

PN-ABS-903
iss 90814

HFS Technical Note No. 26

**EXPANSION OF
PRIVATE HEALTH INSURANCE IN
PAPUA NEW GUINEA**

Submitted to:

**Health Services Division
Office of Health
Bureau of Research and Development
Agency for International Development**

Written by:

**Zohair Ashir
Consultant, Abt Associates Inc.**

January 1994

Health Financing and Sustainability (HFS) Project

**Abt Associates Inc., Prime Contractor
4800 Montgomery Lane, Suite 600
Bethesda, Maryland 20814 USA
Tel. (301) 913-0500 Fax: (301) 652-3916 Telex: 312636**

**Management Sciences for Health, Subcontractor
The Urban Institute, Subcontractor**

AID Contract No. DPE-5974-Z-00-9026-00

ABSTRACT

The expansion of private health insurance in Papua New Guinea is supported by the country's National Department of Health, and believed by that agency to have the prospect of being an important method of financing health services. As the budget for and quality of health services in the public sector continues to decline, it is believed that expanding private health insurance would allow it to assume a growing share of the financial burden of providing health services. The reduced burden on the public sector would increase its prospects for survival, as well as allowing it to provide better services for the uninsured.

Introduction of user fees and expansion of the health insurance market are believed to best be accomplished using managed care principles — payment of a fixed premium providing access to a predefined set of health services for a specific group of people.

To conduct the health insurance assessment and provide recommendations, numerous methods were used, including interviews with insurers, health care providers, and public and private employers. Recommendations are divided into near-term and long-term actions, and include: direction on conducting workshops and technical training to improve the current state of health care and to assist personnel in making the transition to a larger, private insurance-based system; development of quality assurance mechanisms to arrest further deterioration of quality of service in government health facilities; enacting exemptions from taxes on employee premium payments; and the eventual development of a more sophisticated, full-scale social security system.

The interviews conducted showed wide support for the managed care insurance development from employers, insurers, and health providers in Papua New Guinea.

TABLE OF CONTENTS

ABSTRACT	i
LIST OF EXHIBITS	v
LIST OF ACRONYMS	v
EXECUTIVE SUMMARY	vi
1.0 INTRODUCTION	10
1.1 OVERVIEW OF HEALTH CARE SYSTEM IN PNG	11
1.1.1 Description of the Public Health Care System	12
1.1.2 The Private Health Care System	13
1.1.3 The Traditional Health Care System	14
1.2 BACKGROUND OF HEALTH INSURANCE IN PNG	14
1.3 MAJOR HEALTH ISSUES AND PROBLEMS	15
1.4 SCOPE OF WORK	16
2.0 METHODS	18
2.1 KEY ISSUES TO BE ADDRESSED	19
3.0 FINDINGS ON HEALTH INSURANCE AND HEALTH CARE PROVIDERS	20
3.1 ASSESSMENT OF THE EXISTING HEALTH INSURANCE MARKET	20
3.1.1 Review of the Health Insurance Industry	21
3.1.2 Review of Existing Health Insurance Products Available in the Market	22
3.1.3 Major Issues and Concerns Expressed by Insurers	24
3.1.4 Proposed Government Incentives to Induce Expansion of Private Health Insurance	25
3.1.5 Level of Interest Among the Insurance Companies in Market Expansion	25
3.1.6 Ranking of Insurance Companies	27
3.2 IMPACT OF PRIVATE HEALTH INSURANCE ON THE HEALTH CARE PROVIDER MARKET	27
3.2.1 Private Practitioners	27
3.2.2 Port Moresby General Hospital	29
3.3 SOCIAL SECURITY	31
4.0 FINDINGS ON MANAGED CARE	33
4.1 BACKGROUND	33
4.2 KEY CHARACTERISTICS OF MANAGED CARE AND THEIR RELEVANCE TO THE PNG HEALTH SECTOR	34
4.3 THE POTENTIAL FOR MANAGED CARE	34
4.4 SUMMARY OF EMPLOYER, INSURER AND HEALTH PROVIDER VIEWS	36
4.5 MAJOR OBSTACLES TO DEVELOPING MANAGED CARE	37
4.6 POTENTIAL MARKET SIZE FOR MANAGED CARE	38
4.7 A MANAGED CARE INSURANCE MODEL	38
5.0 FINDINGS OF EMPLOYER SURVEY	41
5.1 SPECIFIC OBJECTIVES OF THE SURVEY	41

5.2	METHODOLOGY OF THE SURVEY	41
5.3	FINDINGS AND ANALYSIS OF THE EMPLOYER SURVEY	42
5.3.1	Employer Profile and Review of Current Health Benefits	42
5.3.1.2	Classification of Personnel	43
5.3.1.4	Cost-Sharing of Health Insurance Premiums	44
5.3.1.5	Total Annual Medical Expenditures	44
5.3.1.6	Employers Contracting Directly with Providers for Medical Services	45
5.3.2	Employers' Responses to Proposed Managed Care Plan and Benefits	45
5.3.2.1	Employers' Interest in a Managed Care Plan	46
5.3.2.2	Organizations Interested in Purchasing Proposed Plan for Employees	46
5.3.2.3	Willingness to Pay More for a Managed Care Product	47
5.3.2.4	Response to Features of the Proposed Plan	47
5.3.2.5	Inclusion of Additional Services	47
5.3.2.6	Other Comments Made by the Respondents	48
5.4	EMPLOYEE TRADE ASSOCIATIONS AND UNIONS	48
5.4.1	Public Employees Association	48
5.4.2	PNG Trade Union Council (PNGTUC)	49
6.0	LEGAL ISSUES	50
6.1	REVIEW OF EXISTING LAWS GOVERNING THE INSURANCE INDUSTRY	50
6.2	INTRODUCTION OF MANDATORY HEALTH BENEFITS LEGISLATION	51
6.3	MONITORING OF THE HEALTH INSURANCE MARKET	52
6.4	ROLE OF THE GOVERNMENT IN THE DEVELOPMENT OF PRIVATE HEALTH INSURANCE	52
7.0	RECOMMENDATIONS	54
8.0	IMPLEMENTATION PLAN	58
APPENDIX A: Papua New Guinea Health Insurance Assessment: Proposed Summary of Benefits, Managed Care Model		61
APPENDIX B: Papua New Guinea Health Insurance Assessment: Revised Proposed Summary of Benefits, Managed Care Model		64
APPENDIX C: Health Insurance Options Description of Major Programs		67
APPENDIX D: List of Persons Contacted and Interviewed: Health Insurance Assessment, Papua New Guinea		73
BIBLIOGRAPHY		76

LIST OF EXHIBITS

EXHIBIT 1:	PNG Government Health Expenditures, Five-Year Trend: 1988 - 1992 (various comparisons)	11
EXHIBIT 2:	Major Health Insurance Companies in PNG and Their Current Membership Enrollment	22
EXHIBIT 3:	Major Features of Existing Health Insurance Products Available in PNG	23
EXHIBIT 4:	Level of interest in Market Expansion and the Proposed Managed Care Plan by Companies	26
EXHIBIT 5:	Ranking of Insurance Companies by Level of Interest	27
EXHIBIT 6:	Major Characteristics of Practice of Selected Private Physicians Based in Port Moresby	28
EXHIBIT 7:	Total Hospital Revenue as a Percentage of Annual Budget Allocation Amounts in Kina	30
EXHIBIT 8:	Port Moresby General Hospital Annual patient Volumes and Revenues (All Patients) 1990 - 1992	30
EXHIBIT 9:	Potential Estimate of Population Eligible for Managed Care Plan in PNG (1993 - 2000)	38
EXHIBIT 10:	Type of Ownership of Organizations Surveyed	42
EXHIBIT 11:	Classification of Personnel in Organizations Surveyed	43
EXHIBIT 12:	Employees Surveyed Eligible for Health Benefits through Employer	43
EXHIBIT 13:	Cost-sharing of Health Insurance Premium by Surveyed Organizations	44
EXHIBIT 14:	Total Annual Medical Expenditures Incurred by Organizations Surveyed	44
EXHIBIT 15:	Number of Surveyed Organizations which Contract Directly with Providers for Medical Services	45
EXHIBIT 16:	Employers of Interest in a Managed Care Insurance Plan	46
EXHIBIT 17:	Organizations Interested in Purchasing of the Proposed Plan for Their Employees	46
EXHIBIT 18:	Willingness to Pay More for a Managed Care Health Insurance Product	47
EXHIBIT 19:	Private Managed Care Health Insurance Implementation Plan	58

LIST OF ACRONYMS

HEO	Health extension officer
HFS	Health Financing & Sustainability
HMO	Health maintenance organization
MBF	Malaysian Borneo finance
MOF	Ministry of Finance
NDOH	National Department of Health
NHS	National Health Service (Great Britain)
NIC	Niugini Insurance Corporation
NPF	National Provident Fund
NZI	New Zealand Insurance
PAPI	Pan Asia Pacific Insurance
PEA	Public Employees Association
PMGH	Port Moresby General Hospital
PNG	Papua New Guinea
PNGTUC	Papua New Guinea Trade Union Council
QIC	Queensland Insurance Company
SOW	Scope of Work
USAID	U.S. Agency for International Development

EXECUTIVE SUMMARY

PURPOSE

The National Department of Health (NDOH) would like to stimulate the expansion of private health insurance in Papua New Guinea (PNG). As public resources for financing services decline, private health insurance is increasingly being used as an alternative method of financing health services by governments around the world. The expansion of private health insurance through a managed care health plan would reduce the government's financial burden for the insured population — resulting in savings of scarce resources which could be deployed to provide better services for the uninsured population.

PROBLEM

PNG's 3.6 million (1990) population has an annual growth rate of 2.3 percent. This has placed increasing demand on the government health services without corresponding increases in health resources. Overall government expenditure for health has been declining over the past few years. The quality of services available at public sector health facilities has also suffered, resulting in growing dissatisfaction among users. Reforms of health sector financing policies are required to stop a further deterioration of services and decline in overall health standards. These reforms include the introduction of user fees and expansion of the health insurance market.

THE HEALTH INSURANCE APPROACH

This initiative is designed to stimulate the expansion of private health insurance using managed care principles. The study's central focus is to assess the potential for private health insurance in the largest urban and industrial center of PNG — Port Moresby. The design of the study encompasses the assessment of the health care provider market, a review of the health insurance sector, and a survey of selected employers in the Port Moresby area. Experience indicates that managed care principles effectively address the issues relating to cost escalation, overservicing, and abuse prevalent in many existing insurance plans. Sources of savings include simplified rating structures and a limited need for claims processing. The levy of a copayment or capitation system reduces the opportunities for overuse by consumers and overtreatment by providers.

There are many forms of managed care models in practice, but all have certain basic elements. These include prospective fixed payment of premiums in exchange for access to a predefined set of medical services for a given group of people. The providers are assured a fixed sum for extending medical services, in exchange for a preferential pricing agreement with the insurer, which relieves the burden of payments and claims submission from the insured. The payments to providers are made directly from the insurance organization, bypassing the insured and thus protecting against any opportunity for fraud.

METHODS

A multidimensional approach was selected for conducting this assessment and identifying possible solutions. The methodology for this study included a visit by an external technical consultant, interviews and meetings with leading insurers and some health care providers, and a survey of a cross-section of public and private sector employers to gauge their interest in a managed care health insurance plan. A summary of health benefits based on a managed care model was also developed.

Analyses and findings indicate that while the size of the health insurance market is currently restricted, the demand for health insurance in the formal employment sector is increasing. There is an immediate need to improve government health facilities, especially strengthening the infrastructure, medical technology, staff training, and development of management systems. The findings indicate the health insurance market could support a managed care product in the Port Moresby area by developing an indigenous health insurance product which could be expanded to cover larger segments of the population.

RECOMMENDATIONS

To guide the expansion of health insurance using managed care principles in PNG, the following recommendations are submitted:

Near-Term Government Actions:

- ▲ *Conduct a workshop for potential insurance organizations, employers, and health care providers in Port Moresby to present the findings of this study.*
- ▲ *Help potential insurers acquire technical training in designing and operating managed care plans.*
- ▲ *Conduct a supplemental workshop for NDOH officials and selected invitees from other government departments in Port Moresby to ascertain the probable impact of the health insurance initiative on health financing in PNG.*
- ▲ *Prepare a health information package for potential insurers containing key statistical, and historical health and demographic data.*
- ▲ *Assist potential interested insurers by furnishing a list of private practitioners and government health facilities in Port Moresby and the types of services provided by them.*
- ▲ *Provide financial incentives to potential insurers investing in a managed care product by exempting employers from tax on premiums paid for purchase of health insurance for their employees.*
- ▲ *Arrange for a government backed demonstration of a managed care plan.*

- ▲ *Improve the quality and services of government-managed health facilities by raising user fees.*
- ▲ *Initiate the process of developing a quality assurance mechanism for the health facilities, especially hospitals in PNG.*
- ▲ *Gradually restrict the use of intermediate beds to insured patients or those willing to pay high advance deposits.*
- ▲ *Increase the daily accommodation rate for intermediate beds to enable Port Moresby General Hospital (PMGH) to recover a larger share of real costs and increase its revenue-generating capacity.*
- ▲ *Grant admitting privileges to private practitioners through a credentialing process.*
- ▲ *Develop legislation for regulation of the health care insurance industry.*
- ▲ *Recognize that the market size of the potential population eligible for private health insurance is restricted.*

Near-Term Insurer Actions:

- ▲ *Develop and price a managed care package of services for employers.*
- ▲ *Market managed care plans to the formal employed sector in Port Moresby.*
- ▲ *Provide NDOH with health insurance product and subscriber information.*

Long-Term Government Action:

- ▲ *Enact national legislation requiring employers to provide health benefits to their employees and dependent.*
- ▲ *Establish a "watchdog council" with proportional representation from the public, insurers, employers, providers, and government to serve as a regulatory and grievance body.*
- ▲ *Assist the government in the development of a social security system including provision of subsidized health services for the indigent or disadvantaged population.*
- ▲ *Arrange a training program for private practitioners on how to administer a managed care program in a financially beneficial manner.*
- ▲ *Encourage government and private financial institutions to provide secured special loans and grants to national PNG medical professionals.*
- ▲ *Improve services offered by the government facilities.*
- ▲ *Develop a cost recovery model for PNG health system.*

Long-Term Insurer Actions:

- ▲ *Develop a full-scale managed care health plan based on the experience gained from the initial product.*

This study concludes that employers in PNG are interested in further exploring the option of private health insurance along managed care lines, and if the recommendations presented here are implemented, insurers and health providers could also be induced to offer and practice a managed care insurance plan.

1.0 INTRODUCTION

The expansion of private health insurance in Papua New Guinea (PNG) is seen by the National Department of Health (NDOH) as a critical element in addressing some of the major problems facing the country's health sector. Growth in the private insurance market would help mobilize resources for health — which has seen a gradual decrease in budget allocation in recent years. A government review in the trend for health expenditures for the previous five years indicates a decrease in health sector resources both as a percentage of overall government expenditure and in real terms as well (see *Exhibit 1*).

The expansion of health insurance would also provide the NDOH with the option of an alternative source of financing of secondary health services through the private sector, through payments of user fees for ambulatory care and hospitalization services. This approach could also contribute to greater efficiency and improve the quality of health services. Private health insurance might also serve as a catalyst to the development of private sector providers, which are in short supply.

