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

KRA 1
Improve Service Delivery

KRA 2
Strengthen Partnerships and Coordination with Stakeholders

KRA 3
Strengthen Health Systems

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

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

Health is Everybody’s Business
# Table of Contents

**MESSAGE FROM THE HONOURABLE MINISTER FOR HEALTH AND HIV/AIDS**

Health is Everybody’s Business iii

**FOREWORD FROM THE SECRETARY FOR HEALTH**

Transforming Our Health System v

**EXECUTIVE SUMMARY**

Together We Must Stand for the Human Face of Development vii

**CHAPTER 1**

Introduction 1
Purpose and Role of the National Health Plan 1
Information for the Reader 3

**CHAPTER 2**

Linkages between the Plan and Government of PNG and International Obligations 5
Directions from Key Government Documents 5
Kundu Approach: Health Sector Planning within Whole-of-Government Planning 6
Achieving our International Commitments 7

**CHAPTER 3**

State of Our Health 9
Overview of our Health Profile 9
International Comparisons of Health Performance 9
Current Health Concerns 10
Determinants of Health 13
Health System Performance 14
Addressing the Concerns 16

**CHAPTER 4**

The Way Forward 17
Priorities for the First Ten Years 19
Specific Objectives and Strategies 20
Key Result Area 1: Improve Service Delivery 21
Key Result Area 2: Strengthen Partnerships and Coordination with Stakeholders 22
Key Result Area 3: Strengthen Health Systems and Governance 23
Key Result Area 4: Improve Child Survival 25
Key Result Area 5: Improve Maternal Health 26
Key Result Area 6: Reduce the Burden of Communicable Diseases 27
Key Result Area 7: Promote Healthy Lifestyles 28
Key Result Area 8: Improve Preparedness for Disease Outbreaks and Emerging Population Health Issues 29
Health Vision 2050 — Directions for the Next Forty Years 30
### CHAPTER 5

**Implementing the Plan**
- Involvement of Stakeholders
- Values: The Foundation for Implementation
- Roles and Responsibilities of Different Levels of the Sector
- Ongoing Integration of Health Sector Planning with Whole-of-Government Priorities
- Accountability and Performance Monitoring
- Partnerships
- Risk Management
- Roll-out of Strategic Implementation Planning

### CHAPTER 6

**Financing the Health Sector**
- Background
- Resource Usage
- Resource Allocation
- Resource Mobilisation
- Alternative Health Care Financing

### CHAPTER 7

**Cost of the Plan**
- Approach
- Main Capacity Inputs and Service Levels
- Main Cost Intervention Areas

### CHAPTER 8

**Performance Monitoring Framework**
- Why Monitor and Measure Health Sector Performance?
- How Do We Measure Performance?
- Who Receives the Performance Monitoring?
- How Will It Operate?
- What Will Be Measured?
- When Will It Be Measured?

### ANNEX 1

- Development and Consultation Process for the Plan

### ANNEX 2

- Annual Reporting Indicators

### ANNEX 3

- Lists
- Abbreviations
- Definitions
- Figures
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
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.
Chapter 1

Introduction

Purpose and Role of the National Health Plan

The *National Health Administration Act 1997* 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

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1 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 1 Purpose and Role of the National Health Plan

Government of Papua New Guinea

National Health Plan 2011–2020
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 invaluably to helping make Papua New Guinea a ‘Smart, Wise, Fair, Healthy and Happy Society by 2050’.
Chapter 2 Linkages between the Plan and GoPNG and International Obligations

Figure 1 Linkages between the NHP and GoPNG Vision 2050 Pillars

<table>
<thead>
<tr>
<th>Vision 2050 Seven Pillars</th>
<th>National Health Plan Linkages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Capital Development, Gender, Youth and People Empowerment</td>
<td>The NHP Vision recognises health as a human right for all: women and men, boys and girls.</td>
</tr>
<tr>
<td>Wealth Creation</td>
<td>The NHP Vision is for a healthy and prosperous nation for all. “Better health itself contributes to economic growth”².</td>
</tr>
</tbody>
</table>
| 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

<table>
<thead>
<tr>
<th>PNG DSP Key Health Targets</th>
<th>National Health Plan Key Result Area</th>
</tr>
</thead>
</table>
| 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

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**
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).

