

Transforming our health system towards Health Vision 2050

# National Health Plan 2011–2020

Volume 1 Policies and Strategies



**Back to Basics**

**Strengthened primary health care for all and improved service delivery for the rural majority and urban disadvantaged**

Government of Papua New Guinea  
June 2010



National Health Plan 2011-2020

Strengthened Primary Health Care for All and Improved Service Delivery for the Rural Majority and Urban Disadvantaged

Address Priority Health Outcomes

KRA 1 Improve Service Delivery

KRA 4 Improve Child Survival

KRA 5 Improve Maternal Health

KRA 2 Strengthen Partnerships and Coordination with Stakeholders

KRA 6 Reduce the Burden of Communicable Diseases

KRA 7 Promote Healthy Lifestyles

KRA 8 Improve our Preparedness for Disease Outbreaks and Emerging Population Health Issues

to Achieve

Improve Service Delivery

A Healthy and Prosperous Nation For all, both Now and for Future Generations

KRA 3 Strengthen Health Systems

Health Workforce

Financing

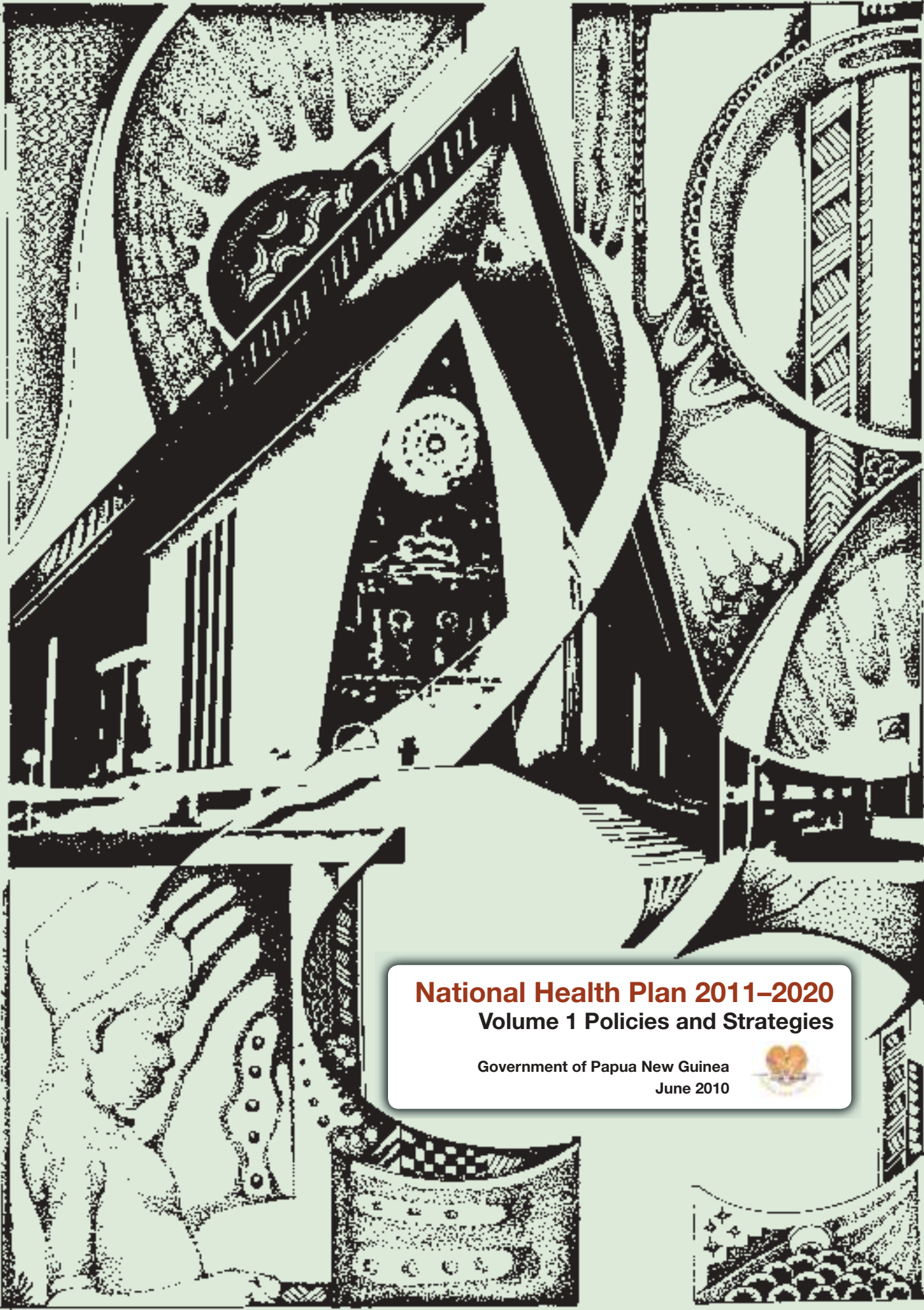
Information (ICT)

Infrastructure

Drug and Medical Supplies

Leadership and Governance

Health is Everybody's Business



**National Health Plan 2011–2020**  
**Volume 1 Policies and Strategies**

Government of Papua New Guinea  
June 2010



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## Message from the Honourable Minister for Health and HIV/AIDS

### Health is Everybody's Business

The health of our Nation is everybody's business. Our constitutional fathers imagined a life for our people that included good health, a good education, and economic prosperity for all. Yet after 35 years of hard work, and funding from many sources, we still figure low on the United Nations Human Development Index ranking. The health of our great Nation is preventing us achieving our dreams for the future. This is unacceptable to me and to the Government of Papua New Guinea.

On 18 November 2009, the Government of Papua New Guinea embarked on a new way forward and endorsed Vision 2050. This landmark document paves the way to a Nation where every man, woman, and child can live in peace, grow, and be happy. Good health is considered an essential ingredient to this blueprint for the future. Your Government recognises this critical need for good health to enable personal growth and economic prosperity, and has allocated 20% of the available development budget for health services.

But we have a long road to travel. Our health indicators have not improved over the past ten years, and our health system is experiencing challenges it has never



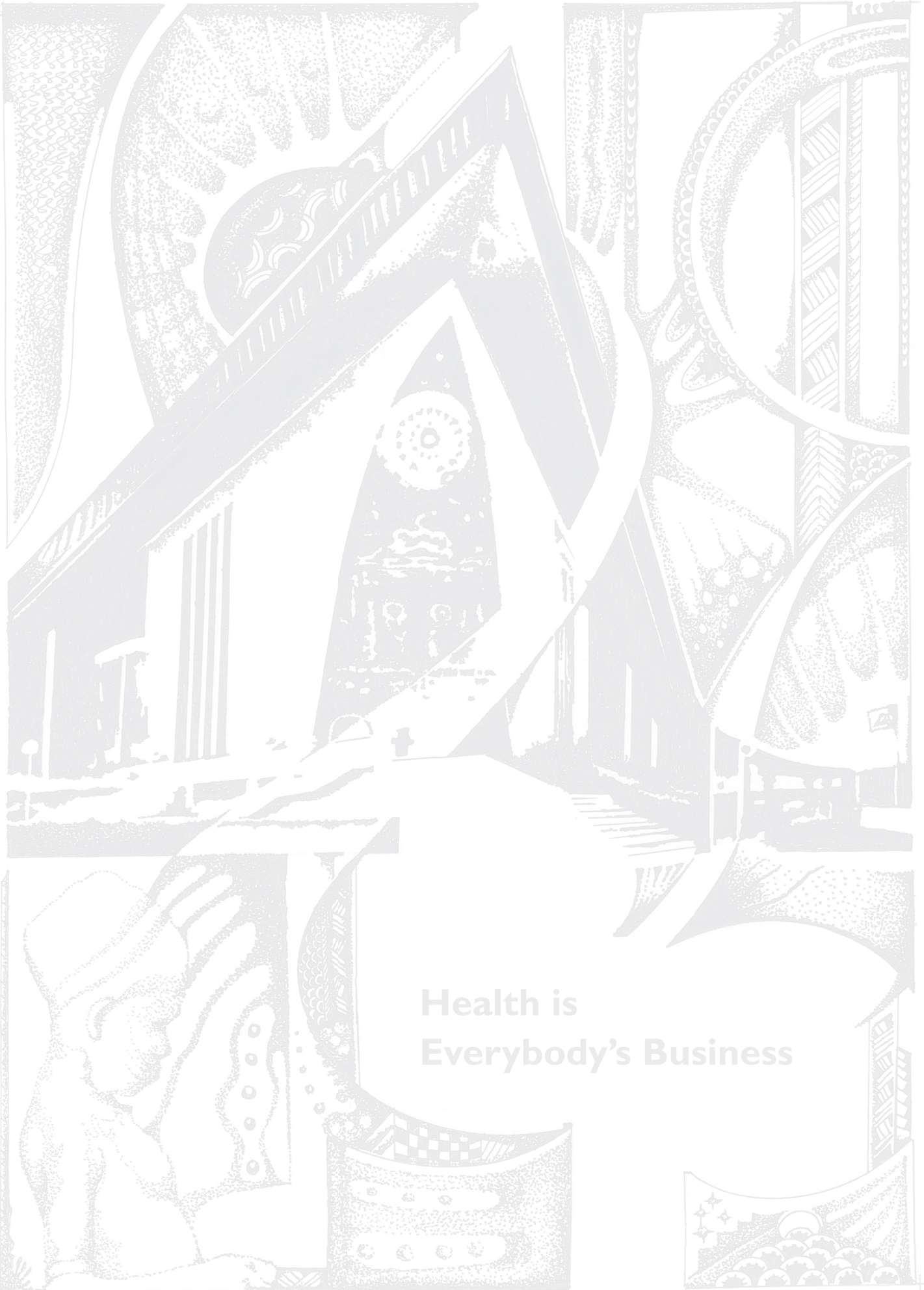
before seen. It is unacceptable that women and children continue to die unnecessarily from treatable causes. It is unacceptable that clinics are not open and don't have the essential medicines to treat simple conditions. It is distressing to see the re-emergence of diseases such as cholera, long thought gone from our shores.

The time is now for action. The time is now for a new approach. The current system is not effectively providing the level of service that we need to meet our targets. This *National Health Plan 2011–2020* will focus on where the 87% of our population reside; it will focus on improving service delivery; it will focus on primary health care; and it will capitalise on opportunities provided by the wealth under the ground and turn them into improved health services for our people. This plan will renew dedication to reversing the declining trend in health outcomes. From the introduction of Community Health Posts at the village level, to world standard hospitals in our country's capital, this plan is the first step in transforming our health system.

A new plan requires a new vehicle to drive it. The current dual system, with its fragmented roles and functions, is ineffective. We have the ability to turn this around through the implementation of the *Provincial Health Authorities Act 2007*, a law aimed at removing impediments and barriers in the delivery of health services. This plan will enable delivery of this key reform to all provinces who desire it.

But we cannot do this alone. Health is everybody's business. We will build on the partnerships already in place with Churches, seek new partners, and work with our Central Agencies, to deliver on the promise of improved service delivery for the rural majority and urban disadvantaged.

**Hon. Sasa Zibe MP,  
National Minister for Health and HIV/AIDS**



# Health is Everybody's Business





## Foreword from the Secretary for Health

### Transforming our Health System

The *National Health Plan 2011–2020*, our sixth since independence, is an important roadmap for the PNG Health Sector, as we enter an era of unparalleled economic growth and prosperity. Reversing the trend of our deteriorating health indicators and achieving the Millennium Development Goals by 2020 is central to our vision for a happy, healthy Papua New Guinea.

Our focus must be where the majority of our population live, in rural areas and in urban settlements. It is here that the health services to our people are failing; it is here we must dedicate our resources, and it is here we must think differently to how we have done things in the past.

The PNG Health Sector has embraced the challenge to be the:

#### Human Face of Development

This plan will transform our health system. Over the next ten years we will see the introduction of new initiatives, such as the Community Health Post, roll-out of the Provincial Health Authority, and a focus on improving maternal health outcomes.

We will continue to challenge ourselves and use evidence and research to change our practice and apply innovative approaches to treatment and health



management. The sector will establish a National Institute for Public Health, which will incorporate Centres for Disease Control and Public Policy dialogue. We will focus on implementing appropriate technology to provide better communication with our health workers and to gather urgent information that will ensure rapid responses to emerging health concerns.

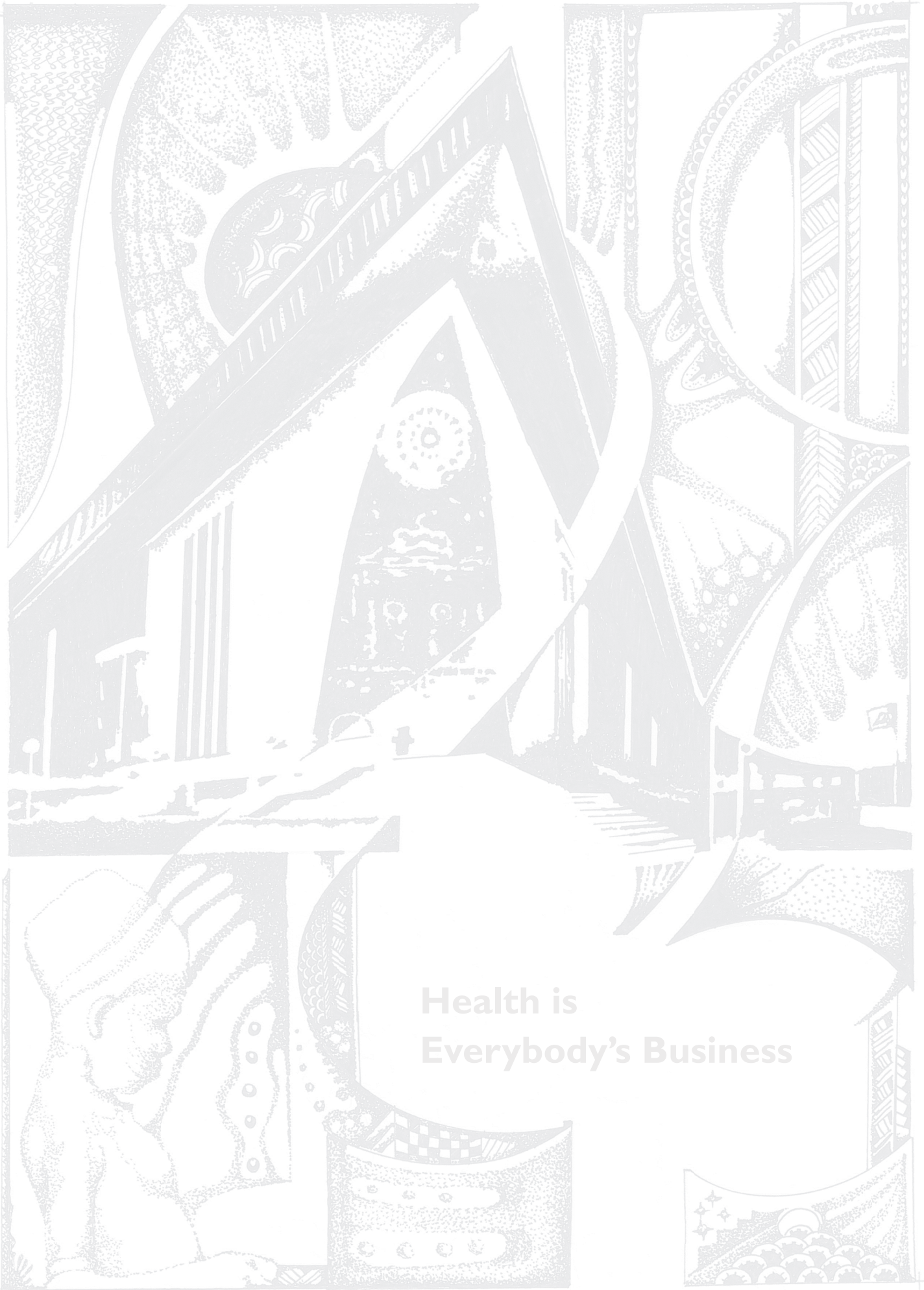
This Plan also provides the blueprint for our compliance with the Paris Declaration on Aid Effectiveness and Harmonization. I look forward to working with all of our stakeholders, both national and international. Working together we will improve the health status of Papua New Guinea.

In summary, in acknowledging our problems and our diversity we want to innovate and transform our health system, by focusing on primary health care, improving service delivery, and by putting the human face of development at the centre of our ideas.

I welcome and endorse this *National Health Plan 2011–2020* as a demonstration of our commitment to Strengthen Primary Health Care for All, and Improve Service Delivery for the Rural Majority and Urban Disadvantaged. I urge all health workers to commit themselves, work together, and maximise the resources available, both financial and material, in implementing this Plan.

God bless our beautiful country, Papua New Guinea.

**Dr Clement Malau,  
Secretary for Health**



# Health is Everybody's Business



# Executive Summary

## Together We Must Stand for the Human Face of Development

The framers of the Constitution of Papua New Guinea expressed a desire for the new nation to witness ‘improvement in the level of nutrition and the standard of public health to enable our people to attain self fulfilment.’ They saw health as an integral part of human development, and envisioned how a healthier populace would contribute to all facets of life.

Over thirty-five years later, these dreams have yet to be fully realised. Progress has not been as significant or as widespread as hoped. Especially in rural areas, where the overwhelming majority of Papua New Guineans reside, there is an acute awareness of the deterioration in health service delivery. Women in childbirth die at an alarming rate and our children die unnecessarily of treatable diseases. Volume 2 of this National Health Plan quantifies this trend, with reference data and a national health profile. Reversing this decline will test us. However, doing so along with other growing challenges — such as rapid population growth, a burgeoning HIV and AIDS epidemic, and newly emerging health threats — will require renewed and sustained commitment from all Papua New Guineans.

Recently our leaders have outlined their **Vision 2050 for PNG to ‘be a Smart, Wise, Fair, Healthy and Happy Society by 2050’**. The **PNG Development Strategic Plan (PNG DSP) 2010–2030** has also recently been released and will have an important impact on all sectors. However, the health system cannot by itself achieve the changes that realising these visions and plans will require. Universal education is vital for improving health indicators over time, as is the provision of safe water and effective transport infrastructure. Health is a key determinant of economic growth and is essential

to the development agenda. A healthy population leads to a more productive society.

To realise the PNG Vision 2050 and the PNG DSP 2010–2030, the strategy for the health sector for the next twenty years and forty years is to transform the current health service delivery system. This will include the progressive introduction of community health posts, district hospitals, regional specialist hospitals, new national referral hospitals, and the National Public Health Institute, as well as meeting the requirements of two new provinces. The new referral model is intended to reverse deteriorating health and the widening accessibility gap. It acknowledges that service delivery improvement is required at all levels, and there is a need for greater integration between hospital and rural health services (both public and church-managed). *The National Health Plan 2011–2020*, directs the health sector improvement for the first ten years of this longer-term strategy and vision.

The health of the people and health services are in crisis, and together as partners this plan commits us to strategies aimed at achieving our goal of:

**Strengthened primary health care for all, and improved service delivery for the rural majority and the urban disadvantaged.**

In many ways, the state of our health system requires a **‘back to basics’** approach in the coming ten years. **Strengthening our primary health care approach** will be paramount in reversing this country’s deteriorating health indicators. It is essential that those at the front line of health service delivery are equipped with the necessary facilities, supplies, equipment,

and training. The health sector's most important resource, the health sector workforce, works under trying conditions. Fighting to improve rural health service delivery means that human resources need to be strategically and efficiently placed, and that there is access to operational funding and medical supplies at a health facility level.

The current state of our system makes it imperative to cultivate strong, cooperative, and innovative partnerships. The already strong links with the churches, which are so vital to health service delivery in this country, can be strengthened further. The health

sector will use evidence in its relationships with central agencies at the national level to advocate for further resources for health. The special skills of civil society can also be better harnessed. Involvement of the private sector in the delivery of health services needs to become commonplace. With increasing urgency, the health sector will work with the government and resource companies to transform the wealth stored under the ground into economic opportunity and health for all of those above it.

**At the National Health Conference 2009, the Honourable Minister for Health and HIV/AIDS reminded delegates that 'health is everybody's business'. This has never been truer.**





# Chapter 1

## Introduction



### Purpose and Role of the National Health Plan

The *National Health Administration Act 1997*<sup>1</sup> mandates the National Health Plan as the single governing policy document for the health sector. This publication is the sixth National Health Plan for Papua New Guinea since 1974.

