximately US$13 per patient per year. Table 7.3 displays the breakdown of practice costs for general practitioners.

Specialists in private hospitals face higher costs than specialists in public hospitals because they are required to pay the operating costs of the polyclinic. Table 7.4 displays the cost breakdown for specialists. The assumption is that specialists see an average of 6000 patients per year, which translates to 3.4 patients per hour (if we assume that doctors work 11 months per year, and 8 hours per day). The result is that specialists in public hospitals are entitled to a payment of US$7 per patient and specialists in private hospitals are entitled to US$8 per patient. The committee agreed on a payment of US$8 for all specialists, both private and public.

Because all parties agreed in advance that they would accept the results of the study, the 1995 rates were determined in the described way. Doctors were not satisfied with the result, however, and tried to argue for an increase to cover expenditures that are expected in the future such as the cost of automation and malpractice insurance. In any case, this process is viewed by SZF management as an example of a case where solid data were used to arrive at a decision.

Table 7.3 General Practitioner Costs, 1995

	Cost per year (US$)	Cost per year (Sf)
Rent	1,475	663,879
Furniture and Equipment	387	174,327
Medical Supplies	522	235,000
Personnel	1,098	493,992
Transportation	3,093	1,392,448
Doctor's Compensation	17,238	7,756,982
General Operating Costs	3,043	1,369,683
TOTAL	26,856	12,086,311
Cost per patient per year (assume 2000 patients)	7	3,259
Honorarium per patient per year (assume 2000 patients)	6	2,784
Capitation payment per patient per year	13	6,043

Source: *Rapport: Inzake Tarieven Voor Algemeen Artsen en Medische Specialisten Voor 1995,* Tjong A Hung, in association with Coopers and Lybrand, appendix 1.

Table 7.4 Practice Costs for Medical Specialists, 1995

	Public		**Private**	
	Costs in US$	**Costs inSf**	**Costs in US$**	**Costs in Sf**
Fee to Private Hospital to use the outpatient clinic *			8,333	3,750,000
Transportation	4,422	1,990,013	4,422	1,990,013
Medical Specialist Compensation	30,911	13,909,832	30,911	13,909,832
Other Costs	4,112	1,850,172	4,112	1,850,172
TOTAL	39,445	17,750,017	47,778	21,500,017
Cost per patient (assume 6000 consults per year)	3	1,288	4	1,913
Honorarium per consult (assume 6000 consults per year)	4	1,670	4	1,670
Outpatient consult fee	7	2,958	8	3,583

* Public hospitals do not currently charge specialists for use of hospital outpatient clinics.

Source: *Rapport: Inzake Tarieven Voor Algemeen Artsen en Medische Specialisten Voor 1995,* Tjong A Hung, in association with Coopers and Lybrand, appendix 1.

7.1.4 Assessment of the Rate Setting Process

It is clearly important to consider actual practice costs to arrive at appropriate reimbursement rates to pay physicians. This exercise contributed to the rate setting process by providing the SZF, the Government, and physician groups more accurate cost information to begin the process. What was not considered, however, is the degree of efficiency with which different doctors were operating. Rates should be set to encourage efficiency, rather than reward inefficiency.

Added to the rate setting process should be incentives to rationalize the use of care. General practitioners should be discouraged from referring patients to specialists unless referrals are medically justified. A system to monitor the billing practices of specialists is also needed. To implement additional changes, an improvement in the institutional capacity of the SZF will be needed.

7.1.5 Institutional Capacity of the SZF

In order to transform it from a passive payer to an institution that manages costs and pools risk, major institutional changes will be needed inside the SZF. This will be especially necessary if the SZF is to become the dominant payer in Suriname. Adequate details are not available about the qualifications of SZF staff nor about the quality of the information and monitoring systems, though preliminary studies have been carried out[24]. Additional studies of the organization, human resources, and capacity of the SZF would contribute to any discussion of health sector reform.

7.1.6 Primary Care

Enrollees of the SZF (civil servants and voluntary) are required to register with a general doctor. The general doctor receives a monthly capitation payment of approximately US$1.10 from SZF for each person who chooses him or her. Note that this monthly payment is not adjusted for age, sex or severity of illness. General practitioners that are successful at attracting primarily healthy patients will incur fewer costs than G.P.s that serve a higher risk population. The target number of enrollees is 2,000. In theory, SZF enrollees are required to visit their general doctor for all non-emergencies. Only if the general doctor treats the patient are referrals to specialists, labs, and the hospital supposed to occur. A written referral form is supposed to follow the patient to the next level of care. In practice, however, patients often go directly to specialists and return to the general doctor after treatment to get the referral form signed. This practice is not surprising given that general doctors also have nothing to gain by enforcing the system of referrals. General doctors may, in fact, have more to gain if they acquire a reputation for easily signing referral slips. More SZF enrollees may choose them, their monthly fixed income that comes from capitation payments will increase, and less work will be required of them. This system has unfortunate incentives for general doctors to over-refer to higher levels of care and to under-enforce the rules of the system. Introducing a small copayment from enrollees to the general doctor may help to shift these perverse incentives. Introducing financial incentives to control referrals would help even more.

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[24]Theodore, Karl, 1995, AA Reform-Oriented Overview of the State Health Foundation (SZF) of Suriname≅, Department of Economics, University of the West Indies. And Soucy, Gerard, 1995, AManagement Information System (MIS) for Staatsziekenfonds (SZF) State Health Insurance Foundation (SZF) (Suriname), PAHO report.

7.1.7 Outpatient Specialist Care

Specialists bill the State Insurance Fund item by item for every office visit and lab test. They receive a pre-determined fee for the consultation (approximately US$8 in 1995) plus fees for each additional procedure, or "medical handling" provided to the patient. The SZF has applied the relative value factors used in Holland to develop a "medical handling list". Each area of specialization is associated with a factor that determines the amount a specialist gets paid. For example, if the basic value is Sf 200 and the factor for a pediatric medical handling is 5, the pediatrician would be paid Sf 1000 per "medical handling".

This fee-for-service method of reimbursement incorporates no incentives to control costs. In addition, the weak capacity of the SZF to audit bills for errors creates the additional potential for over-billing. A recent analysis of submitted bills of 30-40 specialists in internal medicine revealed a three to four-fold variation in billing amounts between specialists. The SZF concluded that this large difference could not be explained purely by differences in patient mix or patient volume.[25] To find a solution, representatives of the SZF met with a group of specialists. The purported response of the specialists was that the government should not interfere and should regulate less.