<table>
<thead>
<tr>
<th>Millennium Development Goals</th>
<th>National Health Plan Key Result Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1: Reduce Poverty and Hunger</td>
<td>ALL</td>
</tr>
<tr>
<td>Goal 4: Reduce Child Mortality</td>
<td>KRA 4: Improve Child Survival</td>
</tr>
<tr>
<td>Goal 5: Improve Maternal Health</td>
<td>KRA 5: Improve Maternal Health</td>
</tr>
<tr>
<td>Goal 6: Combat HIV/AIDS, Malaria and Other Main Infectious Diseases</td>
<td>KRA 6: Reduce the Burden of Communicable Diseases</td>
</tr>
<tr>
<td>Goal 7: Ensure Environmental Sustainability</td>
<td>KRA 7: Promote Healthy Lifestyles</td>
</tr>
</tbody>
</table>
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’³, it has a growing economy that is built on its natural resources. The indicators of health status, however, show PNG as

³This 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

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

### Figure 6 International Comparisons

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

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

**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.

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**

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.

**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.

![Figure 16 Ageing Workforce](image)
**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 (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.

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**Figure 17 Expenditure — International Comparison**

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

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.
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.

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**Figure 18 Focus Areas of National Health Plan 2011–2020**

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National Health Plan 2011–2020: Back to Basics
First step to Health Vision 2050 — Transforming our Health System

and address PRIORITY HEALTH OUTCOMES

- **KRA 1:** Improve Service Delivery
  - (IMCI, Immunisation, Pneumonia, Nutrition)

- **KRA 2:** Strengthen Partnerships and Coordination with Stakeholders
  - (Healthy Islands, health promotion, Water Supply/Sanitation, Non-communicable Diseases, Nutrition)

- **KRA 3:** Strengthen Health Systems
  - Health Workforce
  - Financing
  - Information (ICT)
  - Infrastructure
  - Drug & Medical Supplies
  - Leadership & Governance

- **KRA 4:** Improve Child Survival
  - (FP, Population, Supervised Deliveries, EDC, Adolescent Health)

- **KRA 5:** Improve Maternal Health
  - (STIs, HIV, Malaria, and TB)

- **KRA 6:** Reduce the Burden of Communicable Diseases
  - (Institute of Public Health, CDC, CPH, Climate Change)

- **KRA 7:** Promote Healthy Lifestyles
  - (Iodine Deficiency, Nutrition)

- **KRA 8:** Improve our Preparedness for Disease Outbreaks and Emerging Population Health Issues
  - (Institute of Public Health, CDC, CPH, Climate Change)

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

**Strengthened Primary Health Care for All and Improved Service Delivery for the Rural Majority and Urban Disadvantaged**
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 1: 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 (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.

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.

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4 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.
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.
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.

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

- 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.

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.
### Table: Facility Type Implementation Schedule 2011–2050

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Phase 1 2011–2020</th>
<th>Phase 2 2021–2030</th>
<th>Phase 3 2031–2040</th>
<th>Phase 4 2041–2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Health Posts</td>
<td>Rehabilitation and open Aid Posts</td>
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<tr>
<td>Phase 1 (a)</td>
<td>Establish CHPs in strategic locations</td>
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<tr>
<td>Phase 2</td>
<td>Progressively replace Aid Posts and Health Sub-Centres with CHPs</td>
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<tr>
<td>Health Centres</td>
<td>Rehabilitation all Health Centres to become fully operational</td>
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<tr>
<td>District Hospitals</td>
<td>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</td>
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<tr>
<td>Provincial Health Authorities</td>
<td>Roll-out PHAs</td>
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<tr>
<td>Provincial Hospitals</td>
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<tr>
<td>Phase 1</td>
<td>Key Provincial Hospitals fully operational over 20 years including teaching Hospitals</td>
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<td></td>
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<tr>
<td>Phase 2</td>
<td>Remaining Provincial Hospitals fully functional</td>
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<tr>
<td>Regional Specialist Hospitals</td>
<td>Feasibility Studies</td>
<td>Establish four Regional Specialist Hospitals over 20 years</td>
<td>Extend services and technology as funds become available</td>
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<tr>
<td>Rehabilitation of PMGH</td>
<td>PMGH refurbished</td>
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<tr>
<td>National Referral Hospitals</td>
<td>New Hospital built “PMC”</td>
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<td>Further consideration of new referral hospitals</td>
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</tbody>
</table>

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