In addition, the revenue generated by insurance would be used to pay for the services used by the insured, thus allowing government resources to be entirely devoted to serving poorer people who are not insured. It would also enable the providers, especially the government-owned hospitals, to significantly improve their revenue-generating capacity by providing services to a larger privately insured population. The additional revenue generated could be invested in manpower training and technology improvements. These additional resources could also provide better health services to the poor and disadvantaged population who are not covered by health insurance. Government could dedicate more of these resources to primary care and reduce its subsidy to secondary care services.

The assessment of the health insurance market conditions and environment in PNG and its prospects for expansion are very timely in view of the government's current emphasis on economic development. To overcome the shortage of resources, the NDOH had already embarked on developing alternate strategies to finance health services. In this regard, a comprehensive study on health sector financing had been conducted in 1990¹. This assessment of health insurance is consistent with the strategies outlined in the PNG National Health Plan for 1991-95. It is also the next step towards increasing private sector involvement through financial burden-sharing as envisaged in the 1990 study. Therefore, this study complements the efforts initiated by the NDOH to seek alternative financing sources to meet the increasing demand for resources for the health sector.

¹ "Health Sector Financing Issues and Options," John Snow Inc., 1990.

EXHIBIT 1
PNG Government Health Expenditures
Five-Year Trend: 1988 - 1992
(various comparisons)

(Amount in Kana: 1k = US \$ 1.05)

	1988	1989	1990	1991	1992
Govt. Esp (millions)	918.0	1,037	1,089	1,187	1,358
% of GAP	30.0%	33.0%	35.4%	32.9%	32.8%
Real Govt Esp (mil)	724.5	823.7	777.9	848.4	944.6
Govt Health Esp (m)	88.3	100.2	104.4	90.8	91.8
% Govt Esp	12%	12%	13%	11%	9%
Real Govt Health Esp (millions)	70.1	79.6	79.8	64.8	63.8

- Sources:*
- 1) NDOH Health Plan (1991-1995)
 - 2) Economic and Development Policies, Volume I, Ministry of Finance, 1994 Budget
 - 3) Various Comparisons

To help the NDOH find sustainable solutions to its health financing problems, U.S. Agency for International Development (USAID) through its Health Financing and Sustainability (HFS) Project offered to conduct the assessment of health insurance prospects in October 1993. The work on the health insurance initiative was focused on the capital city of Port Moresby, which is not only the largest urban center in PNG with a population exceeding 200,000², but also where the bulk of the formal employment sector is based.

1.1 OVERVIEW OF HEALTH CARE SYSTEM IN PNG

In 1990, PNG had an estimated population of 3.6 million, growing at a rate of 2.3 percent per year.³ Life expectancy was 49.6 years and the infant mortality rate was 72 per 1,000. The male population was 52.3 percent of the total population an estimated 12 percent of the population resides in the urban centers and 88 percent in the rural areas. The major causes of morbidity and mortality were upper respiratory tract infections, malaria, diarrhea, and

² National Statistical Office, *1990 Census: Population Census & Social Statistics Division* (Estimate).

³ National Statistical Office, *1990 Census: Population Census & Social Statistics Division*.

perinatal conditions.⁴ In PNG, health services are available from three sources: the public health care system, private health care, and the traditional health care practices which are mostly found in the rural areas of the country.

1.1.1 Description of the Public Health Care System

The public health care system consists of services provided by the Government and the churches. They provide promotive, preventive and curative services at three levels:

- ▲ Primary health services are universally available and are intended to be as accessible to the community as possible. Generally, they use the most appropriate and least expensive manpower that can deliver the required services.
- ▲ Secondary health services support the primary health services and provide the advanced diagnostic and treatment facilities available at hospitals.
- ▲ Tertiary health services which provide the more advanced and sophisticated care such as radiotherapy, are available on very limited basis in PNG.

These public health services are delivered through five different types of health facilities⁵:

i.) Aid posts are the smallest health unit, staffed by an aid post orderly, who is trained in simple curative treatment. There were 2,304 aid posts nationwide in 1989, and they provide care for population ranging from 1,000 to 5,000 people.

ii.) Health subcenters are the next level of health facility and are staffed by nurses, aides, and orderlies. They are capable of providing maternal and child health, obstetric (including 100 - 150 deliveries each year), and limited inpatient care (300 - 500 per year). In 1989, there were 278 health subcenters which normally cater to a population of between 5,000 to 8,000.

iii.) Health centers are the most integral unit of the PNG health care system and provide comprehensive health services to a large rural population. Health centers have a health extension officer (HEO), who receive three years training in rural health services and has clinical and diagnostic skills which are greater than those of the nurses. The health centers offer limited inpatient facilities (400-600 per year) and can supervise deliveries (100-150 per year). In addition to the basic services available at the aidposts and health subcenters level, some of the larger health centers have x-ray, laboratory, and dental facilities. Based on a 1989 survey, there were 195 health centers which covered the population base of 8,000 to 20,000.

⁴ PNG National Health Plan, 1991 - 1995.

⁵ PNG National Health Plan, 1991 - 1995.

iv.) **Urban Clinics**, a more recent development in the PNG health care system, are specifically designed to meet the needs of emerging urban populations. The services of the urban clinics are closely linked with the outpatient department of the hospital. They are staffed by a health extension officer and nurses. Currently there are no arrangements to keep the patients overnight. There were 36 urban clinics in 1989 (15 in Port Moresby), each with a capacity to serve a population exceeding 10,000 people.

v.) **Hospitals** provide secondary care services and are the most advanced form of health service unit. Currently there are 19 hospitals in the country that offer varying types of services based on their staffing and technical capabilities. Currently, there is no dedicated tertiary care facility and, due to the financial constraints facing the government, no tertiary care facility development is envisaged during the 1991-1995 plan period. Selected hospitals in PNG do provide some limited form of tertiary care. Patients requiring tertiary care services not available in PNG are referred overseas (mostly to Australia).

Private voluntary organizations in PNG play a key role in the management of health service facilities in the rural areas. Based on 1989 estimates, private voluntary organizations operate 115 (five percent) aidposts, 178 (64 percent) health subcenters, and 46 (25 percent) health centers.

1.1.2 The Private Health Care System

The private health sector is very small, both in terms of number of individual practitioners and number of private health facilities. In 1989, there were 248 medical practitioners in PNG, of which 61 or 24 percent were in private practice. Medical practitioners in the public sector are not permitted to engage in private practice. There is only one private hospital staffed by seven doctors. In addition, there are two private clinics in Port Moresby and one in Arawa, but with limited inpatient capabilities. The private doctors refer patients to the public hospitals if they require hospitalization, but do not have admitting privileges at these hospitals.

There are 10 dentists and one eye specialist in private practice. Twenty-five privately owned pharmacies serve 80 percent of the urban population. This industry is dominated by three pharmacy retail chains, which have enjoyed a 20 percent annual growth rate.

Under existing laws, there are no regulations to define the standards for private facilities, nor does the government have the authority or mechanism to monitor or control charges levied by private practitioners or hospitals. The only legislation that regulates private practice is the Medical Services Act, which controls the registration of doctors and dentists by the PNG Medical Board. Recently the NDOH embarked on a process of introducing quality assurance mechanisms to monitor compliance with public health facilities standards. This is monitored by the Policy, Planning, and Evaluation unit of the NDOH.

1.1.3 The Traditional Health Care System

There is very little statistical information available about the utilization rates for traditional health care providers. This practice is more common in the rural areas. The most common form of treatment is through plant products (herbal medicines) and simple surgery. When traditional healing methods fail, however, the rural population turns to scientific services.

1.2 BACKGROUND OF HEALTH INSURANCE IN PNG

Only a limited amount of health insurance now exists in PNG. The government is interested in the potential for expansion of health insurance in the country. This is reflected in the National Health Plan for 1991-1995, which identifies the development and expansion of private health insurance as one of the key strategies.

Today, few employers in the public or private sector offer health benefits to their employees. Most employees who carry private health insurance coverage pay for it through payroll deduction without any premium cost sharing from the employer. Unlike many other developing countries where provision of health benefits is considered mandatory, there are no such regulations in place in PNG, which may contribute to the diminished market for private health insurance. The employed population largely depends on the health services provided by the public sector at a very minimal fees. The availability of low cost public health services does not create a sufficient financial risk for the population to seek coverage through insurance.

However, the quality of public health services has been declining in recent years. This has generated a demand for private medical services, especially in the urban centers.

Most of the existing private health insurance activities are focused in Port Moresby, which is the capital and largest city. There are currently six insurance companies which market health insurance products directly or through brokers. Five of these underwrite the health insurance in PNG. Based on interviews conducted by the author, these insurance companies have an estimated enrollment of 78,500 members (2.1 percent of the total population).

Two different types of health insurance policies are available in the existing market. There are more than 8,000 expatriates^o based in PNG, and the insurance companies have a specially designed health insurance policy for this group, which contains evacuation and treatment facilities in Australia or New Zealand. The coverage available under this policy is quite extensive with full out-patient and hospitalization benefits. In most cases, the employers share or pay in full the premium on behalf of the employees. The second type of policy is designed for PNG nationals. This policy has a low upper limit (5,000 Kana per policy per annum) and is basically an indemnity type of health insurance. The premiums for this type of policy are generally paid for by the employees

^o Census of Employment, 1988 — National Statistical Office

themselves with no contribution from the employer. The coverage for the dependent population is optional and available upon payment of an additional premium by the employee.

The government in PNG supports the expansion of private health insurance. The NDOH has been in the forefront of this effort and has undertaken many initiatives to induce the expansion of private health insurance, such as restructuring the government owned hospitals by establishing independent management boards, strengthening management information systems and introducing user fees. The primary reason for the NDOH's interest in this initiative is their belief that private health insurance is one of the more effective ways of financing health services in PNG. The NDOH has been facing an increasing demand for the health services while the population grows at 2.2 percent.⁷ Thus, the NDOH has encountered a declining per capita expenditure allocation during the last few years, resulting in a substantial resource shortfall, especially in the services provided at the secondary care level. To overcome this challenge, the NDOH is exploring various options available under alternative sources of financing health services, including the expansion of private health insurance.

There are some economic indicators and conditions which favor the expansion of private health insurance. The formal employment sector in PNG is becoming increasingly conscious of the benefits of private health services and is therefore increasing the demand for service provided by the private practitioners. This particular segment also demands efficiency and high quality of care, which is not presently available through the services provided by the public sector institutions. In addition, as the employed sector forms employee unions and associations, these groups will become more aware of their rights, including the provision of health benefits by the employers. It is estimated that the total number of people employed in the public and private sectors now exceeds 200,000⁸ on a nationwide basis. This offers the potential insurers a sizable group which could make the expansion of health insurance commercially more viable. There are at least two PNG- owned insurers who find the health insurance market financially attractive enough to make health insurance services part of their primary product line (see Section 3.1.3).

1.3 MAJOR HEALTH ISSUES AND PROBLEMS

Among the major issues and problems facing the health sector in PNG are the following:

- ▲ Failure to control the spread of major diseases, such as pneumonia, malaria, diarrhoea, and also immunizable diseases like diphtheria, polio and tetanus. In addition, typhoid, influenza, and some sexually transmitted diseases are also cause for major concern.

⁷ PNG, National Health Plan 1991-1995

⁸ National Statistical Office, Census of Employment for 1988 and the Public Employment Association.

- ▲ The existing health systems are weak. In particular, mismanagement in the provision and distribution of pharmaceuticals is undermining the government's efforts. The health information system is underdeveloped, which continues to hamper NDOH's attempts to create a data base for the monitoring and planning of health services.
- ▲ A shortage of critical manpower resources. On the secondary care level, the shortage of doctors, nurses and other health professionals continues to put these services under pressure.
- ▲ The per capita expenditure on health services in real terms is declining. The shortage of resources to cope with the increasing demand for all levels of service is a source of major concern for the NDOH.
- ▲ The quality of services available in hospitals is deteriorating and the NDOH urgently feels the need to strengthen the infrastructure and improve the efficiency of the hospitals.
- ▲ The revenue-generating capacity of hospitals is currently limited and is further diminished by the inability of the hospitals to recover costs from the patients. At present, hospitals levy very nominal user fees (rates set in 1978 and still in existence), which they retain at the facility through a trust fund established for each hospital. The utilization of these funds is at the disposal of the hospital management according to the terms and conditions set out for this account. Expansion of private health insurance is expected to alleviate the problem of limited resources facing the hospitals and at the same time offer the hospitals an alternative to generate revenues through user fees and reimbursement from the insurers. The NDOH expects the hospitals to use these funds to upgrade and improve their quality and efficiency.

1.4 SCOPE OF WORK

The purpose of this assignment is to collect information on the health insurance industry in PNG and make recommendations for the development of policies, a plan of action, and the monitoring function. In addition, this report will also make recommendations relating to legislative measures required to safeguard the interests of users. The specific objectives to be addressed by this study are:

- ▲ Assess the existing status of health insurance in PNG and its potential for expansion. Identify alternative types of health insurance. Assess the size of the health insurance market by interviewing/surveying the level of interest among public and private sector employers, insurance companies, and providers (public hospitals and private clinics).
- ▲ Assess the impact of health insurance on provider revenues, i.e., the hospitals and private providers' abilities to bill and collect fees for services provided to users directly from the insurance companies (third party).

- ▲ Classify major potential users by groups (public and private sector employees, etc.) who may be eligible for membership to health insurance scheme(s). Assess the eligibility and accessibility of health insurance to the urban/rural population.
- ▲ Examine the existing legislation and its suitability to support the growth of health insurance. Also, identify the need for additional regulation to safeguard the interests of the users.
- ▲ Advise on the relationship of a social security/national provident funds system to health insurance.
- ▲ Identify what types of incentives — legislative, financial, and administrative — the government can provide to stimulate the growth of the health insurance industry.
- ▲ Develop a typical health benefits package which can serve as a prototype so that the NDOH can initiate the process of dialogue with interested insurers, providers, and employers.

2.0 METHODS

This study on the expansion of private health insurance in PNG undertook a multidimensional approach to data collection and analysis. It involved a broad array of policymakers, health professionals, insurers, and employers. The assessment relied heavily on an interactive process of data collection. The main characteristics of the methodology were:

- ▲ **Development of the Scope of Work (SOW).**
The process of developing the SOW began in August 1993. The SOW was initially developed by the PNG NDOH with assistance from the USAID regional office in Fiji. During this period, many discussions were held between Abt Associates Inc., the primary contractors for this study, and the USAID regional office in Fiji, culminating in the final revision of the SOW by the external consultant upon his arrival in PNG. This revised SOW was reviewed and approved by the NDOH, USAID/Fiji and Abt Associates Inc.
- ▲ **Review of past studies on health financing in PNG.**
The design for this study was strengthened by a review of the national health plan of PNG and of previous work carried out in health financing, especially the findings and recommendations of the "Final Report — Volume I, Health Sector Financing Issues and Options, February 1990." In addition, other key documents were also reviewed (listed in the References).
- ▲ **Team Planning Consultations.**
A number of special planning sessions and consultations were conducted to design and develop a technical plan for this assessment. The technical experts who participated in this process included Dr. Marty Makinen (Technical Director, HFS Project), Dr. John Novak (HFS Task Manager), and the lead consultant Mr. Zohair Ashir.
- ▲ **Interviews with Health Sector Representatives.**
Over the course of conducting this study, interviews and meetings were conducted with the health care providers, insurance companies, employers and, representatives of the NDOH. Additional interviews and meetings were conducted with officials from other government departments, including Finance and Planning, Labor, and representatives of private and public sector associations.
- ▲ **Survey of Employers in Port Moresby.**
To assess the interest of the employers in a private health insurance plan, the consultant conducted a survey of 20 selected public and private sector employers in Port Moresby. Employers representing medium to large-size organizations were randomly drawn from a "reasoned sample." This survey served as the main basis for the analysis and findings contained in this report.