7.1.8 Inpatient

Hospitals in Suriname offer three classes of hotel services. Class one corresponds to a private room; class two corresponds to semi-private; and class three, wards. The SZF pays 100% of class three services. The rate paid by SZF to hospitals is Sf 20,000 for each day a patient spends in the hospital. This rate is defined as "all in" which means that medicines, physician care, nursing care, operating room time, and lab tests are included. While this practiced is not condoned by the SZF, physicians are known to bill the SZF fees for consultations to patients while they are in the hospital.

Reimbursement methods for inpatient services (except for normal deliveries: explained below) in Suriname incorporate no incentives to improve efficiency or control costs. The first days of a patients' stay are the highest cost because they are when the most intensive procedures occur. Hospitals have strong incentives to keep patients in the hospital as long as possible in order to average out high cost initial days with lower cost later days. These incentives are especially strong when the hospital has empty beds. In addition, physicians can supplement their income by keeping patients in the hospital longer. Patients also have no financial incentives to question the length of hospital stay being recommended by their doctors because the cost of their care is completely covered. This combination of incentives results in Suriname having the highest average length of stay of the entire Caribbean region.

Suriname has introduced a package payment system for normal deliveries. A fixed price of Sf 62,000 covers up to three days in the hospital and is all inclusive. If there are complications that cause a woman and her newborn to remain in the hospital for longer than three days, the hospital can begin billing the daily class 3 rate starting on day 4. This form of all inclusive package payment system has good incentives to improve efficiency and to reduce length of stay since the hospital is

[25] Discussion with SZF management, November 1996.

paid Sf 62,000 even if a woman leaves after two days. The design of this mechanism, however, does not shift any of the financial risk onto the provider. If a patient is high cost, the hospital has the flexibility to keep the patient in the hospital for additional days. This implies that the hospital can only win from this arrangement and the SZF can only lose.

7.1.9 Information System

Management of the SZF is in need of better information. An improved management information system that would provide information on billing histories of individual providers would help in monitoring billing errors. Information on the utilization patterns of different segments of the population would provide the SZF with the tools to better understand the insurance risk posed by different groups. Currently, non-integrated vertical systems are maintained for outpatient and inpatient health costs. A system that linked these vertical systems would enable the SZF to monitor the frequency of specialist's visits.

7.2 Ministry of Social Affairs

In addition to having the important role of certifying eligibility to subsidized health services, the MSA is also an important payer of hospital services. Rates paid by the MSA for hospital inpatient services are equal to the reimbursement rates used by the SZF, currently Sf 20,000 per day "all in"

The MSA does not, however, reimburse specialists for outpatient visits or procedures. Hospitals are required to use the inpatient fees to fund salaries and hospital operating costs. It is clear that all hospitals prefer SZF and private patients over theMSA covered patients. The public hospitals are required to serve the poor, while the private hospitals use more discretion. This distinction between public and private facilities is clearly shown by the comparison of admission patterns in Table 6.1.

The MSA is responsible for safety net programs for the poor. In the health sector, the MSA certifies eligibility to receive subsidized services and functions as a payer to hospitals for this certified population.

7.2.1 Process of Certifying the Poor

The MSA has the responsibility to certify the poor and near poor. Surinamese people who believe that they qualify must go to a local office of the MSA and answer a list of questions. These questions include:

- Identification number
- Employment status
- Place of employment
- Number of dependents
- Housing costs
- Monthly income

The essential criteria used to certify a person as poor is that they have a monthly income of Sf 10,000 or less. The near poor have between Sf 10,000 and Sf 20,000 in income per month.

The MSA Identification cards have expiration dates that vary from one week to one year. The beneficiary is required to return to the MSA regional offices to re-certify when the expiration date is reached. In addition, the MSA employs officers that investigate fraud. The MSA recognizes that this process has problems and that the number of people currently carrying cards that qualify them for subsidized social services is too large. Approximately 170,000 Surinamese citizens were covered by the MSA in September 1996[26]. The MSA plans to revise the system to include additional questions to assess household wealth and ability to pay.

7.2.2 Benefits Package of MSA

The package of benefits that the poor and near-poor are entitled to under the MSA is similar to that covered by the SZF. MSA patients are also able to gain access to medicines that are not on the BGVS list if the drugs are stocked at RGD pharmacies. In reality, this is a small extra benefit. MSA patients can also get basic dental services at RGD clinics after the age of 18 (before age 18, preventive and basic restorative dental services are provided free to all Surinamese people through the Youth Dental Service). Emergency services are covered for MSA patients as well as ambulance costs.

7.2.3 Copayments

General practitioner outpatient visits are provided at RGD clinics free of charge. Outpatient visits are, in theory, also provided free of charge through the polyclinics at public hospitals. In contrast to SZF covered patients, MSA covered patients do pay a small daily copayment for inpatient hospital visits of Sf 200 if they are poor and Sf 600 if they are near poor. The poor pay a copayment for drugs of Sf 75, and the near poor pay Sf 150. The only other official fee is a charge of Sf 75 imposed on the near poor to get a card from the MSA that certifies eligibility for subsidized care.

7.3 Employer Self-Insurance

The majority of private firms with employees that are covered under collective bargaining agreements have chosen to self-insure rather than purchase health insurance from a private company or from the SZF. Large employers, such as SURALCO and Billeton, hire a team of doctors and nurses to staff company run polyclinics. Some polyclinics have the capacity to perform x-rays and lab tests. The polyclinic run by SURALCO also has a burn treatment facility and capacity to treat other work place related injuries. Some firms also manage an inventory of medicines in company run pharmacies to control drug expenditures.

Employees and their families are required to consult the firm's salaried medical staff before gaining a referral to specialists or hospital admissions. Medicines are dispensed in small doses, often a two-day supply at a time, to control waste and to minimize the problem of employees selling company provided drugs to people that do not have insurance coverage. Hospital length of stay is also monitored by the firm's medical staff.

[26] Conversation with the Minister of Social Affairs, 11/18/96

Smaller private firms enter into contractual arrangements with private general practitioners to serve as family doctors and gatekeepers for their employees and dependents. Employees are often given a choice of a few family doctors. These contracted doctors control referrals to specialists.

7.3.1 Benefits Package Offered by Private Employers

While there are no actual figures available, the perception is that employees in firms that are covered by collective bargaining agreements are provided with coverage for health services. The common belief is that, because of competition among unions to attract members, the collective bargaining agreements tend to be quite similar. This is an area for more study.

If benefits packages as negotiated through collective bargaining agreements are similar, the following package should be representative. The sample firm offers complete payment for the following medical expenses:

- Medical specialists
- Inpatient days, second class
- Medicine in the hospital
- Home medical care
- Visits to the firm's general practitioner
- Ambulance transport
- Lab and x-rays
- Expenses for deliveries
- Expenses for prosthesis, hearing aids, arch supports, artificial limbs.
- Dental care up to a yearly cap of Sf 40,000
- Eyeglasses or contact lenses up to a yearly cap of Sf 45,000

Treatments for narcotic or alcohol abuse are not covered. A doctor must approve sick leave if absence is more than two days.

