



Republic of Nauru

Ministry of Health and Medical Service

Strategic Plan

2010 – 2015



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Message of Minister of Health and Medical Services



The vision of the Strategic Plan 2010-2015 relays the intention of Government and Ministry of Health and Medical Services to bring about improved health and health care services to all people in Nauru. The Strategic Plan is linked to and guided by the National Sustainable Strategy 2005-2025 which focuses on the provision of effective preventative health services and reducing lifestyle related illness as a Social and Health sector goal.

Hon. Matthew Batsiua

Indeed, prevention of diseases is a corner stone strategy for health systems faced with limited resources. In Nauru, non-communicable diseases are the most prevalent health condition. The high prevalence of diabetes and its complications continues to threaten the population and health services against the vision of a healthy population. To complicate this reality, traditional communicable diseases such as sexually transmitted infections, tuberculosis, and leprosy etc; are still prevalent and draws on the ministry's limited resources.

Secondary curative health service is well covered in Nauru at its main hospital Republic of Nauru Hospital. However, certain tertiary care services still warrants overseas referral and government has made a generous funding allocation to cover this need. The renal dialysis service provided locally caters for patients with advance renal disease. The Ministry will continue to support this service.

Health infrastructure is considered every year under existing plans and budgetary provisions. As a public building, wear and tear is quite significant in most buildings apart from the age of the infrastructure. Maintenance cost is high with frequent renovation and extension to existing buildings undertaken on a regular basis. Considering this scenario and noting clinical service expansion and expectations in the next 5-10 years, the Ministry is proposing that a new hospital be constructed to cater for the country health care needs. A master planning exercise is been undertaken for the new hospital and later funding options will be considered and sought.

Legislation is important to support the work of the Ministry of Health. Based on its local and international health commitments, the Ministry during this strategic plan period will seek to ensure that regulations will be enacted on at least tobacco control and food safety. The Public Health Act is an important piece of legislation for the protection and enhancement of health and will be considered for enactment and later enforcement by the Ministry.

Financing health is a key component of health systems. Government's budget commitment and provision to health is applauded. A generous allocation of 17% of whole of government annual budget to health is comparatively high when compared to the rest of countries in the Pacific Island region. Furthermore, the ongoing assistance and commitment of the Australia Government to the country and to the Ministry of Health is appreciated. AusAID funding assistance accounts for close to half of overall health budget. Other funding Governments and Agencies such as New Zealand, Taiwan, Global Fund, WHO and SPC are recognised for their ongoing assistance and partnership.

The Strategic Plan has some key health targets that reflect the ambition of the Ministry to effect and bring about good health status of the population. Working together we can achieve these targets and ensure that the people of Nauru can benefit from improved healthcare and support services so as to live healthier lives.

Message of the Secretary for Health and Medical Services - Mr. Taniela Sunia Soakai



I am pleased to note that the Health Strategic Plan outlines key strategies and activities that are in line with regional and international health initiatives. The plan is structured to incorporate key components of health system strengthening, primary health care and the Pacific initiative on Healthy Islands.

The Strategic Plan has been developed after several consultations sessions with key units and staff of the Ministry and development partners. The plan is costed with the historical baseline budget amount and components for planning purposes.

There are new activities proposed in the Strategic Plan that will need new funding and resource allocations.

Nauru continues to maintain a reasonable level of preventive health care such as health promotion and community based maternal and child health care. The childhood immunisation programme has been successful in controlling vaccine preventable disease. Furthermore the Ministry is considering introducing new vaccines against *Haemophilus influenzae* type b (Hib) and HPV which are common causes of childhood pneumonia and cervical cancer on in women respectively. The school feeding programme is an innovative initiative directed at primary school students' nutrition. This programme will continue to be supported by the Ministry in the Strategic Plan.

For health systems, human resource continues to be a major challenge for Nauru. The heavy dependency on expatriate staff for the clinical areas will continue into the foreseeable future. To mitigate against this dependency the Strategic Plan is proposing a Human Resource action plan that will see a gradual reduction of expatriate staff over the five years period of the plan. Key to this undertaking is the Ministry continued investment in local staff capabilities such as the Leadership Group initiative whereby local staff with are identified and placed on formal academic programmes with the objective of assuming managerial positions in key health services area in the Nauru.

Health financing is another health system component that remains in a precarious position as seen with significant dependence on donor funds. However, the Ministry believes that with current resource allocated, working smarter within allocated and available resources can further enhance health service and outputs.

Whilst legislation has been pursued in areas and responsibilities under the Ministry of Health, review and development of internal policies of the Ministry needs to be strengthened. Policies need to be consolidated so that staff will become well versed with the requirements of the services and also be guided by them.

There are some key new initiatives included in the Strategic Plan. These initiatives include at least the introduction of microbiology services, prosthesis services and pharmaceutical manufacturing. All of the services and activities will need to be budgeted for during the phase of the strategic plan.

Another area under consideration in the plan is health research. The Ministry will need to develop and strengthen this area of health service and conduct research on common disease occurrence and distribution including situation analysis for health communication activities.

At the same time, the Ministry needs to seek solutions for emerging health problems like trachoma and rheumatic fever, and to maintain ongoing vigilance and preparedness for global health threats like pandemic influenza.

I encourage unit heads and staff to take ownership of the Strategic Plan and implement identified objectives in the annual Operational Plans every year. Working together we can achieve the set goals and targets of the plan.

Executive Summary

The Ministry of Health and Medical Services Strategic Plan has received the support and endorsement of the Cabinet for its implementation. The Health Strategic Plan (HSP) was formulated through several consultation processes within the various departments of the Ministry and also key stakeholders. From the HSP, the Annual Operational Plan for the financial year 2011/2012 has been finalised with the latter expected to be an annual planning process.

Guiding principles

The plan has the noble vision of 'A Healthy and Peaceful Nation that values and supports *human rights and dignity* through the provision of *quality health care and services*'. The plan also has linked mission and vision commitments and undertakings to the main vision statement. The HSP guiding principles relate to the regional and global commitment on health system strengthening, primary health care and healthy island revitalisation.

Strategic targets

Standard functions, priority interventions and new development activities and programmes of the Ministry have been grouped under four Key Result Areas in the plan. For ownership and management accountabilities, the KRAs are aligned to existing organisational and operational structure of the Ministry. The KRA include the following;

Key Result Area 1:	Health Systems
Key Result Area 2:	Primary Health Care and Healthy Islands
Key Result Area 3:	Curative Health
Key Result Area 4:	Support Services and Networking

Linkages

The Health Strategic Plan is aligned to the seven (7) NSDS Strategies for Short, Medium and Long Term achievement. Incorporation of the key NSDS targets and key activities are included in the Key Result Areas of the HSP noting that the medium term target year of the NSDS is 2015 and coincides with the MDG milestone and also the last year of the HSP implementation. The HSP is also aligned to the Australia / Nauru Partnership Priority Agreement on Outcome 3; Cost Effective Health System which Delivers Improved Health Outcomes. It is noted that the outcome has three areas of emphasis namely health systems, non communicable diseases and maternal and child health.

Laws and Legislations

The Administrative Arrangement Act 2011 has assigned 11 legislations for supervision and enforcement by the Ministry of Health. In the Strategic Plan, two Bills namely, the Public Health and Pharmacy Bills are proposed for consideration and inclusion. It is noted that following the passage of the PH Bill, several existing Acts and Ordinances will be repealed. Departmental enforcement of the Acts by the Ministry is proposed for strengthening in the Strategic Plan. The creation of a special Enforcement Unit is proposed with the unit placed under the supervision of the Director Public Health.

Health status

Major health issues and causes of significant morbidity relate to non communicable diseases. Diabetes is very common with an estimated prevalence rate of 22.7% (DHS 2007). Obesity and related nutrition disorders are quite prevalent along with hypertension and heart diseases. A number of conditions are emerging as significant health problems. These include rheumatic health disease, anaemia and malnutrition in children. The re-emergence of infectious diseases such as leprosy, and trachoma along with traditional STI is a concern. Mental health and disease is a growing problem in Nauru. Overall, 0.8% of the population are affected by one form of mental illness.

Preventive health activities continued to be supported and enforced. A programme such as that for infant immunisation has been very successful. Ongoing intervention particularly on school nutrition under the school feeding programme will yield positive outcome in the long run.

Millennium Development Goal

Progress towards the achievement of the MDG targets has been slow. Infant mortality rate has been steady at around 24 per thousand in the 1990s to 2010. Maternal mortality measured in absolute number showed that there are years that do not record any maternal deaths while other record 1 or 2 deaths. On MDG 7 target, addressing STI particularly Chlamydia infection remain a challenge. The high prevalence rate of Chlamydia infection has prompted the Ministry to institute a population mass treatment against the infection. There is no recorded HIV in the country and preventive activities under the Global Fund assistance and support hope to keep the country HIV free and controlling traditional STIs. Family planning acceptance and uptake needs to be improved along with safe motherhood issues such as breastfeeding and maternal nutrition. Targets on adolescents are being addressed in this strategic plan along with environmental and water safety measures.

Health system gaps

Health financing and human resources for health remain as major challenges to the health system. With a free health service, consideration for revenue generation could be explored as means to boost health funding. Furthermore and in relation to human resource for health, continue training and development of nationals needs to be maintained and strengthened to ensure a stable workforce, not dependent on expatriates, is achieved and maintained. Improvement of data collection and analysis is required of the health information unit to support not only surveillance but also health care services.

New activities

The strategic plan has identified new programme and activities for implementation during the strategic plan period. Budget allocation to these activities will have to be sought and made to ensure implementation and output achievement. These activities and programmes address cross cutting issues issue such as disability, waste management and disasters mitigation. Activities for health system strengthening including clinical care are also included in the list.

Health Financing

Based on the current funding commitment and baseline of both the GoN and GoA, the projected cost of the 6 year national strategic plan is Aus\$33million. Cost for the various financial year health is \$6 million for financial year 2010/2011, \$6.6million for 2011/2012 and \$6.8 million as baseline for years 2012/2013, 2013/2014 and 2014/2015. New projects and activities have been included in the budget estimates. Funding gap of \$1.3 million is estimated for financial years 2012/2013 and 2013/2014 and 2014/2015. Funding contribution from other development partners vary each year and are usually specific to a programme or output. Non financial assistance from partners such as the Cuba and Taiwan governments provides additional mechanisms for health service delivery particularly in the areas of human resource and specialist medical services.

Monitoring and Evaluation

Monitoring and evaluation exercise has been built into the strategic plan for follow up by the Ministry of Health. The targets agreed to for each of the key result areas forms the basis for measuring the progress and achievement of the plan over the next 5 year period. Reporting of the progress of objective implementation including budget expenditure will be made quarterly during the years of the plan.

ACRONYMS / ABBREVIATIONS

AH	Allied Health
ANC	Ante Natal Care/Clinic
AVI	Australian Volunteers International
BME	Biomedical Engineer
CD	Communicable Disease
CPIC	Clinical Practice Improvement Committee
CPG	Clinical Practice Guidelines
CTS	Cargo Transport Services Pty Ltd.
CW	Capital Works
DA	Director of Administration (Health)
DHS	Demographic Health Survey
DMS	Director of Medical Services
DON	Director of Nursing
DPH	Director of Public Health
EHO	Environmental Health Officer
FY	Financial Year
GOA	Government of Australia
GON	Government of Nauru
HDU	High Dependence Unit/ Intensive Care Unit
HE	Health Educator
HIC	Healthy Island Council
HIMS	Health Information Management System
HPRB	Health Practitioners Registration Board
HPU	Health Promotion Unit
ICU	Unit/ High Dependence Unit
IDA	International Dispensing Association
IMR	Infant Mortality Rate
JD	Job Description
KRA	Key Result Area
MMR	Maternal Mortality Rate
MO	Medical officer
MOU	Memorandum of Understanding (AusAID funding)
NCD	Non-Communicable Disease
NGH	(former) Nauru General Hospital
OIC	Officer in Charge
OT	Operating Theatre
OTJ	On-the-Job (Training)
P&L	Procurement and Logistics
PMR	Perinatal Mortality Rate
POHLN	Pacific Open Health learning Network
RHD	Rheumatic Heart Disease
R/O	Reverse Osmosis
RONH	Republic of Nauru Hospital
SHMS	Secretary Health and Medical Services
SHP	Strategic Health Planner
SMO	Senior Medical Officer
SMT	Senior Management Team
STI	Sexually Transmitted Illness/Infection
TOR	Terms of Reference
WDF	World Diabetes Fund

1. INTRODUCTION

Geography

Nauru is a single rock island, with a central phosphate plateau surrounded by a ring of fertile soil and sandy beaches. It is located in Micronesia between the Solomon Islands to the south-west, Kiribati to the east and the Marshall Islands and the Federated States of Micronesia to the north and north-west. It is the world's smallest island nation, covering just 21 km². The island is divided into 14 districts; the districts and major landmarks are shown in the map, Figure 1.1.