- ▲ **Development of a summary of benefits based on a managed care model.**
An integral tool in conducting this assessment was the development of a model of a managed care plan containing a summary of health benefits. This summary was designed after consultation with the NDOH officials and review of the existing health insurance coverage available in the market. This model could serve as a negotiating instrument for the NDOH to use as a incentive to attract insurers, employers, and providers in promoting private health insurance.
- ▲ **Final Report on the Assessment of Private Health Insurance in PNG.**
This report will present the results from this insurance assessment study. A draft copy was submitted to NDOH and USAID/Fiji upon the consultant's departure.

2.1 KEY ISSUES TO BE ADDRESSED

The following issues must be addressed to assess the prospects for expansion of private health insurance:

- ▲ Determine the characteristics of the existing private health insurance products available in the market;
- ▲ Determine the size of the potential private health insurance market by estimating the number of people employed in the employment sector in Port Moresby;
- ▲ Assess the level of interest among employers to provide private health insurance to their employees;
- ▲ Determine the position of insurers toward introducing a managed care type of insurance product in the market;
- ▲ Determine if any kind of legislative and/or financial constraint(s) currently exist which may hinder the expansion of private health insurance in PNG, and identify any legislative or financial incentive(s) the government should offer to insurers, providers, or employers to promote the expansion of health insurance;
- ▲ Identify measures that the NDOH can undertake to improve the efficiency of government health facilities to make them more responsive to the needs of a private health insurance market, and
- ▲ Determine initiatives that could be undertaken to safeguard the interests of the consumers of health insurance services and advise on the relationship of social security issues to this health insurance model.

3.0 FINDINGS ON HEALTH INSURANCE AND HEALTH CARE PROVIDERS

The findings of this study are presented in the order of the questions and issues listed in Chapter 2.0. The primary purpose of conducting these findings is to determine the nature of existing private health insurance products available in the market, the size of this market, the level of interest among insurers to promote a managed care type plan, and the capacity of health care providers to support expansion of health insurance in PNG.

The data collection process was undertaken by identifying all the insurance companies in PNG (there are only handful operating in the country) and interviewing those who either market health insurance products or underwrite them. A questionnaire was administered to representatives of all the companies identified.

Data collection efforts were focused on Port Moresby, the nation's capital and its largest urban center. By virtue of its size and economic importance, Port Moresby offers the most potential for expansion of private health insurance in the country.

3.1 ASSESSMENT OF THE EXISTING HEALTH INSURANCE MARKET

The health insurance industry in PNG is relatively young. It started selling products to public servants and employees of statutory bodies in 1982. With the increase in demand for private health services, stemming mainly from the declining quality of public health facilities and the influx of an expatriate population into PNG, the demand for private, voluntary health insurance has steadily increased. The health insurance companies now market their services actively to the growing private sector.

Employment in the formal private sector in PNG is greater than the public sector. According to the estimate provided by the National Statistical Office, the total employment in the formal sector now stands at 200,000 (150,000 in the private and 50,000 in the public sector). Therefore, at present, only 2.2 percent of the total population or 39 percent of the formally employed population could be covered by voluntary, private health insurance.

Currently, there are no social insurance laws in PNG. In most developing countries, the employers have to provide certain defined employee benefits under the law, which generally include health benefits.⁹ There are no such laws in place in PNG, however, except the mandatory retirement income fund which requires compulsory contributions from both employers and employees. The absence of such legislation places no obligation nor provides any incentive to employers to make health benefits available to their employees. This has inhibited the growth of private health insurance in PNG.

In recent years, however, employee associations and unions have begun to organize. While their first priority remains focused on wage increases, they

⁹ Abel-Smith, B. (1990) *Health Insurance in Developing Countries*, Rome, ILO.

have also started to demand better working conditions and more benefits for their members. As a result, the insurance companies have found a growing market in this sector. A review of the current enrolled membership and the type of health insurance policies being marketed indicates that the majority of the subscribers belong to employee associations or unions.

While the majority of the population still relies on government health facilities for their medical needs, the decline in quality of care and standards of government services has generated an increased demand for medical services offered by the private providers. This is especially true of those in the formal employment sector. Several of the leading private practitioners in Port Moresby estimated that, currently, 30 percent of their patients carry some form of private health insurance.

3.1.1 Review of the Health Insurance Industry

The information in this section is based on interviews conducted with the insurance companies and feedback received about the health insurance issues from various other key sources, such as employers and health care providers.

All the major health insurance companies are based in Port Moresby, where not only the bulk of their members reside, but also offers the largest potential market for health insurance products. Today, the market consists of seven health insurance carriers who sell general insurance products including health. Five of the seven serve as underwriters for this market. In addition, the health insurance products are available through at least three major insurance brokers. Based on interviews with all the major insurance underwriters and selected brokers, it is estimated that current membership in the private, voluntary health plans stands at 78,500. Exhibit 2 displays the membership enrollment by company.

EXHIBIT 2
Major Health Insurance Companies in PNG
and Their Current Membership Enrollment

No.	Company Name	Underwrite	Current Enrollment
1.	American Home Assurance	Yes	Not Available
2.	Malaysian Borneo finance	Yes	8,000
3.	New Zealand Insurance	No*	10,000
4.	Niugini Insurance Corporation	Yes	4,500
5.	Pan Pacific Asia Insurance	Yes	10,000
6.	Queensland Insurance Company	Yes	45,000
7.	Southern Pacific Insurance	No	1,000
	TOTAL		78,500

* NZI markets health insurance underwritten by Queensland Insurance.

The three health insurance brokers, Kila Bowring, Alexander and Alexander, and Sedgwick Kassman, use the products of the seven companies listed in Exhibit 2 and their enrolled membership is included in the totals mentioned above. Niugini Insurance Corporation (NIC) is a state-owned organization and Pan Pacific Asia Insurance (PAPI) is a privately owned PNG company, while the remaining are foreign companies. Queensland Insurance Company (QIC) has the largest market share and derives 40 percent to 50 percent of its income from its health insurance products.

3.1.2 Review of Existing Health Insurance Products Available in the Market

All the insurance companies listed in Exhibit 2 sell health insurance products, with the exception of Southern Pacific Insurance, who mainly concentrates on income protection plans and marine insurance. The small number of members enrolled represents clients who place other insurance business with them. As a special service to them, Southern Pacific extends health insurance coverage. American Home Assurance membership for health insurance is also very limited; according to market estimates, their total membership is less than 1,000.

Most of the health insurance products available in the market today can be classified as indemnity insurance policies. They do not provide significant financial protection against catastrophic illnesses, since the maximum upper limit is restricted to 5,000 Kana per year (with the exception of one company which recently introduced a policy with an upper limit of 20,000 Kana). NIC has very recently introduced new health insurance policies with higher upper limits (100,000 to 175,000 Kina per year). Since these policies are very new, no

information about their subscription and marketability were available. The major characteristics of the existing health insurance products are presented in Exhibit 3.

EXHIBIT 3
Major Features of Existing Health Insurance
Products Available in PNG

#	Company Name	Type of Plan	Maximum Upper Limit	Type of Medical Coverage and Annual Deductible
1.	American Home Assurance	Group	K 5,000/ year per member	<ul style="list-style-type: none"> ⊗ Outpatient and Hospitalization services ⊗ 10% of incurred services
2.	Malaysian Borneo finance (MBf)	Group	K 5,000/ year per member	<ul style="list-style-type: none"> ⊗ Outpatient and Hospitalization services ⊗ 10%-20% of incurred services
3.	New Zealand Insurance	Group	Not Available	<ul style="list-style-type: none"> ⊗ Evacuation and Treatment Abroad for Expats Only*
4.	Niugini Insurance Corporation	Group and Individual	Plan 1:K 5,000 per yr/member. Plan 2: K 100,000 to K 175,000	<ul style="list-style-type: none"> Plan 1: Outpatient and Hospitalization services ⊗ 10% of incurred services Plan 2: Outpatient, Hospitalization, and Evacuation ⊗ Deductible information not available
5.	Pan Asia Pacific Insurance	Group and Individual	K 20,000/ year per member	<ul style="list-style-type: none"> ⊗ Outpatient and Hospitalization services ⊗ Not available
6.	Queensland Insurance Company	Group	5,000/ year per member	<ul style="list-style-type: none"> ⊗ Outpatient and Hospitalization services ⊗ 10% of incurred services

*Evacuation facilities are now available in all the listed products but are generally limited to a maximum of 1,500 Kina per year.

The claims administration and reimbursement practices of all the companies are consistent; they all require that the policyholders pay first and then claim reimbursement against the receipts. Therefore, none of the insurance companies currently offers a direct billing facility to its members. This system has met with some resistance from users because claims processing is time consuming and members often have to wait for a considerable period to recover out-of-pocket expenses.

Another significant aspect shared by all the insurance companies is the absence of any contractual relationship with the health care providers. Such a relationship might be effectively used to negotiate discounted rates and direct

billing facilities — both of which could prove beneficial not only for the insurers and providers but also for the members. In our interviews, the insurers expressed concern with the increments in physician consultation fees and their inability to influence providers to maintain rates at a fixed level.

3.1.3 Major Issues and Concerns Expressed by Insurers

Four of the six insurance companies cited the small size of the eligible population as a major constraint in expanding the health insurance market in PNG. Generally, insurers in PNG consider the population employed in the formal sector (those with regular secure incomes and ability to pay) eligible for the purchase of their products.

Two companies, NIC and PAPI, did not share this sentiment, but felt that the health insurance market was growing and the potential for expansion was bright. Their confidence in a growing health insurance market is evidenced by NIC's decision to establish a separate company (by 1994) for the development and marketing of medical insurance and by PAPI's decision to introduce a policy with a higher upper limit.

Another major concern shared by all insurance companies was the lack of historical and statistical data required to configure new insurance products. This was cited as a significant drawback, especially in designing a managed care insurance plan along the lines proposed by the NDOH (see *Appendix B*). While the insurers currently have not developed a health data base for actuarial purposes for PNG, they indicated that the availability of general demographic data (total population by cities, average family size, income levels, etc.) could prove very beneficial for rating health insurance premiums.

There is, however, a significant amount of relevant data available through the NDOH and National Statistical Office. Health statistical information including morbidity and mortality rates, is collated by the NDOH and available to anyone on request. Similarly, the National Statistical Office collects demographic and other key data which they also make available to the public on request. While there may be some reason for concern about the lack of statistical information for actuarial purposes, it appears there is far more information available than the insurance companies acknowledge. The NDOH could take the initiative in this respect and develop an information package for insurers containing key health and demographic data.

The insurance companies have suggested that the NDOH look for some mechanism to regulate the fees charged by private practitioners. The insurance companies identify this as one of the major reasons they are not aggressively marketing health care insurance. In the recommended managed care plan, this issue could be resolved by requiring the insurance companies and providers to agree to fixed price contracts and use the power of group purchasing to obtain favorable discounted rates for their members. This process also reduces the need for a government-controlled agency to regulate medical fees by allowing the open market to determine the best market rate.

3.1.4 Proposed Government Incentives to Induce Expansion of Private Health Insurance

The insurance companies identified the following financial and legislative measures which would stimulate the expansion of private health insurance in PNG:

- ▲ Introduction of legislation mandating employers to provide health benefits to their employees *and* share in the cost of premiums with their employees;
- ▲ Payment of health insurance premiums by employers should be exempted from taxation;
- ▲ Provide tax relief to insurance companies by reducing special taxes paid by them (stamp tax, duties, etc.). The insurance companies also pay taxes on profits under the existing system;
- ▲ Government, specifically the NDOH, should undertake immediate steps to improve the quality of government facilities which may be used by prospective health insurance policyholders. Special emphasis should be given to improving the services at the PMGH, and
- ▲ Government should also consider extending loans and grants on easy installments to the private medical professionals who are nationals. This would improve the quality of services available in the private sector and also introduce services (private pathology lab, CT Scan, etc.) which are not currently available in Port Moresby or in PNG.

3.1.5 Level of Interest Among the Insurance Companies in Market Expansion

All the insurance companies in this study were asked to express their interest in participating in an expansion of the private health care insurance market and in marketing a managed care plan proposed by the NDOH. Their responses are presented in Exhibit 4.

EXHIBIT 4
Level of interest in Market Expansion and the
Proposed Managed Care Plan by Companies

#	Company Name	Interest Level in Market Expansion			Proposed Managed Care Plan	
		Not Interested	Some Interest	Very Interested	With Major Modifications	With Minor Modifications
1.	American Home Assurance	Did Not Respond			Did Not Respond	
2.	Malaysian Borneo finance (MBf)		X		X	
3.	New Zealand Insurance		X		X	
4.	Niugini Insurance Corporation			X		X
5.	Pan Asia Pacific Insurance			X		X
6.	Queensland Insurance Company			X	X	

The strongest favorable response was given by the two PNG based insurance companies (state-owned NIC and privately owned PAPI), who feel their current products and systems are conducive to the proposed plan and adaptable within a reasonable period of time. They also expressed interest in pricing such a plan if there were significant interest on part of the employers and NDOH.

Both these companies consider health insurance as one of their primary products whereas other companies are more keen to market other general health insurance services. NIC stated they may be willing to invest in establishing a company-owned private hospital in Port Moresby to meet the needs of insured patients. The NDOH should provide support and encouragement to them, as this initiative could prove extremely beneficial in improving the level and quality of health services available in the private sector.

QIC which has the largest market share, would like to proceed in a cautious manner and has suggested that they would be interested in being kept informed and would review their position after more data (employer feedback) was available. In addition, QIC along with New Zealand Insurance (NZI) and Malaysian Borneo finance (MBf) suggested major modifications in the proposed plan, including a reduction in preventive care benefits, a higher rate of copayment, and fixed upper limits (unspecified).

3.1.6 Ranking of Insurance Companies

The insurance companies are ranked, based on their level of interest, in Exhibit 5.

EXHIBIT 5 **Ranking of Insurance Companies by Level of Interest**

1.	Niugini Insurance Corporation Pacific Pan Asia Insurance
2.	Queensland Insurance Company
3.	New Zealand Insurance
4.	Malaysian Borneo finance

3.2 IMPACT OF PRIVATE HEALTH INSURANCE ON THE HEALTH CARE PROVIDER MARKET

Two different types of providers were interviewed for this part of the study. In Section 3.2.1, background on the private practitioners' market and their responses during our interviews are presented. Section 3.2.2 reports on the findings concerning the operations of PMGH, the only hospital in Port Moresby.

3.2.1 Private Practitioners

To assess the impact of the expansion of private health insurance on the practitioners and the one hospital in the Port Moresby area, interviews were conducted with four private practice physicians and the medical superintendent of the PMGH. The findings in this section are based on these interviews and data provided by the NDOH.