Employees must wait two months before coverage begins. Single employees contribute 2% of their salary, and employees with families contribute 3%. There is a clear provision that states that if the family has other coverage, the other coverage pays first.

7.3.2 Payment to providers

Hospitals charge private employers rates that are "all out". This means that private firms are charged separately for days in the hospital, operations, physician consultations, medicines, lab tests, and x-rays. The "all out" daily rates for hospital stays are the following:

Class Three: Sf 20,000
Class Two: Sf 25,000
Class One: Sf 30,000

Rates charged to private payers by specialists that are employed by the public hospitals are not controlled or managed by the hospital. Each specialist takes care of his or her own billing.

The Diakonessen Hospital does control the rates that are billed to private payers. Rates paid to specialists for operations are as follows:

Rates for Operations to Private Payers (Sf)

Degree of Difficulty of Operation	Class 3	Class 2,1
Light	6,000	45,000
Medium	10,000	75,000
Heavy	14,000	120,000

The additional fee to anesthesiologists is 40% of the fee paid to the doctor who performs the operation. In addition, specialists charge for daily consultations to patients while they are in the hospital. Rates are as follows:

Inpatient Specialist Consultation Rates to Private Payers (Sf)

Time Frame	Per week	Per day
First Week	Sf 44,800	Sf 6,400
Second Week	Sf 22,400	Sf 3,200
Third Week	Sf 11,200	Sf 1,600

Employers have chosen to control medical expenditures through the only mechanisms they feel are available to them; by controlling referrals, prescriptions, and monitoring length of stay. Employers do not feel that they have any influence over the actual rates charged by providers. At one time, SURALCO tried to enter into contract with specific specialists for negotiated tariffs but the proposal was blocked by the Specialists Association.

7.4 Private Health Insurance

The private health insurance market was much more active before the period of rampant inflation. In the past, some civil servants bought policies that enabled upgrades to first or second class from the third class coverage they were entitled to under the SZF. High rates of inflation caused hospitals and doctors to frequently revise their rates, making it very difficult for private insurance companies to know how to price premiums. In some cases, increases in tariffs were actually imposed retroactively. This caused insurers to incur losses. Purchasers of private insurance were also dissatisfied with the frequent increases in their insurance premiums. With each increase in premium, insurance companies found that the healthiest people chose to cancel, leaving a higher risk pool of people to insure. These factors combined to cause private insurers to stop offering private health insurance.

Currently, a few firms have begun to offer policies. One company, Cliko, currently covers 595 people in group policies. Another company, ASSURIA, offers private health insurance but information about the number of people covered was not available. Both companies offer annual

renewable policies which means they have the option to either cancel policies to high cost people or raise the premium to cover expected claims. Policies state that insurance coverage stops at age 65. Coverage for a new policyholder must begin before age 60.

Cliko only sells policies to groups with at least ten employees. This practice was adopted after the realization that individual purchasers of health insurance often had hidden information that they were sick. The groups must go through a medical examination to give the underwriters the information needed to determine premiums. Firms insured by Cliko must choose one or two general practitioners from a list of approximately twenty to be used by employees and their dependents. There is free choice of specialists. In most cases, G.P.s are paid fee-for-service for each consultation. Covered employees and dependents pay no copayments or deductibles.

ASSURIA offers policies to individuals and groups. Coverage is not extended to pre-existing conditions that the consumer had knowledge of and an eight-week waiting period is imposed. Substance abuse treatment is not covered, nor is treatment for sexually transmitted diseases. Injuries from small motorcycle accidents are not covered, nor are injuries arising from taking part in a demonstration. If a patient has a history of problem pregnancies, ASSURIA will not pay. There is no coverage for glasses or orthopedic inserts. The premiums for each person per year and the maximum amount ASSURIA will pay out per person per year, are explained below. In addition, the cost of insuring each child under age 12 is Sf 35,000 per year. There are also restrictions on the number of outpatient consultations per year (maximum of 30).

Class of Service	Annual premium Sf	Annual premium Cap Sf
I	115,000	1,250,000
II	92,000	1,000,000
III	71,000	750,000

7.5 Private Out-of-Pocket

People without coverage from the SZF, private employers, private insurance, or the MSA must pay for health service out-of-pocket. There is anecdotal evidence that people who do have health coverage are sometimes forced to pay additional fees to ensure adequate access to care. Documentation of the extent of this practice is not currently available. Incorporating questions into the quarterly household survey that is fielded by the Central Bureau of Statistics might give additional insight into the extent of extra billing.

7.6 Auto Insurance

All people who register cars in Suriname are required by law to purchase automobile insurance that covers physical and property damage to third parties. This means that if an insured person has an accident and is at fault, the insurance policy should cover medical treatment for the injured third parties as well as compensating for damage to property. The medical coverage is third class and the payment is "all out".

If a third party who is injured has insurance through another payer, an automobile insurance company representative indicated that they *never* pay. In effect, this practice forces payers such as the SZF, private employers who self-insure, and the MSA to subsidize private insurance companies. Since the majority of the population is insured through a public program, and these programs are heavily subsidized by general tax revenue, this practice is a direct subsidy from public funds to private companies.

7.7 Work Place Accident Insurance

Many private firms also purchase insurance to cover health care costs to treat employees who are injured on the job. Hospitals are not clear about the proportion of their revenue that is collected this way. The perception is that the entity that provides individuals with health insurance is the entity that pays for medical costs that arise from work place related injuries.

8. HOW HOSPITALS PAY DOCTORS

This section presents an analysis of the mechanisms used by public and private hospitals to compensate the doctors on their staff. Empirical results are presented to demonstrate that the various financial incentives confronting hospitals and doctors result in significantly different average lengths of hospital stays for patients covered by different payers.

8.1 Public Hospitals

Doctors employed by public hospitals are civil servants. Their salaries are determined by civil service guidelines, but paid out of revenues collected by the hospital. In other words, the Ministry of Finance does not directly pay the salaries of hospital staff. In exchange for their salary, doctors employed by public hospitals are expected to treat all patients certified as poor or near poor by the MSA. This includes both inpatient procedures and outpatient visits to the ambulatory care clinics. Outpatient visits are often the first step toward hospitalization, one reason why MSA admissions are much higher in public hospitals than in private hospitals (as seen in Table 6.1).