The National Health Plan (NHP) provides the direction for everyone with a stake in health, both private and public, and within the health sector and in other supporting spheres of life in PNG. Consequently, the purpose of the National Health Plan is to define the policy directions and priority areas for investment within the health sector. In this way it can ensure the efforts of all players (government and non-government) combine to reverse deteriorating health indicators. Growing a healthy nation requires the efforts of everyone.

Following extensive analysis of the current state of health and health services, the directions and

priorities described within this National Health Plan emphasise a 'back to basics' approach. A focus on the most efficient and evidence-based strategies will be required to meet the needs of the growing population, stop further deterioration, and improve health and health services to an acceptable level. Priorities must be set for investments and development efforts.

The goal of this Plan reflects the need to concentrate on improving primary health care for the rural majority and urban disadvantaged, where the effects of ill health are most keenly felt. This National Health Plan defines what needs to be done, in what manner, for which reasons, and by which players, to enable a return to the basics and fundamental improvements to the health system.

### Guidance for Health Workers

The first and foremost partners of the National Health Plan are the professionals working for health: from Community Health Workers to Medical Officers, including government, faith-based organisations, and

<sup>1</sup>Section 4(2).

the private sector. For them, the Plan provides the direction in their work and determines the objectives, priorities, and expected results in improving health. The priorities of this NHP are everybody's business. Every health worker can and must take action now, within their own role, to particularly improve the health of mothers and children.

### Guidance for Health Managers

While individual health workers and their supervisors can make a great difference through improved efficiency and effectiveness of health services, even more is required from managers at all levels of health care. For them, the NHP is a guide for detailed planning, for decisions about human and financial resources, and for improving the components of the health system to make them function effectively. Health services must improve accessibility to health services, and, for example, find ways to double the number of mothers giving birth in a well-functioning health facility.

### Guidance for Decision Makers and Politicians

Major decisions on mobilising and allocating resources for health care are made at district, provincial, and national levels. Every decision to allocate health funds that deviates from the priorities of the NHP is taking a risk that may increase deaths and illness. Every Kina counts. The commitment and support of politicians is crucial. As health workers we need to advocate for the priorities identified in the Plan and hold politicians accountable.

### Relevance to Communities

This Plan recognises the important role of communities in improving standards of health. Communities, villages, and individuals must be empowered to be responsible for their own health. A key to this will be improved collaboration between formal health services and community-led initiatives. The interface between the community and the community health posts will be strengthened. This Plan will pilot new initiatives and continue to support current initiatives, such as Healthy Islands, that are aimed at preventing ill health. Health workers and communities need to work together with a focus on preventing ill health.

### A Plan for All Players in the Health Sector

The key to successful implementation of the National Health Plan is ownership by all stakeholders of the priorities to take forward.

An extensive process has been undertaken to examine the current state of health and health services within the country, to prioritise areas for investment, and

to consult on the draft policies and strategies. This process involved representatives from: Government health services, Church health services, training institutions, NGOs, research institutes, development partners, health professional associations, central agencies, and other key GoPNG departments, as well as medical specialists, health workers, and managers from all levels of the system.

The consultation process is described in more detail in Annex 1. The development of the NHP was coordinated by the National Health Plan Secretariat in the Strategic Policy Division of the National Department of Health.



## Information for the Reader

The *National Health Plan 2011-2020* has two parts. **Volume 1** is the main document and includes the policies and strategies. It discusses and explains what needs to be done to overcome the crisis in health and health services. **Volume 2** includes extensive background information on health and health services that have been used as evidence in developing the National Health Plan. Available primarily on CD-ROM, it is an important source of information, especially for managers and planners in health care at all levels.

Volume 1 consists of 8 chapters. Chapter 2 puts the NHP in a wider context demonstrating how the NHP takes its direction from the whole-of-government development plans and from the perspective of international commitments.

Chapter 3 analyses the state of health of the people and the factors that determine ill health in the country. It provides the basis to define the most important diseases and illnesses — those that cause the heaviest burden to the people and the nation — and the most important determinants of health. They have

informed how to focus and target rescue efforts for the health system. Chapter 3 also discusses the health system components, identifying the major bottlenecks in availability, accessibility, equity, quality, and use of health services. It examines reasons why the previous NHP for 2001–2010 resulted in improved health among some population groups and not in most others. This analysis has informed the National Health Plan actions for health system strengthening.

Chapter 4 introduces the vision, mission, and goal of the NHP. The main strategies are defined, on the basis of the analyses in Chapters 2 and 3, to achieve the goal of the Plan. Chapter 5 explains how the process of implementing the NHP has been planned and the roles each administrative level will play. Chapters 6 and 7 present and discuss costing of the NHP and financing options. Finally, Chapter 8 talks about the mechanisms and processes to review and monitor the implementation of the NHP.









## Chapter 2

### Linkages between the Plan and Government of PNG and International Obligations



The National Health Plan takes its higher level and long-term directions from: (i) the overall development plans of PNG Government, and (ii) the international commitments to which the Government has agreed.

#### Direction from Key Government Documents

The *National Health Plan 2011–2020* has been developed within the framework provided by key GoPNG policy documents. The Vision 2050 of the Government of PNG describes where we see ourselves as a nation in the next forty years — ‘We will be a Smart, Wise, Fair, Healthy and Happy Society by 2050’. This mission recognises the importance of basic services: ‘We will be ranked among the top 50 countries in the UN Human Development Index by 2050, creating opportunities for personal and national advancement through economic growth, smart innovative ideas, quality service and ensuring a fair and equitable distribution of benefits in a safe and secure environment for all citizens’.

The PNG Development Strategic Plan (PNG DSP) 2010–2030, developed by the Department of National Planning and Monitoring (DNPM), is linked to and

guided by the National Vision 2050. The PNG DSP links the principles and focus areas of the Vision 2050 and provides policy direction and sector interventions with clear objectives, quantitative targets, and baseline indicators. Both documents emphasise that long-term planning needs to be embraced to ensure fundamental improvements in service delivery.

As a ten-year document, this National Health Plan covers a shorter time horizon than each of these guiding documents. However, the NHP has been designed to ensure that the health sector is on a course that will ensure the realisation of the long-term Vision depicted by our leaders, as well as the achievement of the related policy objectives set out in the PNG DSP. This means that at the completion of the period covered by this ten-year Plan and the one following it, the key health targets set in the PNG DSP will have been achieved. By the time a further two ten-year National Health Plans are implemented, the health sector will have contributed invaluable to helping make Papua New Guinea a ‘Smart, Wise, Fair, Healthy and Happy Society by 2050’.

**Figure 1 Linkages between the NHP and GoPNG Vision 2050 Pillars**

Vision 2050 Seven Pillars	National Health Plan Linkages
Human Capital Development, Gender, Youth and People Empowerment	The NHP Vision recognises health as a human right for all: women and men, boys and girls.
Wealth Creation	The NHP Vision is for a healthy and prosperous nation for all. 'Better health itself contributes to economic growth' <sup>2</sup> .
Institutional Development and Service Delivery	KRA 1: Improve Service Delivery KRA 2: Strengthen Partnerships and Coordination with Stakeholders KRA 3: Strengthen Health Systems
Security and International Relations	KRA 8: Improve our Preparedness for Disease Outbreaks and Emerging Population Health Issues
Environmental Sustainability and Climate Change	KRA 7: Promote Healthy Lifestyles KRA 8: Improve our Preparedness for Disease Outbreaks and Emerging Population Health Issues
Spiritual, Cultural and Community Development	KRA 7: Promote Healthy Lifestyles
Strategic Planning, Integration and Control	KRA 3: Strengthen Health Systems

**Figure 2 Intersection of NHP Objectives with PNG DSP Key Health Targets**

PNG DSP Key Health Targets	National Health Plan Key Result Area
By 2030 increase life expectancy from 56 to 70	KRA 4: Improve Child Survival KRA 5: Improve Maternal Health KRA 6: Reduce the Burden of Communicable Diseases KRA 7: Promote Healthy Lifestyles KRA 8: Improve our Preparedness for Disease Outbreaks and Emerging Population Health Issues
By 2030 reduce under five mortality rate from 75/1,000 to below 20	KRA 4: Improve Child Survival
By 2030 reduce Maternal Mortality Rate from 733 per 100,000 to below 100	KRA 5: Improve Maternal Health

Figures 1 and 2 reveal how this Plan reflects the objectives articulated in these two key government documents. They also show how this Plan has translated government priorities into achievable health sector actions for the next ten years.

### **Kundu Approach: Health Sector Planning within Whole-of-Government Planning**

The *National Health Administration Act 1997* and the new *Provincial Health Authorities Act 2007* are the key legal documents underpinning the structure of the PNG health system. They guide relationships between players at different levels in the health system and

determine the responsibilities of each. Figure 3 illustrates how this Plan fits into a clear framework. It takes guidance and direction from long-term national level plans, and in turn provides guidance and direction about the desired shape of the health sector to lower levels of government.

The 'Kundu approach' adopted by the National Government illustrates the importance of ensuring that planning is always linked with the overarching objective of improved service delivery. The Provincial and Local-level Services Monitoring Authority (PLLSMA), and the Provincial Coordination and Monitoring Committees (PCMC) will play a lead coordinating role to ensure that national policies are transformed into tangible actions at the implementation stage. Importantly, these

<sup>2</sup> 2006, IBRD/World Bank, *Priorities in Health*, p.8.

bodies will continue to provide regular interaction for health decision makers to engage with the activities of other sectors.

In the same manner that the National Health Plan derives its character and direction from National-level policy documents, so Provincial Development Plans and District Development Plans should inform the corresponding health sector planning documents. Figure 3 demonstrates these arrangements. It also clarifies which bodies are responsible for developing key health sector planning documents for each level of government or administration, as well as those political bodies that must screen and approve these plans.

In the implementation section of this Plan (Chapter 5), further detail is provided regarding the role of corporate plans and provincial plans, how these will flow from key whole-of-government medium-term strategies, how implementation plans will be developed across the sector, and the important contribution that corporate plans will provide, by defining how corporate entities in the health sector discharge their corporate and legislative responsibilities.

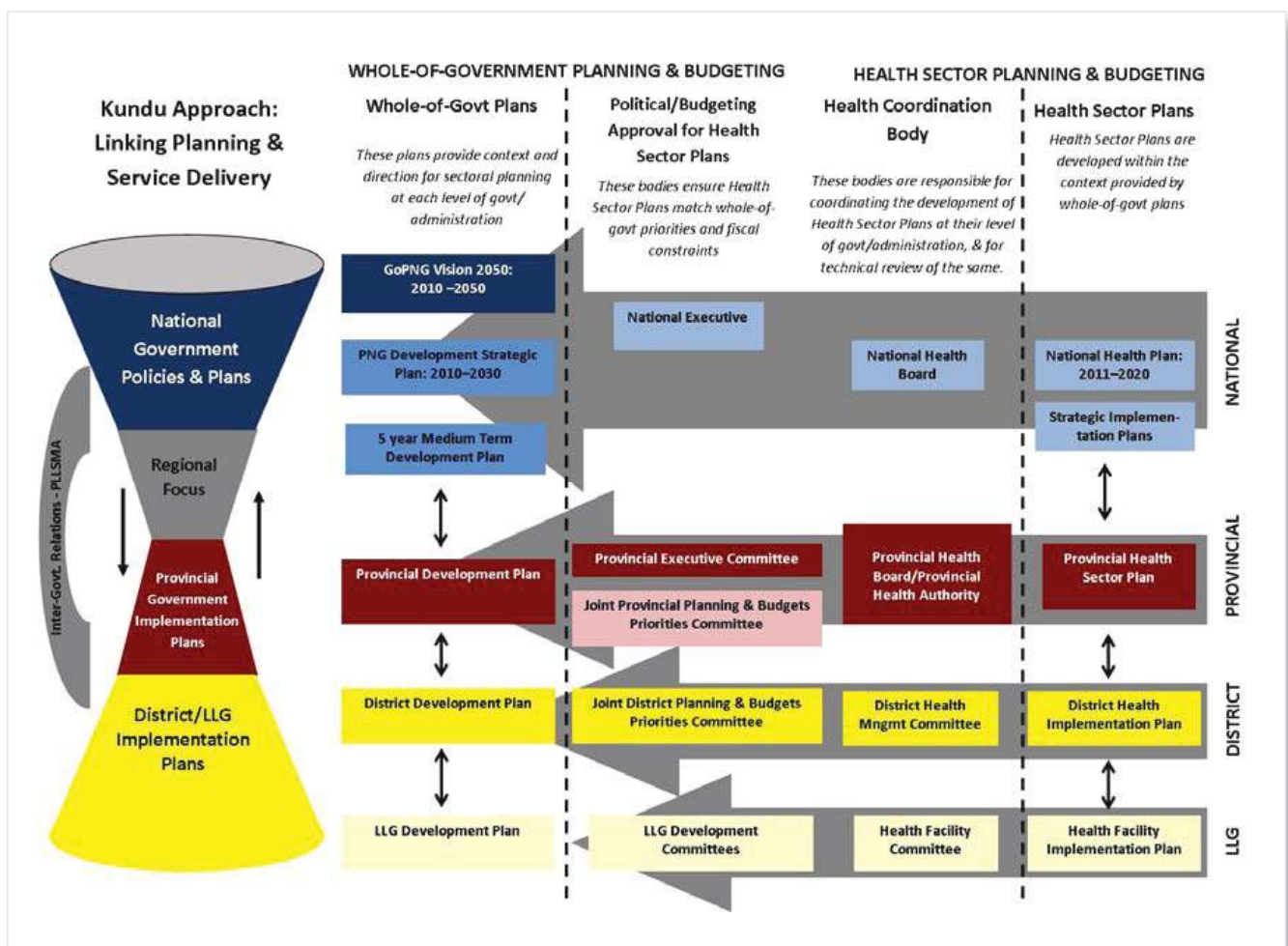
## Achieving Our International Commitments

PNG is party to a number of international health initiatives, conventions, and treaties, which place certain health and health-related obligations on the country. These have also provided direction in the development of the *National Health Plan 2011–2020*.

The Millennium Declaration of 2000 assumes primary importance in the achievement of the country’s Millennium Development Goals (MDGs) across several sectors, including health. Besides contributing to Goal 1 Reduce Poverty and Goal 7 Ensure Environmental Sustainability, the health sector has a significant role in achieving Goals 4 to 6, Reduce Child Mortality, Improve Maternal Health, and Combat HIV/AIDS, Malaria and Other Main Infectious Diseases.

The PNG DSP 2010–2030 links the attainment of PNG-tailored targets to broad sectoral goals, targets, and expected outcomes. The targets are discussed in connection with the specific objectives and strategies of this NHP in Chapter 4, while the figure below highlights where the health-related goals intersect with the Key Result Areas of this Plan.

**Figure 3 Health Sector Planning within Whole-of-Government Planning**



**Figure 4 Intersections of NHP Objectives with Millennium Development Goals**

Millennium Development Goals	National Health Plan Key Result Area
Goal 1: Reduce Poverty and Hunger	ALL
Goal 4: Reduce Child Mortality	KRA 4: Improve Child Survival
Goal 5: Improve Maternal Health	KRA 5: Improve Maternal Health
Goal 6: Combat HIV/AIDS, Malaria and Other Main Infectious Diseases	KRA 6: Reduce the Burden of Communicable Diseases
Goal 7: Ensure Environmental Sustainability	KRA 7: Promote Healthy Lifestyles

Other international commitments are also reflected in the NHP, including the WHO Framework Convention on Tobacco (2005), which addresses tobacco as an addictive substance and seeks to protect public health (KRA 7). As a member of the World Health Organization, PNG has obligations under the International Health Regulations (IHR), which assist countries to prevent and respond to acute public health threats that have a potential to cross borders. This has been addressed specifically as part of KRA 8 Improve Preparedness for Disease Outbreaks and Emerging Population Health Issues.

In addition, the Government of PNG signed an agreement with its development partners in 2008, the Kavieng Declaration on Aid Effectiveness, to localise the Paris Declaration on Aid Effectiveness of 2005. Progress in the implementation of this declaration is monitored on a regular basis.

As a party to the Declaration of Commitment on HIV/AIDS, PNG is obliged to submit annual reports to the

UN General Assembly Special Session (UNGASS) on progress in its HIV/AIDS program. Support for this is included as part of KRA 6 Reduce the Burden of Communicable Diseases.

PNG ratified the Convention on the Rights of the Child in 1993, which protects children from economic exploitation and performing work that is likely to affect a child's health, physical, mental, and social development. This also underpins KRA 4 Improve Child Survival.

The Madang Commitment Towards Healthy Islands (2001) emphasises health protection and health promotion and regional cooperation among the Pacific Island Countries and supports KRA 7 Promote Healthy Lifestyles.

Other global initiatives that have a significant influence on the health sector include the Global Fund on AIDS, Tuberculosis and Malaria, and the Global Alliance for Vaccines and Immunization (GAVI).





## Chapter 3

### State of Our Health



#### Overview of Our Health Profile

Papua New Guinea is a unique and special country, and one that has grown rapidly. Since independence from colonial rule in 1975, the population has increased steadily to an estimated current population of 6.5 million people. With the current trend of population increase of 2.7%, by 2030 it is expected to reach 13 million, and to almost double again by 2050.

However, while life in Papua New Guinea offers many inspiring elements, for many of the people, whether they are part of the 87% who reside in rural villages, or those who dwell in urban centres, there are significant challenges. A number of health and social indicators tell a story of hardship, and in spite of its beauty and natural wealth, Papua New Guinea languishes in social disadvantage.

The most recent estimates of mortality show some improvement, and life expectancy at birth continues to rise. However, the beneficiaries of improvements are not uniform. Maternal deaths are unacceptably high, especially in rural areas and particularly in the

Highlands Region. Neonatal deaths continue to be static, and are of particular concern in rural areas. Infants have twice the chance of dying before their first birthday in rural areas than in urban areas.

The health sector has a vital role to play. The sector has the responsibility of assisting people and communities to lead healthier lives, and providing suitable and quality health care when it is needed. Papua New Guinea has struggled to achieve this. In spite of the leadership and efforts of so many, from the Aid Posts to the National Department, the evidence shows that a picture of ill health remains, and health services are increasingly inaccessible. There are also new and emerging health threats that may further erode the inadequate capacity of the current system.

#### International Comparisons of Health Performance

PNG is the largest country of the Pacific region. While classified as a 'Lower middle income country'<sup>3</sup>, it has a growing economy that is built on its natural resources. The indicators of health status, however, show PNG as

<sup>3</sup>This is classified on the basis of the country's Gross Domestic Product.

seriously disadvantaged across a number of measures of health. Several of PNG's health indicators are the lowest performing in the Pacific. Life expectancy is 15 years shorter and maternal mortality 3.5 times higher in PNG than in Fiji.

Comparison with Lao PDR, a country of similar size, economy, and geographical and cultural constraints, shows some striking similarities with PNG, yet important differences. While infant and child mortality are similar, life expectancy is nearly 20% longer and maternal mortality clearly lower. These are related to decreasing fertility and the birth rate

in Laos, associated with higher literacy levels. (See Figure 6 below and Volume 2 of this Plan for further international comparisons.)

## Current Health Concerns

There is solid evidence that identifies the major health problems, and increasing evidence on the factors that contribute to these concerns. Infectious disease and maternal and child health concerns account for the greatest burden of disease in the community, and typically the greatest burden on the health services.