There were 248 medical practitioners in PNG in 1989, of which 61 were in private practice. Over 30 of the physicians in private practice are based in Port Moresby.¹⁰ A survey of physicians in private practice demonstrated that financial reasons were the prime reasons for switching from public to private practice. The same survey indicated that a number of physicians in private practice were underemployed, i.e., seeing fewer than 30 patients per day. However, even this group expected to double or triple their annual income compared to the salaries paid in the public sector.¹¹

¹⁰ "Health Sector Financing Issues and Options," Final Report - Volume I, John Snow Inc. for Asian Development Bank, February 1990.

¹¹ Kolehmainen-Aitken, R.L. Mondia, P., and Margen, C., (1990). "A Survey of Papua New Guinean Private Medical Practitioners", PNG Medical Journal, (Date)

With the number of PNG national physicians steadily increasing, it would appear that one of the essential characteristics for the development of a managed care plan would be fulfilled, i.e., the abundant supply of private practitioners which would allow the insurance companies to negotiate discounted fees in exchange for group referrals. This approach was supported by our discussions with selected private physicians who stated that Port Moresby is becoming "saturated" with private practitioners. The market has become far more competitive in terms of retaining private patients.

The group of private practitioners interviewed for this study generally provided only outpatient, consultative services, with the exception of Moresby Medical Center, which also handles deliveries and could provide limited inpatient facilities. Most of the physicians also extended some preventive services, usually immunizations. Exhibit 6 presents the specialties of the private physicians and the annual volumes of patients they examined.

EXHIBIT 6
Major Characteristics of Practice of Selected
Private Physicians Based in Port Moresby

#	Name of Provider	Specialty	Total Patient Visits Per Year	Percent of Patients with Health Insurance Coverage
1.	Dr. Hain Daromira	General Surgeon	8,000	50% (4,000)
2.	Moresby Medical Center	General Physician & Obstetrics	9,500*	75% (7,125)
3.	Dr. Paul Mondia	General Physician	7,700*	75% (5,775)
4.	Dr. Peter Korimbo	Eye Specialist	Did Not Respond	15%

* Majority of their patients are expatriates who are all insured.

The fees charged per visit by these physicians ranged from 12 Kina to 40 Kina (Specialist). They indicated their willingness to bill directly to the insurance companies if this facility were available to them. All the providers stated that the present health insurance coverage (for the national population) was very limited and often patients have curtailed their visits due to the limits.

Their response to the proposed managed care plan was quite positive and they expressed their support in helping the NDOH introduce such a plan. In their view, the expansion of private health insurance would stimulate more investment on their part on selected diagnostic equipment, which currently is not available in PNG, since insurance would offer them a more secure assurance of recovering their costs. In addition, they felt that the availability of government loans and grants on special terms would induce the private practitioners to invest more towards improving the quality of medical services. Presently, according to Papua New Guinea banking corporations, banks make loans to the medical community like

any other commercial venture and there are currently no special provisions for subsidized or special financing for this group.

The private practitioners suggested that the evacuation option should be included as a standard feature since certain specialized services, especially post-operative nursing care, is of poor quality locally, requiring patients to be treated abroad.

This group also felt that a monitoring or a watchdog committee with independent powers and representation from the physician community, insurance companies, employers, NDOH, and the public would receive support from the private physicians. This committee should serve as a recourse for the general public to address their grievances, safeguard against unjustified escalation in premiums and fees, and also regularly evaluate the growth of this industry and its effect on the population at large.

Based on these discussions, the author feels that the most sensitive issue relating to private health insurance is a fixed price negotiation of physician fees. There was reluctance on the physicians' part to subscribe to this principle but it could be partly due to their lack of understanding of all the issues involved including an underestimation of the benefits of group purchasing principles. Under a managed care insurance plan, physicians would receive a negotiated guaranteed income, however, which is a major incentive for private practitioners.

This reluctance, however, may be overcome by creating awareness and providing more information about the benefits of group purchasing under fixed fee contracts. A training program could assist them in administering physician services in a managed care system.

3.2.2 Port Moresby General Hospital

PMGH is the only hospital in the city. It is publicly owned and receives annual budget allocations from the Ministry of Health, which administers the hospital. PMGH currently has 730 available beds (1,000-bed capacity), out of which 69 are intermediate beds (private beds, available at 12 Kina per day). The hospital employs 1,000 personnel, including 180 medical staff and 480 nursing staff. Existing management systems are weak and, in the absence of a hospital management information system, the data on hospital operations is sketchy.

The most direct impact of private health insurance will be on patients who currently use PMGH intermediate wards. These beds are available at most public hospitals to serve the needs of patients who are treated at the hospital by private physicians or want better accommodations. Under the existing arrangement, they pay 12 Kina per day for an intermediate bed and additional nominal sums for other ancillary services. These rates were introduced in 1978 and are now in the process of being revised. In real terms, the total revenue generated from these user charges account for less than five percent of PMGH's existing operating costs, as shown in Exhibit 7.

EXHIBIT 7
Total Hospital Revenue as a Percentage of
Annual Budget Allocation Amounts in Kina

Year	Annual Budget Allocation (Million)*	Total Hospital Revenue/Year (000's)	Hospital Revenue as a Percentage of Total Budget Allocation
1990	7.6	354	4.6%
1991	7.7	320	4.1%
1992	9.5	494	5.2%

* Actual

Source: Port Moresby General Hospital, Finance Department

According to the medical superintendent of PMGH, the demand for intermediate beds has increased over the past three years. Users have increasingly expressed their dissatisfaction with the quality of services available at the hospital. Approximately 80 percent of the annual budget allocation is devoted to recurrent expenditures, which leaves limited resources for improvements in the quality of service by either investing in strengthening the skills of medical care professionals or purchasing new medical technology. One of the major concerns of both the hospital management and the NDOH is their inability to control the increase in accounts receivable (see Exhibit 8).

EXHIBIT 8
Port Moresby General Hospital
Annual patient Volumes and Revenues (All Patients)
1990 - 1992

Year	Patient Volumes per Year		Total Revenue (000's) in Kina	Account Receivable (000's in Kina & %)
	Inpatient	Outpatient		
1990	21,088	84,929	354	130 (37)*
1991	20,876	57,572**	320	180 (56)
1992	20,789	95,889	494	212 (43)

* Represents percentage of total revenue

** Urban clinics were introduced in Port Moresby area, providing outpatient services at multiple locations, and reducing the patient load at PMGH.

Source: Port Moresby General Hospital, Finance Department.

While the hospital management acknowledges increasing demand for the intermediate beds is an indication of an increase in insured patients using PMGH, the hospital is unable to quantify this estimate because the insurance status of patients is currently not captured by the hospital information system. The hospital is seeking to increase its share of private patients, and the expansion of the private health insurance market would support the hospital strategy of

attracting more privately insured patients. Another significant impact of the expansion could be the reduction in its uncollected accounts receivable, averaging 45 percent over the past three years.

Hospital management and NDOH, however, have to undertake some immediate steps to improve the infrastructure and quality of PMGH services to meet the expectations of the privately insured population. In addition the hospital currently does not have a cost recovery mechanism in place which would enable them to bill the patients at full cost. The hospital would require substantial technical assistance to design and implement an efficient cost recovery system. The NDOH should request assistance for this activity from some of its active donors.

Under the present system, all revenue collected by PMGH through user fees is deposited in a trust account. Based on the terms and conditions established by the NDOH, the hospital is allowed to utilize these funds for its self-defined needs. The Finance Department has indicated its approval in allowing public health facilities to retain revenues collected through user fees. Expansion of private health insurance would further strengthen the capacity of hospitals to generate more revenues and use them for improving their quality of service.

3.3 SOCIAL SECURITY

The NDOH also seeks information on the relationship of private health insurance to the social security issues. The concept of a social security system is generally based on a country's aspirations to attain social equity in the dispensation of its wealth and public services to the population. Its special focus is the disadvantaged population, such as the elderly, handicapped, and financially indigent.

The formation of a plan for a social security system can take many forms depending on the social priorities of a country. In most instances, these plans constitute the provision of some of the following elements: retirement income, unemployment benefits, housing, education, and health services. Social security can be funded in several ways, including the more common sources of using tax monies, sharing contributions between employer and employee, or the establishment of special funds.

A review of the existing legislation in PNG indicates that there are currently no specific laws which address the social security issue. The only existing plans relating to this issue are the State Services Fund for the public sector employees and the National Provident Fund (NPF) for those employed in the private sector. The NPF is a compulsory savings scheme mandatory for employers with 25 or more employees on their payroll. The employee contributes five percent of his or her gross salary every month (payroll deduction) which is matched by a seven percent contribution from the employer. The main benefit of this scheme is a cash award at the time of retirement or completion of 15 years of service. An average contribution in this plan is 14 Kina per month and the 54,000 members of NPF cumulatively contribute 1 million Kina per month.

The expansion of private health insurance would result in access to private medical services for the urban-based population which, during the initial period, would be the most eligible group of beneficiaries. This may create a further gulf between the services available to the urban population, but not to the rural masses. This difference in social equity exists today not only in PNG but in most developing countries without a private health insurance sector, where the urban population has access not only to better health services but to better education, housing, and other social benefits.

In the case of private health insurance, however, this social inequity is partially offset by the indirect financial benefit that is realized for the rural sector, i.e., since insurance pays for some health services in urban areas, some public funds can be re-allocated to other urban or rural-based services. The central objective of the NDOH's effort to expand the health insurance market is to develop an alternative financing mechanism which not only provides resources for the improvement of secondary care facilities in the urban centers but also enables the government to shift more resources to the rural areas.

Since the introduction of any social security system is not restricted to the health sector alone but involves many other key government departments, the design of such a system should be a collaborative effort. It is suggested that the NDOH should approach other national government departments, such as education, labor, finance, and housing, and organize a central coordination committee which could evaluate the benefits of a social security system and develop a comprehensive package, including health, and support it by introducing enabling legislation.

4.0 FINDINGS ON MANAGED CARE

4.1 BACKGROUND

There are many different forms of health insurance in practice around the world. The choices for a country such as PNG, in selecting an efficient and affordable system is difficult because a product's success in one country does not guarantee success in another. A country's economic, social, and cultural environment greatly influences the outcome of a new concept such as private health insurance. However, this process can be helped by reviewing the experiences of other countries, and discarding those practices which have proven inefficient or unaffordable.

In the context of this study, the review of other health insurance models has been restricted to the North American experience (because the United States is a pioneer in this area and though their existing system has major drawbacks, they continue to be a leader in introducing innovative methods of private health insurance) and the Australian and New Zealand health insurance systems (because of their geographical proximity and strong influence on PNG's economy). While the SOW for this study does not permit an extensive review, it should be noted that the design and investigative work recognized the usefulness of other experiences and incorporated lessons which could prove helpful in the design of an insurance system for PNG. To further aid in the understanding and selection of an appropriate form of a private health insurance system for PNG, a description of other health insurance programs and options as summarized in the recent study "Health Insurance in Fiji" by Deborah McFarland is attached as Appendix C to this report.

The selection of a particular private health insurance product for PNG was also highly influenced by the intentions of the NDOH which primarily focused on using voluntary private health insurance as a key mechanism in financing health services, especially at the secondary care level. In addition, NDOH expects the expansion of private health insurance to reduce the demand on NDOH's declining resources by offering the formal employed sector in the urban areas access to private medical care financed jointly by employee and employer. The NDOH plans to redeploy the resources released from the urban center to the rural population where very limited options exist to increase the total expenditure on health and raise the quality of care and service. NDOH is also encouraging the expansion of private health insurance to stimulate the health providers (public and private) to raise the quality of service and increase their investment (see Section 1.3).

Given this background and the characteristics of the economic, population, and the health sectors, it was suggested to the NDOH that a managed care health plan would have greater relevance and fulfill the insurance-related objectives outlined by NDOH. Therefore, this study was designed to test the feasibility of a managed care health plan in PNG. The investigative work for this assessment included determining the interest of the providers, insurers, and employers. This section discusses their response to the proposed managed care plan submitted to the NDOH (Appendix A).

4.2 KEY CHARACTERISTICS OF MANAGED CARE AND THEIR RELEVANCE TO THE PNG HEALTH SECTOR

There are many different versions of managed care insurance available in various parts of the world. The initial concept was developed in the United States; one of its most common forms is known as a health maintenance organization (HMO). The essential elements of a managed care insurance plan are summarized as follows:

- ▲ Prepayment (premium) for a specified package of medical care services or health care benefits. Generally the premium costs are shared between employer and employees.
- ▲ The delivery of health care services to members by a network of providers (hospitals, clinics, and physicians), which is actively managed by a insurance company or a health plan organization.
- ▲ The providers are selected by the insurance company at a negotiated discounted rate for a fixed set of benefits. The insurer and provider share financial incentive for the plan's successful operation (risk sharing).
- ▲ Both the insurer and provider have direct interest and incentive in managing the plan cost-effectively to minimize their financial risks.
- ▲ Users or members of the plan have incentives to stay within the plan or pay higher fees or coinsurance if they use a provider outside the approved network.

4.3 THE POTENTIAL FOR MANAGED CARE

There are some requisites for a managed care plan to succeed. A surplus of providers (physicians and hospitals) is very important because it creates competition between providers who are then willing to offer discounted rates (through insurance companies) to capture larger patient volumes. The ability of the insured population to pay the premiums on a regular basis is another major consideration, especially for PNG where affordability is a major issue.

In addition, it is critical that employers are willing to share with their employees the cost of monthly premiums in the form of a health benefit. That a sizable population exists in the formal employment sector to allow prospective insurers to realize the benefits of group discounts is also a very important requisite for a managed care plan.

Based on the level of economic development in PNG, it was determined that perhaps Port Moresby is the only urban center that can meet these requisites. Our findings in this context are summarized as follows.

In Port Moresby, there is increasing competition among private physicians. Competitiveness will further intensify as the number of physicians attracted to private practice steadily increases. In addition, there is a greater

dissatisfaction among public sector physicians with the salaries they earn compared to their counterparts in the private sector. There is now a visible shift of public sector physicians entering into private practice, thereby increasing the resource pool of private physicians in Port Moresby area. These conclusions are supported both by the findings of an independent survey conducted by a group of physicians and a study done by Asian Development Bank (see footnotes 10 and 11, Section 3.2).

The issues of affordability and enrollment in a health plan are major concerns in PNG. These could be resolved through more direct and active participation from employers. Our survey of employers indicated that now an increasing number of employees enroll in private health insurance plans offered through employers (see Section 5.0). Though limited employers currently share in the cost of premium, it is evident from the survey that if the government mandates a legislation making it compulsory for employers to provide health benefits for its workforce, there would be strong compliance and support for this legislation. The employers in all likelihood would turn to private health insurance companies to minimize their financial risks and would be willing to share the cost of health insurance premiums, thereby making it more accessible for their employees and dependents.

This would result in making the proposed managed care plan for PNG more feasible because it would resolve the issue of affordability and also offer insurers a ready and sizable financially secure market.

Recent experience in other countries reinforces the probability of an insurance health plan succeeding if the provider and the purchaser of services are separated. This is particularly true of the health reforms being introduced in New Zealand. The separation of the two roles relieves the obligation on the purchaser to concentrate on funding for their own facilities similar to some developing countries where government-funded health systems performed both roles.¹² This proposed managed care plan follows this principle by separating the roles of purchaser and provider.