Figure 1.1: Map of Nauru showing districts and major landmarks



Political and Economic Context

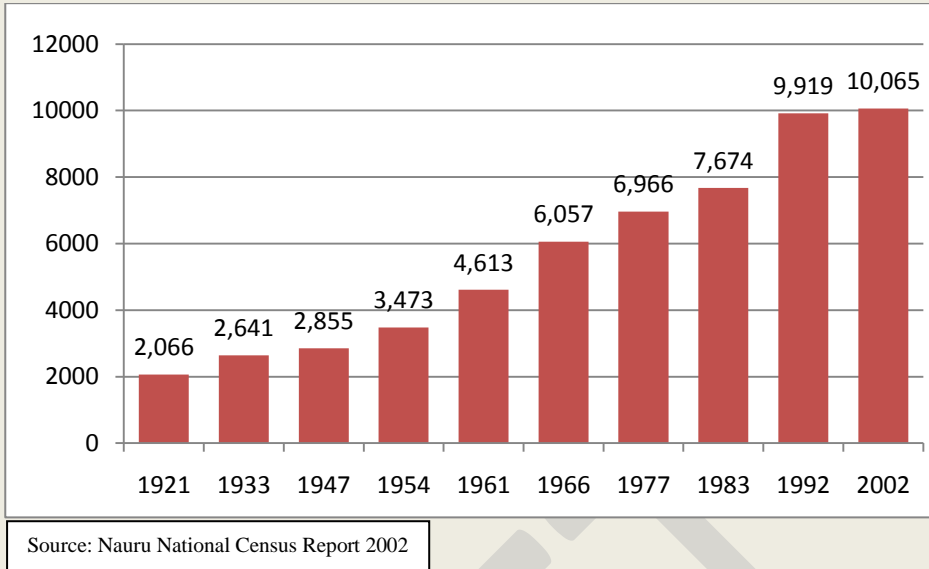
Nauru is a republic. The President is both the head of state and head of government. The legislature comprises a Parliament of 18 seats. Members are elected by popular vote to serve three-year terms. The Cabinet is appointed by the president from among the members of Parliament; there are currently 5 members (in addition to the President).

Population

The 2002 census estimated the total population of Nauru at 10,065 people, with slightly more males than females. The negligible population increase from the 1992 census – only 146 people – represents the combined effects of changes in fertility, mortality and migration.

Figure 1.1 shows the trend in population growth from 1921 to 2002. Indigenous Nauruans represent 75% of the population (7,572), with i-Kiribati, Tuvaluan, other Pacific Islands and Chinese comprising most of the remainder. SPC's mid-year population estimate for 2008 is little changed at 10,168.

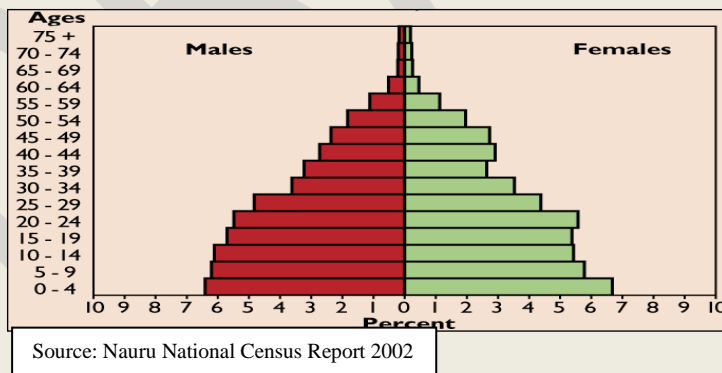
Figure 1.1: Total population of Nauru, by census year, 1921 to 2002



Almost one quarter of the total population lives in the densely populated area known as Location, situated just north of Aiwo (shaded grey on the map); this area historically housed expatriate mining company and government workers. Meneng is still the largest Nauruan community on the island, comprising 13% of the total population.

Nauru's population pyramid (Figure 1.2) shows an abrupt cut-off beyond late middle age, reflecting a life expectancy at birth that is the lowest in the Pacific outside Papua New Guinea – 55.2 years for males and 57.1 years for females. Health-adjusted life expectancy (WHO, 2002) was 53 and 57 years, respectively.

Figure 1.2: Population pyramid by sex and 5-year age intervals, Nauru, 2007



The dependency ratio compares the economically dependent portion of a country's population – those aged 0-14 years plus those aged 60 years and over – to its economically productive portion. Nauru's dependency ratio is 70; i.e. for every 100 people of working age, there are 70 people of dependent age.

2. Role of the Ministry

The Government of Nauru is the sole provider of health care services on the island of Nauru. The Ministry of Health's goal is to provide quality health services that are accessible by all communities. In doing so, the Ministry of Health will address its goal under four strategies of health systems strengthening, primary health care and health islands, curative health and support services and networking.

Apart from health care services, the Ministry has statutory functions as 11 legislation fall under its administration. The Ministry will strengthen enforcement of legislation through the establishment of an enforcement unit.

Improvements to the delivery of health services will continue to be pursued by the Ministry and in partnership with key stakeholders including the private sector and development partners. The Ministry will also continue with the training of personnel to address critical staff shortages in health institutions, together with improved provision of pharmaceuticals and bio-medical equipment, and the maintenance and upgrading of health facilities. The Ministry will seriously look at improving services to the aged/elderly, geriatric medicine and those with chronic illnesses.

3. Health Laws and Legislation

Under the Administrative Arrangement Act 2011, the following 11 legislations are under the direct administration of the Minister for Health and the Department of Health. It should be noted that the Public Health Bill is currently before Parliament and following the passage of this Bill some of the current Acts will be repealed.

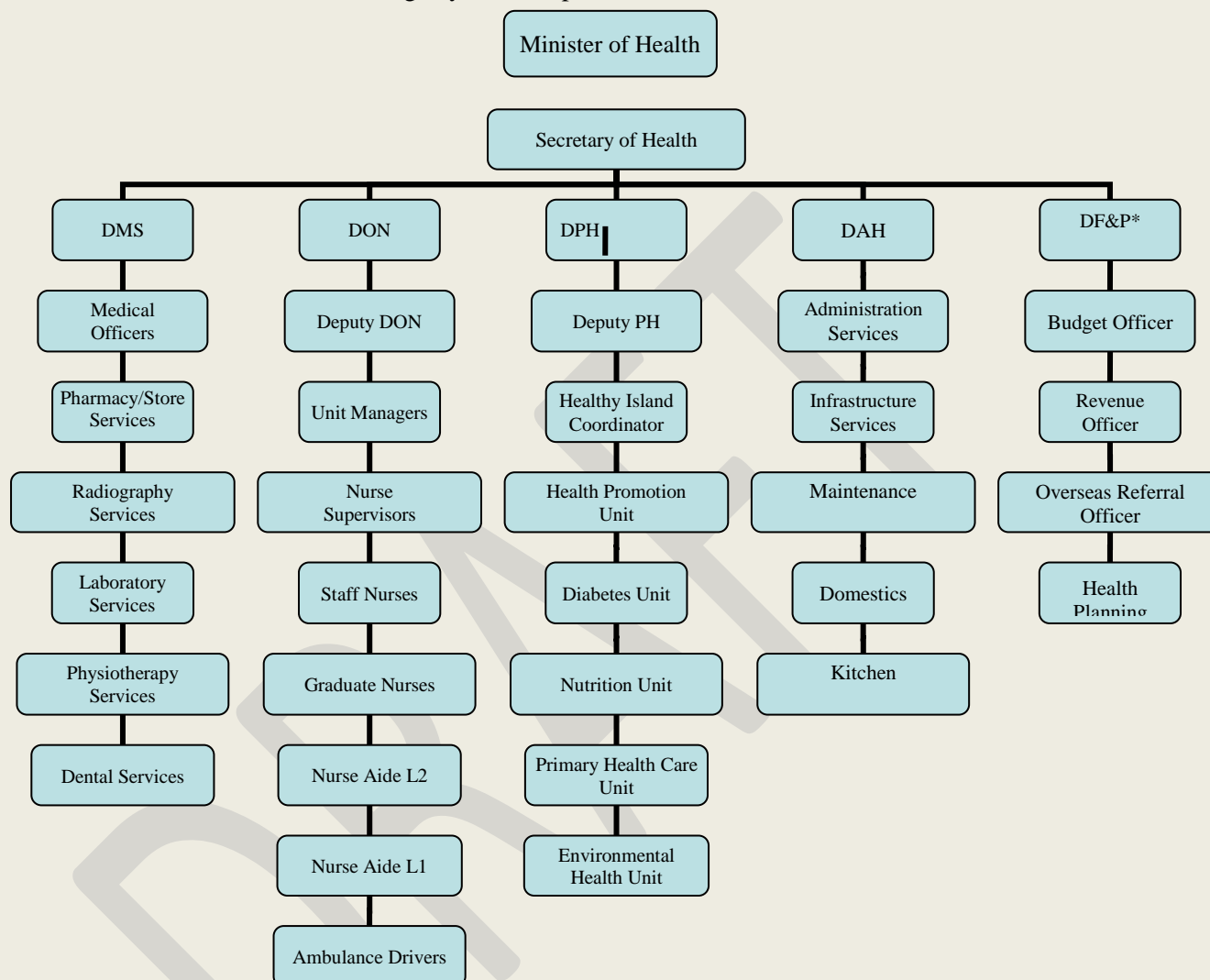
1. Tobacco Control Act 2009
2. Food Safety Act 2005
3. Health Practitioners Act 1999
4. Litter Prohibition Act 1983
5. Tuberculosis Ordinance 1967
6. Mental Disordered Persons Act 1963
7. Public Health Ordinance 1925
8. Notification of Infectious and Contagious Diseases Ordinance 1923
9. Cemeteries Act 1922
10. Sanitary Inspectors Ordinance 1921
11. Quarantine Act 1908

Specific health sector policies include at least:

1. Medical Referral Policy
2. Visiting Medical Officer Policy
3. Locum Staff Remuneration Policy
4. Overseas Travel Policy
5. Inventory and Asset Management Policy
6. Equipment and Stores Ordering Policy
7. Health – Use of Government Vehicle Policy
8. Health Traineeship Policy

4. Organisational Structure

The current organisational structure of the Ministry of Health reflects the key changes proposed under the *Ministry of Health Organisational Reform 2009* and the *Workforce Strategic Plan 2009*. The new structure has four Directorates of Medical Services, Nursing, Public Health and Administration. The fifth division of Finance and Planning is yet to be operational.



5. Health and Social Indicators

Indicator	Nauru		Year of Data
	Male	Female	
Mid Year Population (SPC Data)	10,168		2008
Life expectancy at birth	52.5	58.2	2002
Under-5 mortality per 100,000	45		2008
Death rate (crude), per 1,000 population	6.68		2010
Birth rate (crude), per 1,000 population	32.6		2010
% births with skilled attendants	98		2010
Infant mortality per 1,000 live births	24.0		2010
Maternal mortality by number	1		2010
Maternal mortality ratio per 100,000 live births	301		2010
% illiterate >15 years old	23.0	45.5	2007
Gross enrolment ratio in education (both sexes) (%)	55.0		2010
GDP per capita (USD)	\$2,671		2005-6

Millennium Development Goals

Nauru has committed to the health-related MDGs, which are included in the NSDS. As a signatory to UN Conventions and Treaties, the Government of Nauru also has obligations to meet the requirement of the Framework Convention on Tobacco Control, the International Convention on Population Development, the Women Plan of Action, the Convention on Rights of the Child and the WHO Constitution.