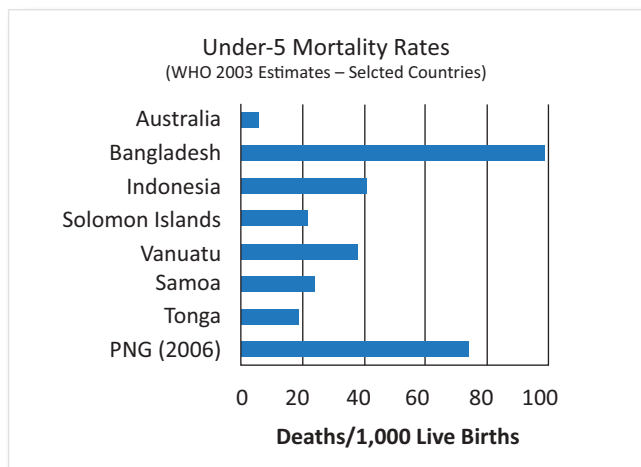
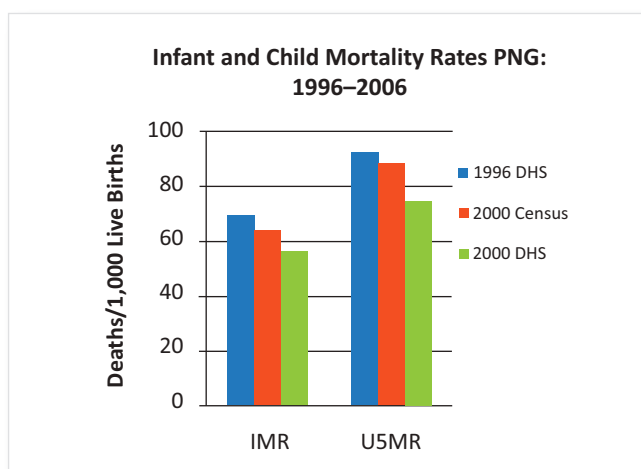
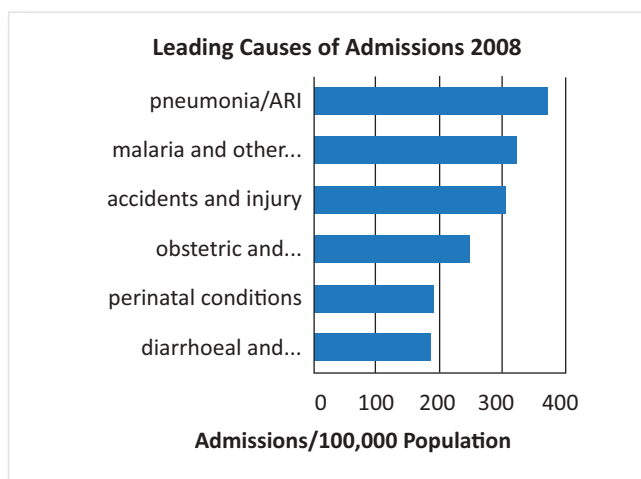
**Figure 5 Indicators of PNG Health and Development Status**

Indicators	1996	2000	2006
Total population (million)		5.2	
Urban population		13.2%	
Total Fertility Rate (average number of children born alive to a woman)	4.8	4.6	4.4
Crude Birth Rate (births per 1,000 population)	34	35	32
Infant (under 1 year) mortality rate (infant deaths per 1,000 live births)	69.3	64.0	56.7
Child (1 year–5 year) mortality rate (deaths per 1,000 live births)	25.3	25.0	19.1
Maternal Mortality ratio (maternal deaths per 100,000 live births)	370		733
Life expectancy at birth (years)	54.0	54.2	

**Figure 6 International Comparisons**

Area of data	Measure of health and development	PNG	Lao PDR	Fiji	Australia
Economy	Gross National Income (\$US per person)	1,010	750	3,930	49,350
Demography	Estimated total population (million)	6	6	0.8	21
	Life expectancy at birth (years)	54	65	69	81
Mortality	Neonatal Mortality Rate (deaths in infants <30 days/1,000 live births)	29	30	10	
	Infant (under 1 year) Mortality Rate (infant deaths per 1,000 live births)	57	56	16	5
	Under 5 years Mortality Rate (deaths per 1,000 live births)	75	70	20	4
	Maternal Mortality Ratio (maternal deaths per 100,000 live births)	733	660	210	4
Fertility	Total Fertility Rate (average number of children born alive to a woman)	4.4	3.5	2.8	1.8
	Crude Birth Rate (births per 1,000 population)	32	27	21	
Literacy and education	Adult literacy rate	58%	73%		

Sources: PNG DHS, World Bank, WHO, UNICEF; most recent data quoted.

**Figure 7 Mortality Rates for Under-Fives****Figure 8 Infant and Child Mortality****Figure 9 Admissions**

The main health concern is poor maternal health. Maternal deaths have been increasing in the past ten years. The PNG Millennium Development Goals target for 2015 is to decrease maternal deaths to 274 per 100,000 live births, while it is now about 733.

This ranks PNG as second highest in the world in maternal mortality, after Afghanistan and outside Sub-Saharan Africa. The main causes of deaths related to pregnancy are prolonged labour and excessive bleeding; a safe and accessible delivery environment could save many lives. The risks for maternal deaths have increased due to the still high fertility levels (many children) and shortened birth intervals over the past decade. Currently, a woman in PNG will have a 25 times higher chance of dying in her lifetime as a result of childbirth, compared to those women not giving any birth. The neonatal death rate (within one month of birth), frequently a result of poor maternal health and the delivery environment, has shown little change over the past decade.

Health of children similarly remains of concern. One child in every 13 born in PNG will die before the age of five years, a rate far greater than in any other country of the Pacific region. However, the child health program has shown that good program implementation and improving environmental conditions can make a difference — in the ten years from 1996 to 2006, both infant and child mortality rates declined by 20% (see Figure 8). Preventable and treatable diseases, including malaria, pneumonia, diarrhoea, tuberculosis, HIV, and neonatal sepsis remain the most frequent causes of childhood deaths. Adequate space between births provides for greater survival rates of children. An infant born less than two years after his/her sibling is 85% more likely to die in the first year of life than if the interval had been three years or more. Infant mortality is also influenced by family size; children who are fourth born or of higher parity are over 50% more likely to die in infancy.

Besides mothers and children, the urban poor suffer from the poorest health status. Anecdotal evidence suggests urban migration is increasing throughout PNG. The Demographic Health Survey (DHS) in 2006 observed increasing numbers of people living in urban squatter settlements, more people depending on unsafe water sources, and fewer people with access to toilets.

**Acute respiratory infections** or ARI (in particular, pneumonia) take a high toll. They are the leading cause of hospitalisation, and besides neonatal conditions the leading cause of deaths in health facilities (see Figure 9). In 2008, there were about 240,000 children under the age of five who sought treatment for ARI. The introduction of the Hib vaccine and opportunities for improved treatments (for example, access to oxygenation) provide strong grounds for optimism that substantial health improvements can be made.

Figure 10 Outpatient Visits

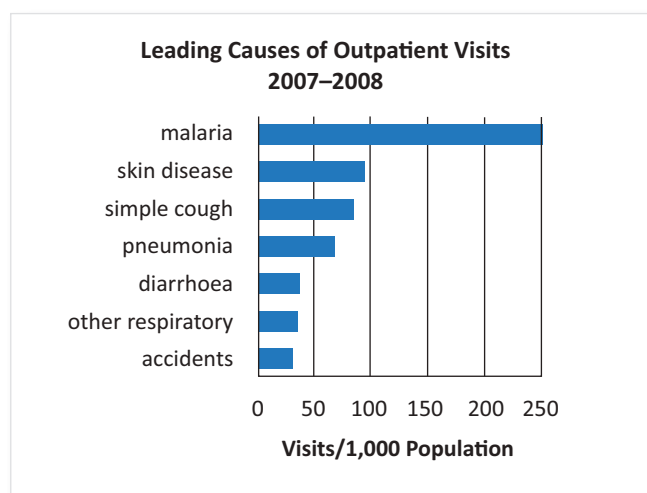


Figure 12 HIV Diagnoses

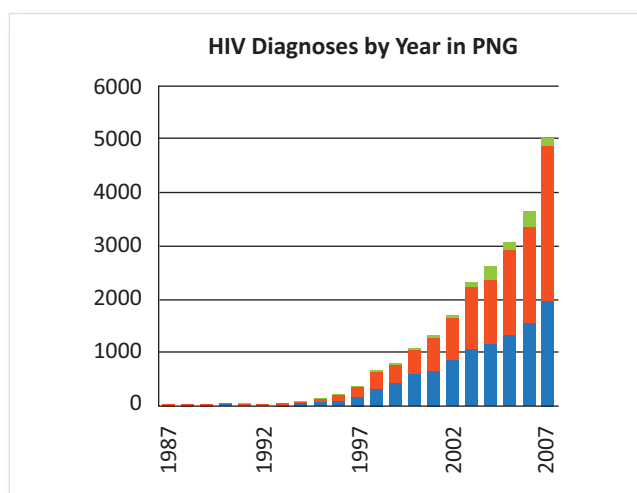
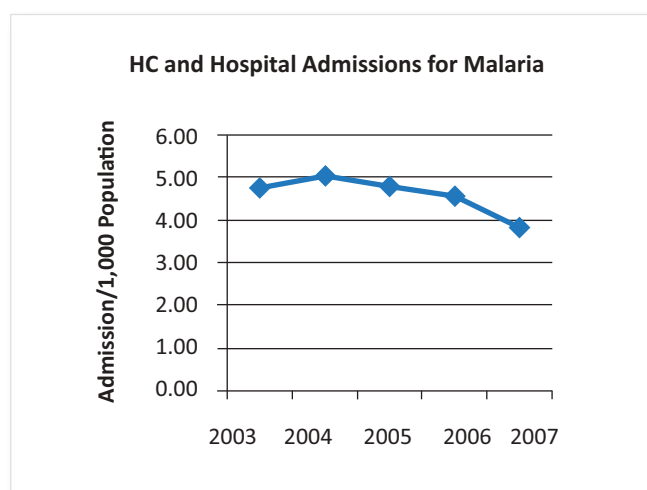


Figure 11 Malaria Admissions



**Malaria** remains an intractable problem in PNG, and is the second most common cause of admission to hospital. It affects all age groups, but is most lethal in children, and with serious consequences in pregnancy. There are some signs of hope. The malaria program has received more funds and the incidence of malaria has steadily declined in the past ten years. Further gains can be expected with recent prevention and new treatment programs. Malaria and acute respiratory tract infections (in particular, pneumonia), are the two leading diseases in PNG.

**Tuberculosis** is again of increasing concern. With the exception of obstetric cases, tuberculosis now consumes 13% of hospital bed days, more than any other illness. These concerns are further fuelled by increasing evidence of multi-drug resistance and the co-existence of HIV, as well as worrying levels of people defaulting from treatment programs.

The past decade has seen the rapid dissemination of **HIV** throughout the country, reaching into every

province, and both urban and rural areas. Since 2005, up to 60% of new diagnoses have affected females (see Figure 12). HIV-related illnesses are now also the most common cause of child mortality.

Injuries are also prevalent and account for 8% of total admissions, and 11% of the total burden of disease in the country. Many of them are believed to be transport or violence related. There is scarce information on causes and determinants of injuries and very limited focus on them in the health sector.

**Non-communicable** diseases (for example, cardiovascular disease, diabetes, chronic respiratory illness and renal disease) occur, but in small numbers to date. Obesity is often considered a sign of wealth, and is likely to link to excessive consumption of Western foods rather than traditional foods. It is expected over the coming decade that non-communicable diseases will become more prevalent as a result of urbanisation, greater penetration of energy-rich Western foods and market goods to rural areas, increasing wealth in sub-sectors of the community, and a shift away from traditional lifestyles and traditional foods. Current hospital data does not yet show evidence of this. Cancer rates have remained the same over the past ten years. However, there is little capacity for diagnosing cancers, which may cause under-estimation. There are now more people living beyond the age of 65, which leads to the likelihood of increasing burden of cancers in PNG.

Dependable clean water sources and lack of access to toilets, particularly in rural areas, creates a situation where **diarrhoea** and other enteric diseases may easily spread. Diarrhoea features as one of the leading reasons for both inpatient and outpatient visits to health facilities. This burden is further compounded by the risk of epidemic illness. The emergence of cholera in 2009, not seen in the country for nearly 50 years, is



indicative of the risks that exist when safe water and sanitation are not available and basic hygiene, such as hand-washing, is neglected.

Many of the deaths and illnesses in the country can be prevented by having safe water and proper sanitation, proper hygiene practices, and balanced nutrition. Improving access to health services, and ensuring the system has the resources, such as medicines, well-performing staff and communication systems, are all well established as effective ways of improving health.

## Determinants of Health

Frequently, ill health is directly or indirectly a result of the physical environment (e.g. nutrition, safe water, and proper houses); the social and economic environment; and also education and behavioural choices (e.g. smoking, sexual behaviour, diet and physical activity). In addressing health concerns, these 'determinants' must be considered to target strategies appropriately.

### Physical environment and urbanisation

Poor quality water and unhygienic or non-existent toilets (where animals, insects, or people can spread infection through contact with human faeces) increase the risk of gastro-intestinal illness. Surveys of villages and urban centres confirm that a large proportion of the population face these risks. Only 46% of rural households have access to a clean water source. As much as 18% of the rural population and 5% of the urban population have no access to a hygienic toilet.

Crowding in households not only places pressure upon household facilities, but increases the likelihood of transmission of infection, including skin, gastro-intestinal, and respiratory contagion (including skin diseases, diarrhoea, pneumonia, tuberculosis, and others). Every fourth urban household has nine or more persons living in it, with 5% of urban households having seven or more persons sleeping in one room. This level of crowding in urban households has increased by 20% to 40% over the past decade. Psycho-social concerns arise with urban migration, due to limited opportunities and separation from family and cultural settings; there is also an increased risk of trauma and violence-related injury.

### Geographical location and access to health services

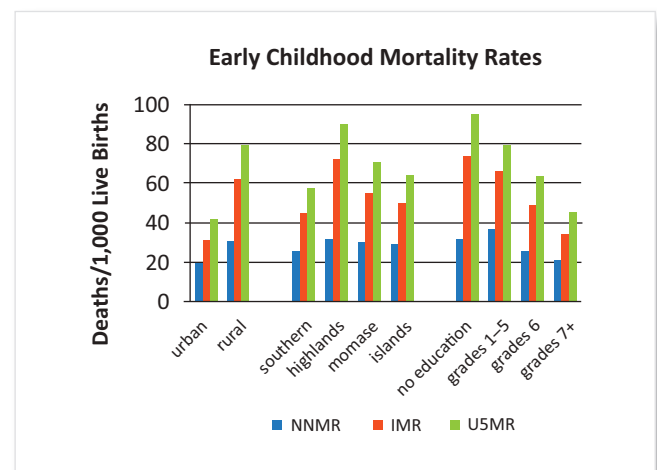
The majority (87%) of PNG's population, however, live in rural settings. A lack of quality water and poor sanitation facilities lead to gastro-intestinal illness, among the five most frequent illnesses in PNG.

Access to services is frequently extraordinarily difficult. Nearly a third of all aid posts are closed. Retrieval systems in emergency situations are limited. Most villages lack any capacity for telecommunications. The rate of unsupervised births at home is more than four times those of urban births; immunisation coverage is lower in rural areas. Child mortality in rural populations is double that of urban children. Diarrhoeal disease and acute respiratory infections occur at higher incidence.

The PNG population is expected to double in the next twenty years, increasing the demand upon health services. Regional differences in health are large.

The recent DHS shows that the Momase and Highlands regions are most disadvantaged in health status (and in access of health services). Incidence of fever and acute respiratory infections are the highest. Deaths of children under the age of 5 years are twice as common in the Highlands than in Southern Region, relative to the population (see Figure 13).

Figure 13 Childhood Mortality Distribution



### Education relates to better health

Better health is strongly correlated with education, especially of girls and women. Those with education are more likely to access health information through mass media, to access health services, and to give birth to their children in a health facility. Childhood mortality rates fall in direct relationship with greater levels of education. More years of education of girls results in having the first child later and correlates with improved spacing between children, which in turn results in improved health of the mother and the children. Higher education levels are also linked to greater knowledge of methods and sources of family planning, and with improved care of infants and children.

**Social and cultural transition** in some parts of the society, including shift from subsistence to cash economy, changes in traditional values and norms, and deterioration of social safety nets, continue to contribute to health concerns, including common sexually transmitted infections and violence. The age of first intercourse for men, for example, has decreased by 2 years over the past 25 years.

**Gender** plays an important role in health choices and health outcomes, as well as age, with programs needing to target in accordance with sex and age-specific risks. More health information broken down by sex is essentially needed.

Personal choice — of **diet, physical activity, smoking and drinking** — all influence health. There is very limited information available to quantify these risks in PNG. Nutrition is better known than the others: every third man suffers from anaemia resulting in lower productivity. Nutrition of children has improved in the past years. Smoking seems to be increasing as more cigarettes are brought across the border from Indonesia. Betel nut chewing with lime is very common, causing oral diseases including cancer.

## Health System Performance

### Health Sector Reform — Provincial Health Authorities

Over the past decade, successive governments have committed to implementing reform initiatives to enable the health sector to reverse the decline in service delivery and health indicators. In 2007 the Parliament of PNG passed the *Provincial Health Authorities Act*. This landmark amendment enables streamlining of provincial health services to occur by transferring the management of public hospital services and rural health services to one Provincial Health Authority or entity.

The Act creates the right for provinces to choose to create a single Provincial Health Authority responsible for the management of health service delivery within the Province. This will occur when the Minister and the Provincial Governor agree that provincial health services may be better delivered under a unified system and they enter into a provincial health partnership agreement. Three provinces, Milne Bay, Eastern Highlands, and Western Highlands, signed in 2009 to pilot the implementation of the Provincial Health Authority. Several other provinces also indicated their intention to implement these reforms. In 2011 a review of the outcomes of the pilot is expected, and acceleration of the roll-out of the PHA to other provinces.

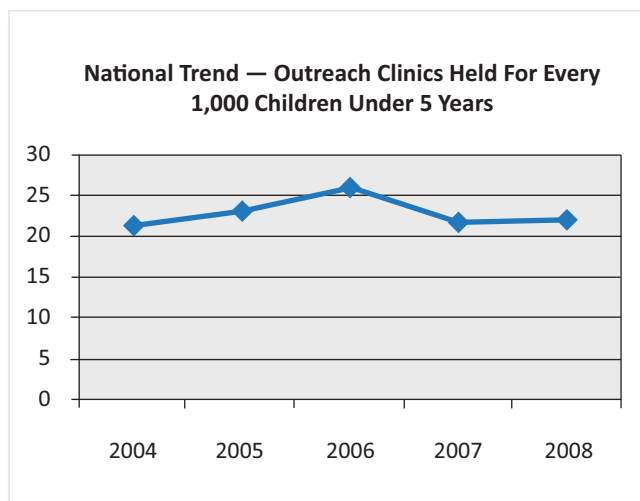
While the Act does not fundamentally change the responsibilities and accountabilities of each level of government, it does enhance the ability of government to direct finance to priority areas for health service delivery.

### Access to Health Services

At the commencement of the current plan, 78% of registered aid posts were open. After almost nine years this has deteriorated to 71%. This equates to 781 more aid posts closed during the implementation of the current *National Health Plan 2001–2010*.

From 2003 to 2008 the general inpatient bed numbers decreased by 1,328. The national trend on the number of outpatient visits per person to health centres (not aid posts) over the past five years has also gradually declined. Outreach clinics from health centres to rural remote villages, to provide essential immunisation, nutrition monitoring, antenatal care, and family planning, have stalled from an already unacceptably low level.

Figure 14 Outreach Visits



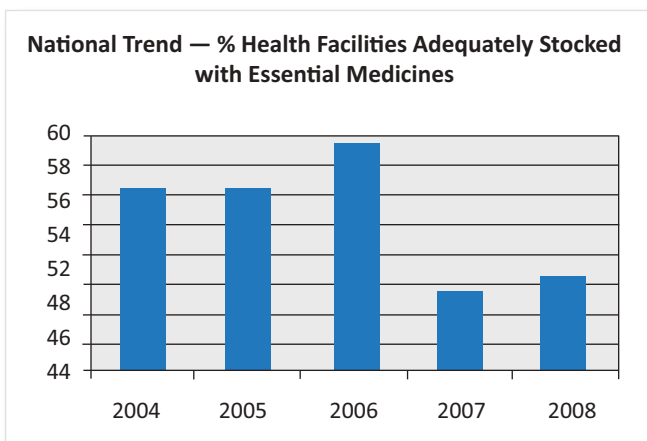
### Performance of Medical Supplies

Procurement and distribution of medical supplies and vaccines to health facilities in PNG remains a major challenge for the health sector. The evidence shows that there is a consistent low availability of key medicines.