Port Moresby seems to be the best place to introduce this managed care insurance plan. It is the largest urban center with a population of 200,000. Its commercial and public sectors represent the largest formal employment sector in the country. It also offers the largest pool of private practitioners in PNG, currently estimated at 30 (see section 3.2) along with the largest public hospital. It is also well-served by a network of three major private pharmacies who may be willing to enter into a contract with the insurance companies to become plan-referred pharmacies.

Other factors which favor the introduction of a managed care health plan are the keen interest on the part of the private practitioners to support such a plan (see Section 3.2) and the increasing disillusionment of the employed sector with the quality of service available in the public sector. As the

¹² McFarland, D. *Health Insurance in Fiji*, Health Financing and Sustainability Project, Abt Associates Inc., Bethesda, MD, September 1993.

employed sector becomes more aware of the quality of life issues and their relationship to high-quality health care, they would increasingly rely on the private health care service to provide them with better quality medical services at an affordable price.

4.4 SUMMARY OF EMPLOYER, INSURER AND HEALTH PROVIDER VIEWS

The reactions of employers, insurers, and selected health providers towards the proposed managed care health plan were collected through a series of surveys, interviews, and meetings. A more detailed explanation of these findings pertaining to employers, (see *Section 5.0*) and pertaining to insurers and health providers (see *Section 3.0*) is presented in the following summary:

Employers

Most of the employers expressed strong support for the proposed managed care plan (19 out of 20 employers would be interested in offering this plan to their employees; see *Section 5.0, Exhibit 16*). Some of the opinions about managed health care cited by the majority of those surveyed are as follows:

- ▲ Preventive health care benefits are an excellent idea. Employers would strongly support it because it would help reduce absenteeism (a major problem in PNG), improve productivity, and minimize health care costs.
- ▲ Evacuation and eye care (including prescription glasses) should be part of the regular benefits.
- ▲ The quality of services provided by government facilities should be improved if the government expects private health insurance policyholders to use its services.
- ▲ If the price of the proposed plan is "reasonable," employers would be willing to share costs of the premium with employees.
- ▲ Strongly favor higher upper limits.

Insurance Companies

- ▲ Most of the insurance companies were strongly in favor of the concept of copayment as a tool for controlling costs, provisions to negotiate discounted fixed fee contracts with providers, and the inclusion of preventive care.
- ▲ Two insurance companies (NIC and PAPI) expressed strong support for the plan and stated they would be willing to market it with minor modifications (see *Section 3.1.5, Exhibit 4*). One other company (QIC) is very interested in promoting health insurance in PNG but would like to make major modifications to the plan before marketing it (*Section 3.1.5*).
- ▲ Two other insurance companies (MBf and NZI) were less supportive of the plan and would only introduce it if major modifications were made and

their concerns about the management of the plan could be resolved. These concerns included overutilization of benefits, high premium costs, inaccessibility to patient's medical records, and the burden of direct billing on insurance companies (see Section 3.1.5).

- ▲ Major improvements in government health facilities are necessary. These include improvements in both the medical care delivery and "hotel type" services as well. Special emphasis should be placed on reducing waiting periods, better diagnostic capabilities, development of standards, and improved hospital administrative systems.
- ▲ Insurance companies were generally non-committal towards pricing the proposed plan. Some of them indicated that they would require technical assistance to establish the administrative and pricing systems required for such a plan.

Health Care Providers

- ▲ All providers strongly favored inclusion of preventive care benefits as well as the comprehensiveness of the plan (preventive, outpatient, hospitalization, and higher maximum limits).
- ▲ Providers recommended that evacuation coverage be included because PNG has very limited tertiary care facilities and post operative nursing care.
- ▲ Providers liked the idea of direct billing to insurance companies *unless* administrative paperwork became a burden on their time.
- ▲ Providers were unsure concerning negotiated discounted fixed fee arrangements with the insurance companies.

4.5 MAJOR OBSTACLES TO DEVELOPING MANAGED CARE

Based on the investigative work conducted by the consultant and discussions with health care professionals and insurers, the following obstacles were identified to developing managed care in PNG:¹³

- ▲ Small market size and limited urban population. Only 12 percent of the country's population resides in urban areas (432,000). Except for Port Moresby (population 200,000), no other city offers a sizable market for insurers. In addition, the number of private practitioners outside of Port Moresby is also limited (31).
- ▲ Limited number of hospitals in the country (currently there are 19 publicly owned hospitals, one for each province). Port Moresby has only one hospital so the competitiveness necessary to allow insurers to bargain and receive substantial discounts from competing hospitals does not exist.

¹³ All statistical information for this section provided by PNG, National Statistical Office.

- ▲ High illiteracy (78 percent) and poor communications infrastructure will inhibit the dissemination of reforms in the health care system. ..
- ▲ Problems related to finding accessible private care providers.
- ▲ A small formal employment sector (currently estimated at 200,000). In addition, slow growth rate for this sector makes it difficult for insurers to invest now for greater profits in future.
- ▲ Lack of progressive labor laws and regulations which normally provide coverage against financial and social risks and places more responsibility on the employer to extend certain minimum health benefits.

4.6 POTENTIAL MARKET SIZE FOR MANAGED CARE

Traditionally, managed care insurance programs initially start in the urban centers and spread to other smaller urbanized areas. The basic reason for this progression is that managed care plans are heavily dependent on large employers (for group purchasing power), an abundant supply of care providers (to obtain discounted rates for medical services), and accessible health facilities. Presently in PNG, Port Moresby is the only existing urban center which comes close to meeting this criteria.

Based on our findings, the potential market size for a managed care plan in PNG is displayed in Exhibit 9. Again, based on the review of historical trends in the development of managed care plans, these projections are made with the assumption that insurers would initially be interested in the population employed in the formal sector:

EXHIBIT 9
Potential Estimate of Population Eligible for
Managed Care Plan in PNG
(1993 - 2000)

Year	Total Population (in Million)	Population Employed in Formal Sector	Total Population Eligible for managed care (in Million) *
1993	3.6	200,000	1.00
2000	4.6**	290,000***	1.45

* Includes dependents (five per family unit as estimated by the NDOH).

** NDOH Projected Estimate

*** Estimate of Employers Federation of PNG, Post Courier, Nov. 17, 1993

4.7 A MANAGED CARE INSURANCE MODEL

The potential for managed care in PNG is limited by the constraints of the existing health care delivery system and the concerns expressed by the insurers, providers, and employers.

There is sufficient evidence to suggest that a modified form of managed care can be introduced, which, if it proves successful, can evolve into a full-scale managed care program. It would be prudent for NDOH to first encourage a managed care plan in Port Moresby and use this experience to develop a plan which can later be extended to other parts of the country. The main advantage of this approach is that it allows PNG to develop an indigenous managed care plan without risking the experimental implications normally associated with new initiatives implemented on a nationwide basis.

A model managed care health plan was developed in PNG as part of this study. The proposed plan was designed to be both consistent and supportive of key NDOH strategies for both the primary and secondary care level. This plan emphasizes preventive care, since disease control through immunizations and reducing population growth through family planning measures are important.

Appendix A describes the managed care plan as initially proposed for this study. Appendix B represents the modified model after completion of the investigative work and includes interviews with employers, health providers, and insurers. The modified version (Appendix B) should be used by NDOH for ongoing development of the private health insurance initiative. While further development and improvements in the plan depend on experience, the system of proposed managed care should have the following features:

- ▲ The system should rely on the interdependent relationship of the insurers, health providers, and the employers. It should require the insurer to use the power of group discounts to negotiate a fixed-rate contract for specified health services with the health providers. The employers should also negotiate a fixed-price contract with the insurer in return for payment of premiums.
- ▲ Initially, the plan should be based on selected physicians, ability to manage patient cost effectively rather than on some of the more sophisticated devices used in developed countries to monitor physician behavior to realize the benefit of managed care. The plan should also use the co-payment concept to control cost and restrict utilization and misuse of selected services.
- ▲ The plan should be implemented in phases. Phase one should provide core and essential services as described in the proposed model (Appendix B). This phase should be used to test the administrative and financial systems. Phase two should include the addition of more advanced diagnostic facilities and use of a more sensitive monitoring system to manage the plan more economically.
- ▲ Due to the lack of adequate data to predict reliable capitation figures and due to the unfamiliarity of the concept to the providers, the

caregivers should first be reimbursed on a fee schedule. To encourage risk-sharing, a certain amount of the fees charged should be held back by the managed care organization and paid to the providers after a year-end reconciliation.¹⁴

- ▲ The successful development of the managed care plan also requires skilled managers. In the absence of suitable management resources, significant training programs may be necessary.

¹⁴ Ashir, Z., Berman, H. & Kingsdale, J. *Development of Private Health Insurance Based on Managed Care Principles, Volume IV*. Health Financing and Sustainability Project (Pakistan), Abr Associates Inc., Bethesda, MD, February 1993.

5.0 FINDINGS OF EMPLOYER SURVEY

The study technical team recommended to the NDOH that a survey of employers based in Port Moresby should be conducted to ascertain their level of interest and support for a managed care plan. The availability of this employer data could prove very useful in determining the feasibility of managed care in PNG. This chapter is devoted to the findings of this employer survey.

5.1 SPECIFIC OBJECTIVES OF THE SURVEY

- ▲ To obtain information on current health benefits provided by the employers and determine if these benefits extend coverage to employee dependents;
- ▲ To determine if the employer contract for health services is with private practitioners or hospitals;
- ▲ To ascertain the yearly expenses borne by employers for medical services for their employees;
- ▲ To assess which types of health insurance employers make available to their workforce;
- ▲ To appraise employers' reaction to the proposed managed care plan, and their interest in acquiring this type of a plan if it were available in Port Moresby, and
- ▲ To find out how employers would react to sharing the cost of premiums for the proposed plan and measure their reaction to the introduction of mandatory legislation requiring them to provide compulsory health benefits for their employees.

5.2 METHODOLOGY OF THE SURVEY

A list of organizations based in Port Moresby was prepared based on "reasoned selection." Both small and large organizations in addition to state-owned, private (PNG-owned) and multinational/foreign companies were all represented in the selection. Twenty such organizations were short-listed and the consultants were able to interview all the companies. The information presented in this section is based on the feedback received from these 20 organizations.

The survey was conducted by the lead consultant and his counterpart from the NDOH. An interview was scheduled with a responsible official of the organization, normally a mix of the company's chief executives, financial controllers, or personnel managers. Each respondent was administered the specially prepared standard questionnaire, which included the following:

- ▲ Background and briefing about the study by the NDOH counterpart;
- ▲ A basic description of how a managed care plan works, and

- ▲ A proposed summary of benefits of the model managed care plan: preventive health services, outpatient (ambulatory) benefits, hospitalization (inpatient) services and exclusions under the proposed plan (see Appendix A for more details).

5.3 FINDINGS AND ANALYSIS OF THE EMPLOYER SURVEY

Findings and analysis are presented in two parts. The first part contains a profile of the employers and their existing health benefits policies. The second offers the employers' opinions about the hypothetical managed care health insurance plan as described in Appendix A. A brief commentary after each exhibit describes the survey findings.

5.3.1 Employer Profile and Review of Current Health Benefits

This section presents a profile of employers who participated in the survey. It describes the type of ownership, total number of employees, and classification by management rank (where available), information about existing health benefits, the employee population eligible for health coverage, cost-sharing of premiums by employers, contracts with providers, a review of medical benefits, and recent annual medical expenditure for each company.

5.3.1.1 *Employers by Type of Ownership and Total Number of Employees*

Exhibit 10 contains the information about employers by type of ownership and total number of employees.

EXHIBIT 10
Type of Ownership of Organizations Surveyed
(N = 20 of 20)

Ownership	Number of Organizations	Number of Employees
State-Owned	4	7,250
Multinational or Foreign	8	3,563
Private (PNG-Owned)	8	5,294
Total	20	16,107

The state-owned organizations in this group represent the most of the large quasi-government organizations, such as telecommunications and utilities. The multinational and private organizations selected for this survey constitute a mixture of medium and large-size companies.

5.3.1.2 *Classification of Personnel*

EXHIBIT 11
Classification of Personnel in Organizations Surveyed
(N = 16 of 20)

Classification of Employees	Number of Employees Based in Port Moresby	Number of Employees Other Locations in PNG	Total Number of Employees
Management	1,051	207	1,258
Non - Management	4,495	4,585	9,080
No Classification Information Provided	-	-	5,769
Total	5,546	4,792	16,107

There were four organizations that could not provide the breakdown of employees by classification or location. At least 34 percent (5,546 out of 16,107) of all employees are based in Port Moresby. This percentage would probably be higher if the breakdown on other employees was also available (5769). This is another indication of a why the expansion of health insurance or introduction of managed care plan should be initially focused on Port Moresby. Employers, of course, should be able to insure their employees and dependents based outside of the city.

5.3.1.3 *Employees Surveyed Eligible for Health Benefits through Employers*

EXHIBIT 12
Employees Surveyed Eligible for
Health Benefits through Employers
(N = 20 of 20)

Covered Population	Number of Organizations
1. Employees Only	14
2. Employees & Dependents (Spouse and Children)	1
3. No Health Coverage	5

Many employees have access to health insurance through their employers *but in most cases the full cost is borne by the employee*. Employees also have the option to buy health insurance for their dependents at an additional cost. It is estimated that less than 10 percent of the employees who have access to private health insurance through their employers have enrolled themselves or their dependents in the health plan.

5.3.1.4 Cost-Sharing of Health Insurance Premiums

The employers were asked if they subsidized cost of the health insurance premium for their employees.

EXHIBIT 13
Cost-sharing of Health Insurance Premiums
by Surveyed Organizations
(N = 20 of 20)

Premium Paid by	Number of Organizations
1. Employer (Mgmt & Non-Mgmt)	1
2. Employee	14
3. No Health Benefits/Insurance Coverage Provided	5
Total	20

There are some organizations (four out of 20 surveyed) who have limited on-site medical clinics. Otherwise the employees themselves are responsible for funding the premium costs of health insurance plans. This information underscores the need for introduction of legislation to ensure employers' financial participation in sharing cost of health care with employees.

For information on the type of medical benefits provided by the insurance plans, refer to Section 3.1.2, Exhibit 3.

5.3.1.5 Total Annual Medical Expenditures

EXHIBIT 14
Total Annual Medical Expenditures Incurred
by Organizations Surveyed
(N = 14 of 20) (Amount in Kina)

Type of Organizations	# of Organizations Responding	# of Organizations		Total Annual Medical Expenditure
		Zero Med. Expenses	Some Med. Expenses	
State-Owned	3 of 4	1	2	125,000
Multinational/ Foreign	6 of 8	2	4	224,000
Private (PNG-Owned)	5 of 8	2	3	40,000
Total	14 of 20	5	9	389,000

Nine organizations incurred some annual medical expenses, but only one company (Shell Oil Company) paid the medical expenses (mainly full cost of

premiums) on behalf of all its employees. Their annual medical expenses represent 25 percent of the cumulative total (100,000 Kana out of 389,000 Kana) shown in Exhibit 14. The medical expenditures incurred by the other eight companies was spent on paying health insurance premiums for their selected management employees (expatriates) or operating costs for on-site clinics.

5.3.1.6 Employers Contracting Directly with Providers for Medical Services

In this survey, the organizations were asked to give information about contracting directly with providers for medical services rendered to their employees.