A puzzle, however, is why average length of stay in the hospital is higher for SZF patients than for MSA patients? Both the MSA and SZF pay the same daily "all in" rate of 20,000 Sf to hospitals. Part of the explanation is that the small copayment paid by MSA patients serves to limit length of stay from the demand side, as MSA patients question whether the final stages of their recovery could occur at home. Doctors also have no financial incentives to encourage MSA patients to remain in the hospital, because their salary is fixed. In contrast, SZF patients pay nothing for hospitalization. They can remain in the hospital throughout the recovery process receiving hotel services and custodial care absolutely free of charge. Hospitals provide doctors with additional incentives to keep SZF patients in the hospital in the form of fees to perform operations and daily fees for inpatient consultations. In addition, SZF patients can choose private or public hospitals for care because the SZF does not discriminate between public and private providers. If public hospitals want to ensure that specialists offer services that are attractive enough to SZF patients to compete with private hospitals, financial incentives must be offered to publicly employed doctors to provide inpatient services.

Out of the daily fee the hospital receives from the SZF to cover inpatient days, public hospitals pay specialists fees for performing operations and for inpatient consults. In the AZP, the specialist fee for performing an operation is determined by whether the procedure is classified as light, medium or heavy. Fees are as follows:

Light:	US$6.75	(Sf 2,700)
Medium:	US$11.25	(Sf 4,500)
Heavy:	US$15.75	(Sf 6,300)

In addition, specialists receive daily fees from the hospital for consults while patients remain in the hospital. The US$9 fee received for inpatient consults in week one is actually higher than the fee specialists are entitled to receive for outpatient consultations (approx. US$8). The hospital payment to the specialist is reduced for each week the patient remains in the hospital as follows:

Inpatient Consults:

Week One:	US$9 per day	(Sf 3,600)
Week Two:	US$4.50 per day	(Sf 1,800)
Week Three:	US$2.25 per day	(Sf 900)

The reasoning claimed by the hospital to reduce the fee paid to specialists each week is to give specialists an incentive to discharge patients. While the declining payment to specialists provides a small incentive to discharge, the payment from the SZF to the hospital does not. The hospital receives a daily fee from the SZF which remains constant from the first day to the last (Sf 20,000). As long as there are empty beds to accommodate new patients, one would not predict that specialists would have strong incentives to discharge existing patients.

Specialists employed by public hospitals bill the SZF directly for outpatient visits. Their fees are based on the fee-for-service schedule described in the SZF section. Public hospitals receive no portion of SZF fees for outpatient visits. The costs of operating the outpatient clinics are covered by the hospital through other revenue sources.

All other income to specialists comes directly from the payer. This includes inpatient fees from private payers and private outpatient visits.

8.2 Private Hospitals

Salaries at the Diakonnessen Hospital are higher than in public hospitals. To earn the basic salary, specialists are required to treat employees and their family members and supervise other staff. Specialists employed by private hospitals are not required to treat MSA patients in the outpatient polyclinics. In contrast to public hospitals, in the private hospitals specialists must reimburse the hospitals for the operating costs of running the outpatient clinics. According to an accountant that was contracted to revise the tariffs used by the SZF to pay specialists, the methodology used to allocate the costs of running the outpatient clinics to each specialist is quite rigorous.[27] Specialists directly bill the SZF and private payers for outpatient consults.

The private Diakonnessen Hospital and St. Vincentius Hospital receive a daily inpatient fee from the SZF and MSA that is equivalent to the fee received by public hospitals (Sf 20,000 per day). From this fee, the hospital pays the specialist a fee for operations and for consults. In the Diakonessen Hospital, these fees are paid for *both* MSA and SZF patients. This information was not collected from St. Vincentius Hospital. Since the Diakonessen Hospital is the referral hospital for Medical Mission patients who are covered by the MSA, one would expect that the hospital would want to encourage specialists to treat this poor population. Anesthesiologists receive 40% of the fee paid to the doctor who performs the operation. Fees from the hospital to the specialist for operations that are covered by the SZF and MSA are:

Light:	US$15	(Sf 6,000)

[27] Discussion with L.P.P. Pahladsingh, Accounting Firm Tjong A Hong, in association with Coopers and Lybrand, November 1996.

Medium:	US$25	(Sf 10,000)
Heavy:	US$35	(Sf 14,000)

Reimbursement for normal deliveries is much lower. For example, a doctor is paid US$1.22 (or Sf 490) for a normal delivery with no complications. Though the reimbursement for cesareans is much higher, as they are considered a medium operation, the hospital has a surprisingly low cesarean rate. In 1995, only 5% of all deliveries were by cesarean (67 out of 1306).[28]

Daily consults while the patient is in the hospital are reimbursed the following way:

Week One:	US$8.80 per day	(Sf 3,520)
Week Two:	US$4.40 per day	(Sf 1,760)
Week Three:	US$2.20 per day	(Sf 880)

Notice that the reimbursement for operations is higher, but the daily consult fee is lower than in the public hospital. Another large difference is that the private hospital pays fees to specialists to treat MSA patients while they are in the hospital, as well as for SZF patients.

[28] Discussion with Dr. Miranda, Director of Diakonnessen Hospital, November 1996.

9. SUMMARY OF THE IMPACT OF PAYMENT MECHANISMS ON COSTS AND EFFICIENCY

World experience has taught us that a fee-for-service payment system, with little monitoring and few controls, will lead to escalating health sector costs. Suriname has an open ended system for secondary care. Combined with the absence of rigid payer budget constraints, the influence health care providers have over the determination of fees, and labor unions that insist on maintaining a comprehensive benefits package with minimal consumer copayments, we can expect the health sector in Suriname to consume a growing percentage of national income over time. In addition, a fee-for-service payment system does not encourage either technical or allocative efficiency in the health system.

9.1 Consumer Incentives

To the majority of Surinamese residents, health services are essentially free. Access to free care with no limits causes consumers to consult physicians and demand medicines as if the cost is almost zero. While it is important to offer health care services at prices that people can afford, it is generally accepted that small copayments, especially for outpatient services and drugs, are desirable to control excessive demand. Small copayments for drugs, procedures, and specialist visits cause consumers to question whether the additional services are really needed. Copayments should be enough to control excessive demand, but not too large so that they impose a financial burden on people who pay.