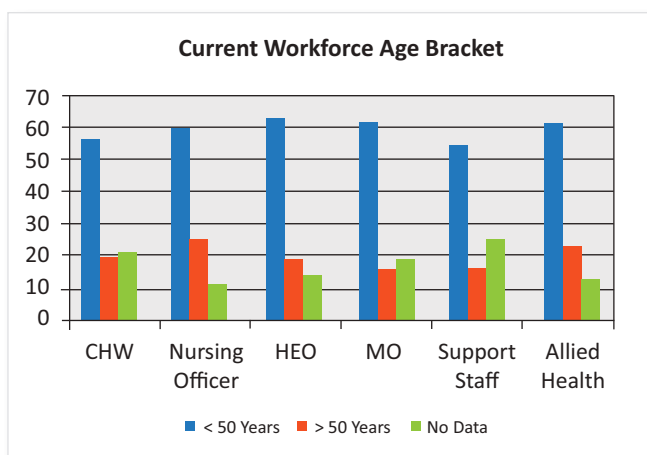
In 2004, 40% Health Centre kits were introduced to supplement the routine supply chain. However, this has not improved the situation, with 'stock outs' of key medicines (see Figure 15) increasing. Key reforms in the medical supply area to improve procurement and distribution networks have not gained significant traction.

Provincial transit stores lack adequate facilities and space to store and distribute medicines and vaccines. Poor storage facilities at rural health centres and aid posts are a major concern for safe keeping of drugs, vaccines, and intravenous fluids. Health managers lack skills in management of drugs and supplies. Theft and illegal sale of medical supplies is common.

**Figure 15 Medical Supplies at Facilities**



**Figure 16 Ageing Workforce**



**Performance of Human Resources**

Increasing population growth, impacts of new and emerging diseases, and changing patterns of behaviour leading to more lifestyle-related illness, continue to outpace the human resource capacity of the health sector to respond effectively to the needs of the people.

A picture emerged at the 2008 Human Resources (HR) Forum of an ageing workforce, low on critical cadres such as midwives and community health workers, with low wages and insufficient capacity within training facilities to produce the number of health workers needed.

According to the Asia Pacific Alliance for Human Resources for Health 2008, PNG has a ratio of 0.58 health workers (doctors, nurses, and midwives) per 1,000 population (2000 data), compared with Fiji at 2.23, and 2.74 for Samoa.

Combined with the declining state of health facilities and the inability of health services to meet the needs of the population, these factors have had a significant negative effect on the morale of health workers.

As well as the limited numbers of available health workers, those trained in specialist clinical and technical skills are not located where they are supposed to be. For example, the recent profiles produced by NDOH HR branch indicated that over 30% of skilled health professionals were occupying administrative and management jobs.

**Performance of Expenditure in Health**

Chronic under-funding of health systems limits the capacity of the health sector to provide adequate services that are of acceptable quality. The World Health Organization (WHO) recommends that for a developing country to provide a basic package of essential health services it must spend at least US\$34 per capita per annum. According to the WHO (reports 2006, 2007, 2008, and 2009) government per capita expenditure in Papua New Guinea during the same period from 2000 and 2006 ranged between US\$21 and US\$24, peaking at US\$34 in 2005. As an example during the same period, Fiji spent an average of US\$94 per capita, peaking at US\$148 in 2005. As a proportion of total government expenditures, PNG spent an average of 9.5% on health, with an average of 3.7% of GDP during the same period.

National Economic and Fiscal Commission (NEFC) studies also indicate that while there is some improvement in funding for health, it remains the lowest-funded sector in meeting the government’s Medium Term Development Strategy (MTDS). However, there is some hope for the future with the GoPNG indicating in the recently released Vision 2050 document that 20% of the development budget will be given to health in the near future.

Overall government per capita expenditure on health in PNG fell way below the recommended US\$34. There are challenges in the efficiency of health spending in terms of both allocation (doing the right things) and technical (doing things right) efficiency. This situation is compounded by inadequate available resources, especially at the provincial level.

**Figure 17 Expenditure — International Comparison**

<b>Papua New Guinea</b>	<b>2000</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Government expenditures on health as % of total government expenditures	9.9	10.9	10.0	9.6	7.3
Government health expenditures as a % of GDP	4.0	3.4	3.6	4.2	3.2
Government per capita expenditures on health (average exchange rate US\$)	21	20	26	34	24
<b>Fiji</b>	<b>2000</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Government expenditures on health as % of total government expenditures	10.3	7.8	9.1	9.6	8.4
Government health expenditures as a % of GDP	4.7	3.7	4.6	4.1	3.7
Government per capita expenditures on health (average exchange rate US\$)	68	64	92	148	97

Sources: WHO Statistics Reports (2006, 2007, 2008, and 2009).

### The Sector-wide Approach (SWAp)

Since the introduction of the Health Sector Improvement Program (HSIP) in November 2004, concerns have been expressed about a number of aspects of the SWAp, including weak absorptive capacity, and the difficulty of getting resources to provinces and districts, thereby resulting in limited or no improvement in the health indicators.

During 2010 the review of the current health SWAp arrangements is being undertaken. Through this consultative process between key stakeholders in the health sector, it is proposed to develop/recommend possible adjustments of the health SWAp arrangements.

### Information Communication Technology

With one exception, PNG has an extremely underdeveloped Health ICT infrastructure; the exception is the PNG health radio network linking around 1,300 facilities across the country.

This is one of the largest such radio networks in the world. Apart from this network there is little or no ICT connectivity between provinces and Port Moresby, within provinces, or even within hospitals and provincial health offices. This is in an environment of a very good, though expensive, telephone system and mobile telephone systems that already have wide coverage and are steadily increasing in coverage and reducing costs to the users.

Aside from the finance and payroll systems, the main national system is the well-established National Health Information System (essentially a primary care information system), and the national Discharge

Information System (an acute care focused patient level data collection).

The geography of PNG makes it susceptible to further major health risks. While there has been development of communication systems to all health facilities throughout the country during the past decade, notification of and capacity to respond to disease outbreaks remains very limited.

### Addressing the Concerns

The current situation cannot remain. There is an urgent need to address priority health problems, and to ensure that quality services can carry these programs to the villages, health centres, and hospitals throughout the country. The problems of service provision will be exacerbated by growing population pressure. The transitional economy, with its potential for greater access to cash by Papua New Guinea citizens, is likely to lead to a 'double burden' health profile, with persistence of communicable diseases as the dominant health problem, yet a growing burden from non-communicable diseases. This will further challenge the health system.



## Chapter 4

### The Way Forward



The Vision 2050 of the Government of PNG describes where we see ourselves as a nation in the next forty years — ‘We will be a Smart, Wise, Fair, Healthy and Happy Society by 2050’. The PNG Development Strategic Plan (PNG DSP) 2010–2030, developed by the Department of National Planning and Monitoring (DNPM), is linked to and guided by the National Vision 2050. Together these two documents challenge the health sector to transform itself and deliver quality services to all people of PNG, by using innovative and creative approaches and striving for international best practice.

In response, the health sector has drafted a comprehensive and arguably ambitious forty-year strategy — Health Vision 2050. This *National Health Plan 2011–2020* is the first of four ten-year plans designed to achieve Health Vision 2050. It outlines the aim of a transformed health care system, delivering improved health for all Papua New Guineans, while continuing to stand for the Human Face of Development.

The *National Health Plan 2011–2020* is the single governing policy document for the health sector, from which all players — both private and public, both within the health sector and in other supporting spheres of life in Papua New Guinea — take their direction.

Priority areas for investment across all sectors, the minimum suite of health services that must be provided by each level of government, and new areas of reform, are all articulated within this Plan to ensure the efforts of all players combine to reverse the deteriorating health indicators in the country. Growing a healthy nation requires the efforts of everyone.

Considering the current state of health in our nation, the **Goal** of this National Health Plan is to strengthen primary health care for all, and to improve service delivery to the rural majority and urban disadvantaged. The priority strategy of the plan is ‘back to basics’, with rehabilitation of the foundations of our primary health care system, focusing on improving maternal health and child survival, and reducing the burden of communicable diseases. This will be enhanced through the implementation of the Provincial Health Authority reforms, which are expected to roll-out across the country over the next ten years.

Concentrating our efforts on this goal, will lead to the realisation of our Vision of a healthy and prosperous nation that upholds human rights and our Christian and traditional values, and ensures:

**Affordable, accessible, equitable, and quality health services for all citizens.**



National  
Health Plan  
2011–2020

## Our Vision

A healthy and prosperous nation that upholds human rights and our Christian and traditional values, and ensures:

**Affordable, accessible, equitable, and quality health services for all citizens.**

## Our Goal

Strengthened primary health care for all, and improved service delivery for the rural majority and urban disadvantaged.

## Our Mission

Improve, transform, and provide quality health services through innovative approaches supporting primary health care and health system development, and good governance at all levels.

**Health is Everybody's Business**

Within the ten years of this NHP, significant progress has to be made towards realising the Vision. All partners and actors in the health sector must share the same **Mission** to: Improve, transform, and provide quality health services through innovative approaches supporting primary health care and health system development, and good governance at all levels.

### Essential Values of the Health System

- **Accountability:** Being accountable to the people for the services we deliver, and being committed to learning from experience to improve our performance.
- **People focused:** Being genuinely concerned that our people receive quality health care and social welfare services, respecting the dignity of all people, and delivering services in accordance with our cultural values and traditions.
- **Integrity:** Committing ourselves to the highest ethical standards in all that we do, and advocating and applying best practices to the best of our abilities.
- **Equity:** Striving for an equitable health care that is independent from political decision making, and being fair in all our dealings, irrespective of age, gender, ethnicity, religion, and political affiliation.

- **Quality:** Pursuing innovative, high quality, and safe outcomes in all facets of our activities and services.
- **Diversity:** Acknowledging the diverse nature of the country and the unique make-up of each setting.
- **Teamwork:** Working in partnership at all levels of the health system with all stakeholders.

### Priorities for the First Ten Years

This Plan has been developed in consultation with relevant stakeholders and seeks to be realistic, affordable, based on the evidence available to us, and, most importantly, a practical and usable Plan. The policy directions for the immediate ten years from 2011 to 2020 are centred on rehabilitating the system we currently have to a level where each facility is fully operational, and on improving the ability that individuals have to take responsibility for their own health. This will require a three-pronged approach:

- Targeted investment in improving service delivery to people living in the rural areas and in disadvantaged urban settings, including the roll-out of the Provincial Health Authority reforms.
- Reinforcing health services with strong efficient systems for the health workforce, financing, information, medical supplies, leadership, and governance.

Figure 18 Focus Areas of National Health Plan 2011–2020



- Renewed dedication to reversing the trend of our health indicators. To this effect, a series of prioritised health outcomes have been agreed for primary attention, based on those diseases and situations that have caused the greatest levels of morbidity and mortality over the previous ten years, as well as on areas that are likely to become threats to the health of our population.

In summary, **if** we improve service delivery **and** address priority health outcomes and strengthen health systems, **we will achieve** a healthy and prosperous national for all, both now and for future generations.

### Specific Objectives and Strategies

To achieve the vision, mission, and goal of the *National Health Plan 2011–2020*, the sector will focus on the following **Key Result Areas**:

- Improve Service Delivery
- Strengthen Partnership and Coordination with Stakeholders

- Strengthen Health Systems
- Improve Child Survival
- Improve Maternal Health
- Reduce the Burden of Communicable Diseases
- Promote Healthy Lifestyles
- Improve our Preparedness for Disease Outbreaks and Emerging Population Health Issues.

These are outlined along with the accompanying objectives and strategies in the following pages. The objectives concern all of the levels of health care, and all of those involved. All players should develop their specific plans to achieve these objectives.

The list of strategies is not exclusive. Some of the specific strategies require action at the national level, while some are the responsibility of provincial, district, or facility level and should be transferred into activities in the respective plans. The relevant indicators and targets for each Key Result Area are discussed in Chapter 8 Performance Monitoring Framework.





## Key Result Area I: Improve Service Delivery



### Objective 1.1

Increased access to quality health services for the rural majority and the urban disadvantaged.

#### Strategies

- 1.1.1 Increase the number of outreach services provided in rural areas and for the urban disadvantaged.
- 1.1.2 Improve the reliability of medical supplies distribution and management.
- 1.1.3 Improve availability and use of funding for operational activities.
- 1.1.4 Increase funding for referral transport of patients from health posts and health centres.
- 1.1.5 Establish community health posts with facilities and staff to deliver maternal and child health services, including health promotion activities in areas where they improve accessibility.
- 1.1.6 When medical doctors will be available, prioritise their placement to district hospitals.
- 1.1.7 Integration of hospitals and rural health services into a single health authority.

### Objective 1.2

Rehabilitated and strengthened primary health care infrastructure and equipment.

#### Strategies

- 1.2.1 Increase the number of ward areas with at least one aid post open and available to deliver services.
- 1.2.2 Prioritise rehabilitation of aid posts, health centres, and district hospitals.
- 1.2.3 Increase the number of facilities in rural areas and urban settlements that have essential equipment available in accordance with the National Health Standards, including functioning cold chain, communications, and transport.
- 1.2.4 Gradually rehabilitate essential static plant equipment at district hospitals and health centres, as per National Health Standards.

### Objective 1.3

The right health professionals work in the right places, are motivated, and deliver right (quality) services.

#### Strategies

- 1.3.1 Review the distribution of the current available workforce and prioritise to place the right people with the right skills in the right places.
- 1.3.2 Increase the level of skills of health workers and improve the skills mix so they deliver the right (quality) services.
- 1.3.3 Increase motivation of formal and informal health workers through costed and government-approved incentive schemes (such as housing and uniforms, medical cover, and school subsidies).
- 1.3.4 Ensure clinical supervision is provided in accordance with the National Health Standards.
- 1.3.5 Ensure specialists for all provincial hospitals will be available by 2030 as per the National Standards.

### Objective 1.4

Hospital infrastructure is rehabilitated.

#### Strategies

- 1.4.1 Rehabilitate at least four major provincial hospitals (as regional specialist hospitals) to the approved Minimum Standards by 2030.
- 1.4.2 Establish a major new referral hospital in PNG by 2020.

## Key Result Area 2: Strengthen Partnerships and Coordination with Stakeholders



### Objective 2.1

The National Public Private Partnerships Policy is implemented, and innovative and cost-effective options for delivering services introduced.

#### Strategies

- 2.1.1 Establish Public–Private Partnerships<sup>4</sup> (PPPs) with relevant major mining and agriculture ventures.
- 2.1.2 Establish health sector monitoring and coordination mechanisms for PPPs.

### Objective 2.2

Expanded partnerships with resource developers, private health care providers, churches, and NGOs in rural (remote) areas and urban settlements.

#### Strategies

- 2.2.1 Improve purchaser–provider relationships between private health care providers, churches, NGOs, and the resource industry.
- 2.2.2 Increase the use of outsourcing, when relevant, as a means of increasing public–private alliances/partnerships.

- 2.2.3 Implement strategies to increase the number of trained health workers through innovative partnerships, such as private training schools or scholarships.

### Objective 2.3

The health sector works collaboratively with all stakeholders to expand the reach of quality health services.

#### Strategies

- 2.3.1 Ensure the NDoH is the lead agency in supporting the National Health Board to coordinate health development partner support (including NGOs).
- 2.3.2 Enhance communication, cooperation, and reporting coordination with central agencies and other GoPNG Sectoral Departments, especially with the Departments of Treasury, Planning, Finance, and Provincial and Local Governments.
- 2.3.3 Engage community-based organisations in planning and delivering health services.
- 2.3.4 Ensure all health service providers are compliant with relevant Acts and accreditation requirements.

### Objective 2.4

The health sector coordinates and monitors the implementation of the National Health Policy.

#### Strategies

- 2.4.1 Ensure the health sector maintains the National Health Information System within a single operating policy.
- 2.4.2 Ensure all stakeholders receiving Government of Papua New Guinea or health development partner funding provide an annual report, including proposed future programming and expenditure.
- 2.4.3 Ensure all stakeholders develop and build service delivery infrastructure in accordance with the National Health Service Delivery Policy and National Health Standards.

<sup>4</sup> The PNG Government policy defines PPP as those with pure capital investments over K50m. The Partnership Policy Framework (PPF) enables Government to use Civil Society Organisations to implement some of its development programs.

### Key Result Area 3: Strengthen Health Systems and Governance



#### Objective 3.1

Improve financial resource management for health service delivery.

#### Strategies

- 3.1.1 Increase incrementally over ten years the overall percentage of GDP available for health services to meet the needs of population growth.
- 3.1.2 Improve efficient and effective use of existing financial resources.
- 3.1.3 Facilitate an improved flow of funds to where it is needed at the facility levels.
- 3.1.4 Develop and implement a single Health Sector Funding Plan and Strategy.
- 3.1.5 Institutionalise the National Health Accounts.
- 3.1.6 Explore opportunities for alternate health care financing.

#### Objective 3.2

Quality workforce provided, capable of meeting the health needs into the future.

#### Strategies

- 3.2.1 Develop a National Human Resource policy and plan for the health sector.
- 3.2.2 Build the capacity of training institutions to reduce attrition rates and provide appropriate cadres of workers for the workforce of the future.
- 3.2.3 Increase the annual output of qualified and accredited health workers to meet the needs of population growth.
- 3.2.4 Focus on increasing the numbers of nurses, midwives, and community health workers.
- 3.2.5 Increase the staff ceilings for critical health workers through evidence-based advocacy to central agencies.
- 3.2.6 Develop and implement a sector-wide human resource information system (HRIS) by 2012.
- 3.2.7 Outsource the management of Laloki for in-service training.
- 3.2.8 Develop and implement affordable health sector workforce recruitment and retention strategies.

#### Objective 3.3

Medical supply procurement and distribution services are efficient and accountable.

#### Strategies

- 3.3.1 Improve the capacity of the procurement and distribution systems within the health sector.
- 3.3.2 Outsource logistics management and operations for the drug supply chain.
- 3.3.3 Implement 100% kit system for rural facilities until 2015.
- 3.3.4 Build the capacity of provinces and districts to implement the pull/demand systems for medical supplies.
- 3.3.5 Rationalise the number of area medical stores to two, and build the capacity of the provincial transit stores.
- 3.3.6 Provide the provinces with delegated authority from the Pharmaceuticals Board to investigate and prosecute fraud and corruption in relation to medical supplies.

### Objective 3.4

The health sector proactively identifies and uses innovative and evolving ICT solutions and delivers accurate and timely information for planning and decision making.

#### Strategies

- 3.4.1 Review, strengthen, and integrate the different health sector management information systems
- 3.4.2 Improve capacity of districts to compile, analyse, and use information.
- 3.4.3 Establish by 2020 a common hospital patient information management system in all provincial hospitals, which is linked to a national patient master index.
- 3.4.4 Build the capacity of Provincial Health Information Officers and Hospital Medical Records Officers to compile, analyse, and provide quality information for district and provincial management.
- 3.4.5 Build the management capacity of the sector to specify, acquire, implement, and manage major IT systems, both clinical and reporting.
- 3.4.6 Implement by 2020 a national health sector-wide area network that connects all provincial capitals and Port Moresby to provide integrated communication and data services.

### Objective 3.5

Improved leadership, governance, and management at all levels of the health system.

#### Strategies

- 3.5.1 Ensure all partners and stakeholders develop implementation plans in line with the single national health policy (the National Health Plan) for their legislative compliance and reporting obligations.
- 3.5.2 The Secretary of Health holds national and provincial management staff accountable for the delivery of services in accordance with the *National Health Administration Act 1997* and *Provincial Health Authorities Act 2007*.
- 3.5.3 Review and strengthen a performance monitoring and evaluation framework, including accountability for use of funds, for all governance and management authorities within the health sector
- 3.5.4 Strengthen management capabilities at national, provincial, district, and health facility levels.
- 3.5.5 Planning, budgets, expenditure, and management decisions are evidence-based and are linked to health priorities.

- 3.5.6 Implement whole-of-government reforms, and initiate health sector reforms, including consideration of a Health Service Commission and a Health Endowment Fund.
- 3.5.7 Ensure committees such as the National Health Board, Audit Committee, Professional Registration Boards, and Pharmaceutical Board implement quality assurance programs and meet reporting requirements in compliance with legislation.
- 3.5.8 Review and update by 2020 all Acts of Parliament pertaining to health administration policies.
- 3.5.9 Review the *Provincial Health Authorities Act 2007* by 2012 and plan the roll-out to other provinces.