EXHIBIT 15
Number of Surveyed Organizations which
Contract Directly with Providers for Medical Services
(N = 20 of 20)

Type of Provider	# of Org. Responding 'Yes'	# of Org. Responding 'No'	Did Not Respond	Total
Hospital(s)	-	19	1	20
Private Practitioners	3	16	1	20

This data is indicative of the employers' "hands-off" policy towards getting involved with employees' health care benefits. Those employees who have health insurance coverage are required to pay out-of-pocket expenses to the provider and then get reimbursed by the insurer against a claim or receipt submitted. Under the existing system, there is no obligation or necessity on part of the employer to contract directly with the provider for services rendered to its employees. The three organizations who do contract with private practitioners mainly use them for conducting physical examinations on individuals entering into their employment or for medical emergency or accident cases.

5.3.2 Employers' Responses to Proposed Managed Care Plan and Benefits

The second part of the employer survey measured the employers' reaction to the proposed managed care plan. In this section, employers were briefed on the major benefits of the proposed plan and how it would work (see *Appendix A for details of the plan*). The basic reason for preparing the model plan was to test its feasibility with employers and determine their level of interest in purchasing such a plan. It was also explained to employers that the proposed model could be amended at their request (see *Appendix B for a modified version of the plan*). The findings and analysis are summarized here.

5.3.2.1 Employers' Interest in a Managed Care Plan

**EXHIBIT 16
Employers of Interest in a Managed Care Insurance Plan
(N = 20 of 20)**

Interest	Number of Organizations
Responses received	20
Organizations interested in offering the model plan to all its employees (Mgmt. and Non-Mgmt.)	19
Organizations interested in the plan for its non-management staff only	1

The model managed care health plan drew a very positive response from the organizations surveyed. Nineteen out of 20 companies expressed their interest in pursuing this further if an insurance company would provide them with the pricing information. Most of the employers, however, made their expression of interest conditional on the price of the product.

5.3.2.2 Organizations Interested in Purchasing Proposed Plan for Employees

**EXHIBIT 17
Organizations Interested in Purchasing
of the Proposed Plan for Their Employees
(N = 20 of 20)**

Ranking	# of Organizations
1 Not Interested	1
2	0
3	2
4	6
5 Very Interested	11

The employers expressed substantial interest in receiving the pricing information, and 55 percent (11 of 20) expressed deep interest in the development of such a plan. This should be very encouraging for prospective insurers since it indicates that the employer market could be very receptive to the purchase of such a product if pricing information were made available to them.

5.3.2.3 Willingness to Pay More for a Managed Care Product

The organizations surveyed were asked if they would be willing to spend more than they currently do to purchase a health insurance product similar to the proposed model.

EXHIBIT 18
Willingness to Pay More for a
Managed Care Health Insurance Product
(N = 17 of 20)

Response	Yes	No	Total
Willing to pay more	14	3	17
Plan must cost less than existing costs	3	14	17

Most employers indicated that they would be willing to pay more for a managed care product. Perhaps they realize that the workforce in PNG is becoming more aggressive in demanding an employer financial commitment to providing them better health care benefits. The data, however, in this exhibit should be weighed against the fact that at least five employers do not incur any medical expenses under the existing arrangement (see Section 5.3.1.5.).

5.3.2.4 Response to Features of the Proposed Plan

Liked:

Twenty percent of the respondents felt the inclusion of preventive health care in the plan is a very good idea, especially in view of the large number of employees reporting sick for work due to immunizable diseases. Other features supported by employer representatives were the introduction of copayments as a tool to control costs and utilization, maternity care coverage and the comprehensive nature of the plan.

Disliked:

There was some concern expressed with the restriction of choice of provider as required by the proposed plan (freedom of choice issue).

5.3.2.5 Inclusion of Additional Services

Employers felt the following services should be made available as a regular part of the proposed plan or as an option (at a reasonable additional price):

- ▲ Evacuation for serious illness or services not available in PNG;
- ▲ Prescription eyeglasses with some restrictions to ensure against misusing this benefit, and
- ▲ Dental coverage.

5.3.2.6 Other Comments Made by the Respondents

All the organizations surveyed were also asked for some general comments, in addition to responding to the specific questions asked by the interviewers. A summary of their responses follows:

- ▲ A large majority (75 percent) of employers surveyed were fully supportive of complying with and supporting legislation making it mandatory on employers (employing 20 or more employees) to provide health benefits to all employees and dependents.
- ▲ In general the employers also responded positively towards sharing the cost of health insurance premiums with the employee, provided the price of the health insurance plan is "reasonable."
- ▲ If the government of PNG is willing to grant financial incentives to employers in exchange for employers sharing the cost of premiums, then the following incentives could be considered: exemption of health insurance premiums from taxation and reductions in import duties.

5.4 EMPLOYEE TRADE ASSOCIATIONS AND UNIONS

The technical experts also consulted with two trade associations and unions to obtain information about their organizations' views on health insurance and future plans, if any, for including health insurance as part of their labor force bargaining position. It appears, however, that trade unions in PNG are quite passive compared to the assertive nature of these organizations in other countries. A summary of consultations held with them follows.

5.4.1 Public Employees Association (PEA)

The PEA, established in 1947, represents the public sector employees. It assists its members in industrial employment negotiations. All public servants are eligible for membership. Currently the PEA membership stands at 23,000 out of a potential population of 50,000. PEA manages the super-annuation fund—current membership, 9,000. Employees from 42 different government organizations are members, with the Finance Department providing the largest single group.

Only 5,700 out of the 9,000 super-annuation members have purchased a health insurance plan. The PEA has recently switched its health insurance coverage from MBF to PAPI because they were dissatisfied with the services and the slow processing of claims. The plan available through PEA offers employees a choice between two different policies. Plan One carries an upper limit of K 5,000 per year and restricted coverage for ambulatory and hospitalization services. Plan Two has a maximum limit of K 20,000 per year with more liberal benefits and flexibility for evacuation if deemed medically necessary.

PEA feels its members are increasingly becoming interested in health insurance. They strongly support the introduction of legislation for compulsory health insurance coverage on employers. They also believe that if the employers would pay part of the premium, its membership would pay their contribution more willingly.

5.4.2 PNG Trade Union Council (PNGTUC)

PNGTUC represents 45 affiliated unions from both the public and private sector with a combined membership of 120,000 (PEA is not affiliated with PNGTUC). Currently, most of the affiliate unions do not offer health insurance coverage but PNGTUC would be supportive of the idea, especially if mandated by law.

6.0 LEGAL ISSUES

The SOW for this study specifically states the need for a review of legal issues pertaining to private health insurance in PNG. The NDOH is especially concerned with the potential growth of the health insurance industry in an unregulated environment and the possible counterproductive effects on access to health care services through the insurance mechanism. The technical experts examined the existing legal framework and its relationship to private health insurance. The findings in this section summarize the legal implications of an expansion of health insurance in PNG.

6.1 REVIEW OF EXISTING LAWS GOVERNING THE INSURANCE INDUSTRY

The health insurance sector is unregulated and currently governed by rules designed for monitoring general insurance practices. A review of the existing legal framework indicates that no specific regulations have been developed for health insurance. The Ministry of Finance (MOF) is responsible for the regulation of this industry through the appointment of an insurance commissioner.¹⁵ The MOF did indicate that they had already taken the initiative of introducing legislation governing life and medical insurance policies and this is currently under preparation by the legal section of the MOF. Our attempts to obtain more information proved unsuccessful because the MOF officials were extremely busy with the preparation of the national budget. The NDOH should follow up on this initiative and review the draft of the proposed legislation.

There is a need to create laws to regulate the insurance industry and ensure that the interests of individuals and the state are safeguarded. In most countries, the regulation of the insurance industry is the responsibility of the finance department, as it is in PNG. However, the NDOH should collaborate with the Finance Department on laws governing health insurance and specify its regulatory objectives. These should include the following:

- ▲ Financial regulations requiring health insurance companies to make their annual reports available to the NDOH via the Finance Department;
- ▲ Maintenance of minimum reserves or re-insurance coverage in relation to potential actuarial obligations, and
- ▲ Providing full information about health insurance products to the NDOH.

The first two objectives ensure the financial solvency of the insurance companies and to safeguard against either the consumers or state suffering financial losses. The availability of health insurance product information would ensure the consumers "right to know" and also provide information to employers in making their selection of insurers and products.

¹⁵ Information Derived From: Laws of PNG, Volume 9, Chapter 255, Enacted February 1976.

The NDOH should contact the Department of Finance and obtain more information about the legislation under preparation regarding life and medical insurance.

6.2 INTRODUCTION OF MANDATORY HEALTH BENEFITS LEGISLATION

In the absence of any legislation regulating employer provision of medical care benefits to their employees, there is no obligation on the part of employers to purchase or share in the financial risk normally associated with health insurance plans. Most developing countries mandate by law the provision of certain minimum benefits by employers. Examples include Indonesia, Thailand and Malaysia, some of which have only recently introduced legislation making it compulsory for employers to provide medical benefits through health insurance plans.¹⁶

There are many advantages to compulsory legislation. It provides access to medical care for sizable subpopulations (depending on the exact nature of legislation). It provides insurers in a country like PNG, an incentive because they would be able to market their products to a larger number of employers who would be compelled to buy health insurance to minimize their medical costs against catastrophic episodes.

In addition, compulsory health insurance ensures that a population containing both good risks (young and healthy individuals requiring minimal active health services) and bad risks (older persons and those requiring intense medical care) are shared, and resources are pooled to spread the costs of health insurance more evenly. This type of arrangement is not only beneficial for the insurance companies, but is one of the more effective methods of providing health insurance coverage.

In the survey of employers, there was strong support for the need for compulsory health benefits legislation. The insurers and providers were also very supportive of this concept. The introduction of this regulation in PNG would enable the formal employed sector to come to par with the types of benefits available to similar labor forces in other countries.

There can be some cautionary or negative impacts of compulsory legislation, however. It can prove counterproductive in an economy such as PNG, which is aggressively trying to attract investment by offering a regulation-free environment. Some employers may also see the sharing of premium costs as an additional burden on their resources (this should be offset, however, by the drop in absenteeism rates, increases in productivity, and higher morale among the workforce — benefits which have been noted — where employees have access to similar health insurance benefits). In some cases, employers may also find ways to circumvent the legislation to avoid paying the costs of health benefits.

¹⁶ Aviva, R., Abel-Smith, B., Tamburi, G. *Health Insurance in Developing Countries: The Social Security Approach*, International Labour Office (1990).

The NDOH should consider applying of this legislation to medium to large-sized employers (in most countries, the minimum employees on staff is 15).

6.3 MONITORING OF THE HEALTH INSURANCE MARKET

Normally the monitoring of a health insurance company would fall under the jurisdiction of a health department. In the context of PNG, however, this would mean creating another layer of bureaucracy within the NDOH where resources are already limited and any additional financial burden would be difficult to justify. The monitoring of the health insurance market is not only focused on insurance companies, but also on providers and the interests of consumers.

All the key participants in this process require a forum where their grievances and concerns can be addressed. These could be issues relating to cost escalation by providers, escalation of premiums by insurers, misuse or overutilization of services by individual users and issues dealing with social equity. Perhaps it would be more effective for the NDOH to consider the establishment of an independent watchdog group with representation from the public, NDOH, insurers, providers, and employers. Through legislation, this body should be empowered to resolve disputes relating to health insurance and serve as the guardian of individual and consumer interests. This type of an organization would have greater support from the participatory groups (insurers, employers, and providers) because of their representation. Such a group would be seen as less bureaucratic and acrimonious than a body supervised directly by a government agency.

6.4 ROLE OF THE GOVERNMENT IN THE DEVELOPMENT OF PRIVATE HEALTH INSURANCE

The role of the government, specifically that of the provincial and central Departments of Health, would undergo some redefinition as PNG moves towards a more pluralistic form of health care delivery system including the expansion of private health insurance. While the current SOW and the time constraint do not permit a more detailed discussion of this issue, however, a brief summary of major issues facing the NDOH is presented in this section.

In the existing health care delivery system, the primary role of the government is both the development of health policies and delivery of health services. In the future, the development of a more pluralistic health service would be significantly affected and could be replaced with one aimed at regulating and facilitating the provision of health services through a combination of public and private sector institutions.

The critical issue for the health policy decisionmakers to consider at this stage is to ascertain how this transition in the government role can take place in the future without reducing the accessibility and quality of health services for its people.

The impact of its new role would also require some reorganization of the functions of provincial and central health departments. Establishment of a separate unit within the Ministry of Health for regulation and facilitation needs

to be evaluated further as the Government of PNG initiative on health policy reforms evolves.

The PNG skills and experience necessary for regulating and facilitating health policies are considerably different capabilities than what the NDOH personnel possess under the current system. Therefore, retraining of staff and acquisition of different would be a major related need of the refocused governments role. The redefined role would also create a need for some form of health enforcement authority, which can monitor the conformity and implementation of government regulations by the health care providers.

It is anticipated that the development and evolution of the health policy reforms towards reducing government role in health delivery services and increase in the private sectors involvement as major providers of health services in PNG would take a considerable period of time (about 10 years). The government would be well advised to use this intervening period in preparing for this transition. It is recommended that the NDOH consider commissioning a separate technical study to evaluate the issues raised in this section in greater detail and provide the NDDH with options as it continues to reform its health sector policies.

7.0 RECOMMENDATIONS

The introduction or expansion of private health insurance has been successfully employed as a mechanism for financing health services in many countries. This could also happen in PNG. To expedite the advancement of managed care health insurance in that country, this study offers the following recommendations:

Near-Term Government Actions:

- ▲ *Conduct a workshop for potential insurance organizations, employers and health care providers in Port Moresby to present the findings of this study. The findings of this report would be made available to the participants. The report's action plan would serve as a strategic plan for potential insurers.*
- ▲ *Help potential insurers acquire technical training in designing and operating managed care plans. The NDOH should request that donors provide technical training to interested insurers as part of their programs for health care in PNG. This would both stimulate private health insurers and also reinforce the government's commitment to promoting health insurance along with managed care principles.*
- ▲ *Conduct a supplemental workshop for NDOH officials and selected invitees from other government departments in Port Moresby to ascertain the probable impact of health insurance initiatives on health financing in PNG. The findings of this report could provide the basis for understanding the wider implications of using health insurance as an alternative source of financing health services. These proceedings would assist the NDOH to design a monitoring and evaluation system based on the study's findings.*
- ▲ *Prepare a health information package for potential insurers containing key statistical and historical health and demographic data. The NDOH should use existing data to provide insurers with basic information which could be used for actuarial and rate-setting purposes. The NDOH should ask insurers the types of information they require. The Policy, Planning, & Evaluation of the NDOH and the Statistical wing of the National Statistical Office should cooperate in producing this package.*
- ▲ *Assist potential interested insurers by furnishing a list of private practitioners and government health facilities in Port Moresby and the types of services they provide. This would provide insurers with the member size and a range of medical care facilities. Insurers could use this information to tailor their health insurance products to the services available in the market.*
- ▲ *Provide financial incentives to potential insurers investing in a managed care product by exempting employers from tax on premiums paid for the purchase of health insurance for their employees. The NDOH should work with Department of Finance to obtain taxation relief on health insurance premium payments.*

- ▲ *Arrange for a government-backed demonstration of a managed care plan.* The NDOH should take the initiative of enrolling a selected group of government employees with insurers using the managed care principles for their health insurance product.
- ▲ *Improve the quality and services of government-managed health facilities by raising user fees.* This would be another example of the government's effort to improve public sector health deliver facilities. This could be achieved by gradually increasing user fees and using those funds to strengthen the infrastructure, train the staff, invest in technology, and develop management systems (cost recovery and allocation, health information system, etc.).
- ▲ *Initiate the process of developing quality assurance mechanisms for the health facilities, especially hospitals.* The quality of services (medical and general) at government health facilities in PNG are deteriorating. There is an urgent need to develop quality assurance mechanisms — minimum standards and accreditation systems for monitoring and evaluating health facilities. The development of a quality assurance system would improve the standard of health facilities and also make them more attractive to the health insurance market.
- ▲ *Gradually restricting the use of intermediate beds to insured patients or those willing to pay high advance deposits.* This would significantly reduce the accounts receivable at PMGH.
- ▲ *Increase the daily accommodation rate for intermediate beds to enable PMGH to recover a larger share of real costs and increase its revenue-generating capacity.* The management of PMGH may also consider offering discounts on intermediate beds in return for the insurance company commitment to direct billing. This would enable PMGH to admit insured patients to intermediate beds without risking non-payment for services.
- ▲ *Granting admitting privileges to private practitioners through a credentialing process.* The findings of this report indicate that private practitioners have a strong following among insured patients. The granting of admitting privileges would allow the private practitioner another source of income (physician and surgeon fees) and the government hospital(s) the opportunity to generate additional revenues (ancillary service and bed charges) through privately insured patients.
- ▲ *Develop legislation for the regulation of the health care insurance industry.* The MOF has already begun drafting laws for the regulation of medical and life insurance companies. The NDOH should support these efforts and ensure its interests are protected by this legislation.
- ▲ *Recognize that the market size of the potential population eligible for private health insurance is restricted.* The NDOH should be cognizant of the limited market size of the PNG private health insurance market, because of its small labor force and slow economic growth. Therefore, NDOH should be patient with the development of this market and continue to

explore other options for financing health services for the uninsured population (mostly those residing in rural areas).