Progress on the achievement of the MDG goal has been slow and it is anticipated that IMR would be at least achieved by end 2015. Maternal mortality ratio is an indicator that is difficult to compare across countries especially in those with population less than 10,000. Furthermore, challenges and difficulties in consolidating data under health information is a real challenge in Nauru. Attempts and steps are now being taken to address health information issues in the Ministry. Other MDG related indicators also warrant scrutiny as reported by line agencies.

6. Health Sector Analysis

Disease burden and trends¹

Nauru's health profile and child health indicators are intermediate between those of a developed and a developing country. As seen around the region, the incidence of communicable diseases has generally declined but the re-emergence of old infectious diseases a concern. Tuberculosis and leprosy programmes continue to report new cases whilst periodic outbreaks of diarrhoeal illness still occur. Non communicable diseases particularly type II diabetes, chronic renal insufficiency, cardiovascular diseases, cancer and injuries remain the largest disease burden in the country.

Health Service Access and Utilisation

According to administratively collected data from the RON Hospital for 2007 and 2008, access to and utilisation of health services in Nauru compares very favourably with other low income countries. This probably reflects the excellent access that can be achieved in a small island state, and the absence of user fees for the majority indigenous Nauruan population.

The 23,660 attendances to the general outpatients department and for dressings during 2008 represent 2.33 visits per person (or about 77 visits per day calculated on a Monday-to-Saturday basis, of which about 55% are paediatric attendances); diabetic patients represent 53.8% of dressing unit attendances. Adding the 9,211 emergency room consultations increases the overall annual *per capita* health service utilisation to 3.23.

This represents a well utilised health service by global standards, and compares favourably with the other study countries (4.7 annual outpatient visits per person in Palau and an estimated 2-2.5 visits in Solomon Islands), and elsewhere in the region (1.43 visits in PNG and just over 2 visits in Vanuatu).

The number of outpatient and dressing unit visits has increased significantly from the 15,093 recorded in 2001-02 (representing a mean 1.5 visits per person per year, based on 2002 population estimates).

The 2007 Demographic and Health Survey (DHS) reports that parents sought health facility treatment for 68.8% of children with symptoms of acute respiratory illness (ARI), 50.6% of children with fever, and 34.3% of children with diarrhoea. About half of children with diarrhoea were given oral rehydration solution (ORS, either home-made or reconstituted from a packet).

Morbidity

Excluding obstetric and neonatal care, the principal causes of morbidity requiring admission to RON Hospital in 2007 were: endocrine disease (almost exclusively diabetes); cellulitis, cutaneous and sub-

¹ Framework of Priorities for Health in the Pacific, Nauru Country Report (2009); SPC

cutaneous abscess (which may also reflect poor glucose control among diabetics); asthma; acute gastro-enteritis; heart disease and hypertension; and genitourinary disease.

The commonest reasons for presentation for outpatient and emergency care in 2007 were respiratory illness, acute gastro-enteritis and injuries.

Mortality

The principal causes of death among adults are almost all NCDs: ischaemic heart disease, complications of hypertension (including cerebro vascular disease), diabetes, kidney disease, and lower respiratory infection. NCDs represent 79% of all deaths on the island.

Nauru's age-standardised mortality rate for NCDs was steady between 2002 (1,136 per 100,000) and 2006 (1,132 per 100,000), which currently ranks it second in the world behind Afghanistan.

The disability-adjusted life year (DALY) combines in a single measurement the time lived with a disability and the time lost due to premature death. In 2002, Nauru recorded an estimated 19,949 DALYs lost due to NCDs per 100,000 (representing 75% of all DALYs) – the highest in the Pacific region. By comparison, DALYs lost due to communicable diseases represented 16% of the total (age-standardised rate 4,131 per 100,000) and, for injuries, 9% (2,529 per 100,000).

Among children aged less than 5 years, the principal causes of death are diarrhoea (principally during outbreaks), pneumonia and injury.

Maternal and Child Health Indicators

Infant and Child Health –

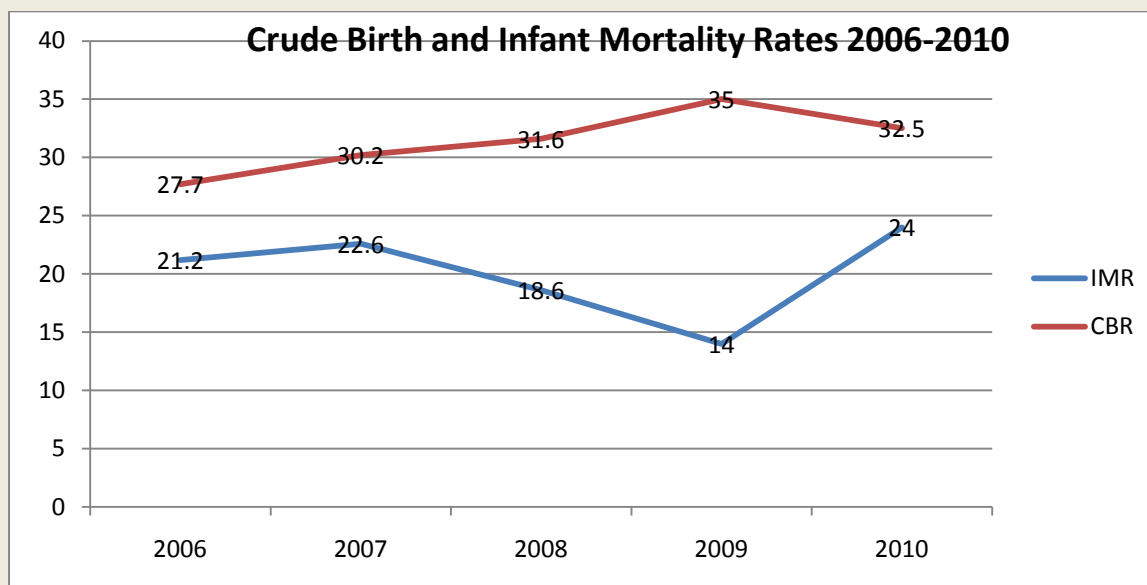
Available data indicate that infant (IMR) and under-5 mortality rates (U5MR) remained steady at 24 and 30 per 1,000 live births, respectively, from 1990 to 2010.

However, the 2002 census recorded an IMR of 42.3 per 1,000 for non-Nauruan residents of the island and 36.6 for indigenous Nauruans; moreover, a 2003 study of hospital records suggested that the true overall IMR may be 44.1 per 1,000 live births (53.3 for non-Nauruans and 42.1 for indigenous Nauruans). It also represents a substantial increase compared to the mid-1990s, when the IMR was estimated at 21.4 and 12.5 per 1,000 for the non-Nauruan and Nauruan populations, respectively.

In the Asia-Pacific region, this would rank the U5MR in Nauru between that in Samoa and the Philippines (27 per 1,000) and Kiribati (64 per 1,000), and about the same as the Federated States of Micronesia (42 per 1,000).

Neonatal mortality is estimated at 14 per 1,000 live births; the principal causes are prematurity (reflecting the limited facilities for advanced neonatal care at RON Hospital), sepsis, congenital abnormalities and sepsis.

Figure 6.1: Crude Birth and Infant Mortality Rates 2006-2010



Source: MOH Statistics

Child Health (Immunisation Coverage)

Childhood immunisation against poliomyelitis, diphtheria, tetanus, pertussis, measles and tuberculosis (BCG) is provided centrally through the Maternal and Child Health (MCH) clinic located at the public health unit, opportunistically at the RON Hospital, and also through periodic supplementary immunisation outreach activities (SIAs). An initial cycle of vaccination against *Haemophilus influenzae* type b (Hib) infection has been conducted, and Hib vaccine is expected to be incorporated into the routine schedule around March 2010.

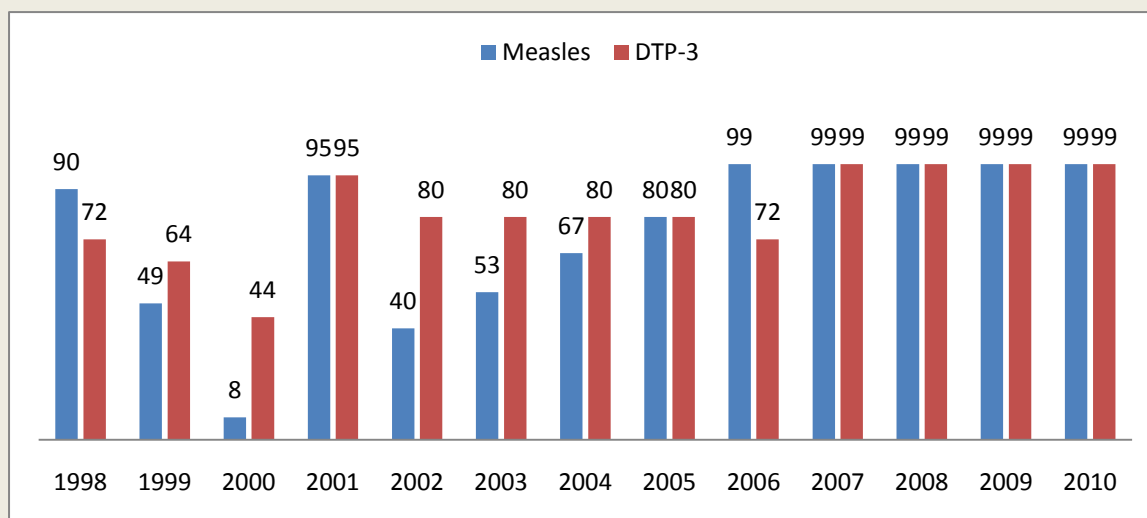
Figure 2.1 summarises the 10-year trend in officially reported immunisation rates among one-year-olds for measles vaccine and the third dose of diphtheria-tetanus-pertussis vaccine (DTP-3).

The 2007 DHS, which was based on inspection of parent-held cards, indicates that immunisation coverage remains consistently high across the island for all antigens.

Overall, among children aged 18-29 months, 95% were fully vaccinated (i.e. had received BCG, measles and three doses each of DTP-3 and oral polio vaccines). Only 2% of children were unvaccinated.

In particular (given recent outbreaks of measles in the Pacific), Nauru has achieved and maintained consistently high measles coverage rates (around 95%) – above the 90-92% coverage rates that is required to prevent break-through transmission of measles.

Figure 6.2: Infant Immunisation Coverage (%) of Measles and DTP3 Vaccines, 1998-2010



Source: MOH and WHO Statistical Information System

The DHS does not measure age-appropriate vaccination. Nevertheless, the DHS report does note that coverage falls slightly for subsequent doses of vaccine relative to the first dose.

During 2007-08, mass hepatitis B vaccination campaigns (3 doses) were undertaken, targeting higher risk groups including health care personnel (doctors, nurses and allied health staff), the police department, the fire brigade and patients identified as being at increased risk.

UNICEF has continued to support cold chain equipment and vaccine supply through the Pharmacy at RON Hospital. At the time of our visit, all Expanded Program on Immunisation (EPI) vaccines were in stock and satisfactory cold chain equipment and monitoring were in place.

Maternal Health –

There is a strong pro-natal sentiment on Nauru, with the 2007 DHS reporting that almost a quarter of all women and up to 60% of nulliparous women want a baby “soon”. Only 25% of women of reproductive age use a modern method of contraception. Contraceptive prevalence rises with age and parity; tubal ligation is the most common form (13.3%), with only 9.7% of women using a non-permanent form of contraception.

Despite this, the annual number of recorded births in Nauru has fallen from 371 in 1996 to 312 in 2008, with an estimated 40 additional births to Nauruan mothers occurring overseas each year.

The 2007 DHS reports that around 95% of pregnant women receive antenatal care from a skilled birth attendant, and that 98% deliver in a health facility. The caesarean section rate in 2008 was 12.8%.

In 2002, WHO reported a maternal mortality ratio of 300 per 100,000 live births. However, maternal death is a rare event among the approximately 300 births per year; the confidence limits around this indicator would be broad, and its usefulness limited.

The most recently reported teenage fertility rate (2002) was 84 births per 1,000 women aged 15-19 years. Among four consecutive months of obstetric data available for review by the team, the mean age at child birth was 25.8 years (range 15-43) – slightly lower than the mean of 28 years reported in the 2002 census; the median parity among this group of mothers was 2 (range 1-19), which is lower than the total fertility rate recorded in the 2007 DHS (3.4) and the 2002 census (4.0).