### Objective 3.6

Strengthen health sector management and system capacity across Papua New Guinea.

#### Strategies

- 3.6.1 Provide leadership at all stages to develop and implement a health sector capacity development strategy and plan.

### Key Result Areas 4–8

The NHP uses the WHO framework for implementing primary health care, as identified in the World Health Report 2008, as well as the WHO framework for health system strengthening. Together these tools ensure a holistic, multi-sectoral, equitable, and efficient approach to strengthening health systems.

The following Key Result Areas relate to the major health concerns, which are to be focused on improving the health of the nation. It is important to note that the results related to these health outcomes can be achieved only through combining the work with the previous Key Result Areas. Each national program will develop a five-year strategy defining the strategies and actions in more detail, including elements of KRAs 1–3.

## Key Result Area 4: Improve Child Survival



### Objective 4.1

Increase coverage of childhood immunisation in all provinces.

#### Strategies

- 4.1.1 Ensure every facility, every day, has the capacity to immunise children.
- 4.1.2 Conduct supplementary immunisation programs every three years, or more frequently as needed.

### Objective 4.2

Reduce case fatality rates for pneumonia in children through acceleration of roll-out of Integrated Management of Childhood Illnesses (IMCI) to all provinces.

#### Strategies

- 4.2.1 Increase the number of health facilities that have the capacity to implement IMCI.
- 4.2.2 Increase the percentage of communities with the capacity to implement IMCI.
- 4.2.3 Ensure antibiotics are available every day, at every facility, to combat pneumonia in children under five.

### Objective 4.3

Decrease neonatal deaths.

#### Strategies

- 4.3.1 Ensure that every facility has the capacity to provide life-saving support to the neonate.
- 4.3.2 Increase tetanus toxoid coverage of antenatal mothers.
- 4.3.3 Improve maternal health services, and improve supervised deliveries.

### Objective 4.4

Reduce malnutrition (moderate to high) in children under the age of five years.

#### Strategies

- 4.4.1 Advocate and promote exclusive breastfeeding.
- 4.4.2 Ensure all babies and children under five have access to supplementary feeding when and where they require it.
- 4.4.3 Increase access for mothers and children to micronutrient supplementation.

## Key Result Area 5: Improve Maternal Health



### Objective 5.1

Increase family planning coverage.

#### Strategies

- 5.1.1 Ensure every health facility has the capacity to offer family planning services at all times.
- 5.1.2 Advocate for the advantages of having fewer children and increased spacing of children.
- 5.1.3 Extend the reach of the village health volunteers (VHV) program and community-based distribution systems.

### Objective 5.2

Increase the capacity of the health sector to provide safe and supervised deliveries.

#### Strategies

- 5.2.1 Increase the number of facilities capable of providing supervised deliveries.
- 5.2.2 Increase the numbers of health workers skilled in obstetric care.
- 5.2.3 Ensure every health facility is capable of providing quality service/support before, during, and after pregnancy.

### Objective 5.3

Improve access to emergency obstetric care (EOC).

#### Strategies

- 5.3.1 Increase the capacity of all facilities to provide essential EOC.
- 5.3.2 Increase the number of facilities capable of providing comprehensive obstetric care.
- 5.3.3 Ensure every maternal death is investigated and audited, and practice improved.

### Objective 5.4

Improve sexual and reproductive health for adolescents.

#### Strategies

- 5.4.1 Increase the knowledge of adolescents about sexual and reproductive health.
- 5.4.2 Increase cross-sectoral collaboration with schools to strengthen education of students in sexual and reproductive health.

## Key Result Area 6: Reduce the Burden of Communicable Diseases



### Objective 6.1

Reduce malaria-related morbidity and mortality in Papua New Guinea.

#### Strategies

- 6.1.1 Strengthen political commitment for malaria control.
- 6.1.2 Improve vector control measures, with a priority of all households having access to a long-lasting insecticidal net (LLIN), and a reintroduction of residual spraying where appropriate.
- 6.1.3 Maximise access to prompt quality diagnosis and appropriate treatment for malaria.

### Objective 6.2

Control tuberculosis (TB) incidence by 2020, with a decline in cases of multi-drug resistant tuberculosis (MDR-TB).

#### Strategies

- 6.2.1 Strengthen political commitment for TB control.
- 6.2.2 Implement a quality and supervised Tuberculosis Directly Observed Treatment, Short-course (TB DOTS) program in every province by 2015.

- 6.2.3 Ensure a sufficient number of quality-assured laboratories are established and functioning efficiently under the coordination of the Central Public Health Laboratory (CPHL).
- 6.2.4 Ensure every person who is HIV positive has access to TB DOTS.

### Objective 6.3

Scale up prevention, treatment, care, and support for sexually transmitted infections (STIs) and HIV to meet universal access targets.

#### Strategies

- 6.3.1 Increase access to quality HIV counselling and testing services.
- 6.3.2 Increase access to quality antiretroviral (ARV) treatment for adults and children.
- 6.3.3 Ensure male and female condoms (and lubricants) are available and accessible throughout the country.
- 6.3.4 Increase access of the general population to post-exposure prophylaxis (PEP) services.
- 6.3.5 Ensure every facility is able to provide prevention of parent-to-child transmission (PPTCT) services.

### Objective 6.4

Strengthen communicable disease surveillance and monitoring.

#### Strategies

- 6.4.1 Introduce an integrated surveillance and monitoring strategy for communicable diseases.
- 6.4.2 Strengthen epidemic surveillance and response capacity for communicable diseases with a potential for outbreaks.
- 6.4.3 Improve access to quality and appropriate rapid diagnostic and laboratory testing services at facility, province, and national levels.

## Key Result Area 7: Promote Healthy Lifestyles



### Objective 7.1

Increase health sector response to prevention of injuries, trauma, and violence with an impact on families and the community.

#### Strategies

- 7.1.1 Increase the advocacy for population-based health awareness interventions designed to reduce the number of preventable injuries and trauma.
- 7.1.2 Increase the roll-out of and access to family support centres to reduce the impact of violence in the home and community.
- 7.1.3 Increase the capacity of hospital accident and emergency departments to address transport-related injuries.

### Objective 7.2

Reduce the number of outbreaks of food and water-borne diseases.

#### Strategies

- 7.2.1 Increase the number of households that have access to safe drinking water, and effective waste disposal and sanitation.

- 7.2.2 Ensure all health facilities have access to running water, and effective waste disposal and sanitation.
- 7.2.3 Ensure public and private buildings comply with legislation in relation to water supply, sanitation, and food handling.
- 7.2.4 Review and improve relevant legislation to enhance the management and control of rural water supplies.

### Objective 7.3

Increase individuals' and communities' involvement in their own health.

#### Strategies

- 7.3.1 Increase the roll-out of the Healthy Islands strategy.
- 7.3.2 Extend the reach of community-based health care, including enhancing village volunteer programs.
- 7.3.3 Implement strategies that empower the community and the individual to take ownership and direction of their health and the health of their families.

### Objective 7.4

Reduce morbidity and mortality from non-communicable diseases.

#### Strategies

- 7.4.1 Increase the focus on population-based health awareness interventions designed to reduce the impact of substance abuse, increase the level of physical activity, and improve diet.
- 7.4.2 Increase early detection (screening) and immediate clinical interventions for non-communicable diseases, such as heart disease, strokes, diabetes, and cancers.
- 7.4.3 Ensure all government facilities promote healthy lifestyles and schedule healthy workplace activities.
- 7.4.4 Review and improve legislation that will support the adoption of healthy lifestyles.
- 7.4.5 Improve and expand the standards in mental health service delivery.
- 7.4.6 Improve the provision of disability aids/appliances, physiotherapy, and community-based rehabilitation services.



## Key Result Area 8: Improve Preparedness for Disease Outbreaks and Emerging Population Health Issues



### Objective 8.1

Increase capacity of the health sector to identify, monitor, and report on urgent and emerging health threats.

#### Strategies

- 8.1.1 Establish a National Public Health Institute, incorporating a Centre for Disease Control (including response).
- 8.1.2 Strengthen surveillance systems for detecting and responding to epidemics.
- 8.1.3 Strengthen capacity of the health sector to report on notifiable diseases in accordance with international regulations.
- 8.1.4 Increase the capacity of provinces to coordinate their responses to epidemic and population health emergencies.

### Objective 8.2

Increase capacity of the Central Public Health Laboratory (CHPL) to provide services to meet urgent and emerging concerns.

#### Strategies

- 8.2.1 Ensure the CPHL (including all provincial laboratories) has sufficient capacity and supplies at all times to support a national response to disease outbreaks and other emergency health concerns.
- 8.2.2 Ensure a functioning and safe blood transfusion service is available to the health sector, and includes HIV blood screening capability.
- 8.2.3 Ensure the CPHL provides support for clinical diagnosis and public health functions to provincial laboratories.

### Objective 8.3

Improve capacity and preparedness of the health sector to address the impacts of climate change.

#### Strategies

- 8.3.1 Increase cross-sectoral collaboration to prepare for impacts of climate change on the health of Papua New Guineans.
- 8.3.2 Ensure every health facility has a Disaster Preparedness Plan, including issues associated with climate change.

### Objective 8.4

Ensure the health sector works collaboratively to manage population health threats related to the growing resources boom.

#### Strategies

- 8.4.1 Strengthen the regulatory role of the health sector to reduce the adverse health impact on the population of development projects.
- 8.4.2 Ensure private sector health facilities (mining and agricultural) support national surveillance systems.

## Health Vision 2050 — Directions for the Next Forty Years

Health Vision 2050 is a forty-year strategy that will transform the current health service delivery system in Papua New Guinea, and links to the National Government's Papua New Guinea Vision 2050 and the PNG Development Strategic Plan 2010–2030. It includes the progressive introduction of community health posts, district hospitals, regional specialist hospitals, and national referral hospitals, and also incorporates the requirements of two new provinces. This new referral model, underpinned by strengthened health systems will create an enabling environment to reverse our deteriorating health indicators, and to reduce the accessibility gap for our rural majority and for those living in disadvantaged urban settings.

The strategy underpinning Health Vision 2050 acknowledges that service delivery improvement is required at all levels of the health care referral model. It further acknowledges the need for greater integration between hospital and rural health services (both public and church-managed), and seeks to maximise the use of the human and other resources available to the sector. Furthermore, considering the fluidity of the population at any one time, it is recognised that the first point of access to the system may be at any level, including hospitals.

### Components of Health Vision 2050

**Community Health Posts** will be the new outer periphery of the health system, staffed by three health workers skilled in maternal and child health, midwifery, health promotion, and community awareness programs. These facilities will be slightly larger than the current Aid Posts, and differ by the inclusion of a labour room. It is anticipated that supervised deliveries and routine immunisation will be conducted from these points. A new focus for these facilities will be improving the interface between the community and formal health services, ensuring that the community knows how to access the appropriate level of care, as well as equipping them with the necessary skills and knowledge to better take responsibility for their own healthy living. This latter aspect will be enhanced by encouragement of the use of informal health care from the community and family level, including, for example, Village Health Volunteers.

**Health Centres** will remain the intermediary referral point between Community Health Posts and District Hospitals, ensuring an accessibility gap does not widen as reforms are introduced.

In accordance with geographical and population catchment requirements, **District Hospitals** will gradually be introduced to most districts, and will each over the forty-year period be progressively staffed with a doctor. A new Rural Doctor's Program will be developed and implemented by Divine Word University with this operating environment in mind. The introduction of this facility across districts will begin to address the demand for more complex obstetric care at a more local level. Clinical services provided at District Hospitals will include general surgery, maternal and child health, malaria, HIV/AIDS, and TB diagnostics, as well as health promotion, health improvement, and health protection.

**Provincial Public Hospitals** will be progressively rehabilitated and upgraded during the forty-year period. In general, these hospitals will provide, as a minimum, the following clinical services: Internal Medicine, Surgery, Paediatrics, Obstetrics and Gynaecology, Accident and Emergency, and Anaesthetics. Health promotion, health improvement, and health protection services will also be provided. In provinces where the hospital performs a dual role as a specialist regional hospital, additional clinical services will be provided as mentioned below.

It is proposed that four specialist hospitals be established, with one located in each region within Papua New Guinea. The approach acknowledges the manpower constraints within PNG (specifically that of specialist medical officers and specialist nurses) and seeks to maximise access for the population to these services through establishing centres of excellence. These **Specialist Regional Hospitals** will therefore have a multi-faceted role as a national specialist hospital (for example, provision of oncology services for the country), as a provincial hospital catering to its individual province, and as a regional hospital catering to the needs for complex treatment of patients from its individual region.

**Pacific Medical Centre** will be developed as a 100% not-for-profit, state-of-the-art, full-service teaching hospital, to benefit the entire country. It will:

- (a) Serve as the nation's centre of excellence in health care, where the world's best practices in health care and medicine will be provided and demonstrated to benefit Papua New Guineans, in collaboration with public hospitals and some of the world's leading teaching hospitals.
- (b) Serve as the nation's leading referral hospital for urgent and critical care needs that are beyond the capacity of any public hospital in PNG.

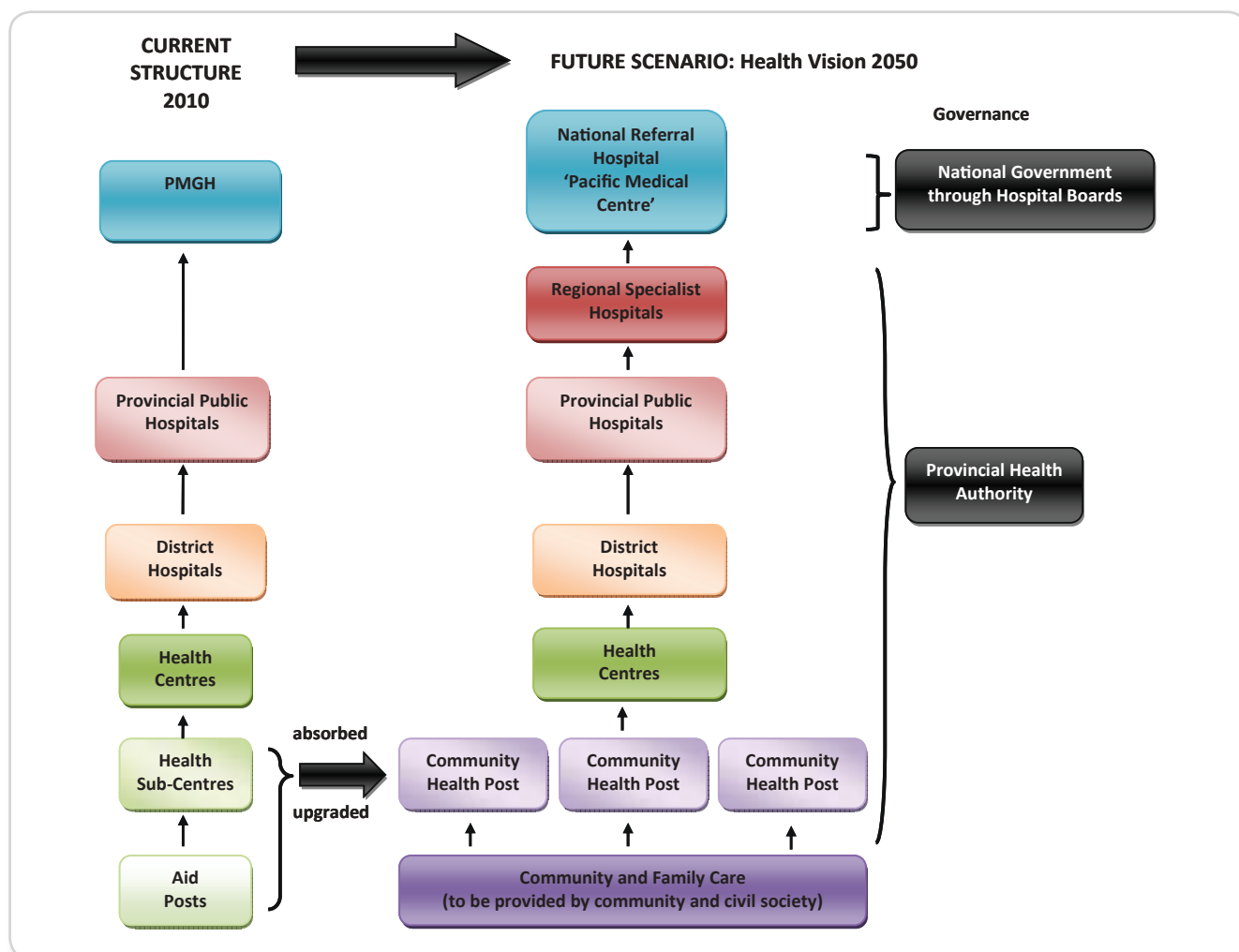
- (c) Become a centre of excellence in postgraduate and continuing medical education, including professional training aimed at improving the skills of national physicians, nurses, hospital administrators, biomedical engineers, and other ancillary staff working in public hospitals in PNG.
  - (d) Become the nation’s centre of excellence in medical research in useful areas of health and medicine, in collaboration with national institutions, such as the UPNG School of Medicine and Health Sciences, PNG Institute of Medical Research, and other local universities, including in partnership with participating university medical centres and hospitals, and other global health care partners in the United States and around the world.
- Rehabilitation of Aid Posts
  - Establishment of Community Health Posts and expansion in strategic locations
  - Rehabilitation of Health Centres
  - Rehabilitation of current District Hospitals, and expansion of the number of these in strategic districts
  - Rehabilitation of Strategic Provincial/Regional Hospitals
  - Rehabilitation of PMGH
  - Establishment of a new national referral hospital for PNG.

A **National Institute for Public Health** will be established, incorporating **Centres for Disease Control** and **Health Policy Management**. This facility will provide guidance in policy development and planning for the sector.

The implementation schedule is detailed on the following page. While this is designed as a forty-year schedule, the sequencing in the first ten years will reflect the funds available, and the focus on a back to basics approach and rehabilitation of rural health services.

The implications of Health Vision 2050 for the immediate ten-year period of the *National Health Plan 2011–2020* include:

**Figure 19 Health Vision 2050**



**Figure 20 Health Vision 2050 — Implementation Schedule**

Facility Type	Phase 1 2011–2020	Phase 2 2021–2030	Phase 3 2031–2040	Phase 4 2041–2050
Community Health Posts				
Phase 1 (a)	Rehabilitate and open Aid Posts			
Phase 1 (b)	Establish CHPs in strategic locations			
Phase 2	Progressively replace Aid Posts and Health Sub-Centres with CHPs			
Health Centres	Rehabilitate all Health Centres to become fully operational			
District Hospitals	Establish one fully operational hospital in most Districts over 40 years (note: in Districts without co-located Provincial Hospitals) in accordance with population/geographical requirements			
Provincial Health Authorities	Roll-out PHAs			
Provincial Hospitals				
Phase 1	Key Provincial Hospitals fully operational over 20 years including teaching Hospitals			
Phase 2	Remaining Provincial Hospitals fully functional			
Regional Specialist Hospitals	Feasibility Studies	Establish four Regional Specialist Hospitals over 20 years	Extend services and technology as funds become available	
Rehabilitation of PMGH	PMGH refurbished			
National Referral Hospitals	New Hospital built 'PMC'		Further consideration of new referral hospitals	





## Chapter 5

### Implementing the Plan



**The best plan, the greatest plan, is the one we achieve.**

Professor David Kavanamur

Implementation is the process of turning a policy into practice. It is common to observe a gap between what was planned and what occurred as a result of a policy; or to find out that much of what was intended to be implemented was never done. The health sector is such a complex area that an overall health policy has much less chance of being implemented as planned than a simple, straightforward policy aiming to change one single issue.

Keeping this in mind, the central level policy-makers of the *National Health Plan 2011–2020* have concluded that in the current PNG environment there are several issues to be taken into account to enhance the policy implementation. These include:

1. Wide involvement of various stakeholders in the NHP development process.
2. Emphasis on values of service providers and health workers.

3. Planning mechanisms within the levels of government and other service providers.
4. Linkages with the whole-of-government planning mechanism.
5. Accountability and performance of different policy implementers.
6. Close partnerships.
7. Effectively managing risks.
8. Planning a strategic implementation process.