Near-Term Insurer Actions:

- ▲ *Modify the managed care model to incorporate employer feedback and pricing.* The survey of employers indicates a strong interest on their part to receive pricing and contracting terms for a managed care type health insurance plan. We recommend the development first of a basic managed care package (containing essential core services) for pricing, with add-on services (optical and dental care, etc.) available as options at additional cost to interested employers in Port Moresby.
- ▲ *Market managed care plans to the formal employed sector in Port Moresby.* The survey results indicate a high interest among employers for a managed care plan. Insurers should use these employers as a base for marketing the modified plan.
- ▲ *Provide NDOH with a health insurance product and subscriber information.* The NDOH has indicated its willingness to monitor the development and growth of private health insurance in PNG. The availability of such information from insurers would assist NDOH plan and finance health services more effectively.

Long-Term Government Action:

- ▲ *Enact national legislation requiring employers to provide health benefits to their employees and dependents.* The findings of this study indicate a strong need and support for legislation mandating provision of medical benefits through employers on a cost-sharing basis. This type of legislation should be enacted gradually and applied to employers with predefined minimum number of employees (20 is recommended).
- ▲ *Establish a "watchdog council" with proportional representation from the public, insurers, employers, providers and government to serve as a regulatory and grievance body.* The findings of this report support the need for a independent body to monitor and evaluate the establishment of health insurance services. This council should be empowered through legislation to oversee the critical issues involved in private health insurance (price escalation, equity, and quality standards). The NDOH should provide the council with monitoring and evaluation data on a regular basis.
- ▲ *Assist the government in the development of a social security system including provision of subsidized health services for the indigent or disadvantaged population.* Based on these findings, there is a strong need for the development of multi-purpose legislation which could provide protection and security to the underprivileged population of PNG. This legislation should consider the development of a minimum set of social services that could include housing, retirement income, education, and health services. This type of legislation, however, should not be

developed in isolation and, therefore, NDOH should coordinate their efforts with other government departments.

- ▲ *Arrange a training program for private practitioners on how to administer a managed care program in a financially beneficial manner.* Some of the donors should be requested to provide technical assistance for a training program designed to improve the private practitioners efficiency in operating under a managed care system.
- ▲ *Encourage government and private financial institutions to provide secured special loans and grants to national PNG medical professionals.* We recommend that the scarcity of medical professionals in PNG could be reduced by offering PNG nationals, financial incentives in the form of loans or grants to establish their practice in the private sector.
- ▲ *Improve services offered by the government facilities.* The results of this study show unanimous agreement among the employers, insurers and private health care providers that the standard of services at government facilities must be quickly improved if the private health insurance is to succeed. Specific areas for improvement include the availability of advanced diagnostic technology, more specialists, tertiary care services, and nursing care.
- ▲ *Develop of a cost recovery model for the PNG health system.* It is essential that NDOH continue with its initiative to reform the health sector. To meet its objectives of using private health insurance as a financing mechanism, the NDOH should aggressively develop a cost recovery model based on user fees and a cost allocation system. The NDOH should ask the donors to provide technical assistance to develop systems required to construct effective cost recovery models.

Long-Term Insurer Actions:

- ▲ *Develop a full-scale managed care health plan based on the experience gained from the initial product.* The early version of a managed care plan will not fully conform to the characteristics of a the final plan. As insurers gain experience, they will develop more sophisticated and sensitive plans which would prove more effective and economical for providers, members, and insurers.

8.0 IMPLEMENTATION PLAN

The details of the implementation plan for the expansion of private health insurance in PNG are presented in Exhibit 19. The plans identifies the Near-Term Actions which should be implemented in near future, followed by Long-Term Actions which could be implemented after some of the preliminary measures have been initiated.

EXHIBIT 19
Private Managed Care Health Insurance Implementation Plan

OBJECTIVES	ACTIVITIES	TIME FRAME FROM TO	ACTION BY	BUDGET RESOURCE S
INTRODUCE MANAGED CARE HEALTH IN PORT MORESBY	NEAR TERM:			
	Conduct workshop in Port Moresby to present study findings to insurers, employers, providers, & NDOH	1/94 1/94	NDOH and Donor	DONOR
	Conduct supplemental workshop in Port Moresby for NDOH officials; prepare health & demographic information package for insurers	1/94 1/94	NDOH and Donor	DONOR
	Prepare private practitioners list	1/94 6/94 2/94 8/94	NDOH NDOH	NDOH NDOH
IMPLEMENT MANAGED CARE INSURANCE PLANS IN PORT MGRESBY	NEAR-TERM:			
	Technical training for interested insurers	4/94 10/94	NDOH and DONORS	DONORS
	Improve quality of service at government health facilities by increasing user fees on selected services	3/94 Ongoing	NDOH and DONORS	NDOH
	Grant admitting privileges to private practitioners	3/94 8/94	NDOH MOF	NDOH
Develop financial incentives for potential sponsors (employers and insurers)	2/94 10/94		NDOH and MOF	

OBJECTIVES	ACTIVITIES	TIME FRAME FROM TO	ACTION BY	BUDGET RESOURCE S
IMPLEMENT MANAGED CARE INSURANCE PLANS IN PORT MORESBY (continued)	Enroll selected government employees in a managed care plan to demonstrate its commitment and test the validity of managed care in PNG	4/94 Ongoing	NDOH	NDOH
	Develop legislation regulating health insurance companies with department of finance	1/94 6/94	NDOH and MOF	NDOH and MOF
	LONG-TERM: Develop legislation to mandate employers to provide health benefits for their employees	6/94 3/95	NDOH, DOF & MOL	NDOH, DOF & MOL
	Introduce "watchdog council" to oversee health insurance plans	4/94 1/95	NDOH	NDOH
	Coordinate efforts with other government departments to develop a policy on social security	6/94 6/95	NDOH and OTHER GOVT. DEPT'S.	NDOH & OTHER DEPTS.
	Continue improvement of government health facilities through user fees, cost recovery and cost allocation systems	1/94 Ongoing	NDOH	NDOH and DONORS (TA)
	MONITOR & EVALUATE PERFORMANCE OF MANAGED CARE PLANS IN PORT MORESBY	Gather information on experiences in Port Moresby, evaluate and modify approaches	4/94 4/95	NDOH

NDOH: NATIONAL DEPARTMENT OF HEALTH
 MOF: MINISTRY OF FINANCE/DEPARTMENT OF FINANCE
 MOL: MINISTRY OF LAW
 TA: TECHNICAL ASSISTANCE

APPENDICES

**APPENDIX A
Papua New Guinea
Health Insurance Assessment
Proposed Summary of Benefits Managed Care Model**

The following benefits will be covered when provided directly by the participating providers (hospitals, doctors, diagnostics, etc.), and authorized (where necessary) by the health insurance plan.

SERVICE	COVERAGE	COPAYMENT
1. Preventive Health Care		
Child Spacing Counseling	Unlimited	No copay
Oral Contraceptives	Unlimited	2K/Month
Condoms	Unlimited	No copay
Immunizations	Unlimited	No copay
Annual Routine Eye Exam	Once per year	2K
Patient's Medical Guide		1K
Newsletter on Health Promotion	Covered in full	No copay
2. Outpatient Services (Ambulatory)		
Health Extension Officers/ Nurses	10 visits/yr, no fee after 10th	1K/visit
GP visits, where available	5 visits/yr, no fee	2K/visit After 5th visit
Specialist visits, where available (Med/Peds/Gyn/Snr)	Unlimited	5K/visit
Laboratory tests	Unlimited	No copay
Diagnostic Radiology	Unlimited w/restrictions	No copay
Other Diagnostics	Unlimited	No copay
(Spec. ref. for "big ticket" items)		

	Pharmacy (Drugs)¹⁷	Plan Pharmacy Post-Discharge Prescription Drugs & Specialist Visit Prescription	1K/script
	Emergency Care		
	Emergency Room	Covered in full	5K/Visit
3.	Inpatient Hospital Care		
	Semi-Private/Ward Room & Bd.	Covered in full	No copay
	Physician care in Hospital	Covered in full	No copay
	Surgery	"	(Pre-auth.)
	Anaesthesia	"	No copay
	Medications	"	"
	Nursing Care	"	"
	X-Ray & Laboratory	"	"
	Intensive/Coronary Care	"	"
4.	Maternity Care		
	Prenatal Obstetrical Care	Covered in full	1K/Visit
	Home Delivery Services	"	No copay
	Newborn Care in Hospital	Covered in full	No copay
	Postnatal Care	"	1K/Visit
5.	Other Services*		
	Durable Medical Equipment	Covered in full	No copay
	Ambulance	Covered in full	"

¹⁷ Drugs can be purchased from the plan-owned and/or authorized pharmacy only.

Optional Services (Available at additional costs)

Evacuation and Repatriation for Treatment

Dental Coverage

Eye Prescription, limited to one prescription per member

Exclusions

Other services excluded from this plan are listed as follows:

- Any services listed earlier that are asterisked (*) and for which the particular service in question has not been pre-approved by the health plan as medically necessary.
- Any service which is not provided by a participating specialist physician, hospital, pharmacy, or other participating provider
- Private room hospital charges above semi-private\ward charges
- Cosmetic surgery
- Personal comfort items
- Custodial care
- Any service furnished to someone other than the patient
- Charges incurred for staying beyond the discharge hour
- Infertility service

**APPENDIX B
Papua New Guinea
Health Insurance Assessment
Revised Proposed Summary of Benefits
Managed Care Model**

The following benefits will be covered when provided directly by the participating providers (hospitals, doctors, diagnostics, etc.), and authorized (where necessary) by the health insurance plan.

SERVICE	COVERAGE	CO-PAYMENT
1. <u>Preventive Health Care</u>		
Child Spacing Counseling	Unlimited	No Copay
Oral Contraceptives	"	2K/Month
Condoms	"	No Copay
Immunizations	"	"
Annual Routine Eye Exam	Once Per Year	2K
Patient's Medical Guide		1K
Newsletter on Health Promotion	Covered In Full	No Copay
2. <u>Outpatient Services (Ambulatory)</u>		
GP Visits	5 Visits/Yr, no Fee	2K/Visit After 5th Visit
Specialist Visits (Med/Peds/Gyn/Snr)	Unlimited	5K/Visit
Laboratory Tests	"	No Copay
Diagnostic Radiology	Unlimited w/Restrictions	No Copay Spec. Auth. Reqd. For CT Scan, NMR, Etc.
Other Diagnostics	Unlimited	No Copay (Spec. Ref. for "Big Ticket" Procedures)

Pharmacy (Drugs)¹⁸	Plan Pharmacy Post Discharge Prescription Drugs & Specialist Vist Prescription	1K/Script
<u>Emergency Care</u>		
Emergency Room	Covered In Full	5K/Visit
3. <u>Inpatient Hospital Care¹⁹</u>		
Semi-Private/Ward Room & Bd.	Covered In Full	No Copay
Physician Care In Hospital	"	"
Surgery	"	(Pre-Auth.)
Anaesthesia	"	No Copay
Medications	"	"
Nursing Care	"	"
X-Ray & Laboratory	"	"
Intensive/Coronary Care	"	"
4. <u>Maternity Care</u>		
Prenatal Obstetrical Care	Covered In Full	1K/Visit
Home Delivery Services	"	No Copay
Newborn Care In Hospital	"	"
Postnatal Care	"	1K/Visit
5. <u>Other Services¹</u>		
Durable Medical Equipment	Covered In Full	No Copay
Ambulance	"	"

¹⁸ Drugs can be purchased from the plan-owned and/or authorized pharmacy only.

¹⁹ Admissions by plan doctors only, except in case of emergency. Hospitalized emergency patients, once stabilized, would be transferred to a plan approved by the hospital.

Other services excluded from this plan are listed as follows:

- Any services listed that which is asterisked (*) and for which the particular service in question has not been pre-approved by the health plan as medically necessary
- Any service which is not provided by a participating specialist physician, hospital, pharmacy, or other participating provider
- Private room hospital charges above semi-private\ward charges
- Cosmetic Surgery
- Eyeglasses or Contact Lenses
- Personal Comfort Items
- Custodial Care
- Any Service furnished to someone other than the patient
- Charges incurred for staying beyond the discharge hour
- Infertility Service

Revised: November 4, 1993

APPENDIX C
Health Insurance Options
Description of Major Programs

There are various types of health insurance systems in both developed and developing countries. In the information presented in this section, the major types of health insurance practices are reviewed. The contents of this section are derived from Deborah McFarland's report, HFS Technical Note No. 20 "Health Insurance in Fiji" and Glaser's 1991 book, *Health Insurance in Practice*.

Private Health Insurance

The concept of insurance implies a person's self-centered (no perjorative connotation intended) calculations to protect himself/herself against loss. An insurance company creates pools of subscribers to spread risks, so it can market policies, bear the actuarial risks, and earn profits. But insurance in this form is designed to avoid exceptionally risky persons, not necessarily to protect them.

Insurance is a social arrangement to reduce the risk of a serious loss through cooperation of many similarly situated persons or organizations, such as persons working for the same employer, persons in the same age group, or persons in the same geographic area. An insurance carrier pools the many comparable individuals, calculates the value of each type of potential adverse health event, calculates the proportion of members of that class suffering the event each year, and converts that proportion into a probability for individual, a process known as actuarial assessment.