9.2 General Practitioner Incentives

General Practitioners in Suriname have strong incentives to *over refer* patients to specialists, to prescribe drugs, and order lab tests. G.P.s are paid a fixed monthly capitation payment by the SZF per enrolled person. The payment remains fixed whether the G.P. sees all his enrolled population in a given month or he sees no one. Incentives are extremely strong to put in the minimal amount of effort. In theory, SZF enrollees are required to visit their general doctor for all non-emergencies. Only if the general doctor treats the patient are referrals to specialists, labs, and the hospital supposed to occur. A written referral form is supposed to follow the patient to the next level of care. In practice, however, patients often go directly to specialists and return to the general doctor after treatment to get the referral form signed. This practice is not surprising given that general doctors also have nothing to gain by enforcing the system of referrals. General doctors may, in fact, have more to gain if they gain a reputation for easily signing referral slips. More SZF enrollees may choose them, their monthly fixed income that comes from capitation payments will increase, and less work will be required of them. This system has unfortunate incentives for general doctors to over-refer to higher levels of care and to under-enforce the rules of the system. Introducing a small copayment from enrollee to the general doctor may help to shift these perverse incentives. Introducing financial incentives to control referrals would help even more.

In theory, salaried general practitioners employed by the RGD have incentives to over refer to specialists as well because their salary is supposed to be fixed. In practice, RGD doctors are known to charge MSA patients fees which gives stronger incentives for general practitioners to treat the target population. What is not clear is if this practice is imposing a serious financial burden on the

poor that may be causing fewer than the optimal number of consultations with general doctors. In addition, RGD doctors have incentives to prefer to treat SZF patients that choose them as their primary care doctor over the poor and near poor certified by the MSA. The reason is that RGD doctors receive a monthly capitation payment from the SZF that is in addition to their RGD salary for each SZF enrollee that chooses them.

Salaried general doctors employed by private firms are more likely to be held financially accountable for referrals and drug expenditures. Because private firms have not been successful at negotiating favorable rates with specialists, they have chosen to control health care costs by managing utilization. The difference in length of stay between private and public payers shown in Table 9.1 can be partially explained by the gatekeeper and monitoring function performed by private firm employed medical doctors. General practitioners working for private firms monitor length of stay and control prescriptions and lab tests.

Table 9.1 Average Length of Stay in Surinamese Hospitals by Type of Payer in 1995 (number of admissions)

Payer	Academic Hospital	"S Lands Hospital	Diakonnessen Hospital	Nickerie Hospital	St. Vincentius Hospital**
MSA	9.3 (3941)	7.1 (5279)	13.1 (1515)	7.5 (1057)	N/A (246)
SZF	14.1 (1728)	13.3 (1168)	8.1 (2392)	6.3 (360)	N/A (1828)
Private class 3 (total)	8.3* (2929)	6.7 (1080)	6.6 (1894)	5.1 (402)	N/A (1856)
Private class 1,2		5.8 (367)			N/A (798)
Overall average length of stay	9.9	7.9	8.9	6.7	9.8
Occupancy rate	57%	56%	62%	42%	48%
Number of beds	408	303	230	80	287

* Individuals that pay out of pocket had average length of stay of 5.7, and individuals covered by private firms had average length of stay of 12.5. Only the AZP provided this breakdown.

** St.Vincentius Hospital did not separately report the number of occupied bed days by payer.

9.3 Specialist Incentives

Specialists are paid for each office visit, procedure, operation, and visit to SZF and private patients while they are in the hospital. There are no incentives to limit the number of services provided and there are strong incentives to keep patients in the hospital for as long as there is an unfilled bed. This system generates no incentives to control costs or to improve efficiency. This payment system also does not generate incentives to evaluate how resources are being utilized or allocated.

In contrast, public hospital employed specialists are compensated to treat the poor and near-poor out of a fixed salary that does not vary with the number of patients seen or the intensity of procedures provided.

9.4 Hospital Incentives

Reimbursement methods for inpatient services in Suriname incorporate no incentives to improve efficiency or control costs. The first days of a patient's stay are the highest cost because they are when the most intensive procedures occur. Hospitals have strong incentives to keep patients in the

hospital as long as possible in order to average out high cost initial days with lower cost later days because hospitals are paid a fixed amount per day by the MSA and the SZF. These incentives are especially strong when the hospital has empty beds. In addition, physicians gain additional income by keeping SZF and private patients in the hospital longer.

SZF covered patients also have no financial incentives to question the length of hospital stay being recommended by their doctors because the cost of their care is completely covered. In contrast, the MSA charges a small copayment for each day a patient remains in the hospital. Private firms that pay for health care services for employees and their dependents typically pay the full fee but we would expect the monitoring function of the firm employed general doctor to control length of stay and hospital utilization to some degree. Those who pay for hospital services out of pocket would be expected to have the shortest length of stay because they bear the full cost of each additional hospital day.
Table 9.1 displays the distribution of length of stay by category of payer. As predicted, SZF patients have the longest length of stay, on average. The relatively long length of stay for MSA patients in the Diakonnessen Hospital of 13.1 days can be explained by the fact that the majority of the MSA patients come through the Medical Mission. Medical Mission patients are often flown in from the interior. Relatively long length of stay of this population can be explained by three reasons: they have no family in Paramaribo that can care for them while they recover; they must wait for a scheduled trip to occur to their village before returning; and specialists in the Diakonessen hospital are paid daily inpatient consult fees for attending to MSA patients, unlike their public hospital counterparts. There are no clear other differences in the age distribution of the populations covered by the three categories of payers that would predict large and significant differences in length of stay. These figures support the hypothesis that incentives in the payment system largely determine how long patients remain in the hospital. The payment system is causing Surinamese resources to be used inefficiently and the aggregate costs of health care services to be unnecessarily high.

9.5 Incentives to Prescribe and Consume Medicine

The current system of drug procurement, distribution, and reimbursement incorporates no incentives to control costs. Employees of BGVS are not held accountable for managing inventory well. They are not rewarded for negotiating low prices with international suppliers and they get no financial rewards for improving the efficiency of the operations of BGVS. Consumers who are covered by SZF and the MSA pay a fixed copayment for prescriptions that is not a percentage of the actual price of the drug. Consumer copayments are extremely low and incorporate no incentive for consumers to question the total price of the prescribed item. Hospitals and pharmacies pass on all their costs to the MSA and the SZF. In addition, hospitals and pharmacies add an additional healthy markup reported to be as much as 35%. This could even be expected to encourage hospitals to pressure their specialists to prescribe excessively. While the SZF and the MSA do work with budgets, in reality they face only soft budget constraints. The MOF has a history of approving budget increases when these institutions run out of funds. There are no incentives for doctors to control the number of prescriptions they write; no incentives for consumers to control demand; and no financial incentives to control prices or costs all along the line from procurement to final payer.

10. CONCLUSIONS

If Suriname continues to use a fee-for-service system to pay for health services and does not impose budgetary controls, we can predict that expenditures for health will consume a growing portion of GDP over time. While it is clear that expenditures will continue to grow unless changes are introduced, it is not at all clear that the people of Suriname will be getting better quality services for this additional money. In addition to escalating costs, the current system has weak incentives to improve either technical or allocative efficiency.