#### **Involvement of Stakeholders**

From the very beginning of the NHP development until the final version, various stakeholders have been involved. This has included a wide variety of institutions and individuals, as well as the general public. Overall, the interest in the NHP has been extensive, indicating commitment to implement the NHP and also raising expectations for the NHP to be able to spearhead the major changes required.

## Values: The Foundation for Implementation

The extent and the quality of implementation of the National Health Plan depends on political will, enabling resources and systems, and particularly on the manner in which health professionals perform their work.

To realise the Vision of this Plan, all health workers, administrators, and support staff within the health sector, need to ensure the Values identified in Chapter 4 underpin all that we do.

## Roles and Responsibilities of Different Levels of the Sector

Implementation of this Plan will be in accordance with the recognised different levels of responsibility:

- **National** — policy, standard setting, technical advice and monitoring
- **Provincial** — overseeing implementation
- **District** — implementation.

## Planning Hierarchy within the Health Sector

### National Level

Chapter 2 described how this Plan receives its overarching direction from key long-term GoPNG documents. The purpose of this chapter is to further explain how specific health sector strategies and planning cascade from the National Health Plan.

The NDoH will develop medium-term (5 years) strategic plans. They will guide the development of national health program plans and provincial health plans (see below). The plans draw from the overall GoPNG Medium-Term Strategies, namely the Medium-Term Fiscal, Manpower, Development, and Reform Strategies.

### Medium Term Development Plan

The NDoH will work with the Department of National Planning and Monitoring to develop the five-year Medium Term Development Plan (MTDP) for health. The MTDP prioritises and sequences the implementation policies and activities of sectors and links resources to outputs.

### National Health Sector Development Plan

During the period of the current National Health Plan, two five-year National Health Sector Development Plans will be developed. These plans link to the MTDP and collate information from the Provincial Development Plans. They also include information that identifies strategic capital investment projects.

## National Health Standards

Under the previous *National Health Plan 2001–2010*, health service standards were directed by the Minimum Standards for District Health Services, and Hospital Standards and Standard Treatment Manuals for the curative health services. A single integrated and updated set of Minimum Standards will be developed for the period of this NHP. It will include standards for services, facilities, workforce, and others. Provinces, hospitals, and PHAs will use these standards set by NDoH when developing their plans.

## National Program Five-year Strategic Implementation Plans

Each program will develop its five-year strategic plan on the basis of the NHP. These provide guidance on program priorities, and up-to-date, proven, and cost effective interventions. The respective branches in the National Department of Health have the responsibility to provide high-level technical support to the provinces, as they develop and implement the provincial plans.

## Annual Activity Plans

Activity plans are made for each year, at the national level by and for the NDoH branches. These plans are directed by the NHP and the plans mentioned above.

The national government is also responsible for developing different policy instruments to enhance the implementation of the NHP. These will include changes in and introduction of new legislation and regulations and contracting.

## Provincial Level

### Provincial Development Plan

Provincial administrations develop five-year development plans to guide sectors. These are aligned to the MTDP and NHP priorities. The health sector uses this information in the development of five-year Provincial Health Sector Implementation Plans. During the course of this current NHP, two five-year health sector implementation plans will be completed.

### Provincial Five-year Health Sector Implementation Plan

Health service delivery in each province is guided by the five-year health sector implementation plan, which directs all health sector service providers. These medium-term plans will take their direction from the NHP and the specific National Program Five-year Strategic Implementation Plans, as well as the overall Provincial Development Plan.

According to their mandates, provinces must develop plans that are in line with the NHP and its priority strategies, as well as the specific objectives and strategies.

### Annual Activity Plans

Activity plans include activities that will be implemented by each management unit, the cost, timeframe, source of funds, and means of verification. Standard templates will be updated to reflect the evolving ‘whole-of-government’ concepts in the development of annual district and local level budgets and plans (see below).

The **Provincial Annual Activity Plan** is a yearly consolidated action plan and should be developed jointly with all service providers, public and private. The **District Annual Activity Plans**, again developed by all the service providers in the district, form the core of the Provincial Annual Activity Plan. Over the period of this National Health Plan, concerted efforts will be made to encourage and improve **Facility Level Planning**. Given the intention to roll out reforms to enable direct facility funding, each health facility should be able to plan and budget autonomously according to a defined resource envelope. Aggregation of Facility Level Plans will comprise the core of the District Annual Activity Plan.

### Provincial Health Authority

Planning by the PHAs in the provinces will be consistent with the planning framework. The standards, guides, and templates will be developed by the NDoH and will be used across the sector.

## Ongoing Integration of Health Sector Planning with Whole-of-Government Priorities

The challenge for any implementation process is to ensure that national priorities and strategies are adequately translated and incorporated into the annual operational plans of central and provincial governments. The role of the Joint Planning and Budget Priorities Committees at the provincial and district levels are crucial in promoting bottom-up planning. Each local level government plan is expected to reflect the needs and priorities of communities, while each provincial plan is expected to relate to local realities and national priorities. (This is illustrated in the ‘Kundu Approach’ described in Chapter 2.)

Similarly the implementation of health sector national priorities and strategies face this same challenge, and operate within the same system of both bottom-up and top-down planning. The key to ensuring synergy between health sector and whole-of-government

plans at each level of administration lies with the PLLSMA at the national level, and with the PCMCs at the provincial level. These coordinating mechanisms play a critical role in facilitating dialogue and advocacy across sectors, and will be increasingly used as part of the implementation structures for the new National Health Plan.

## Impacts of Whole-of-Government Reforms on Health Sector Implementation

The implementation of this Plan, and indeed all of the proposed plans detailed above, will take place in the context of significant ongoing ‘whole-of-government’ reforms. Of those that directly have an impact on the health sector, perhaps the most important are the recent changes to the system of intergovernmental financing<sup>5</sup>. Not only do these reforms ensure a more equitable transfer of resources from the national to provincial level, but they also help to clarify the service delivery responsibilities of each level of government.

Other reforms currently being pursued by the GoPNG are efforts to make decentralisation work. The health sector is still coming to grips with the dislocation wrought by the introduction of the Organic Law on Provincial and Local-level Governments (OLPGLLG, or the ‘new organic law’). *The National Health Administration Act 1997* was an early response to this dislocation, but a more practical solution to the disruption of vertical management of health services in the provinces was only embraced following the passing of the *Provincial Health Authorities Act 2007*.

The *Provincial Health Authorities Act 2007* made provision for Provincial Health Authorities to be established in each province. Management of hospitals and rural health services, and therefore all health workers in the province, could once again be managed under a unified authority. This system is being piloted at the time of developing this NHP. It is expected that an accelerated roll-out of this ground-breaking reform will commence as results of the pilot become clear.

<sup>5</sup> These reforms, largely directed by the National Economic and Fiscal Commission under the broad banner of ‘Reform of Intergovernmental Financing Arrangements’ (RIGFA), were brought into effect by the *Intergovernmental Relations (Functions and Funding) Act 2007*.

## Empowering Individuals and Communities

The extensive consultation process conducted to inform this Plan, coupled with the insights provided by analysis of the evidence presented in Volume 2, has revealed the need to strengthen the focus of health care provision in a manner that will ensure all Papua New Guineans are empowered to be involved in, and responsible for, their own health. This is reflected within Key Result Area 7 Promote Healthy Lifestyles. Achieving a prevention-focused approach to health in PNG will involve:

- Ensuring formal health services are brought closer to the community, particularly to those groups of people living in remote rural areas and those living in disadvantaged urban areas.
- Extending the reach of health promotion and awareness activities from health facilities to each community. The Community Health Post roll-out will incorporate a dedicated health worker to community engagement/awareness activities and will encourage and supervise the growth of informal health services within communities such as Village Health Volunteers, Village Health Committees, and safe practice of traditional medicine.
- Eliminating barriers to the access of health services caused by both geographic factors and economic factors. Protecting the rights of access for particularly vulnerable groups, such as women and girls, victims of domestic violence, and individuals wishing to seek services free of discrimination (for example, sexual and reproductive health services) is an imperative which will be upheld at all levels of implementation.
- Improving the access of each village and every household to safe water and sanitation.
- Ensuring health facilities at every level of the system are equipped to cater for the provision of high quality care for mothers and children. Rehabilitating facility infrastructure, water supplies and sanitation, and renewing basic clinical equipment and assets (for example, immunisation refrigerators) is a high priority of this Plan.
- Working with all sectors to improve the delivery of the full complement of services required at the community level for a better of standard of living.

Integrating the provision of health services with education services<sup>6</sup> is a part of the long-term vision for Community Health Post roll-out, and will need to be supported by reliable and accessible transport networks and commercial services, as outlined within GoPNG Vision 2050. Improving the whole spectrum of services available at the local level will contribute to both healthier lives for individuals and securing the long-term dedication of health workers to rural areas.

- Working more effectively with multiple players at the local level, including churches, NGOs and private organisations looking to provide health care to their employees and surrounding communities.

## Accountability and Performance Monitoring

To improve implementation of the NHP, information on performance is crucial. A Performance Assessment Framework has been developed and it will provide the different levels of government with a tool to measure performance and to hold the lower tiers accountable for the use of resources (see Chapter 8). The ways that effective or poor performance will be rewarded or discouraged is a management issue and should be planned for.

However, performance indicators alone do not give an appropriate picture of what is happening and what is not in implementation. At all levels, health managers need to keep themselves closely informed through specific information gathering, observations, and consultations, to find out the reasons for any deviations in implementation and to take action, either to improve the implementation or to revise the policy.

An important part of the NHP will be implemented by the private sector, namely the churches. Accountability on both sides, government and the churches, has room to improve. Making use of purchaser–provider relationship tools will bring change and enhance the NHP implementation.

As part of its responsibility to monitor the overall implementation of the NHP, the NDoH will establish a Project Implementation Coordination and Monitoring Unit to monitor the progress of capital investment priorities.

<sup>6</sup> Results of the PNG Demographic and Health Survey of 2006 show a strong correlation across a number of the health measures between more years of education and better health. The report shows that greater years of education for girls results in delayed commencement of child bearing and correlates with improved spacing between children. Mothers who have received more education are less likely to give birth at home. Higher education levels are also linked to greater knowledge of methods and sources of family planning, and with improved care of infants and children. With respect to health promotion, women who have attained higher education levels show greater use of mass media.



## Partnerships

The pursuit of a sector-wide approach (SWAp) for health, and the emergence of many of the building blocks of such of an approach, was a feature of health sector development over the past decade. In the coming decade, a realigned sector-wide approach will further consolidate the leadership role of the National Department of Health. In this context the National Health Plan states the common vision, strategies, and outcomes to guide all partners in their inputs to the sector.

The Medium Term Expenditure Framework will play an enhanced role in facilitating the coordination of sector financing, while the monitoring and evaluation framework outlines agreed outcomes and provides a basis for joint reviews and performance monitoring.

Improving service delivery in health will be difficult without also strengthening partnerships within and beyond the health sector. The long and successful partnership with the churches has potential to evolve in line with the new challenges faced by the sector.

Improved relationships with central agencies will be essential for the health sector to secure support in resource allocation and advocacy at the highest political level.

Health will be actively involved in broader GoPNG efforts to improve coordination of service delivery implementation. The Provincial and Local Level Services Monitoring Authority (PLLSMA) and Provincial Coordination and Monitoring Committees (PCMCs) provide ready-built interaction points for health sector stakeholders to align their activities with other service delivery agencies.

## Risk Management

Managing risks is the key to successful implementation of any plan. While this NHP has been developed to be achievable in the known environment of PNG, some assumptions made will be strongly challenged if the revenues expected from the LNG Project do not materialise. On the other hand, if infrastructure development funds are made available, then the capacity of the country's building industry to meet the demands of the economic boom will be tested and may have an impact on the Plan's objectives.

A critical success factor in achieving the Plan's outcomes is the focus on a back to basics/primary health care approach. A lack of available funds and/or a loss of this focus may result in a worsening situation for rural health services and health indicators in general.

It will be essential for the health sector to monitor these risks and reflect their impact in annual reporting.

## Roll-out of Strategic Implementation Planning

The national level policy-makers will develop planning guides and templates to enhance and encourage the implementation of the NHP. This will include management of uncertainty and risks and instituting mechanisms for consultations, monitoring, and fine-tuning the NHP.

Through these documents, the national level will be in close contact with the implementers and aiming to respond to the difficulties encountered and support the front-line health workers.

In addition, approved recommendations from the SWAp review will be incorporated into implementation of the Plan, to ensure the goal of 'one Plan, one budget' is achieved.







## Chapter 6

### Financing the Health Sector



#### Background

As the PNG health sector moved ahead with implementing a sector-wide approach (SWAp) in the early stages of the previous National Health Plan period, it was understood that a key building block would be a framework to manage sector expenditure and potential funding shortfalls. As the Medium Term Expenditure Framework (MTEF) has expanded and improved since its initial development early in the last decade, it has helped reveal more about the nature of how the health sector is financed in PNG. Most immediately, it is clear that in recent times, overall government-funded recurrent service expenditure has increased substantially.

Figure 21 reveals that, in particular, overall personnel expenditure — inclusive of church health services and provincial general hospitals — has increased by almost 60%. Overall, expenditure on operational costs for rural health services has doubled between 2007 and 2010, largely due to changes to the system of intergovernmental financing, which have seen a three-

fold increase in the value of health function grants over the corresponding period.

In fact, as Figure 22 shows, the actual levels of funding for rural health service operating costs now almost match the National Economic and Fiscal Commission estimates of what is required to cover the costs of a minimal level of service delivery<sup>7</sup>. Yet despite these welcome improvements, it is clear that this additional funding is not being adequately transformed into tangible improvements in health outcomes. One of the key lessons of the past decade is that more money by itself does not lead to improved service delivery.

While this Plan envisages that more money will ultimately be needed in the health sector to achieve the necessary improvements in the future, it recognises that far greater attention must be paid to ensuring more effective usage and allocation of our existing financial resources. The health sector will focus on putting its existing financial resources to better use over the next decade.

<sup>7</sup> Estimated Operational costs (Goods and Services, excluding medical supplies) — Rural Health Services. NEFC costs adjusted to 2010 prices.

Figure 21 Recurrent Expenditure — Rural and Hospital Services 2007–2010

Recurrent Expenditure 2007–2010 (K'million)	Expenditure		Appropriations	
	2007	2008	2009	2010
Personnel Expenditure (PGH, RHS)	225	258	315	355
Medical Supplies	59	75	80	93
<b>Operational costs:</b>				
General Hospitals	34	44	53	62
<b>Rural Health Services:</b>				
Church services	14	14	17	18
Central Health Grants (200)	13	15	28	39
HSIP	8	10	13	17
Internal Revenue (700)	6	6	6	6
Total Rural Health Services	40	45	65	80
Total Operational costs	74	88	118	143
<b>Total Recurrent Costs</b>	<b>358</b>	<b>421</b>	<b>513</b>	<b>591</b>

Figure 22 Goods and Services, excluding Medical Supplies — Rural Health Services (NEFC cost estimates)

Estimated Goods and Services Costs (K'million)			
<b>Facility operations and outreach:</b>		<b>Financed by:</b>	
Government facilities	18	Health Function Grants	39
CHS facilities	18	Internal revenue	6
Total facility costs	37	HSIP	17
Patients transfers	24	CHS operational grants	18
Medical supplies distribution	4		
Province/district administration	18		
<b>Total (excluding rural water supply)</b>	<b>83</b>	<b>Total RHS financing</b>	<b>80</b>

Reflecting this focus, the remainder of this section will consider:

- **Resource usage:** How our financial resources are spent.
- **Resource allocation:** Allocating our financial resources more effectively.
- **Resource mobilisation:** How to obtain additional financial resources to close possible gaps.

## Resource Usage

In recent times, the drive to increase funding of the resource envelope for the health sector has tended to overshadow the clear opportunities available for Papua New Guinea's health sector to improve within the existing financial situation.

As suggested above, it is arguable that the PNG health system should be functioning more effectively given that the MTEF shows public expenditure on health (including contributions from development partners) in 2010 is approximately K925m. This equates to public expenditure on health of around K140 per capita.

The suggestion that the total of funds available to the health sector is perhaps more adequate than previously thought seems to contradict the experience at the facility level, where front-line service staff report being impeded in their efforts by the lack of operational funds.

The reason for this inconsistency is that health sector funds are not being effectively used. Too many funds are ultimately not reaching their intended destination.

Findings from the Case Study of District Service Delivery confirm the problems of getting funds out to the facilities, and indicate that facilities to a fairly large extent charge user fees to compensate for the lack of funds and resources in the facilities. The study also pointed to a tendency of funds budgeted by provinces for increased program administration purposes and not front-line services. In addition, there are increasing indications that provinces cannot spend the increased amount of funds.

The National Economic and Fiscal Commission (NEFC) have attempted to quantify the extent to which actual resource usage does not match the intended purpose of health sector funding. Their analysis<sup>8</sup> shows that in 2007, provinces on average funded only 21% of the actual costs required in health, but on average spent 197% of the actual costs required for administration.

It is critical that funds reach the point of service delivery, which is the health facility level. Evidence from both the Case Study of District Service Delivery and the Rural Health Services Costing Model reveal that lack of operating funds and medical supplies at the facility level have been key inhibitors of improved service delivery<sup>9</sup>. Because health staff compensate for their lack of resources by charging user fees, equitable access to health services is compromised.

To ensure health sector funding reaches the service delivery front-line, the National Department of Health will implement direct facility funding. Districts and provinces will maintain oversight and management responsibilities, and retain their ability to direct funding allocation, but once allocated funding will be channelled directly to facility accounts. This will empower facility staff to manage their own budgets.

The National Department of Health, on behalf of the health sector, will also engage with central agencies to rectify the slow movement of funds through the government's financial management system.

In addition, it will work to improve its own financial management systems and increase accountability for the health sector's use of its resources.

## Resource Allocation

In addition to effective usage of financial resources, it is vital that these same financial resources are allocated — that is, distributed — across the sector efficiently, and in a manner that will generate the best possible outcome.

In recent times, coinciding with improvement of the MTEF, and the contribution of various studies, a holistic, whole-of-government, sector-wide perspective has become clearer. This perspective is an essential prerequisite to achieving improved resource allocation. The development of a single Health Sector Funding Plan and Strategy (KRA 3.1.3) will facilitate improved sector-wide finance decision-making.

Figure 23 demonstrates the need to consider resource allocation decisions from a sectoral perspective. It reveals that health sector financial resources, represented by staff, facilities, and operating costs, are not distributed equitably across the country.

Those groups of provinces that have relatively poor service indicators are not as well-resourced, in per capita terms, as those with relatively better service indicators. For example, there is on average almost twice as many service staff per 10,000 people in the least well-served group of provinces than in the relatively well-served group.

Similar discrepancies exist in terms of the operating costs available to health workers in different provinces, and with the number of facilities per population. To achieve a more equitable distribution of health sector resources, a gradual relative shift to strengthen service capacity resources to the less well-served provinces is required.

One of the current difficulties to implementing allocation changes is the sheer number of players, who individually decide how to allocate their share of the total health sector financial envelope. This often means that allocation decisions for different components of the health system are made in isolation from the broader financial implications. The collective efforts of all health sector players are needed to ensure financial resources are allocated where they are most needed.

<sup>8</sup> See NEFC (2008), *Closing the Gap: Review of All Expenditure in 2007 by Provincial Governments*.

<sup>9</sup> Rural Health Services Costing Model.

**Figure 23 Distribution of Health Services and Resources Per Capita by Provinces**

Provinces ranked by service indicators per capita					Service staff per 10,000	Facilities per 10,000	Operating costs	
Province	Population	Disch.	OP	Deliv.			NEFC per cap	Funds per cap
Eastern Highlands	515,307							
Southern Highlands	759,183							
Morobe	672,755	2.9%	0.97	0.24	8.7	0.8	8.46	7.80
Simbu	299,543							
Western Highlands	536,128							
North Solomon	200,278							
Central/NCD	557,966	4.2%	1.16	0.43	13.0	0.9	9.53	8.21
Enga	370,844							
Northern	164,675							
East Sepik	408,447							
Madang	451,834							
West Sepik	224,546	4.1%	1.79	0.34	13.0	1.2	18.35	19.27
Manus	53,276							
Milne Bay	256,366							
Gulf	131,264							
East New Britain	268,211							
West New Britain	242,963	5.6%	2.11	0.54	17.1	1.4	20.80	17.52
Western	198,775							
New Ireland	148,761							
<b>Total</b>	<b>6,461,122</b>	<b>3.9%</b>	<b>1.38</b>	<b>0.37</b>	<b>12.1</b>	<b>1.02</b>	<b>12.79</b>	<b>11.88</b>

To assist in improving health sector resource allocation, evidence and information for policy-making will be improved. The Medium Term Expenditure Framework (MTEF) currently helps to demonstrate to policymakers the total pool of funds available to the health sector, and the estimated requirements. Use of the MTEF will be enhanced, and its links to policy-making and financial allocation decisions strengthened.