Chronic Disease - Diabetes

The prevalence of diabetes and impaired glucose tolerance has changed little over the years. In 1976 and 1994, the prevalence was 28.1% among 25-64 year olds; the NCD STEPS Survey undertaken in

2004 showed that 22.7% of adults aged 25-64 years were on treatment for diabetes or had a fasting blood glucose > 7.0 mmol/L. Diabetes increased in prevalence with age and was found in 24.1% of those aged 35-44 years, 37.4% of 45-54 year olds and 45.0% of 55-64 year olds (with a clear predominance among women in older age groups).

Based on extrapolations from the STEPS Survey, the World Diabetes Foundation (WDF) has estimated that there may be approximately 2,150 people living with diabetes in Nauru. However, only 426 diabetic patients are currently registered with the Diabetes Centre at the RON Hospital – this indicates that many people with diabetes are not receiving care for their illness

Clinical studies undertaken in 1994 indicated a high prevalence of diabetic end-organ disease. Over 80% of known diabetics at that time had at least some signs of peripheral neuropathy; about one-third had some degree of retinopathy, and about half of them had the more severe proliferative form.

In 2007, 9 lower amputations were performed at RON Hospital; all were reported to be due to diabetic vascular disease. They included one forefoot, 6 below knee and two full limb amputations.

Emerging Health Issues

A number of conditions are emerging as significant health problems. These include:

- **Rheumatic Heart Disease** (confirmed by echo-cardiography by the visiting Australian cardiologist) – 91 patients currently on follow-up
- Emerging infectious diseases:
 - **Leprosy** – new cases are being diagnosed yearly with limited contact tracing done
 - **Trachoma** – a school survey indicated a prevalence of 30% among children aged <12 years)
 - **Sexually transmissible infections (STIs)** – there are currently no known or documented cases of HIV infection on the island; a recent antenatal survey found a 32% prevalence of *Chlamydia* infection among a sample of 120 pregnant women
- **Gynaecological and other malignancies**
 - Cervical screening among a sample of 257 well women found 22 abnormal (malignant or pre-malignant) smears and 10 with evidence of human papillomavirus (HPV) infection, representing a prevalence of abnormal findings of 12.5%
 - Malignancy is increasing more quickly than other causes of death, including smoking-related malignancy
 - Breast malignancy is becoming a prominent indication for referral for off-shore medical treatment (four cases referred for treatment in Australia during 2008)
 - Despite ongoing exposure to asbestos over many years in occupational (insulation and cladding) and environmental (house roofing) settings, only two cases of mesothelioma have been recorded in the last three years – one was peritoneal mesothelioma in a young child and one was pleural mesothelioma in an adult.
- Other **conditions of childhood**
 - The DHS found a prevalence of mild or moderate **anaemia** of 50.2% in children aged 6-59 months; no faecal surveys, serum iron or other studies were undertaken to ascertain the cause of the anaemia
 - The DHS also found a background level of **malnutrition** – almost one quarter (24%) of Nauruan children are moderately stunted and 8.1% are severely stunted

- **Mental illness**

- A reported 80 cases mental illness of various diagnosis is on official record. Using the population figure of the last census, the overall prevalence percentage of mental illness is 0.8%
- The incidence of depression is reported to be significant and increasing, although actual numbers are not accessible through the existing health information system
- Severe mental illness is uncommon, with only three ambulant patients on the island on follow-up for chronic schizophrenia, and none with affective or bipolar disorder
- Between two and five episodes of suicide or self-harm are reported each year; these involve methods of high lethality (strangulation or gunshot).

7. Health System / Services

Overview and utilisation of physical resources

Until July 1999, clinical services were provided through the Nauru General Hospital (NGH; for citizens) and the National Phosphate Corporation (NPC) Hospital (for i-Kiribati and Tuvaluan migrant workers and other non-citizens). NGH and NPC (which were located no more than 400 metres from each other) then amalgamated to become the Republic of Nauru Hospital.

Health services continue to be delivered through the two facilities.

Republic of Nauru Hospital –

The 56-bed RON Hospital is the principal curative health facility, and provides general outpatient and inpatient services. Departments and services include acute ward areas for adult, paediatric and maternity patients; Out-Patient Department; Dressing Clinic; Operating Theatre; Emergency Room; High-Dependency Unit; Isolation Ward; Radiology; Dental; Laboratory; Pharmacy; Medical Stores; Physiotherapy; Medical Records and an Ambulance service.

The Hospital is well equipped for a facility of its size in the Pacific, but buildings and structural elements are becoming worn and require extensive ongoing maintenance and rehabilitation

There is interest within both the MOH and the community in constructing a new facility on the former NGH site, but there are no firm plans or budget in place for this.

Naoero Public Health Centre–

The former Nauru General Hospital campus houses the Public Health unit, a 6-bed renal dialysis unit and a primary and preventive care unit for MCH and other community health activities.

Public health services (e.g. health promotion, EPI supplementary and catch-up immunisation activities) may also be delivered through outreach visits to schools, the home or community centres.



Role of central and local Government

Coordination and management of health services is completely centralised under the MOH. There are no other community based primary care facilities in Nauru, and no private practitioners.

Given the small size of the country and the ready availability of public and private transportation, access to clinical and preventive services provided through the RON Hospital and the Public Health campus is good.

Role of non-State providers

There are no private or non-government health service providers on Nauru. Over-the-counter medications (but not prescription drugs) are available in the supermarket and in many stores.

Primary/ambulatory care

The RON Hospital Outpatients Department is the only primary care facility on the island. The Naoero Public Health Centre conducts regular community and school outreach visits for both primary and preventive health purposes. A District Health Worker (DHW) is employed in each District to provide a range of outreach services to the community.

Referral services, secondary and tertiary care

For internal referrals for secondary care the RON Hospital is the only clinical facility. Non-urgent cases requiring secondary care or a specialist opinion regarding tertiary care may be placed on a waiting list to be seen by a visiting medical, surgical or other specialist. This program is coordinated by the Royal Australasian College of Surgeons using AusAID funds that lie outside the PPD Agreement.

Patients with more serious conditions or requiring more urgent treatment that is not available in-country may be eligible for off-shore referral at GON expense. In recent years these referrals have been to Brisbane, Australia, but more recently referrals have been arranged in Chennai, India, at greatly reduced costs. The MOH has a policy to guide decisions on eligibility off-shore referrals; these decisions are made by a designated sub-committee with both medical and administrative membership, and subject to Ministerial approval.

Public Health Functions

Public health program priorities

The public health program lists five priority areas of focus for its activities:

- non-communicable diseases,
- communicable diseases,
- primary health care services,
- environmental health and food safety services, and
- global and regional collaboration and cooperation.

Non-communicable disease control

The national NCD Plan addresses the risk of NCDs through a strong focus on awareness and behaviour modification, based on: increased physical activity; reduced alcohol use; decreased tobacco uptake and use; improved diet through production and consumption of safe and nutritious foods; and diabetes prevention and control.

Promotion of physical activity includes the “Walk on Wednesdays” (which attracts between 80 and 200 participants each week), aerobic dancing, and periodic “Walks around the Island”.

For tobacco and alcohol control, a tobacco control bill has been passed. Activities are organised for World No Tobacco Day, and education on the hazards of tobacco and alcohol consumption is provided in schools.

The Diet and Nutrition program provides community education on healthy food preparation and cooking workshops, a weight watchers' clinic and diet control program, and school-based education on nutrition and healthy foods.

Communicable disease surveillance and control

Organisation –

The RON Hospital laboratory is able to provide a preliminary diagnosis of hepatitis B and HIV infection using rapid diagnostic test (RDT) kits and of tuberculosis by microscopy. However, it lacks the facilities for bacterial culture or infectious diseases serology that are necessary to support laboratory confirmation of a broader range of diseases of public health significance.

The Public Health Unit has introduced a weekly system of syndromic surveillance of communicable diseases, with urgent reporting of suspected outbreaks (for which there are guidelines for reporting thresholds) and specific conditions of possible international public health concern. The syndromes currently subject to surveillance include: diarrhoea, influenza-like illness, severe acute respiratory infection or pneumonia, acute fever with rash, and acute flaccid paralysis.

The Public Health Unit produces a monthly surveillance bulletin, which summarises reporting trends from the previous month.

Pandemic preparedness

Nauru is a signatory to the revised International Health Regulations (IHRs; 2005), which place certain reporting obligations on WHO member states for events of international public health concern.

In the context of the influenza A (H1N1) pandemic, Nauru must be regarded as at high risk of importation (due to direct air links to Australia) and high epidemiological risk of severe clinical manifestations of infection (due to the high prevalence of diabetes other chronic diseases and obesity. Confirmatory laboratory testing and sub-typing involves specimen referral to the WHO regional influenza laboratory in Melbourne, with turn-around times for results of up to two weeks.

In collaboration with WHO and the Government of Taiwan the Government of Nauru in 2010 completed an H1N1 vaccination program effectively covering the entire population, free of charge to the people.

Healthy Islands

Under the banner of Healthy Islands, health promotion and health protection are key primary health care elements that are strategised and implemented by the Public Health Division. In addition, the Nauru Health Promotion Council was established by the President and it works to support the Ministry in health promotion strategies.

Collaborations on HIV prevention

The AusAID-funded Pacific Regional HIV Project (PRHP) and UNESCO have both funded and provided training for NGO collaboration on HIV prevention and awareness raising (which is coordinated with the assistance of the public health team).

Environmental health and food safety services

The Public Health Unit's work plan includes environmental sanitation, hospital hazardous waste management, outbreak investigation and disease prevention, vector born disease prevention and control, a food safety and awareness of food borne diseases program, and food inspection. Capacity within the team to undertake many of these functions appears limited.

8. Health Work Force

Health workforce number has progressively increased over the past ten years. After the Organisational Reform of 2009, the total approved health work force is 221. There are 14 medical officers and 78 nursing and nurse aides' positions.

This represents 1.4 doctor and 7.8 nurses per 1,000 populations, which exceeds the WHO recommended combined minimum threshold of 2.5 health care workers per 1,000. The nurse-to-doctor ratio is a little

higher than the median ratio in PICs (which lies between 6:1 and 8:1, but ranges from 1.3:1 in Palau to almost 20:1 in Vanuatu), but much higher than the 4:1 nurse-to-doctor ratio in Australia and New Zealand.

Expatriate staffs are from various countries in the Pacific such as from Fiji, Kiribati, Tuvalu, Tonga and PNG. A group staff from Cuban and Burma are also part of the medical staff.

Table 8.1: Distribution of health workforce by occupation, gender and non-nationals – July 2011

Occupation	Male	Female	Total	Vacant	Non-nationals
Physicians	9	5	14	0	13
Nursing and Midwifery	3	67	70	8	10
Dentists	1	0	1	1	1
Dental technicians/assistants	2	3	5	1	1
Pharmacists	1	1	2	1	2
Pharmaceutical technicians/assistants	5	3	8	0	0
Laboratory technologists	2	2	4	0	2
Laboratory assistants	1	2	3	0	0
Radiographers	0	1	1	1	1
Radiography assistant	1	0	1	0	0
Physiotherapists	1	0	1	1	1
Physiotherapy assistant	1	0	1	0	0
Health Information	2	6	8	0	0
Dietetics and Nutrition	1	1	2	1	1
Environmental Health Workers	7	0	7	0	1

Community health workers	3	14	17	1	0
Ambulance	5	0	5	0	0
Other drivers	4	2	6	0	0
Housekeeping and Laundry	1	22	23	0	0
Catering	4	8	12	2	1
Maintenance	5	0	5	0	0
Management and Administration	3	14	17	1	2
TOTAL	62	141	203	18	36
Percentage of total	28	63.8	91.8	8.1	16.2

- The male/female mix is typical of health care services in the region
- Although expatriate employees make up on 16.2% of the workforce those people serve in key medical, senior nursing, technical and management roles.
- Vacancies, at 8% of the work force, are at typical levels and illustrate the delays and difficulties encountered in filling vacant positions.