The risk borne by the insurer must be insurable according to several criteria:

- ▲ A large number of persons face comparable risks. Mathematical methods can then calculate the probability of occurrence for each class of persons and an appropriate premium to keep the pool solvent with a reasonable safety margin.
- ▲ The loss can be priced exactly. The underwriter can calculate an accurate premium.
- ▲ The occurrence of the loss is a random probability.
- ▲ The loss must be reasonable. If the loss is extremely expensive, it can be covered, provided that it does not occur often and the insurance/reinsurance pool is large. Trivial losses are not covered. The administration of such claims is too expensive.

Insurance is supposed to be designed and purchased for large and uncertain losses, not for small and frequent ones. Therefore, at issue when designing insurance for certain types of benefit for certain types of subscribers is whether their losses are small and frequent or large, serious, rare, and unpredictable. If they face small and predictable costs, there are better financing methods — such as personal budgeting and savings — than paid-in-full

insurance. Traditional insurance mechanisms are probably not the most appropriate way to finance preventive and basic health care services, that is, small and frequent, predictable events. This is a key point to consider when assessing whether private health insurance is a means to reach broader social goals, such as shifting resources away from curative to preventive services.

Traditional insurance reasoning is individualistic: the subscriber (whether a person or an organization) buys a policy covering his/her own risks; the premium is calculated actuarially to cover the probability of his/her loss, and a premium table provides the option of paying higher premiums for higher monetary compensation or a wider array of benefits. The insurer reduces risks by placing comparable subscribers in the same premium class. Each member of the class is equally likely to overpay or underpay premiums in relation to recovery for a loss. Although an insurance company would like to overcharge subscribers, it is restrained by the probability that competing companies can take away subscribers by offering actuarially accurate premiums for the same coverage.

Two potential problems that can threaten the financial viability of an insurance system are moral hazard and adverse selection. Moral hazard is defined as the tendency of individuals, once insured, to behave in such a way as to increase the likelihood or size of the risk against which they have insured. Moral hazard refers to the danger that insured individuals, having paid a premium in advance, will demand more services than they would have, had they not been covered by insurance. Moral hazard thus results in potentially increased and/or unnecessary consumption of health resource. Methods frequently used as safeguards against moral hazard include deductibles and copayments which are intended to increase the consumer's awareness of the costs of health care. Perversely, however, these types of payments may discourage insured individuals from seeking appropriate care in a timely manner because of inability to pay either the deductible or coinsurance.

Adverse selection occurs when individuals at greater risk of illness enroll in an insurance program in larger proportions than they are found in the general population. Individuals at greater risk of illness are more likely to desire insurance, since losses from illnesses are more certain events for them. Health insurers either try to screen out this individual through medical underwriting or raising premiums so high that the individual or group is effectively priced out of the market. In highly competitive insurance markets, there is an adverse selection spiral, and often the government becomes the payer of last resort for individuals "selected out" of the private health insurance market. These tend to be the sickest and poorest patients.

There are some advantages of a private, voluntary, market-oriented health insurance market which need to be understood as insurance options are considered:

- (i.) Management systems may be more innovative than in public systems, which are often encumbered with layers of bureaucracy. New forms of financial accounting and claims processing are quickly adopted if they are more efficient.

- (ii.) New benefit packages can be quickly introduced in response to demand pressures if the regulatory climate is such that this rapid response is allowed.
- (iii.) Inefficient insurers are not protected by a guaranteed subscription list or public subsidies.
- (iv.) Purchasers of insurance — employers and individuals — have a wide choice of providers and can change relatively easily.
- (v.) Purchasers can decide to buy little or no health insurance and can use their money for other purposes.
- (vi.) Access to more comprehensive sets of services may be increased.

There are some clear disadvantages, however, of the market model for health insurance.

- (i.) Poor medical risks can be left uninsured.
- (ii.) Benefits can be cut to reduce expenditures by strong purchasers and by carriers. This may be the case, for example, where employers who pay health insurance premiums are unwilling or unable to incur price hikes in premiums and so are left with cutting benefits to keep the premium at the lower level.
- (iii.) Considerable personnel and money go into marketing and administration, which produces no social benefit in terms of health outcomes.
- (iv.) Salesmanship plays on people's anxieties and sells people as much insurance as possible. Brokers may sell more insurance than a person needs.
- (v.) The health insurance market is less stable than other markets because medical markets are difficult to predict, more difficult to control, and expenses (pay-out in claims) can easily exceed revenue.
- (vi.) The subscriber may find that his or her customary policy is no longer offered or that the customary carrier has dropped out of the health insurance business, leaving the subscriber with no insurance.
- (vii.) Carriers may conceal facts and exaggerate their trends and solvency to attract subscribers, investors, and loans.

The U.S. has had more experience with private, market-oriented health insurance than perhaps any other country. Many would argue that this preference for private insurance over plans mandated or operated by the government is unique, at least among industrialized nations. But, even in the U.S., in response to soaring costs and large numbers of people left uninsured, the very

basis of private insurance is being called into question. Proposals for reform of the private insurance market abound, with emphasis on extensive regulation of the pricing, marketing, underwriting (the process of assessing risk), and design of policies, particularly those sold to small-business groups. This ferment is instructive for countries where the private health insurance market is in its infancy and where the small size of the population makes market segmentation all the more visible and egregious.

Social Solidarity and Social Insurance

In most countries, with the possible exception of the U.S., modern health care financing is based on the philosophy and politics of social solidarity, not on the techniques of private health insurance. Statutory social insurance in health overrides methods of evaluating and underwriting insurable risks under traditional insurance. Social insurance systems stand in contrast to totally publicly financed and controlled national health systems. The latter are funded almost exclusively through general tax revenues while social insurance systems are funded by payroll taxes and other premium structures. The National Health Service (NHS) in Great Britain is the most often-cited example of a total public system; Germany and Netherlands are examples of countries whose health financing structure is built on social insurance concepts and sickness funds. Many countries in South America and some larger countries in Asia have social health insurance systems for segments of the population.

The essential features of a social insurance system are:

- (i) The statute establishing the social insurance system identifies large classes of persons who must be covered, and often, other large classes who can choose coverage. All insurance carriers (sickness funds or insurance companies) recognized under the law must accept all eligible applicants.
- (ii) Usually the same premium — either a percentage of earnings or a fixed amount — is collected from every household regardless of risk.
- (iii) All subscribers are fully entitled to all statutorily defined benefits.
- (iv) Carriers of social insurance cannot ask supplements from subscribers with large households.
- (v) While the government exerts pressure for carriers to control costs, unavoidable deficits are usually covered by government subsidies.

Social solidarity involves the systematic redistribution of resources from the better-off to the less fortunate — both economically and in health status. The premise underpinning social insurance is altogether different from the pooling of randomly occurring risks under insurance. Healthier persons are not allowed to opt out of the general scheme, form their own class, and pay low actuarial premiums.

In most social insurance systems, a distinction is made between basic benefits and extra benefits. The latter are often provided by private health insurance companies. So it is not uncommon that public social insurance system operates side by side with a private insurance system, each with separate roles and responsibilities. Basic benefits usually include ambulatory and inpatient care by physicians; inpatient and outpatient hospital services; drugs; and cash payments to temporarily disabled workers if the wage is suspended. In virtually all European countries, the revenue and payments for the basic benefits are administered by nonprofit carriers, usually called sickness funds, founded most often by trade unions and craft guilds. The sickness funds form the basis of enrollment of not only workers in the formal employment sectors, but also self-employed workers and agricultural workers.

Under modern social insurance, there are several alternative methods of designing payroll taxes and premiums: (i) construction of rates can be based upon a percentage of all income or by class of risk where risk is identified by age, sex, occupation, or lifestyle; (ii) rates can be set by law passed by the legislature or parliament, a rate regulator in government, or each sickness fund; (iii) uniformity may be defined either for the whole country or by sickness fund; (iv) sickness fund can be set with or without an earnings ceiling; (v) there may be special rules, reductions, or exemptions from premiums for self-employed persons, pensioners, disabled, unemployed, and/or low-income earners; and (vi) they can be designed to include or exclude family coverage.

The design of the social insurance systems is obviously a very complex task and choices have to be made based upon a country's specific characteristics and needs as well as the national health policy goals which the country is attempting to achieve. Experienced and sophisticated technical assistance should be sought in the design phase and continued through implementation. Certain salient questions must be addressed in the planning and design of the system.

- ▲ Who is covered by the scheme?
- ▲ What benefits are included in the coverage?
- ▲ What is the mode of administration of the scheme?
- ▲ What is the mode of financing?
- ▲ What are the premium rates and how are they set?
- ▲ Is the scheme compulsory or voluntary?

None of these questions is easy, and there are no "magic bullets" for designing a social insurance system or, for that matter, a private health insurance system. Nonetheless, there are lessons to be learned from other parts of the world where such schemes have been implemented. Useful reviews of these systems have been published (Ron, Abel-Smith, Tamburi, 1990; Griffin, 1992; McGreevey, 1980). Any policy dialogue which occurs in a country striving for development of private health insurance system should benefit from such information or an extraordinary amount of "reinventing the wheel" is likely to take place.

One critical factor in the implementation of a system of social insurance seems to be that success is most likely when the system is implemented gradually. Experience shows that a step-by-step approach has definite advantages. Gradualism can be applied with regard to various criteria, such as the size of the enterprise, geographical area, and type of benefit. Gradual implementation according to geographic area is the most frequent feature in developing countries usually starting in the urban areas and moving to rural areas. It is also common for compulsory health insurance to be applied first to selected categories of persons in the labor force.

APPENDIX D
List of Persons Contacted and Interviewed
Health Insurance Assessment
Papua New Guinea

Department of Health - National

Dr. Isaac Ake	First Secretary of Health
Dr. Puka Temu	Acting First Secretary
Dr. Elvira Berancochea	Director, Policy, Planning & Evaluation
Mr. Navy Molou	Health Economist
Mr. Pascoe Kase	Legal Officer

Other Government Officials — National

Mr. Silvio	Assistant Secretary, Department of Labor
Mr. Rupa Mulina	Deputy Secretary, Department of Finance and Planning
Mr. Ian Alan Tarutia	Assistant Manager, National Provident Fund
Dr. Chris Margen	Medical Superintendent, Port Moresby General Hospital

Private Practitioners/Clinic Owners

Dr. Peter Korimbo	Ophthalmologist, Eye Specialist
Dr. Paul Mondia	Specialist Physician, Boroko Medical Center
Dr. Hein Danomira	General Surgeon
Dr. Steve Webb	General Physician, Moresby Medical Clinic

Insurance Companies/Brokers

Mr. Joseph Sangga	Manager, Life and Medical Niugini Insurance Corporation
-------------------	--

Mr. Bill Beattie	General Manager, Queensland Insurance (PNG)
Mr. Merv Standen	Manager for PNG New Zealand Insurance
Mr. Benais Sabumei	Chairman, Pan Asia Pacific Assurance
Mr. S. Sivakumaran	Assistant General Manager Pan Asia Pacific Assurance
Mr. Paul Absell	Marketing Manager, Southern Pacific Insurance
Mr. Arua C. Koani	Senior Account Executive, Kila Bowring Pty. Ltd.
Mr. Jerry Tan	Underwriting & Claims Manager
Employers	
Mr. David Copland	Managing Director, Steamships Trading Company
Mr. George Nikolic	Regional Manager, South CIG, PNG
Mr. Nick Diplock	Financial Controller, Post Courier, PNG
Mr. Don Manoa	Chairman & General Manager, Shell PNG Ltd.
Mr. Steve S. Tupa	Financial Manager, PNG, Harbours Board
Mr. Tim Holloway	General Manager, Johnston Pharmacy Ltd.
Mr. Andrew Caeske	Group Accountant, Associated Mills Ltd.
Mr. Brad Mason	Technical & Sales Manager, Protect Security & Pacom Ltd.
Mr. Luke B. Supro	Manager, Health, Safety, & Wlf. Post & Telecom
Mr. John R. Lockett	General Manager, PNG Motors

Mr. Lahari Hui	Insurance Officer, Hebou Construction
Ms. Stella A. Miria	Project Officer, Hornibrook NGI Pty. Ltd.
Mr. Craig Young	Executive Assistant PNG Electricity Commission
Ms. Judith Nimmo	Human Resource & Training Manager The Islander Travelodge
Ms. Frieda Ahipum	Manager, Personnel Pol. & PIng Westpac Bank
Mr. Andrew Wollen	General Manager, Hugo Canning Company Ltd.
Mr. Mark Dudley	Customer Service Manager, Remington Pitney Bowes
Mr. Rodney Smith	Company Secretary, Fletcher Morobe Construction
Mr. Brian A. Dennis	Personnel Manager, Ela Motors (Toyota)
Mr. Rei Logona	Administration Manager, Air Niugini
Others	
Mr. Rarua Biga	Executive Officer, Public Employees Association
Mr. John Pasca	General Secretary, Trade Union Congress
Mr. Nicholas Nimboninggii	Loans Department PNG Banking Corporation

BIBLIOGRAPHY

- Abel-Smith, B., Aviva, R., and Tamburi, G. *Health Insurance in Developing Countries: The Social Security Approach*. ILO Publication. International Labour Office, International Labour Organisation, Rome, 1990.
- Ashir, Z., Berman, H., and Kingsdale, J. "Development of Private Health Insurance Based on Managed Care Principles." In "Policy Options for Financing Health Services in Pakistan: A Compendium," edited by Marty Makinen, vol. 4. Health Financing and Sustainability Project, Abt Associates Inc., 1993.
- Mesa-Lago, Carmelo. "Portfolio Performance of Selected Social Security Institutes in Latin America." World Bank Discussion Paper No. 139. The World Bank, 1991.
- Mesa-Lago, Carmelo. "The Ecuadorian Social Security Institute (IESS): Economic Evaluation and Options for Reform." Health Financing and Sustainability Project, Abt Associates Inc., 1992.
- Griffin, Charles C. *Health Care in Asia: A Comparative Study of Cost and Financing*. World Bank Regional and Sectoral Studies. The World Bank, 1992.
- John Snow Inc. "Health Sector Financing Issues and Options." Final Report, vols. 1 and 2. Asian Development Bank, 1990.
- Kolehaminen-Aitken, R.L., Mondia, R., and Margen, C. "A Survey of PNG Private Medical Practitioners." *PNG Medical Journal*, 1990.
- La Forgia, G., Cross, H., and Levine, R. "Social Security." In "Health Financing and Management in Belize: An Assessment for Policymakers," vol. 4. Health Financing and Sustainability Project, Abt Associates Inc., 1991.
- Laws of Papua New Guinea, Volume 9, Chapter 255.
- Makinen, Marty, ed. "Policy Options for Financing Health Services in Pakistan: A Compendium of Technical Notes." 5 vols. Health Financing and Sustainability Project, Abt Associates Inc., 1993.
- McFarland, Deborah A. "Health Insurance in Fiji." Health Financing and Sustainability Project, Abt Associates Inc., 1993.
- McGreevey, William. *Social Security in Latin America: Issues and Options for the World Bank*. World Bank Discussion Paper No. 110. The World Bank, 1990.
- National Department of Health, Papua New Guinea. *National Health Plan*. Government of Papua New Guinea, 1991-1995.
- National Statistical Office, Population Census and Social Statistics Division, Papua New Guinea. *1990 Census*.
- National Statistical Office, Papua New Guinea, and the Public Employment Association. *Census of Employment for 1988*.

World Bank. "Papua New Guinea Structural Adjustment, Growth and Human Resource Development." The World Bank, 1991.