Improving our understanding of health sector costs is another way to improve evidence and information to help policymakers make better decisions about how to allocate financial resources.

The recently developed Rural Health Services Costing Model provides insight to decision makers about the opportunity costs of different financial allocation choices.

The resources required to obtain one outcome can then be compared with those required to achieve another. Every choice to spend money for one purpose means there is less available for a different purpose.

The Model will be improved as more information comes to hand, and is integrated into the MTEF.

## Resource Mobilisation

Expenditure on health in Papua New Guinea remains overwhelmingly publicly-funded, and is likely to remain so. In 2010, the entire publicly-funded resource envelope available to health, as calculated by the MTEF, is approximately K925 million. Of this, a little more than 30% is provided by development partners. Reliance on development partner expenditure on public health will reduce from its current proportion. However, because of the focus on resource usage and allocation, the health sector will be better placed to ensure the contributions of these valued partners will be spent accountably and more effectively.

The dramatic increase in population expected over the life of this Plan will demand a significant increase in resources. The health sector must continually make the case through advocacy, and via tangible results,

that investment in health by the Government of PNG is a worthwhile and fruitful investment. A healthy populace is a prerequisite to achieving the aspirations contained within Vision 2050.

The health sector will also improve its relationship with private-sector partners, particularly with those resource and agribusiness companies that are providing health care to their employees and their families. Partnerships such as these will be leveraged to take the pressure off public expenditure on health, and to foster innovative service delivery models. The sector will also consider investing in public–private partnerships to deliver large-scale infrastructure programs, in line with Government of Papua New Guinea policy. At the same time, development of public–private alliances will be pursued, and those critical existing relationships — especially with Church Health Services — will be strengthened. Opportunities for mobilising resources for health from existing avenues will also be pursued. In particular, more efforts will be made to ensure that District Service Improvement Funds are spent on health.

### Alternative Health Care Financing

The Government of PNG is the major financier as well as provider of health services in PNG. The churches also contribute about 50% of health service delivery in rural areas. However, it must be noted that church health services in PNG are mainly supported by the GoPNG with annual grants for both operational and staffing grants.

Currently the government, through general taxation, finances health services in PNG. However, this source of funding for health is declining not only in real terms, but has also declined as a proportion of total government expenditure over the last three decades. The current high population growth rate of 2.7% per annum has placed undue demands on existing health resources, in particular health financing.

The government is therefore looking at alternatives for health care financing in PNG.

One of these options is health insurance. Currently health insurance in PNG is private and voluntary, and the market size for it is small. However, the demand for private health care is increasing and this has created the need or potential for using health insurance as an option for health care financing. This has been documented in several studies on health insurance that were conducted in PNG.

Funding from health insurance to pay for the health care of the formal sector employees will ease the burden of the government in meeting the health care needs of the population of PNG. In essence this will mean that the government's scarce resources for health can be used to pay for health care for the rural majority of the population and the urban disadvantaged. It will allow those who have the ability to pay for their health care to do this through a viable health insurance scheme that will eventually be adopted by the PNG Government.

Health insurance can be supported through a policy framework, as well as through supporting legislation. The government is serious about the policy aspects of harnessing health insurance as a health care financing option. In 2005, NEC through its Decision No: 282/2005 and Meeting No: 57/2005 approved the policy as part of the revenue budget initiative. The NEC decision was expected to be implemented jointly by the Department of Labour and Industrial Relations and the Department of Health. The NEC Decision called for the implementation of a proposed compulsory employer-sponsored national health insurance scheme.

A Task Force was set up to oversee the implementation of this NEC Decision, assisted by a private consultant. However, the implementation was not realised at that time. There is currently strong political support and commitment for this outstanding NEC Decision to be re-activated.









## Chapter 7

### Cost of the Plan



This section provides background to the costing of the Plan. It is an aggregate estimate of the health sector spending requirements for the next ten years.

#### Approach

The approach to the costing has been to:

- Capture the current cost of the PNG health system based on the Medium Term Expenditure Framework (i.e. what does the health sector cost now?).
- Estimate the likely cost of the interventions proposed in the Plan.
- Project the potential availability of funds — Government and Development Partners — for the health sector over the period.

Costing was done by service level, and looking at the cost of delivering a package of services to a given population in an integrated manner, as opposed to costing out individual programs. Thus costs were estimated for the major capacity inputs required to enable health facilities to provide services to a given population, including the inputs of health service staff, medical supplies, operational funds, and infrastructure in terms of buildings and equipment.

Individual program interventions are covered as they form part of the package of services. Apart from general outpatients, inpatients, and maternity services, which are the main service capacity drivers, using more than 70% of facility capacity, the costs of immunisations, TB, HIV/AIDS, safe motherhood, child health, and malaria interventions have been specifically captured in terms of their supplies/commodity requirements.

Three key sources of evidence to ensure the robustness of the NHP costing have been the Rural Health Costing Model (developed in partnership with Monash University and the Asian Development Bank), the Medium Term Expenditure Framework for the Health Sector, and the National Economic and Fiscal Commission (NEFC) cost of services study.

With the help of these, a picture of a base year (2010) was developed from which to add projected costs of additional activities contained in the Plan, and thereby the additional costs required to fund the NHP. Data on current and past services, the number of units and staff for the different levels was obtained from the National Health Information System.

Figure 24 Costing of the National Health Plan 2011–2020 by Capacity Inputs and Levels

Capacity Inputs and Service Levels (K'million)	2010	2011–2015		2016–2020		2011–2020	
	Base year	Total	Per year	Total	Per year	Total	Per year
<b>Personnel</b>							
Rural Health Services	150	865	173	1,050	210	1,916	192
General Hospitals	172	863	173	950	190	1,813	181
Pre-Service Training	16	91	18	109	22	200	20
Central	33	167	33	169	34	336	34
<b>Total</b>	<b>371</b>	<b>1,986</b>	<b>397</b>	<b>2,279</b>	<b>456</b>	<b>4,265</b>	<b>426</b>
<b>Medical Supplies</b>							
Rural Health Services	82	530	106	689	138	1,218	122
General Hospitals	47	261	52	305	61	567	57
Population Supplies (LLINs, condoms)	20	93	19	96	19	188	19
<b>Total</b>	<b>149</b>	<b>884</b>	<b>177</b>	<b>1,090</b>	<b>218</b>	<b>1,973</b>	<b>197</b>
<b>Operating Costs</b>							
Rural Health Services	80	559	112	699	140	1,258	126
General Hospitals	62	437	87	760	152	1,197	120
Pre-Service Training	1	6	1	7	1	13	1
Central	239	1,047	209	1,044	209	2,091	209
<b>Total</b>	<b>382</b>	<b>2,049</b>	<b>410</b>	<b>2,509</b>	<b>502</b>	<b>4,559</b>	<b>456</b>
<b>Capital</b>							
Rural Health Services		390	78	64	13	454	45
Rural Water Supply	22	108	22	108	22	215	22
General Hospitals	1	1,249	250	1,376	275	2,625	262
Pre-Service Training							
Central		32	6	48	10	79	8
<b>Total</b>	<b>22</b>	<b>1,778</b>	<b>356</b>	<b>1,595</b>	<b>319</b>	<b>3,374</b>	<b>337</b>
<b>Total expenditure requirements</b>	<b>925</b>	<b>6,697</b>	<b>1,339</b>	<b>7,473</b>	<b>1,495</b>	<b>14,170</b>	<b>1,417</b>
<b>Funding</b>							
GoPNG Appropriations	631	3,156	631	3,156	631	6,313	631
Development Partner Funding	294	1,468	294	1,468	294	2,936	294
<b>Total Funding Available</b>	<b>925</b>	<b>4,624</b>	<b>925</b>	<b>4,624</b>	<b>925</b>	<b>9,249</b>	<b>925</b>
<b>Funding Shortfall</b>		<b>2,073</b>	<b>415</b>	<b>2,849</b>	<b>570</b>	<b>4,921</b>	<b>492</b>

## Main Capacity Inputs and Service Levels

The costing was organised on the basis of the following main capacity inputs.

### Recurrent Costs:

- Personnel
- Medical supplies
- Operating costs (operation and maintenance).

### Capital Costs:

- Buildings
- Medical and general equipment (including transport)
- Long-term training (HR development plan not yet available).

The service levels were also used to organise the data:

- Rural health services
- Provincial general and national referral hospitals
- Central level, including pre-service training, central program support (M&E, IEC, research, administrative services/overheads), including specialised support services such as the CPHL/laboratory network.

Of the total funds available — in particular from Development Partners — K206m has not been possible to capture in the costing (see Figure 25 for a breakdown). This amount is part of the K239m that appears as Central level operating costs<sup>10</sup> and represents various specific program support and overhead costs, and discrete project funding, including ongoing capital projects. These currently available funds are thus reflected as cost requirements, assuming these costs are required in the Plan period, although in a cost neutral manner, as they have not been part of the deliberate costing of requirements.

## Main Cost Intervention Areas

The NHP costing reflects three main cost intervention areas (in order of priority):

- Rural health services improvement
- Strategic hospital improvement
- Other hospital improvement.

**Figure 25 Program Support**

Program Support (K'million)	2010
Global Funds for Malaria, HIV/Aid, TB <sup>11</sup>	54
AusAID <sup>12</sup>	95
NZAID <sup>13</sup>	14
UN agencies (UNICEF, WHO, UNFPA)	26
ADB	12
GoPNG Development budget (Torres Strait health issues)	5
<b>Total non-costed program support</b>	<b>206</b>

<sup>10</sup> The remaining central level operating costs are represented by the NDoH G&S, excluding medical supplies 240 appropriations in 2010.

<sup>11</sup> Global Funds: Staff employment, training, M&E, TA, various administrative overheads, excluding medical supplies.

<sup>12</sup> AusAID: Non-medical supplies, Malaria and AIDS support, WHO, Clinton Fund, STI clinics, medical school, IMR, TA, excluding pooled funds.

<sup>13</sup> NZAID: including various NGO support, excluding pooled funds.

Figure 26 Costing of the National Health Plan 2011–2020 by Main Cost Intervention Areas

Cost Intervention Areas (K'million)		2011–2015		2016–2020		2011–2020	
		Total	Per year	Total	Per year	Total	Per year
Public expenditure in the health sector in 2010	Recurrent	4,512	902	4,512	902	9,024	902
	Capital	112	22	112	22	225	22
	Total	4,624	925	4,624	925	9,249	925
<b>Additional costs</b>							
Rural health services improvement	Recurrent	297	59	921	184	1,218	122
	Capital	385	77	60	12	445	44
	Total	683	137	980	196	1,663	166
Strategic hospital improvement	Recurrent	34	7	257	51	292	29
	Capital	863	173	41	8	904	90
	Total	897	179	298	60	1,195	120
2nd phase PGH; PMGH; ICT	Recurrent	75	15	188	38	263	26
	Capital	418	84	1,383	277	1,801	180
	Total	493	99	1,570	314	2,063	206
<b>Total Health Expenditure</b>	<b>Recurrent</b>	<b>4,919</b>	<b>984</b>	<b>5,877</b>	<b>1,175</b>	<b>10,797</b>	<b>1,080</b>
	<b>Capital</b>	<b>1,778</b>	<b>356</b>	<b>1,595</b>	<b>319</b>	<b>3,374</b>	<b>337</b>
	<b>Total</b>	<b>6,697</b>	<b>1,339</b>	<b>7,473</b>	<b>1,495</b>	<b>14,170</b>	<b>1,417</b>

### Rural Health Services

Costs are linked with actual service outputs and the required resources calculated to deliver targeted levels of service provision to the population, with an annual growth of 2.7% built into the cost projections. Costs are estimated for running rural health services with appropriately resourced health facilities (operating at minimum standards) if a package of improved service targets was being delivered.

The RHS cost study indicated wide variations in staff productivity, and suggested there is in most areas capacity for increased service delivery using present staffing levels, although increases in staffing levels will be required to provide for an increasing population in the future. The study also showed significant deficits in spending on infrastructure and equipment, and medical supplies.

Service delivery would also be improved immensely with further operational funding available at health centre level, particularly to cover transport and other costs, which can be used to improve the low level of outreach services currently being undertaken by health centres.

The additional cost requirements for **rural health services improvement** builds on the following interventions:

- Adequate medical supplies in the facilities.
- Adequate operational funding reaching facilities for operations and outreach.
- Better use and distribution of health staff.
- Rural Health Services building upgrades and rehabilitation and equipment replaced to minimum standards.
- Improvements to Central Public Health Laboratory (CPHL) and rural laboratory network.
- Community Health Posts trial in five provinces.

The cost estimates take into consideration that overall increases in services per population as a result of these interventions are expected to reach 2004 levels by 2015, or increase of general service volumes compared with current service provision by up to 40%<sup>14</sup>.

## Hospital Sector

It is expected that better performing and resourced rural and district health services, able to achieve better outcomes in preventive services and early intervention, will lead to reduced overall load on the hospital sector.

Analysis of lengths of stay overall, as well as for similar clinical groups, shows a considerable variation between hospitals, ranging generally from 6 days up to 16 days per admitted patient. This indicates that there is in most areas sufficient available capacity for increased service delivery, using present staffing levels. In addition, reducing the burden of just three significant infectious diseases (malaria, pneumonia, and tuberculosis) can be expected to significantly reduce hospital admissions, and in turn hospital bed days.

Additional cost requirements for **strategic hospital improvement** include:

- Enhancement of four hospitals to strengthen regional services (Health Vision 2050 initiative, including Mount Hagen, Angau, and Nonga), and increase in their recurrent resources by 20%.
- Resources for Master Planning for Port Moresby.
- Resources for emergency minor works in all provincial hospitals.
- Redevelopment (capital works program) for Angau, Kerema, Goroka, and Nonga provincial general hospitals.

Additional cost requirements for second phase improvement of provincial general hospitals and Port Moresby based development includes:

- Enhancement of two district hospitals to provincial hospital standards (for Jiwaka and Hela).
- Redevelopment (capital works programs) for Boram, Kavieng, Popondetta, Wabag, and Daru provincial general hospitals; and construction of a new Central provincial general hospital.

- Port Moresby General Hospital redevelopment.
- Pacific Medical Centre.
- ICT development.

During the process of costing the NHP, certain key messages have impressed themselves repeatedly:

- Significant improvements in the health sector can be made without necessarily needing more money.
- Efficiency gains can readily be achieved in both rural health services and hospital services.
- The health sector should be achieving better outcomes with existing levels of staff.
- Drugs and supplies are a key blockage to service improvement.
- The availability of operational funding at the facility level is a key blockage to service improvement.

The following diagram shows the funding gaps between projected estimates of funding availability and the major cost intervention areas. The major cost interventions are arranged in an accumulative way, such that strategic hospital improvement includes rural health services improvement.

The current (2010) health share of the overall GoPNG recurrent budget is about 16%. Provided the health share of the overall GoPNG recurrent budget remains constant at 16% over the NHP period, then about half of the additional costs required for rural health services improvement can be covered<sup>15</sup>, and this will need to increase to 18% to cover the additional rural health services improvement costs fully (assuming DP funding remains at current levels).

Funding of all cost interventions, i.e. total health expenditure over the NHP period of K14.1 billion, will require 27% of overall GoPNG recurrent budget be allocated to health (again assuming DP funding remains at current levels).

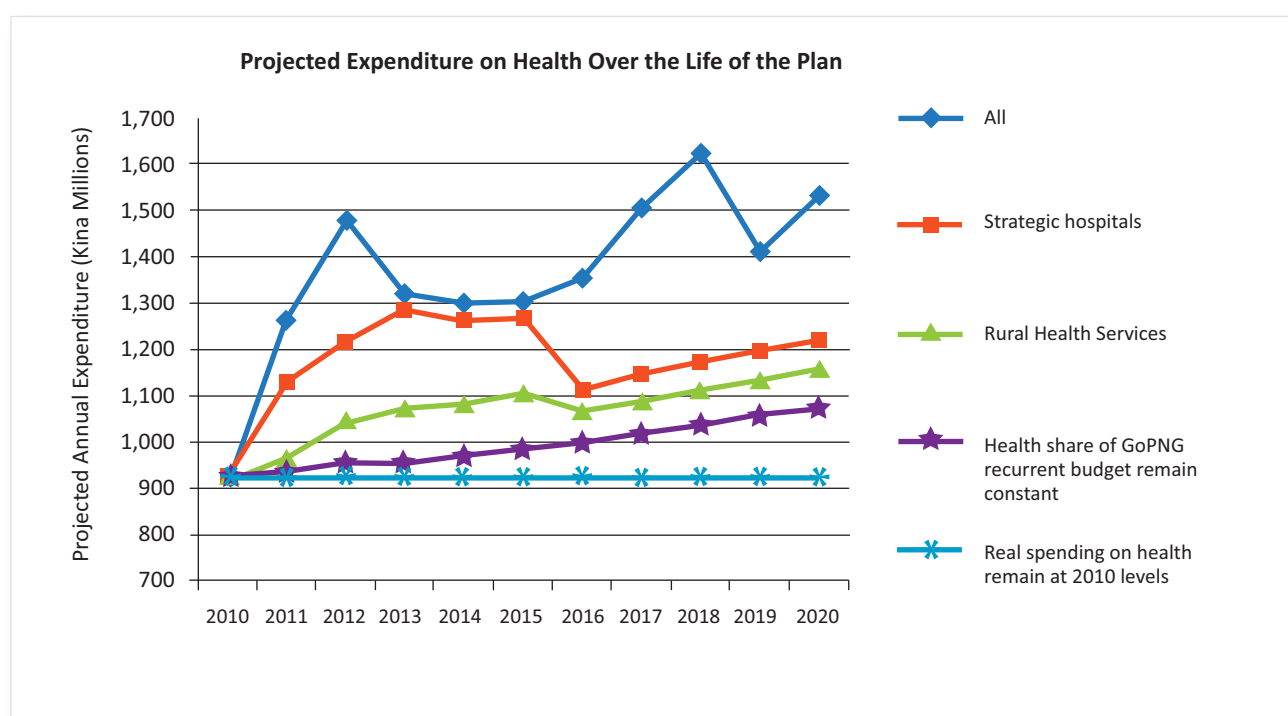
<sup>14</sup> Represented by outpatient services: current (2008) outpatients per capita is 1.37 (total 8.9m) against 1.54 in 2004 (total 8.9m). With a general annual population growth of 2.7%, 1.54 outpatients per capita will translate into more than 12m outpatient services provided in 2015.

<sup>15</sup> Refer to projections from Treasury budget outlook for 2010.

Figure 27 Current Funding (including Government and Development Partners)

PNG Appropriations (K'million)		2010
Recurrent expenditure		619
Capital/Development		12
Total PNG Appropriations		631
Development Partners (K'million)		2010
Development Partners		207
Global funds (HIV/Aids, TB, Malaria)		87
Total Development Partners		294
<b>Total Funds available (K'million)</b>		<b>925</b>

Figure 28 Projected Expenditure on Health over the Life of the Plan





## Chapter 8

### Performance Monitoring Framework



The performance monitoring framework for the National Health Plan will provide a guide to measuring progress towards the agreed targets. It sets out what will be measured and when it will be measured.

#### Why Monitor and Measure Health Sector Performance?

Planning is about achieving results. From the community, right through to the highest levels of the health sector, all want to see improvements in performance and realisation of the goals and objectives of the Plan.

The purpose of monitoring is to improve the performance of the health sector. It is a part of the management process, and focuses implementation with the overall goals and objectives in mind. There are several reasons for measuring health sector and system performance, including to:

- Develop policies, strategies, and plans.
- Evaluate specific interventions (for example, the impact of IMCI).
- Generate knowledge and comparisons (for example, between districts and provinces, and international reporting).