9. Health Products, Vaccines and Technologies

Pharmaceuticals

All drugs and medicines dispensed by the Ministry Pharmacy are made at no cost to the patients. For many years, the medical supply chain was plagued by shortages and stock-outs, which necessitated frequent short-term, emergency procurements through Australian suppliers. WHO has provided technical assistance to develop a national Essential Drug List (EDL). In 2008, the UN Volunteer Pharmacist developed and oversaw a transition of procurement of about 60% of the items on the EDL to the International Drug Association, a NGO based in the Netherlands; about 40% of pharmaceutical procurement is through private providers in Australia. This has virtually eliminated stock-outs of core essential drugs, and only occasional emergency replenishment

is currently required. Stock control is achieved through the mSupply system and a support contract is in operation. The Ministry is also developing a new National Medicine Policy. This policy is expected to be the basis for a new Pharmacy Bill.

Biomedical engineering

A regional Biomedical Engineer serves Nauru and contracts also exist for the maintenance of dialysis equipment; oxygen plant; dental equipment; and general medical equipment. The Medical Equipment Committee has been constituted to address equipment requirement and issues of the Ministry. A minimum equipment list is also been developed along with a new Equipment Policy document.

10. Health Financing

Figure 10.1: Health Funding by Source 2010-2011

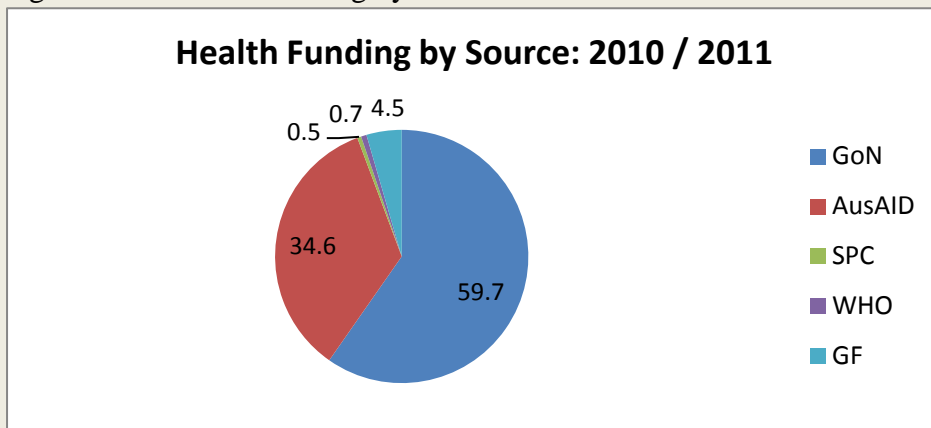


Figure 10.2: Health Sector budget 2010-2011 by sub-head and source

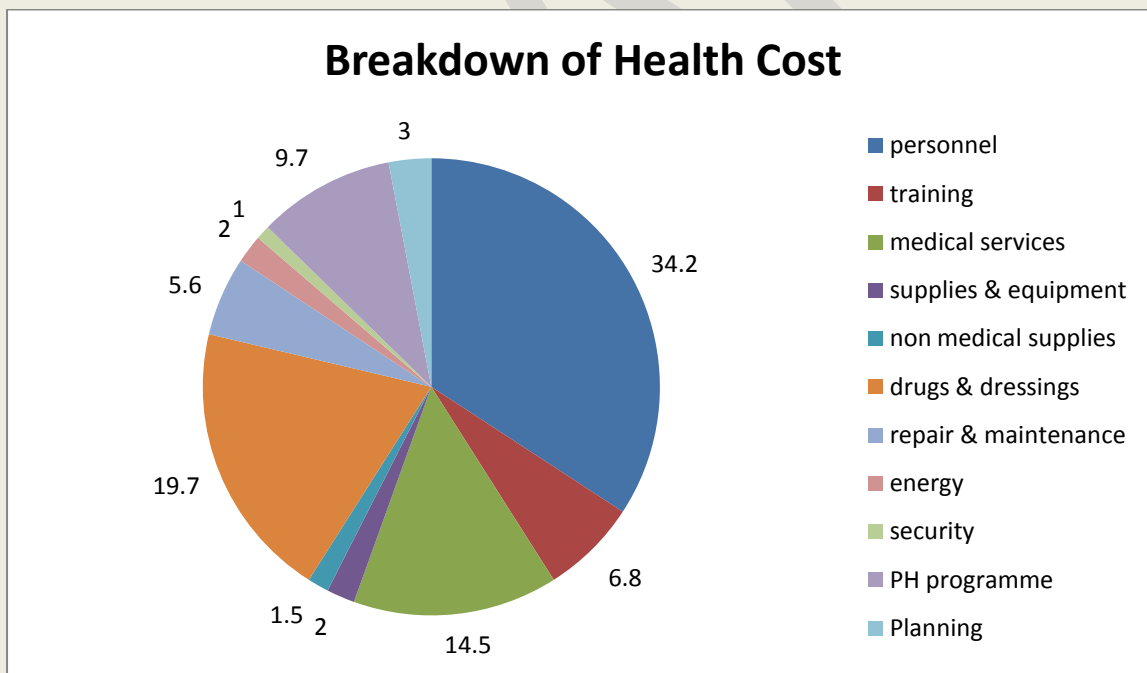


Figure 10.3: Health Sector Budget by Value and Source 2010/2011

Heading	Total	GON	AusAID	SPC	WHO	GF	%
Staff payments	1,952,643	1,952,643					34.2
Training & HIMS	392,520	71,500	321,020				6.8
Medical Services	826,195	716,000	110,195				14.5
Medical supplies & equipment	115,000		115,000				2.0
Non medical supplies	85,373	85,373					1.5
Drugs and Dressing	1,127,500	327,500	800,000				19.7
Repairs and Maintenance	319,310	65,940	253,370				5.6
Energy costs	116,172	116,172					2.0
Security	55,000	55,000					1.0
PH programme	554,223	20,000	210,000	30,062	43,900	250,261	9.7
Planning costs	172,000		172,000				3.0
Total Sector Budget	5,725,906	3,420,128	1,981,585	30,062	43,900	250,261	
%	100	59.7	34.6	0.5	0.7	4.5	

11. Health Information

The RON Hospital Medical Records Department has a Microsoft *Excel* data base into which patient registration data and International Classification of Disease (ICD-10) discharge diagnoses can be entered. Staffs have undergone training in ICD-10 classification through the university of Queensland, and further training in the *Excel* software has been proposed.

The data base does not include any programmed analytic functions, and staff are only able to generate line listings and perform limited manual collation of data. Nursing staff calculate bed occupancy and average lengths of stay manually from their own registers.

The expatriate obstetrician–gynaecologist is developing a gynaecological cancer registry as a stand-alone data base.

To facilitate and manage stock control, the recent UN Volunteer Pharmacist installed *M-Supply* software on a stand-alone computer at the RON Hospital Pharmacy. Some Pharmacy support staff are familiar with and able to use the system. It stands completely separate from the Medical Records information system.

In the absence of a robust health information system, objective evidence-based planning of service development is extremely difficult. (Data cited in the present report are drawn from the Nauru Bureau of Statistics and data contained in

the *Nauru NCD Risk Factors Steps Report* and other surveys).

It is a priority for the MOH to establish a HIS, but resources are not yet allocated for this purpose. At the time of the country

visit, some discussion was under way with the Australian Institute of Health and Welfare (AIHW) to undertake a formal in-country assessment of health information management needs.

12. Health System GAPS

- Financing
Health funding that is highly dependent on donor fund injection can be unsustainable. Cost recovery and user fees could be applied to specific health services if policies are favourable to government
 - Human resource
Human resource remains a major challenge for the Ministry of Health. The high dependence on expatriate staff is both unsustainable and expensive. The high attrition rate for local staff is also a concern and requires a whole of government response. The strategic plan has human resource development particularly training as a key objective with committed funds dedicated to it.
 - Preventive health
Outcomes on disease prevention strategies remain to have significant impact on incidence of common diseases. Preventive health strategies on disease prevention need to refocus on getting more community involvement and participation.
 - Health information
Weaknesses in health information complicate data analysis for planning in service delivery, disease monitoring and surveillance. Development of minimum data set will be priority in the strategic plan.
 - Clinical services
With high disease prevalence and morbidity on several non communicable diseases, diagnostic services need to be upgraded to meet requirements for patient management. At least microbiology and mammography need introduction and support.
-

New Activities, Programmes and Areas of Interventions of Strategic Plan

- Improve health protection through enforcement of regulation such as that on public health, food and tobacco
- New laboratory performance through the introduction of microbiology service and capability
- Expand medicinal preparations and availability through pharmaceutical manufacturing
- Improve health information data collection, tabulation and analysis
- Improved community health service through district community health centres

13. Development Partners

Australian Government

The MOH has a long-standing relationship with **AusAID**, which provides direct financial support and indirect technical and financial support (in the form of grants or contracts channelled through Australian institutions and managing contractors).

The Australian MOU grants are renegotiated each year, but are monitored more frequently by an AusAID officer placed either on Nauru or visiting periodically from Honiara, Solomon Islands. Virtually all MOU-funded activities are complementary to national inputs and align broadly with national strategic priorities; mechanisms are relatively flexible, and formal matching (cash or in-kind) is generally not required.

Following the Government of Australia's *Port Moresby Declaration*, Australian assistance will transition to a new *Australia-Nauru Partnership for Development*. The *Partnership* arrangements are more reflective of the principles of national leadership, shared vision, mutual respect and responsibility, predictable longer term engagement and the increasing use of national systems to address national priorities outlined in the *Accra Agenda for Action*. Health will be one of 6 key sectors specifically addressed by the *Partnership* agreement (the others are public sector management, education, infrastructure, and private sector growth, with the law and justice sector viewed as a cross-cutting sector).

World Health Organisation

The MOH also has a long-standing partnership with the **World Health Organization**, which provides technical assistance, support for human resource development and supplementary funding for in-country implementation of priority public health activities through a biennial budget process that allows the MOH considerable latitude in addressing national priorities. WHO linkages are particularly valuable in connecting Nauru with the global public health community, where some technologies and strategies may be more appropriate to Nauru's circumstances and level of development than those drawn from Australia.

UNFPA

The **United Nations Population Fund (UNFPA)** provides contraceptive and other reproductive health commodities that greatly supplement those obtained through normal Government procurement channels. Apart from contraceptives, UNFPA also provide technical assistance in the area of reproductive health including training support.

UNICEF

The **United Nations Children's Fund (UNICEF)** provides ongoing assistance to the Ministry with vaccine supply and logistics support, and opportunities to participate in regional meetings and training on a variety of child health topics.

The **Asian Development Bank** is slowly re-emerging as a multi-lateral partner. Nauru joined the ADB in 1991, and has received one loan for \$5 million and six technical assistance grants totalling \$1.72 million. However, GON non-compliance with loan conditions resulted in closing of the loan and cancelling of the balance of \$2.7 million in 2003.

Although the MOH is not yet a direct beneficiary of financial assistance from ADB again, ADB provided the GON with valuable technical advice and support during the development of the NSDS.

This support will potentially contribute to health development by further addressing the social determinants of health through multi- and cross-sectoral mechanisms.

Republic of China (Taiwan)

The MOH also has a number of bilateral partners other than Australia. The ***Republic of China (Taiwan)*** provides technical, training, and material support to health and has fostered a twinning relationship for occasional placements and other aspects of training between the RON Hospital and hospitals or universities in Taiwan.

Taiwan also provides occasional support for tertiary care through twice-yearly visiting teams. Treatment of Nauruan patients in Taiwan health facilities is not yet possible. Beyond direct support for the health sector, Taiwan is a major source of technical and financial assistance for agriculture development that will directly benefit Nauruan households (and possibly also eventually see the emergence of small-scale agribusinesses). With time, this assistance may help to address the food security issues highlighted in Sections 4.1.2 and 4.1.3, above.

New Zealand

New Zealand provides technical support through several mechanisms including training. Recent commitment includes funding support for the refurbishment of the recompression facilities at RON Hospitals.

Republic of Cuba

While the ***Republic of Cuba*** does not provide formal financial assistance to Nauru, it is emerging as an important health partner through the training of Nauruan medical students at Cuban medical schools and, potentially, as a source of health professionals to meet gaps in the local health work force.