Policy leaders, hospital directors, representatives of the Doctors' Association, and private firms all recognize and agree that the current fee-for-service system will lead to financial collapse. They are not likely to agree, however, on the solutions. Very strong leadership will be needed to move the process from dialogue to action.

In 1996 the MOH initiated the process by appointing a Task Force to study the financing problems in the system and to recommend actions that will cause the system to evolve into a single payer system that provides universal coverage to a basic package of benefits in three years.

The health system in Suriname confronts the challenge of reform with a number of advantages as well as disadvantages. A major obstacle is that both consumers and providers are likely to resist changes that reduce benefits packages, increase the amount consumers pay out-of-pocket, or reduce provider income. On the side of reform are likely to be private firms who would like to control the health care costs of their employees, and general practitioners if the reforms succeed in shifting the emphasis toward primary and preventive care and away from specialist curative care.

Strengths of the current system include the following:

- Almost the entire population has some form of health insurance coverage that protects against financial risk and ensures that there will be minimal, if any, financial barriers to access. This feature will also make it extremely difficult to convince the population to pay more, to have less choice, or to accept access to a smaller benefits package.

- The MOH is well positioned to become a policy leader. There is almost complete separation of financing from provision of services in the public sector. It is not clear, however, if the Ministry has enough support among major actors in the health sector to initiate major system changes.

- It appears that most of the population has adequate access to primary care services, including the poor and residents of the sparsely populated interior, though most people must travel to Paramaribo for hospital services.

- There is a functioning net for the poor through the MSA.

- Providers are well positioned to respond rapidly to payment system changes, since they already have rudimentary cost accounting and billing systems in place.

- The population has access to an extremely comprehensive package of benefits, (maybe too comprehensive for the country to afford) which includes the possibility of being sent abroad for some procedures.

Weaknesses of the current system include the following:

- The MOH lacks the institutional capacity, the skilled staff, and a functioning health management information system to assume the role of health sector leader.

- Major causes of death and morbidity patterns suggest that Suriname has the problems of both low income and developed countries. Inadequate epidemiological information suggests that the immunization program should be strengthened, maternal and child health services improved, and targeted campaigns aimed at controlling the spread of infectious diseases be launched.

- Powerful stakeholder groups, such as labor unions and the Medical Specialists Association, have vested interests in blocking change.

- The major public payer, the SZF, does not possess the institutional capacity nor information systems needed to assume the role of active purchaser, rather than passive payer, and is not currently prepared to assume the position of single payer for Suriname. Currently, both the MSA and the SZF are payers of hospital services which indicates that economies of scale may be realized by merging the payer operations of the two public payers.

- There are inadequate linkages between primary care and secondary care services. General practitioners do not follow their patients through the system to ensure continuity of care. Only the Medical Mission has achieved this integration.

- General practitioners are not utilized efficiently, a result of the payment system and existing clinical practices.

- The payment system generates weak incentives to provide care efficiently or to make optimal resource allocation decisions.

- Suriname has an insufficient supply of specialists. This is an acute problem in Nickerie.

- There is evidence of much waste and inefficiency in the system as seen by over-consumption of drugs and long average length of stay in the hospital.

Solutions that are currently on the table:

1. **Reorganization of the RGD**: The goal of the RGD reorganization is to position the RGD to compete with the private sector as the dominant provider of primary care services for Suriname. By devolving authority from the center to regions, and involving participation of communities, the reorganization aims to change the perception of the population that health services are an entitlement. Capital investment to improve the quality of facilities is supposed to come partly from the capitation payments from the SZF for enrollees who choose an RGD doctor as their general practitioner. The RGD intends to *raise* the part of the doctors' compensation that comes from a fixed salary and *lower* the compensation received from SZF capitation payments. In essence, this proposal increases the part of the doctor's earnings that are not in any way tied to measures of productivity and lowers the part that results from offering the quality services that the population prefers. On the other hand, if funds are invested prudently to improve facility quality, doctors and patients may end up benefiting. Careful evaluation and monitoring will be needed. Details of the proposed restructuring will require additional study. How will health promotion and prevention services be delivered? Will there be any links between the RGD and specialists and hospitals? What incentives will the RGD general practitioners have to manage care and control referrals? Without clear answers to these questions, it will be difficult to evaluate whether the RGD restructuring will solve any of Suriname's health sector problems.

2. **Single payer system with access to a basic benefits package**: Even with major improvements in efficiency, it is not likely that Suriname will continue to be able to afford to provide the population access to the current comprehensive benefits package. Defining and reducing the benefits package is a concept that has been introduced in the past. It is unclear, however, if consumers and the labor unions that represent them, will be ready to accept a reduction in benefits. The Minister envisions a single payer system, similar to the Canadian system. All Surinamese residents will be forced to participate, including private firms. More details are needed about the mechanisms that will be used to improve efficiency and control costs before this proposal can be evaluated. Simply shifting the administrative responsibility to a single payer without changing incentives in the payment system will not likely solve the critical problems faced.

11. RECOMMENDATIONS

Introducing major reforms to the health care financing and delivery system requires strong and committed leadership. In Suriname, the reforms that are needed to control costs and improve efficiency and quality will not necessarily be popular with powerful interest groups. Providers will resist reforms that limit earnings potential and consumers and the unions that represent them will protest reforms that introduce cost sharing measures. It often takes a financial crisis to force a nation to accept major reforms. The Surinamese health sector is headed toward a financial collapse, especially if external funds from Holland cease to be available in the future to fund growing deficits. The question is whether health sector leaders will be willing to implement needed reforms now, or will wait until crisis forces changes to occur in the future.

This section will first describe potential policy changes that would improve efficiency and quality and control costs. Next, the section will describe improvements to institutional capacity that will be needed to effectively implement changes. Throughout the section, studies to help Surinamese policy leaders make informed decisions will be suggested.

11.1 Policy Changes

1. **Introduce changes in the payment system that will rationalize the way health services are provided and utilized in Suriname**: The population consults specialists for problems that general practitioners are trained to treat. Too many drugs are being prescribed and people remain in the hospital for too long. Excessive consumption of medicine can be dangerous and remaining too long in the hospital can expose the population to unnecessary health risks. This irrational use of scarce health resources increases heath care costs and is inefficient.

    a) Reforms are needed that will cause a change in the behavior of the population so that they choose to consult general practitioners to treat easy problems. This change needs to be buttressed with reforms that change the behavior of general practitioners to restrict referrals to specialists for cases that are medically necessary. Potential solutions include: monitoring by the government and the payers; a change in the payment system that gives both consumers and general practitioners incentives to provide and utilize services rationally; or a combination of both.