#### How Do We Measure Performance?

Each Key Result Area has objectives, in addition to the global aim of achieving better health for PNG. Indicators have been selected that provide for regular review of whether these objectives are likely to be achieved. These indicators are brought together into a Performance Assessment Framework (PAF), which will inform the development of the Performance Monitoring Plan.

The PAF provides the key guide to measuring progress towards the agreed targets, including what will be measured and when it will be measured. The PAF includes a limited number of indicators that provide an overall assessment of services. These indicators measured on an annual basis are relevant to NDoH Provincial and District Health Offices, and examine approaches that are under the direct control of the sector. Each program and province will have more detailed indicators to explore implementation at a deeper level.

## Who Receives the Performance Monitoring?

Most importantly, performance monitoring provides information to managers at each level of the health system. There are also reporting obligations.

The *National Health Administration Act 1997* states that monitoring is the responsibility of the National and Provincial Health Boards and District Health Committees. The National Health Board is required to report to the Minister for Health. The Minister reports annually to Parliament. The sector is also required by central agencies to report on progress towards the internationally agreed Millennium Development Goals, and the Papua New Guinea Development Strategic Plan 2010–2030. The Health Sector Improvement Program (HSIP) requires that progress towards agreed goals and targets is documented on a regular basis with development partners.

The Performance Assessment Framework is a single instrument that provides the necessary reporting on the National Health Plan, and also meets these broader reporting requirements.

## How Will It Operate?

There are three sources of data available to measure inputs and results:

- Facility and service data, most commonly collected through the National Health Information System (NHIS), and providing information about activity and morbidity.
- Administrative and management records and reports, which provide information about inputs into the sector (for example, financial and human resources, and supervision).
- Household surveys, which provide information about coverage, determinants of health, and mortality. The DHS and other routine community surveys serve this need.

These sources collectively provide information on the performance and improvements in health service delivery, and also provide information on why certain areas may not be improving. By simultaneously considering information on expenditures and performance of service delivery, management will be able to respond to performance shortcomings.

The quality of data will accurately depict performance achievements, and also instil confidence in the ability to monitor performance.

Data collection systems will be supported through adequate training and supervision, independent assessment of data quality, and the capacity of systems to provide disaggregated and resourceful information. Appropriate data governance systems are to be established to ensure data quality.

The health information system will be further integrated into existing provincial accountability mechanisms, facilitated through the Department of Provincial and Local Government Affairs (DPLGA), through the Provincial and Local Level Services Monitoring Authority (PLLSMA). This will be primarily achieved by incorporating the PAF indicators into the Section 119 reporting for the health sector. This is expected to further enable the health sector to engage provincial administrations to better understand and appreciate health sector performance issues. Provincial Administrators will have the opportunity to respond to health issues from an informed basis.

The success of the performance assessment will come from its ability to lead to strengthened capacity to achieve results. Regular performance analysis is critical for achieving this. Therefore, it is expected that quarterly reviews examining detailed performance data will be undertaken within provinces and at a national program level. On an annual basis a report against the indicators of the PAF will be published, providing a sector-wide snapshot of national and provincial progress toward goals and targets. The report will provide performance information by province, and will facilitate further discussion on how to adapt planning to meet needs where effectiveness is reduced.

This Plan is also proposing to establish a National Public Health Institute that will, when operational, provide further objective monitoring of the health sector and promote dialogue on emerging health challenges.

## What Will Be Measured?

The PAF defines a set of indicators across each Key Result Area. There are several higher level indicators that provide measures of longer-term gains. The indicators listed below are supported by detailed description of measurements, data sources, and responsibility. A full list of annual indicators can be found in Annex 2. It is expected that these will be refined and be agreed prior to the first reporting period in 2012, and then incorporated into the Performance Monitoring Plan.



**Figure 29 Impact Indicators**

Indicators	Frequency
Maternal Mortality Ratio	5 years
Childhood mortality: <ul style="list-style-type: none"> <li>• Neonatal Mortality Rate</li> <li>• Infant Mortality Rate</li> <li>• Under-5 years Mortality Rate</li> </ul>	5 years
Proportion of population with access to improved water source and sanitation facility	2 years
Contraceptive Prevalence Rate	5 years

**Figure 30 Review Schedule**

Review Type	Frequency
Health Sector Reviews	Annual
Mid-term Review	2016
Final Review (including lessons learned)	2019
Formulation of next ten-year NHP	Starting 2019

Provincial level indicators will be developed in line with national targets, following the launch of the Plan. These will be considered for incorporation into provincial Section 119 reporting.

### When Will It Be Measured?

The broad accountability framework for health services delivery in PNG will be based on one health strategy — the National Health Plan — and its validation process. Partners in health will participate in the development, review, approval, and use of the PAF. To this effect, all partners to the sector will participate in joint annual performance reviews, mid-term reviews, and evaluations of the National Health Plan. Evaluation of the National Health Plan will be undertaken at times deemed suitable and in response to the annual reports of the PAF.

To the extent possible, the use of additional or separate performance reviews and indicators will be phased out. Information on program progress will be gained through an independent joint periodic review that meets the needs of government and development partners, assessing the information gleaned through the PAF, and probing deeper into the achievements and problems faced by front-line management and service delivery staff.







## Annexes

1. Development and Consultation Process for the Plan
2. Annual Reporting Indicators
3. Lists



# Annex 1

## Development and Consultation Process for the Plan

The development of the *National Health Plan 2011–2020* was different to previous plans. This is because the Senior Executive Management (SEM) and National Health Plan Secretariat put in place a communication strategy and provided wider consultations to our stakeholders, partners, and implementers during the process of developing the NHP. The consultation process was coordinated and managed by NHP Secretariat in the Strategic Policy Division.

### Stakeholders and Partners in Consultation

### Representatives

#### Minister for Health and HIV/AIDS:

- NEC endorsed the development of the NHP 2011–2020
- Minister briefed at every stage of development.

#### Service delivery to the rural majority and the urban disadvantaged



**PRIMARY HEALTH CARE  
POLITICAL COMMITMENT AND SUPPORT**



Secretary for Health and Milne Bay nurses at the southern region NHP consultation workshop, Alotau.

#### National Health Plan Committees:

- Technical Advisory Group (TAG)
- Steering Committee (SC)
- National Health Plan Secretariat.

**WE CARRY OUT THE DIRECTIONS FROM SEM**



National Health Plan Secretariat

**Stakeholders and Partners in Consultation** **Representatives**

**Senior Executive Management (SEM):**

- Conducted briefing and consultation meetings
- Provided guidance and directions during different stages of developing the NHP.



**SETTING POLICY AND STANDARDS AND PROVIDING DIRECTIONS IS OUR BUSINESS**



SEM members at Madang Consultation Workshop

**Steering Committee and Technical Advisory Group:**

- Provided direction, technical advice, and feedback on the different stages of the development and finalisation of the National Health Plan.

**PROVIDING GUIDANCE IS OUR RESPONSIBILITY**



TAG and SC committee members

**National Health Conference, June 2009:**

- The National Health Conference in Goroka debated thematic papers on a priority framework and feedback was received, which has formed the basis for the priorities of the *National Health Plan 2011–2020*.



National Health Conference participants, Goroka

## Stakeholders and Partners in Consultation

## Representatives

### National Department of Health Workshops 1, 2 & 3:

- Brainstorming and program and performance review feedback.
- Development of Thematic Framework for June 2009 National Health Conference.
- Provided feedback on the first working draft of NHP.

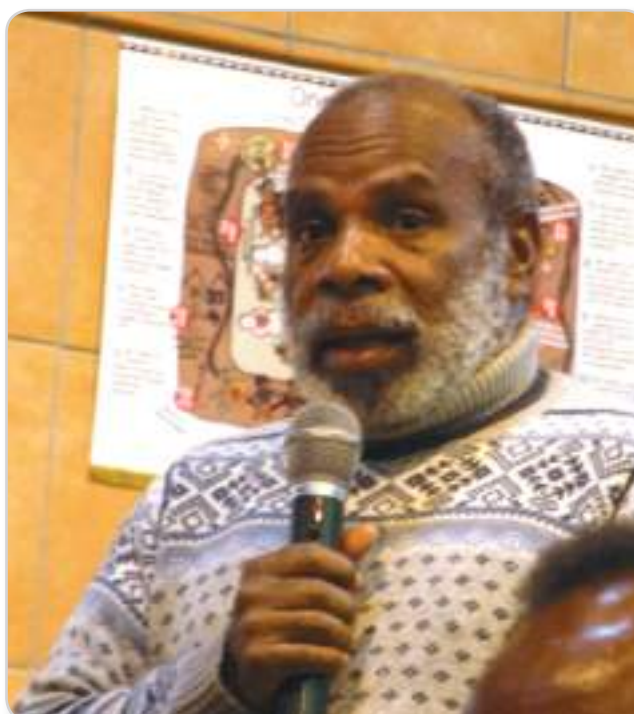
**MONITORING IMPLEMENTATION OF POLICY AND STANDARDS IS OUR BUSINESS.**

### Central Agencies:

- DPLG, DNPM, Treasury, PM Department, DPM, Education, Community Development, PLLSMA were all consulted.



**HEALTH CANNOT DO IT ALONE,  
WE NEED YOUR SUPPORT**



### Provinces, Hospitals and Districts:

- Four Provincial and Regional Consultation Workshops conducted.
- One national consultation and reviewed and provided feedback on the first working draft of the NHP.
- Provinces, Hospitals, and Districts provided feedback during the different stages of the development of the NHP.

**IMPLEMENTATION AND REPORTING IS OUR  
BUSINESS**



PHA, Hospital CEO, PA, DA, DHM

**Stakeholders and Partners in Consultation** **Representatives**

**Churches and Non-Government Organisations:**

- Participated at the Regional Workshops and National Workshop and provided feedback on the first working draft.
- They are our **major partners** in providing health services to the **rural majority** and their contribution and feedback during different stages was very important in framing the NHP for the people of PNG.

**TOGETHER WE WILL MAKE A DIFFERENCE**



Church Health Secretaries, Pathfinder International, Family Health Association

**Training Institutions:**

- Universities, Nursing colleges and Community Health Worker Training Schools, Deans and Principals were consulted and feedback received at every stage of developing the NHP.

**WE WILL PRODUCE WORKFORCE REQUIREMENTS**



Health workers participating in NHP Workshop Alotau, MBP

**Development and Donor Partners:**



**WE NEED YOUR SUPPORT**



**Stakeholders and Partners in Consultation**

**Representatives**

**District Consultation Workshop:**

- A two-day workshop was conducted for District Administrators, District Health Managers, and Provincial Health Advisers to communicate and provide feedback on the NHP.



**IMPLEMENTING NATIONAL AND PROVINCIAL POLICIES, STANDARDS, AND GUIDELINES IS OUR BUSINESS**



District Administrators, District Health Managers

**Public Awareness and Radio Talkback:**

- Radio Talkback by the Secretary and SEM
- Opinion box distributed to province Radio Spot in NBC and Wantok Radio



**HEALTH COMMUNICATION IS OUR BUSINESS**



Radio talkback show at NBC



**Stakeholders and Partners in Consultation**      **Representatives**

**Wider Consultation:**

The Department of Health undertook wider consultation with health professionals, the general public, and our stakeholders.

Thank you all for your participation in this very important initiative.



**SECURING A HEALTHY FUTURE FOR THE PEOPLE OF PAPUA NEW GUINEA IS OUR BUSINESS**

**All of us are the implementers of the *National Health Plan 2011–2020*.**



NCD and Central Participants

## Annex 2

### Annual Reporting Indicators

It is important to note that these will be refined further as part of the development of the Performance Monitoring Plan.

Indicator Number	Key Result Area	Program	Indicator
1a	Service Delivery	<i>Access to services</i>	Proportion of rural outreach clinics per population under 5 years.
1b			Proportion of aid posts that are open.
1c			Proportion of districts with Community Health Posts (after their development).
2		<i>Facility supervision and support</i>	Proportion of health centres that have received at least one supervisory support visit from District and/or Provincial management staff during the year.
3		<i>Curative services</i>	Proportion of general hospitals (PMGH and the provincial hospitals) that have at least three of the five key specialties.
4		<i>Service infrastructure</i>	Proportion of health centres/hospitals with functioning radio/telephone.
5a	Partnerships and coordination	<i>Service agreements</i>	Proportion of provinces that have established service level agreements with church and non-government organisations.
5b			Number of national service level agreements with church and non-government organisations.
6	Health systems and governance	<i>Provincial financing</i>	General expenditure (health functional grants and HSIP) at district/facility level as a percentage of total provincial expenditure on health.
7a		<i>Health workforce</i>	Density of paediatric-trained nurses (per 10,000 of population).
7b			Density of midwives (per 10,000 of population).
7c			Total number of paediatricians in clinical and public health settings.
7d			Total number of obstetricians in clinical and public health settings.
8		<i>Medical supplies</i>	Percentage of months that facilities have all key medical supplies.
9a	Child health	<i>Immunisation coverage</i>	Proportion of 1-year-old children immunised against measles.
9b			Proportion of 1-year-old children vaccinated with three doses DTP-HepB-Hib pentavalent vaccine.
10		<i>Nutrition</i>	Prevalence of underweight children under 5 years of age.
11a		<i>Case fatality</i>	Case fatality rate for pneumonia in children under 5 years in hospitals.
11b			Case fatality rate for pneumonia in children under 5 years in health centres.
12		<i>Neonatal health</i>	Proportion of neonates that are classified as having low birth weight.

<b>13</b>	Maternal Health	<i>Safe motherhood</i>	Proportion of pregnant women who receive any antenatal care.
<b>14</b>			Proportion of births attended by skilled health personnel.
<b>15</b>			Referral rate for emergency obstetric support.
<b>16a</b>		<i>Family planning</i>	Couple years of protection.
<b>16b</b>			Contraceptive acceptor rate.
<b>17a</b>	Disease Control	<i>Malaria prevention and treatment</i>	Number of reported cases of malaria.
<b>17b</b>			Proportion of children under 5 years sleeping under insecticide-treated bed nets.

# Annex 3

## Lists

### Abbreviations

AAP	Annual Activity Plan
AP	Aid Post
ARV	Antiretroviral
CHP	Community Health Post
CHW	Community Health Worker
CMH	Commission on Macroeconomics and Health
CPHL	Central Public Health Laboratory
DHS	Demographic and Health Survey 2006
DNPM	Department of National Planning and Monitoring
DSIP	District Service Improvement Program
DTPw-HB/Hib	Diphtheria-Tetanus-whole cell Pertussis-Hepatitis B/Haemophilus Influenza Type B
EOC	Emergency Obstetric Care
GDP	Gross Domestic Product
GoPNG	Government of Papua New Guinea
HC	Health Centre
HIV and AIDS	Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome
HRIS	Human Resource Information System
HSIP	Health Sector Improvement Program
IBRD	International Bank for Reconstruction and Development
ICT	Information Communication Technology
IMCI	Integrated Management of Childhood Illness
IT	Information Technology
JPPBPC	Joint Provincial Planning and Budgets Priorities Committee
KRA	Key Result Area
LLG	Local Level Government
LLIN	Long Life Impregnated Nets
LNG	Liquid Natural Gas
LTDS	Long Term Development Strategy (now PNG Development Strategic Plan 2010–2030)
MDG	Millennium Development Goal
MDR-TB	Multi-Drug Resistant Tuberculosis
MTEF	Medium Term Expenditure Framework
NAC	National AIDS Council

NDoH	National Department of Health
NEFC	National Economic and Fiscal Commission
NHAA	<i>National Health Administration Act 1997</i>
NHIS	National Health Information System
NHP	National Health Plan
NGO	Non-Government Organisation
NIHF	National Inventory of Health Facilities
OECD	Organisation for Economic Cooperation and Development
PAF	Performance Assessment Framework
PCMC	Provincial Coordination and Monitoring Committee
PEP	Post Exposure Prophylaxis
PHA	Provincial Health Authority
PHAA	<i>Provincial Health Authorities Act 2007</i>
PHC	Primary Health Care
PHO	Provincial Health Office
PLLsMA	Provincial and Local Level Service Monitoring Authority
PMGH	Port Moresby General Hospital
PNG	Papua New Guinea
PNG DSP	Papua New Guinea Development Strategic Plan 2010–2030 (previously LTDS)
PPP	Public–Private Partnership
PPTCT	Prevention of Parent-to-Child Transmission
STI	Sexually Transmitted Infection
SWAp	Sector-wide Approach
TB	Tuberculosis
TB DOTS	Tuberculosis Directly Observed Treatment, Short-course
UN	United Nations
USD	United States Dollar
VHV	Village Health Volunteer
WHO	World Health Organization

## Definitions

Burden of disease	The impact of a health problem in an area, measured by financial cost, mortality, morbidity, or other indicators.
Case fatality rates	The ratio of deaths within a designated population of people with a particular condition, over a certain period of time.
Central Agencies	Government of PNG Core Departments, which includes Department of Treasury, Department of Finance, Department of National Planning and Monitoring, Public Sector Management Reform Unit, and Department of Provincial Local Government Affairs.
Child Mortality Rate (CMR)	The number of children under five years of age dying per 1,000 live births in a given year. Also known as the Under-Five Mortality Rate.
Child survival	A field of public health concerned with reducing child mortality. Child survival interventions are designed to address the most common causes of child deaths that occur, which include diarrhoea, pneumonia, malaria, and neonatal conditions.
Determinants of health	The range of personal, social, economic, and environmental factors that determine the health status of individuals or populations.
Essential medical supplies	Those that satisfy the priority health care needs of the population. They are selected with due regard to public health relevance, evidence on efficacy and safety, and comparative cost-effectiveness. They are intended to be available within the context of functioning health systems at all times in adequate amounts, in appropriate dosage forms, with assured quality and adequate information (WHO).
Exclusive breastfeeding	‘An infants’ consumption of human milk with no supplementation of any type (no water, no juice, no nonhuman milk, and no foods) except for vitamins, minerals, and medications’ (American Academy of Pediatrics).
Health indicators	Measures that reflect or indicate the state of health of a certain group of persons in a defined population.
Healthy Islands	A healthy island is one that is committed to and involved in a process of achieving better health and quality of life for its people, and healthier physical and social environments in the context of sustainable development.
Health financing	How financial resources are generated, allocated, and used in health systems. Examples of health financing issues include: (i) how and from where to raise sufficient funds for health; (ii) how to overcome financial barriers that exclude many poor from accessing health services; or (iii) how to provide an equitable and efficient mix of health services.
Health outcomes	The effect on health status from performance (or non-performance) of one or more processes or activities carried out by health care providers.
Health outcomes	A change in the health status of an individual, group, or population, which is attributable to a planned intervention or series of interventions, regardless of whether such an intervention was intended to change health status.
Health promotion	The process of enabling people to increase their control over and to improve their health.

Health services	All services dealing with the diagnosis and treatment of disease, or the promotion, maintenance, and restoration of health. They include personal and non-personal health services.
Health system	A health system is the sum total of all the organisations, institutions, and resources with the primary purpose of improving health.
Health workers	‘All people engaged in actions whose primary intent is to enhance health’ (World Health Report 2006).
Infant Mortality Rate (IMR)	The number of children dying under one year of age, divided by the number of live births that year. The infant mortality rate is also called the infant death rate.
Maternal Mortality Ratio (MMR)	Number of women dying of pregnancy-related causes out of 100,000 live births in a given year (ODI/HPN paper 52, 2005, Checchi and Roberts).
Neonatal Mortality Rate (NMR)	Number of deaths during the first 28 completed days of life per 1,000 live births in a given year or other period. Also known as the neonatal death rate.
Non-communicable diseases	Diseases that are not contagious, but may be acquired through a person’s lifestyle, genetics, or environment.
Primary health care	Often abbreviated as PHC, primary health care is:  ‘Essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-determination’ (Alma Ata international conference).
Private health care providers	Organisations providing health services that are not part of government.
Public health	Public health is a social and political concept aimed at the improving health, prolonging life, and improving the quality of life among whole populations, through health promotion, disease prevention, and other forms of health intervention.
Public–Private Partnership (PPP)	A method to procure and deliver infrastructure and services through cooperation between a public institution and one or more private enterprises.

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National Health Plan

Moments  
Community



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