Secretariat of Pacific Community

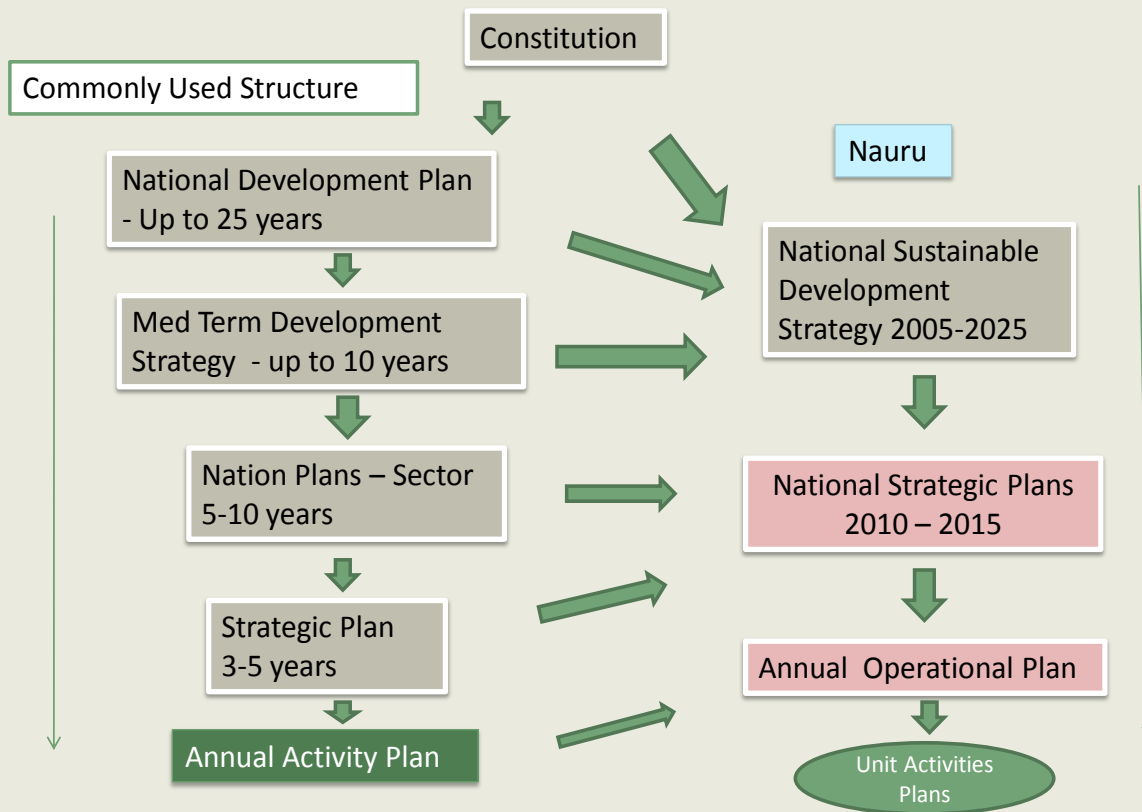
Within the Region, the MOH works closely with the ***Secretariat of the Pacific Community***. Assistance from SPC is primarily in the form of technical assistance and training support, including through the non-health sectors.

It is also through SPC that Nauru can access funding from the Global Fund projects on HIV and TB, the HIV/STI Response Fund and small grants schemes under the regional NCD Framework (see Section 5.9, *Health Financing*, above). Although these funds are a valuable adjunct to national and MOU resources, they represent a relatively narrow and historically inflexible single-disease focus with monitoring and reporting requirements that lie parallel to national mechanisms.



14. STRATEGIC PLAN 2010-2015

Structure and Linkages of National Plans / Processes



Linkages

The country's Constitution provides the legal basis and mandate for the establishment and provision of health services in the country. The mandate of the Constitution is translated and incorporated by elected Governments in its long term Development Plans or Strategies. Sector plans are normally formulated by Government Ministries for medium term periods of up to 10 years to prioritise and strategise the Development Plan. The Annual Operation Plan is a budget linked document that sets out to operationalise the Sector Plan or Strategic Plans. Unit or Departmental Activity Plan is final planning document has list weekly, monthly or quarterly activities. The Ministry of Health key planning document and linkages is presented and discussed below.

National Sustainable Development Strategy (NSDS)

The National Sustainable Development Strategy is the long term development strategy of Government covering a period of 20 years. The NSDS has the vision of "A future where individual, community, business and government partnerships contribute to a sustainable quality of life for all Nauruans". There are seven strategies for health under the social sector goals. The HSP outlines the linkages to the NSDS and proposals to address the health targets. The findings of the 2009 review of the NSDS were noted and gaps identified have been strategized for further implementation in the HSP.

15. Alignment of NSDS and NHSP

Table 15.1: Alignment of NSDS and NHSP

<i>NSDS Strategies for Short, Medium and Long Term Goals</i>	<i>NHSP Key Result Area Strategies</i>	<i>Comments</i>
Strengthening health systems capacity and sustainability through institutional and systems reform, organizational restructure, planning and quality delivery of health services	KRA 1: Health Systems KRA 3: Curative Health	<ul style="list-style-type: none"> • Planning and policy actions included • Governance • Health service • Medical products
Strengthening response and interventions on preventative health, reproductive health, non-communicable diseases, pandemic and national disasters	KRA 2: Primary Health Care and Healthy Islands KRA 3: Curative Health	<ul style="list-style-type: none"> • Curative health strategies are linked to outcomes
Strengthening Reproductive Health Commodity Security for effective and quality service delivery	KRA 2: Primary Health Care and Healthy Islands	<ul style="list-style-type: none"> • Curative Health also incorporate elements of this strategy
Strengthening health systems and service delivery through human resource development, workforce planning, capacity development and training	KRA 1: Health Systems	<ul style="list-style-type: none"> • Human resource • Health finance • Health information
Providing quality and effective service delivery through infrastructure development and upgrading	KRA 4: Administration and Support Services	<ul style="list-style-type: none"> • Infrastructure maintenance and Medical Equipment
Improved quality of life through sports for all	KRA 2: Primary Health Care and Healthy Islands	<ul style="list-style-type: none"> • Multi-sectoral strategy
Strengthening awareness of people with disabilities	KRA 2: Primary Health Care and Healthy Islands - awareness and prevention	<ul style="list-style-type: none"> • KRA 3: Curative Health strategy on prosthesis is relevant

16. Alignment of Australia / Nauru Partnership Priority Outcome to NHSP

Table 16.1: Partnership Priority Outcome 3 Alignment with NHSP

PARTNERSHIP PRIORITY OUTCOME 3: A COST-EFFECTIVE HEALTH SYSTEM WHICH DELIVERS IMPROVED HEALTH OUTCOMES

PPO 3.1 Strengthening health system management in particular budget prioritization, strategic planning and improved health statistics

- NHSP – KRA 1: Governance, Health Financing, Health Information strategies

PPO 3.2 Reduced prevalence of non-communicable diseases and sexually transmitted infections, through more effective preventive and public health programs

- NHSP – KRA 2: NCD, RH, STI/HIV STRATEGIES

PPO 3.3 Improving maternal and child health outcomes, by addressing child nutrition and improving access and quality to ante and post natal care

- NHSP – KRA 2: MCH, NUTRITION, RH, SAFE MOTHERHOOD STRATEGIES

Addressing Crosscutting Issues

The Health Strategic Plan proposes to address key cross cutting issues such as gender, disability, climate change adaptation, disasters mitigation and environment. Identifying gender associated morbidity and mortality has been an ongoing activity of the Ministry. Segregation of data into sex classification is important for analysis purposes. The HSP has proposed the introduction of services on prosthesis. This service will cater for the needs of disabled citizen with lower limb amputations. Assistance for housing renovation to facilitate mobility of disable people on wheel chairs has been made by Government. Climate change adaption is a whole of government strategy with the Ministry of Health contributing on issues related to disease occurrence. Similarly, disaster mitigation is a whole of government activity with the Ministry of Health contributing its role and function in the national plan developed.



17.

GUIDING PRINCIPLES

Vision

A Healthy and Peaceful Nation that values and supports *human rights and dignity* through the provision of *quality health care and services*

Mission

‘Based on the principles of Primary Health Care, the Ministry of Health aims to promote; protect and maintain the health of all people of Nauru through preventive health care programme and appropriate clinic services’.

Values

Professional

- Professional in character and mannerism in all matters related to our services

Responsiveness

- Responsive to the health needs of the population noting the need for speed in delivery of urgent health services.

Caring

- To display real caring attitude to all patients in all areas of service

Customer focus

- Being genuinely concerned that our customers receive quality health care,
- respecting the dignity of all people

Equity

- Striving for an equitable health system and being fair in all our dealings: irrespective of ethnicity, religion, political affiliation, disability, gender and age

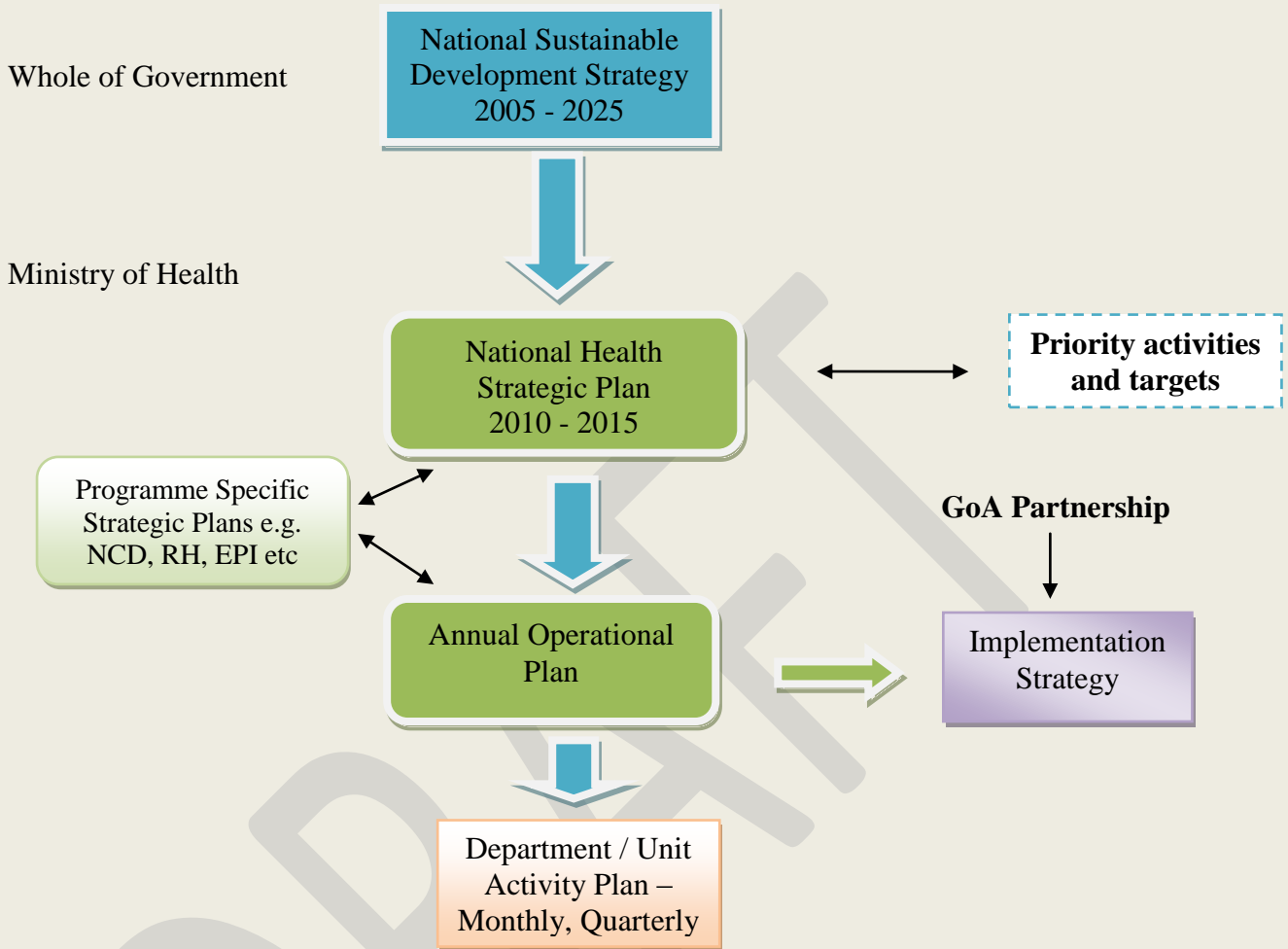
Quality

- Pursuing high quality outcomes in all facets of our activities

Integrity

- Committing ourselves to the highest ethical standards in all that we do.