    One solution is for the government to state that only a specified percentage of a general practitioner's patients can be referred to specialists in a given month. In theory, this may sound like a reasonable idea but, in practice, it would be very difficult to implement. Some general practitioners may end up with a sicker than average pool of people which implies that appropriate referral practice guidelines would need to be adjusted for health risks. Another problem is that this level of monitoring requires a staff of investigators and a developed system to collect and evaluate information. The MOH, the SZF, and the MSA do not currently have this level of institutional capacity.

Another solution that would be easier to implement is to change the way consumers pay for care and to change the way general practitioners get paid so that it is in everyone's best interest to provide and use care rationally. This solution would require a minimal amount of government monitoring.

In Suriname, consumers currently pay no copayment for outpatient care. To consumers, visits to general practitioners and specialists are essentially free. It makes perfect sense since the cost is the same (zero) that consumers would prefer to consult with a specialist rather than a general practitioner. Introduction of a consumer copayment that is smaller for general practitioner consultations than to see a specialist would give consumers the incentive to visit general practitioners for easy to treat problems. The system of requiring referrals from G.P.s to specialists should also be maintained. Fees would have to be set at a level that would rationalize the use of services, not pose a financial barrier. This implies that the poor should pay a lower fee than middle income people.

General practitioners are currently paid a fixed capitation payment from the SZF that does not vary with the volume of patients seen in a month. Nor is the general practitioner's income augmented if he exerts a high level of effort. A solution is to compensate the general practitioner with a combination of a fixed monthly payment and additional fees for each consultation. This would imply a reduction in G.P. capitation payments. Income would be augmented by fees collected directly from consumer copayments or by a combination of consumer copayments and fees from the public payer. Because general practitioners would earn part of their income by collecting fees, they would have incentives to treat patients rather than referring them to specialists.

RGD doctors are currently paid a fixed salary to treat the population that is certified by the MSA as poor or near poor. This population should also have incentives to make rational care choices by facing small copayments. If the financial burden is too severe, it may be preferable to compensate RGD doctors with a combination of fixed salaries and fees that are partially paid by the public payer and partially paid by the patient.

Studies would be needed to determine the appropriate combination of fixed compensation and income earned from fees. It will be necessary to find a consumer copayment that is high enough to encourage rational use of care but not too high to pose a financial barrier. A recommendation is to choose an area to test the impact of payment system changes and to make adjustments before implementing changes in the entire country.

In the current system, RGD doctors and private G.P.s compete to attract SZF members to enroll with them. Private G.P.s also compete to obtain contracts with private firms. This process insures that G.P.s provide the type of services and the level of quality that consumers prefer. If consumers are dissatisfied, they can vote with their feet. The MOH and the MSA should examine the possibility of allowing

the poor and near poor to have more choices. Given that part of the restructuring of the RGD includes improving facilities to attract the private sector and more SZF enrollees, the poor should also be given the choice to get primary care services from private practitioners. The process of competition for primary care services will be expected to result in improvements in both quality and efficiency, when combined with changes in the payment system.

b) Specialists should continue to be paid fee-for-service for office consultations but part of the fee should come in the form of a direct consumer copayment that is larger than the copayment for G.P. consultations.

c) Suriname should move away from fixed daily fee payments to hospitals. A "package payment" system will improve efficiency and reduce length of stay. The current system that pays hospitals fixed daily rates gives hospitals no incentives to find more efficient methods to provide patient care. A recommendation is for Suriname to develop fixed lump sum payments for packages of care. First, Suriname should identify the procedures that represent the majority of cases treated in hospitals. Second, a team of medical experts should convene to determine the appropriate quantity of bed days, medication, operating room time, and related lab tests and images for that diagnosis. A study should then price the elements of the package and arrive at a total sum for that package payment. Hospitals would then be paid the determined fixed sum for each patient with the identified diagnoses. Hospitals would have powerful incentives to discover more efficient ways to deliver care. Potential results might include: reduced length of stay, and more rational use of medicines, lab tests, and images.

d) Introduce drug copayments that give incentives to choose generic drugs over name brands and help rationalize drug consumption. Current copayments for drugs are reported to be too low to help control demand. Private firms dispense drugs in doses that cover two days to control waste and reduce costs. This is a model that is currently working in Suriname and could be considered by public payers and providers as well.

2. **Improve the means testing process of the MSA to determine the poor and near poor**. Many in the health sector, including the Minister of Social Affairs, believe that some Surinamese residents are being certified as poor or near- poor who are actually capable of paying for care. The process of means-testing needs to be improved to both ensure that those in need continue to have access to subsidized care and to limit abuses of the system.

3. **Impose firm budget constraints on public payers**: The open-ended nature of public financing for health imposes no cap on the level of potential spending. Public payers know that if they run out of funds in the middle of the year, they can ask the Ministry of Finance for more, and more will come. This loose funding environment does not force payers to find ways to function within a budget that has limits. The result is that payers have weak incentives to control billing abuse and to develop payment mechanisms to control costs and improve efficiency.

4. **Consider merging the health payment function of the MSA with the SZF**: Currently, both the MSA and the SZF reimburse hospitals for care. There are likely economies of scale to be realized by merging the hospital payment operations of the two public payers. This will be especially advantageous if Suriname moves toward the single payer system that Minister of Health Khodabaks favors.

5. **Define a basic package of benefits to be provided by the public payers**: Currently, the packages of benefits covered by the SZF and MSA are extremely comprehensive. Private employers cover similarly generous benefits as well. In addition, all Surinamese citizens have the right to be sent to Holland for treatment for some conditions that are treated in the country. In the future, if Suriname faces a fixed budget for health, some hard choices may have to be made about what services to include and exclude in the benefits package. One way to control the growth of health care costs when resources are limited, while ensuring that the population has access to a comprehensive package of benefits, is to define a list of covered benefits based on cost effectiveness or other criteria. A comprehensive study of the burden of disease in Suriname would help to determine what should be included in a more restricted benefits package. The result of this process will clearly place preventive and primary care at the top of the list and high cost, low frequency conditions will likely be excluded. Since one of the primary purposes of health insurance is to provide protection against financial risk, Suriname may decide to include these rare high cost illnesses and may choose to exclude other curative care services that occur more often but are affordable. The purpose of this study will be for health sector leaders to examine data that incorporate the costs and benefits of health care to make a determination of which services to include and exclude in a publicly funded benefits package.

6. **Invest in health promotion and prevention**: Examination of available information on mortality and morbidity patterns in Suriname indicates that the population is suffering from conditions that are preventable. This suggests that there is likely to be a significant return from a health education campaign aimed at improving maternal and child health, and reducing injuries from accidents and violence.