18. Health Planning Documents and Linkages



19. Strategic Focuses of Ministry under Key Result Areas

The key areas of health services and health programmes of the Ministry of Health and Medical Services have been organised and grouped under thematic or Key Result Areas. The KRA have been determined according to and in line with global and regional undertakings to strengthen and improve services and systems.

Furthermore, the KRAs are also identified and aligned to the current Organisational Structure of the Ministry and as such, have appointed Directors responsible for the operationalisation of the strategies associated with the KRA.

The four Key Result Areas are as follows.

Key Result Area 1:	Health Systems
Key Result Area 2:	Primary Health Care and Healthy Islands
Key Result Area 3:	Curative Health
Key Result Area 4:	Support Services and Networking

20. New projects and programme proposed under Strategic Plan

1. Health System
 - a. Health Information
 - i. E-Health /data streamlining
 - ii. Medical Registry
 - iii. Cancer Registry
 - b. Health Research
 - c. Pharmaceutical manufacturing
 - d. Pharmacy Bill
2. Primary Health Care and Healthy Islands
 - a. Enforcement Unit
 - PHA, Food Safety, Tobacco Control, IHR
 - b. Adolescent Health
 - c. Healthy Islands
 - i. Health promotion HPC
 - d. District community health centres
3. Curative Health
 - a. Specialist visits – podiatrist
 - b. Microbiology services
 - c. Hydrotherapy pool
 - d. Radiology information system
 - e. Renal services review
4. Support Services
 - a. Prosthesis services
 - b. Medical waste management
 - c. Accident and Emergency
 - d. Disaster mitigation – fire

21. Consolidated Health Indicators and Targets for Strategic Plan 2010-2015

Health and Services Indicators	Targets		
	2010	2012	2015
Infant mortality rate / 000	22	18	<15
Maternal mortality (number)	1	0	0
Chlamydia infection rate	30%	20%	<10%
Trachoma infection rate	30%	20%	<10%
Anaemia prevalence	42%	30%	<25%
Contraceptive prevalence rate	20%	25%	30%
Diabetes population screening rate	20%	50%	70%
Professional expatriate staff	16%	12%	10%
Health expenditure in GoN budget	17%	18%	18%

22.

KEY RESULT AREA 1: HEALTH SYTEMS

Policy Goal: To strengthened health system capacity and capability to meet health services needs, demand and expectations.

Strategic Areas of Focus

- Strategic Area 1: Leadership and Governance
- Strategic Area 2: Medical Services
- Strategic Area 3: Health Finance
- Strategic Area 4: Human Resources for Health
- Strategic Area 5: Health Information
- Strategic Area 6: Medical Supplies and Technology

Priorities Actions and Targets by 2015

Governance

- Improved legislation
 - Public Health Act passed by 2012
 - Pharmacy Bill introduced by 2013
- Establishment of enforcement unit
 - Legal enforcement unit established by 2012

Medical services

- Establish District Community Centres
 - DCC established and operational by 2012
- Health research established and operational
 - Two health research conducted every year
- Nursing Standards
 - Adopted and implemented

Health Finance

- Revenue generation
 - Revenue generation options approved and implemented by 2014

Human Resources for Health

- Capacity building for local staff
 - Expat professional staff reduced to 10% by 2015

Health Information

- Improve health information unit, role and function
 - Minimum health information data set (eHealth) in used by 2013
- Establish Medical Registry
 - Medical registry established and function by 2013

Medical products and technology

- Introduce pharmaceutical manufacturing
 - Pharmaceutical manufacturing established by 2014

What we will do:

Leadership and Governance

- Strengthened health planning process to address at least the requirement for national health strategic planning and annual operational plan preparation.
- Consolidate health policies developed and introduce key policies in health programme and service areas
- Formulate and review legislation to address and meet of health service needs, demands and responsibilities
- Establish a unit to enforce health laws and regulation

Medical services

- Strengthen Nursing services to cater for better patient care and community nursing
- Strengthen nursing services standards and management
- Foster nursing speciality development and recognition
- Establish District Community Centre to serve as outlet for community health services
- Establish and strengthen health research capabilities of the Ministry

Health Finance

- Advocate for appropriate health funding
- Support revenue generation and collection as approved by Cabinet
- Formulate a National Health Account for better record and projection of health care financing

Human Resource for Health

- Continue to support engagement, recruitment and retention of health workers
- Strengthen education and training of health workers

Health Information

- Strengthen health information capabilities by introducing a minimum data set for data collection including morbidity, births, deaths registration
- Strengthen and improve patient records keeping especially tracking, ICD coding and patient data entry
- Introduce computerised health information system - ehealth
- Establish medical department registry for record keeping of the role, function and work of the Ministry and departments.

Medical products and new Technology

- Improve key stores operations of procurement, receiving, storekeeping and dispatching of drugs and medical supplies
- Strengthen stores inventory control systems including mSupply capacity
- Strengthen and enhance pharmacy practice
- Expand pharmaceutical services by introducing pharmaceutical manufacturing to cater for better patient care

23.

KEY RESULT AREA 2: PRIMARY HEALTH CARE AND HEALTHY ISLANDS

Policy Goal: To strengthen and improve community preventive and health care services under the principles and concepts of primary health care and healthy islands

Strategic Areas

- Strategic Area 1: Reproductive Health - STI / HIV / AIDS
- Strategic Area 2: Child Health
- Strategic Area 3: Maternal Health
- Strategic Area 4: Adolescent Health
- Strategic Area 5: Non Communication Disease
- Strategic Area 6: Communicable Diseases
- Strategic Area 7: Nutrition
- Strategic Area 8: Healthy Islands
- Strategic Area 9: Environmental Health

Priority Action and Targets by 2015

- Reduce STI infection especially Chlamydia
 - Reduce Chlamydia infection rate to less than 10%
- Expand vaccine preventative diseases coverage
 - Introduce HPV vaccine by 2015
- Reduce maternal morbidity
 - Reduce maternal anaemia to less than 25%
 - Increase contraceptive prevalence rate to 30%
- Increase Diabetes screening
 - Increase number of diabetics on management
- Reduce Trachoma prevalence
 - Trachoma prevalence to less than 10%
- Reduce Malnutrition in under 5 years
 - Improve exclusive breastfeeding rate to 60%
 - RON declared Baby Friendly Hospital
- Strengthen health promotion and health protection
 - Health promotion council reconstituted and active
- Environmental health
 - Reduce breeding grounds for mosquitoes by 10%

What we will do:

Reproductive Health

- To support national and regional efforts to prevent the spread and minimise the impact of HIV and other STIs on individuals, families and communities
- To increase the early detection of HIV and other STIs to reduce further infections and facilitate timely treatment.
- To strengthen planning, monitoring, evaluation, surveillance, research and information sharing at the national and regional levels.
- To attain good governance and effective coordination of regional and national HIV & STI responses

Child Health

- Strengthen sound infant feeding practices especially exclusive breastfeeding and the promotion of the Baby Friendly Hospital initiative
- Support the maintenance of a strong EPI programme including good management of the cold chain
- Explore possible introduction of new vaccines against common diseases of childhood
- Introduce Immunoglobulin administration for RH+ve mothers
- Maintain and strengthen Well Baby Clinic for follow up and care of children
- Maintain and strengthen School Health services

Maternal Health

- Support and strengthen safe motherhood initiatives and programmes
- Strengthen Family Planning including the introduction of new methods of FP
- Support and strengthen cancer screening and prevention programmes especially PAP smear and breast examination
- Strengthen research in maternal reproductive health issues

Adolescent Health

- Introduce adolescent health programme and services especially adolescent health friendly services
- Support youth centres and activities in the community

Non Communicable Diseases

- Support and strengthen ongoing diagnostic, preventive and treatment services for diabetes, hypertension and cardiac diseases
- Support and strengthen ongoing activities against NCD risk factors particularly, tobacco and alcohol use reduction

Communicable Diseases

- Support and strengthen communicable disease control particularly for TB, Leprosy and Trachoma
- Support Global fund and other donor funded communicable diseases control programmes such as TB and Filariasis

Nutrition

- Support and strengthen ongoing school feeding programme to ensure good nutrient education is fostered in primary schools
- Introduce and support the Baby Friendly Hospital initiative and the promotion of exclusive breast feeding including good weaning practices
- Advocate for good family nutrition through home gardening and healthy food preparation including cooking demonstration

Environmental Health

- Maintain and strengthen environmental sanitation in partnership with local communities and district primary health care workers
- Expand and strengthen food safety control including the enforcement of the Food Safety Regulation
- Maintain and strengthen pollution control measures especially sewerage and medical waste management
- Maintain and strengthen water safety through monitoring, analysis and treatment of water storage vessels
- Strengthen vector control measures and activities including fumigation of residences against adult mosquitoes and other vectors
- Maintain and strengthen quarantine services at ports of entry
- Support the role and functions of the enforcement unit of the Ministry

Healthy Islands

- Strengthen health promotion and health protection initiatives under the healthy island banner
- Revitalise the Healthy Island Council and support its schedule plan and work



KEY RESULT AREA 3: CURATIVE HEALTH SERVICES

24.

Policy Goal: To provide high quality clinical care and services to meet the needs and expectations of patients and that are in line with the policies and resources of the Ministry.

Strategic Area 1: Clinical services
Strategic Area 2: Tertiary care and referral services
Strategic Area 3: Clinical support service
Strategic Area 4: Diagnostic services

Priorities Actions and Targets by 2015

- Reduce infection rate of post operative wound
 - 25% reduction
- Reduce incidence of premature labour and births
 - 10% reduction from current rate of 15%
- Improve services for diabetic retinopathy
 - 15% per year coverage for all diabetic patients
- Improve renal dialysis service management
 - Renal dialysis service review undertaken
- Reduce demand for dialysis services
 - 10% reduction of new patients for dialysis
- Introduce Community Based Rehabilitation
 - Services introduced and operational
- Introduce prosthesis services
 - 50% of amputees assisted with prosthesis
- Re-introduce hyperbaric service
 - Services introduced and operational
- Improved overseas referral effectiveness
 - 10% increase in patient referral numbers
- Introduce breast clinic services
 - Service introduced and operational
- Introduce Radiologic Information System (RIS) and related system
 - RIS developed and functional
- Improve microbiology diagnostic capabilities
 - Service introduced and operational
- Introduce ART, fissure sealant and topical fluoride for dental care
 - Service introduced and 70% of school covered

What we will do

To address these priorities and target and to meet each department's pre assigned roles and responsibilities, the division of medical services will seek to implement at least the following objectives.

Clinical patient care

- Maintain and strengthen clinical services especially patient care in all departments (Medicine, Surgery, Paediatrics, Obstetrics and Gynaecology)
- Improve Accident and Emergency and General Outpatient Patient Department services through better triaging of patients
- Improve and strengthen eye care services including preventive measure against early blindness (laser treatment for diabetic)
- Strengthen mental health treatment services including counselling
- Maintain and strengthen oral health services including prosthetics services and preventive dentistry to the community and schools

Tertiary clinical and referral services

- Maintain and strengthen dialysis services to ensure continuous availability of the service to patients through functional equipment and consumables along with properly trained staff
- Conduct an audit of renal dialysis service to ensure efficient planning and management of services
- Coordinate partner agencies and governments offers for specialist visits and services in the various clinical fields
- Support scheduled visits of specialist for services in the various clinical fields
- Support and facilitate cost effective evacuation and referral of patients for overseas medical treatment

Clinical support services

- Provide and strengthen physiotherapy services to cater for patient needs
- Strengthen Community Based Rehabilitation (CBR) programme including networking
- Provide assistance for basic access and mobility requirements in disable peoples' houses
- Introduce hydro therapy for mobility improvement
- Reactivate and maintain hyperbaric service and management system to support prescribed function and also patient care
- Develop prosthesis services at RON to cater for the need of amputees

Diagnostic services

- Maintain and strengthen current services in haematology, biochemistry and related services in the laboratory
- Establish microbiology diagnostic capability at RON
- Strengthen blood bank services to incorporate voluntary blood donor services including related support mechanisms
- Maintain and strengthen current radiologic diagnostic services
- Strengthen radiologic and scanning services to cater for breast examination and diagnosis
- Strengthen radiology services to include Radiological Information System (RIS)

25.