7. **Improve the process of drug procurement and distribution**: Currently, the BGVS is earning state sanctioned monopoly profits of 22% on every drug and medical supply that is distributed throughout the country. Hospitals and pharmacies add an additional 35% markup to the inflated wholesale price they pay before billing the public payers. These enormous profits are providing windfall gains to some individuals and institutions. These excessive profits are earned at the expense of the average Surinamese tax payer who finances the budget deficits of the SZF and MSA. Because consumers pay minimal copayments for drugs, they have limited incentives to question the price the public payer is being billed for their drugs. The result of this process has the AZP earning 25% of its revenue from drug sales and 17% of expenditures of the SZF are for drugs. Reducing the markup alone could cut these expenditures considerably.
   A study is needed to identify more efficient methods of drug procurement and distribution by the BGVS. Included in this study should be recommendations to change the incentives for BGVS employees to purchase drugs at lower prices and to improve inventory maintenance

and distribution. At this point, it is not clear if Suriname benefits from having a centralized drug procurement parastatal institution because many in the health sector claim that drugs can be purchased from private pharmacies for lower prices.

11.2 Institutional Capacity Building

8. **Develop the planning capabilities of the MOH**: The Department of Health of the MOH is seriously understaffed. Civil service salaries make it difficult to attract qualified people to work in government because they can find better working conditions in the private sector. *The MOH will not be able to function as an effective health policy leader without a staff of qualified and motivated experts in public health, economics, statistics, and management.* The perception is that the human capital does exist inside the country. It is just not possible to attract qualified professionals to work for the government. This is a problem faced by all ministries and is currently being discussed in the context of civil service reform. *Recommendations include: targeted in-country training courses for policy makers, site visits to other countries implementing similar reforms, and longer training programs abroad.*

9. **Reorganization of the MOH to become an effective policy leader**: The current organizational structure of the MOH does not lend itself to long term sector wide planning. *Recommendations include: contract an expert in organizational theory to suggest reorganization of the Ministry so that it can effectively assume the new functions that will be needed in the future reformed system.*

10. **Improve the Information System of the MOH**: The MOH will not be able to function as an effective policy leader without information about the sector. *Emphasis should be placed on improving the epidemiological surveillance system. In addition, the MOH needs information about household utilization patterns, insurance coverage, and the financial burden of health.* It may be possible to add health-related questions to the quarterly household survey that is fielded by the General Bureau of Statistics. *The MOH also needs information about the services that are being produced by individual providers and hospitals and at what cost. Development of a health management information system for the MOH will be vital to the success of any chosen reform.*

11. **Improve the Institutional Capacity of the SZF**: *In order for the SZF to be transformed into an active purchaser of health services, its organizational structure and staff skills will have to change.* A comprehensive study is needed of the current system and current capacity. *Recommendations include: contract an expert in organizational theory to suggest reorganization of the SZF so that it can effectively assume the new functions that will be needed in the future reformed system.*

12 **Improve the information system of the SZF and the MSA**: Currently, the SZF maintains parallel, but unconnected, billing systems for outpatient and hospital reimbursement that makes it impossible to verify if specialists are charging the SZF for outpatient services or for patients who are in the hospital. *The SZF has limited capacity to check for billing mistakes or to monitor the referring practices of general practitioners or specialists.* The information system is inadequate to enable the SZF to function as a true insurance company that must

manage risk and maintain costs within a fixed budget. *Successful implementation of reforms will require an improved information system.*

13. **Improve hospital cost accounting systems and medical record systems**: Because Surinamese hospitals have been billing fee-for-service, rudimentary cost accounting systems are in place. It is unclear, however, if current systems will be adequate to provide hospitals with the information to make resource reallocation decisions in response to the new incentives coming from changes in the payment system. *Some assistance in implementing better costs systems and some training in how to reallocate resources may be useful.* Hospital management is extremely capable of responding to the incentives in new reimbursement systems, but technical assistance and help identifying, purchasing, and installing new systems would facilitate the process.

LIST OF PERSONS INTERVIEWED DURING THE PERIOD NOVEMBER 12th-28th.

Hon. E.M. Khodabaks, Minister of Health

Dr. R. Codfried-Kranenburg, Director of Health

Mr. R. Parmessar, General Manager AZP

Mr. W. Ganga, Director Finance Department AZP

Mr. Bansradj, Head Finance Department AZP

Mr. H. Latiri, Representative PAHO

Mr. Resida, Treasurer, Ministry of Finance

Mrs. Khedoe, Staff Member, Ministry of Finance

Mrs. Els van Soeteren, Staff Member, Ministry of Finance

Mr. D. Mathoera, General Director SZF

Mr. Starke, Economist SZF

Dr. J. De Miranda, General Director DH

Mrs. S. Relyveld, Economist DH

Mr. Ritoe, Act. Director BOG

Mrs. Vensee, Head Epidemolopi BOG

Mr. B. Barrow, Act. Director LPI

Mrs. Tom, Nurse LPI

Mrs. C. Rozemblad-Jap A Joe, General Director LH

Mr. W. Sandriman, General Director RGD

Mrs. J. Abdoelbazir, Head Nurse Dept. RGD

Mr. H. Kort, Chief Medical Dept. SURALCO

Mr. Monsanto, Staff Member, Medical Dept. SURALCO

Mr. H. Pinas, Director of Finance RKZ

Hon. S. Moestadja, Minister of Social Affairs

Mr. Kalhoe, Staff Member SOZA
Mr. Ritfeld, Staff Member Self Reliance

Mr. D. Jhagroe, Deputy Director Finance BGVS

Mr. F. Lieveld, Deputy Director Production BGVS

Mr. M. Panday, Act. Director JTV, Chairman Task Force AZV

Mr. R. Paltantewarie, General Director SZN

Mrs. Meyerhoven, Head Nurse Dept. SZN

Mr. Ganesh, Administrator SZN

Mr. R. Li Fo Sjoe, Head Medical Dept. SZN

Mr. Simson, Project Director ASIH

Mrs. Simson-Kartoredjo, Assistant Program Director ASIH

Prof.Dr. A. Vrede, Dean Medical University, Board Member of SRC

Mr. P. Lewis, Owner of Flora Drug Store – Private Importer of Medicine

Mr. L.P. Pahladsingh, Registered Accountant

Mr. Abdoelhafiz, Staff Member GLICO

Mr. P. Tsie A Foeng, Member Task Force AZV

Dr. G. Hagens, Advisor Task Force AZV

Dr. R. Baptista, Chairman VMS

Dr. V. Nanan Panday, Board Member VMS

Dr. S. Punwasie, Board Member VMS

Dr. R. Lee Hon Fong, Board Member VMS

Dr. P. Wellis, Board Member VMS

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