KEY RESULT AREA 4: SUPPORT SERVICES and NETWORKING

Policy Objective:

To support the clinical and health programme role and functions of the Ministry through a robust health administration and management system.

- Strategic Area 1: Administration
Strategic Area 2: Equipment
Strategic Area 3: Infrastructure
Strategic Area 4: Networking

Priority Actions and Target by 2015

- Improved local staff level at professional cadre
 - Reduction of expatriate staff by 5%
- Improved medical equipment management
 - Minimum standards of equipment established
 - Boarding and removal of non serviceable items yearly
- Improved infrastructure maintenance
 - Maintenance of infrastructure undertaken
 - Master planning exercise for a new hospital facilitated
- Foster new partnership
 - NGO for NCD control revitalised and in action

What we will do;

To address the policy objective and the strategic area, the Ministry through Administration Division will undertake the follow activities.

Administration

- Manage human resource issues of the Ministry especially in terms of staff recruitment and engagement
- Administrative management of the hospital and public health service functions to ensure ease of operations

- Manage transportation and communication requirements of the Ministry

Equipment

- Manage equipment requirements of the health services
- Establish a baseline minimum equipment requirement in all sections and units of the hospital to ensure that basic service can be maintained in the phase of severe resource constraints.
- Ensure the maintenance of all medical equipment including the safe disposal of non serviceable items

Infrastructure

- Maintenance of existing health facility infrastructure
- Appropriate infrastructure development to cater for service expansion and accommodation
- Master planning completed for new Hospital development

Networking

- Working with partners in the government sector and Non Government Organisation to promote and advance health based programme and initiatives in Nauru
- Networking and partnership with countries and institutions of the region to address local health issues and issues common to the region

26. Implementing Structure and Schedule

The Key Result Areas and the accompanying strategies and objectives are aligned to the organisational structure of the Ministry. Under each organisation structure, a health Director is responsible for the supervision and management of the division. Implementation of the key result area, strategies and objectives will be under their responsibility.

Key Result Area	Organisation Structure / Programme Unit	Officer Responsible
Health Systems	All Departments	SHMS / DMS / DPH / DAH
Primary Health Care	Public Health	DPH / Programme Staff
Curative Health	Hospital / Medical Service	DMS / OIC
Support Services	Administration	DAH

Budget and funding allocations are also aligned to the structure and under the supervision of the responsible Director. Furthermore, monitoring of activities implementation and challenges faced will be the responsibility of the line Director.

27. Cost Analysis of Strategic Plan

Key Result Area 1: Health System

Strategic Area	Key Objectives	2011-12 Cost / Source	2012-13 Cost / Source	2013-14 Cost / Source	2014-15 Cost / Source
1.1 Leadership and Governance	<ul style="list-style-type: none"> Strengthened health planning process to address at least the requirement for national health strategic planning and annual operational plan preparation. 	Internal	Internal	Internal	<i>Internal</i>
	<ul style="list-style-type: none"> Consolidate health policies developed and introduce key policies in health programme and service areas 	Internal	Internal	Internal	<i>Internal</i>
	<ul style="list-style-type: none"> Formulate and review legislation to address and meet of health service needs, demands and responsibilities 	(25,000)	-	-	-
	<ul style="list-style-type: none"> Establish a unit to enforce health laws and regulation 	(100,000)	(50,000)	(50,000)	(50,000)
1.2 Medical Services	<ul style="list-style-type: none"> Strengthen Nursing services to cater for better patient care and community nursing 	Internal	Internal	Internal	<i>Internal</i>
	<ul style="list-style-type: none"> Establish District Community Centre to serve as outlet for community health services 	(100,000)	(50,000)	(50,000)	(50,000)
	<ul style="list-style-type: none"> Establish and strengthen health research capabilities of the Ministry 	(50,000)	(30,000)	(30,000)	(30,000)
1.3 Health Finance	<ul style="list-style-type: none"> Advocate for appropriate health funding 	Internal	Internal	Internal	<i>Internal</i>
	<ul style="list-style-type: none"> Support revenue generation and collection as approved by Cabinet 	Internal	Internal	Internal	<i>Internal</i>
	<ul style="list-style-type: none"> Formulate a National Health Account for better record and projection of health care financing 	(WHO)	-	-	-
1.4 Human Resources	<ul style="list-style-type: none"> Continue to support engagement, recruitment and retention of medical staff 	Internal	Internal	Internal	<i>Internal</i>
	<ul style="list-style-type: none"> Strengthen education and training of medical personnel 	125,000 PPD	125,000 PPD	125,000 PPD	125,000 PPD
1.5 Health Information	<ul style="list-style-type: none"> Strengthen health information capabilities by introducing a minimum data set for data collection including morbidity, births, deaths registration 	Internal	(50,000)	(50,000)	<i>Internal</i>
	<ul style="list-style-type: none"> Strengthen and improve patient records keeping especially tracking, ICD coding and patient data entry 	Internal	Internal	Internal	<i>Internal</i>
	<ul style="list-style-type: none"> Introduce computerised health information system - ehealth 	26,000 PPD	(13,000) PPD	-	-
1.6	<ul style="list-style-type: none"> <i>Improve key stores operations of</i> 				

Strategic Area	Key Objectives	2011-12 Cost / Source	2012-13 Cost / Source	2013-14 Cost / Source	2014-15 Cost / Source
Medical Products and Technology	<i>procurement, receiving, storekeeping and dispatching of drugs and medical supplies</i>	1,127,000 PPD	1,127,000 PPD	1,127,000 PPD	1,127,000 PPD
	• <i>Strengthen stores inventory control systems including mSupply capacity</i>	Internal	Internal	Internal	Internal
	• <i>Strengthen and enhance pharmacy practice</i>	Internal	Internal	Internal	Internal
	• <i>Expand pharmaceutical services by introducing pharmaceutical manufacturing to cater for better patient care</i>	-	(50,000)	(20,000)	(20,000)

Key Result Area 2: Primary Health Care and Healthy Islands

Strategic Area	Key Objectives	2011-12 Cost / Source	2012-13 Cost / Source	2013-14 Cost / Source	2014-15 Cost / Source
2.1 Reproductive Health	<ul style="list-style-type: none"> To support national and regional efforts to prevent the spread and minimise the impact of HIV and other STIs on individuals, families and communities To increase the early detection of HIV and other STIs to reduce further infections and facilitate timely treatment. To strengthen planning, monitoring, evaluation, surveillance, research and information sharing at the national and regional levels. To attain good governance and effective coordination of regional and national HIV & STI responses 	\$9,060 (GF)	\$9,060 (GF)	-	-
		\$56,184 (GF)	\$56,184 (GF)	-	-
		\$2,700 (GF)	\$2,700 (GF)	-	-
		\$23,734 (GF)	\$23,734 (GF)	-	-
2.2 Child Health	<ul style="list-style-type: none"> Strengthen sound infant feeding practices especially exclusive breastfeeding and the promotion of the Baby Friendly Hospital initiative Support the maintenance of a strong EPI programme including good management of the cold chain Explore possible introduction of new vaccines against common diseases of childhood Introduce Immunoglobulin administration for RH+ve mothers Maintain and strengthen Well Baby Clinic for follow up and care of children Maintain and strengthen School Health 	WHO / Internal	WHO / Internal	WHO / Internal	WHO / Internal
		UNICEF / Internal	UNICEF / Internal	UNICEF / Internal	UNICEF / Internal
		Donation	Donation	Donation	Donation
		UNICEF	UNICEF	UNICEF	UNICEF
		Internal	Internal	Internal	Internal
		Internal	Internal	Internal	Internal

Strategic Area	Key Objectives	2011-12 Cost / Source	2012-13 Cost / Source	2013-14 Cost / Source	2014-15 Cost / Source
	services				
2.3 Maternal Health	<ul style="list-style-type: none"> Support and strengthen safe motherhood initiatives and programmes Strengthen Family Planning including the introduction of new methods of FP Support and strengthen cancer screening and prevention programmes especially PAP smear and mammography 	Internal UNFPA / internal Internal	Internal UNFPA / internal Internal	Internal UNFPA / internal Internal	Internal UNFPA / internal Internal
2.4 Non communicable disease	<ul style="list-style-type: none"> Support and strengthen ongoing diagnostic, preventive and treatment services for diabetes, hypertension and cardiac diseases Support and strengthen ongoing activities against NCD risk factors particularly, tobacco and alcohol use reduction 	\$50,00.00 PPD /Internal WHO /Internal	\$50,00.00 PPD /Internal WHO /Internal	\$50,00.00 PPD /Internal WHO /Internal	\$50,00.00 PPD /Internal WHO /Internal
2.5 Communicable Diseases	<ul style="list-style-type: none"> Support and strengthen communicable disease control particularly for TB, Leprosy and Trachoma Support Global fund and other donor funded communicable diseases control programmes such as TB and Filariasis 	GF \$66,700 GF	GF \$66,700 GF	- -	- -
2.6 Nutrition	<ul style="list-style-type: none"> Support and strengthen ongoing school feeding programme to ensure good nutrient education is fostered in primary schools Introduce and support the Baby Friendly Hospital initiative and the promotion of exclusive breast feeding including good weaning practices Advocate for good family nutrition through home gardening and healthy food preparation including cooking demonstration 	\$98,000 PPD Internal WHO UNICEF Internal	\$98,000 PPD Internal WHO UNICEF Internal	\$98,000 PPD Internal WHO UNICEF Internal	\$98,000 PPD Internal WHO UNICEF Internal
2.7 Environmental Health	<ul style="list-style-type: none"> Maintain and strengthen environmental sanitation in partnership with local communities and district primary health care workers Expand and strengthen food safety control including the enforcement of the Food Safety Regulation Maintain and strengthen pollution control measures especially sewerage 	Internal Internal Internal	Internal Internal Internal	Internal Internal Internal	Internal Internal Internal

Strategic Area	Key Objectives	2011-12 Cost / Source	2012-13 Cost / Source	2013-14 Cost / Source	2014-15 Cost / Source
	<ul style="list-style-type: none"> and medical waste management • Maintain and strengthen water safety through monitoring, analysis and treatment of water storage vessels • Strengthen vector control measures and activities including fumigation of residences against adult mosquitoes and other vectors • Maintain and strengthen quarantine services at ports of entry • Support the role and functions of the enforcement unit of the Ministry 	Internal	Internal	Internal	Internal
		Internal	Internal	Internal	Internal
		Internal	Internal	Internal	Internal
		(100,000)	(50,000)	(10,000)	(10,000)
2.8 Healthy Islands	<ul style="list-style-type: none"> • Strengthen health promotion and health protection initiatives under the healthy island banner • Revitalise the Healthy Island Council and support its schedule plan and work 	Internal	Internal	Internal	Internal
		\$160,000 PPD	\$160,000 PPD	\$160,000 PPD	\$160,000 PPD

Key Result Area 3: Curative Health Service

Strategic Area	Key Objectives	2011-12 Cost / Source	2012-13 Cost / Source	2013-14 Cost / Source	2014-15 Cost / Source
3.1 Clinical patient care	<ul style="list-style-type: none"> • Maintain and strengthen clinical services especially patient care in all departments (Medicine, Surgery, Paediatrics, Obstetrics and Gynaecology) • Improve Accident and Emergency and General Outpatient Patient Department services through better triaging of patients • Improve and strengthen eye care services including preventive measure against early blindness (laser treatment for diabetic) • Strengthen mental health treatment services including counselling • Maintain and strengthen oral health services including prosthetics services and preventive dentistry to the community and schools 	Internal	Internal	Internal	Internal
		Internal	(50,000)	Internal	Internal
		Internal / Specialist Visit - PPD	Internal / Specialist Visit - PPD	Internal / Specialist Visit - PPD	Internal / Specialist Visit - PPD
		Specialist visits - PPD	Specialist visits - PPD	Specialist visits - PPD	Specialist visits - PPD
		Internal	Internal	Internal	Internal
3.2 Tertiary clinical and referral	<ul style="list-style-type: none"> • Maintain and strengthen dialysis services to ensure continuous availability of the service to patients through functional equipment and consumables along with 	Internal / \$111,800 PPD	Internal / \$111,800 PPD	Internal / \$111,800 PPD	Internal / \$111,800 PPD

Strategic Area	Key Objectives	2011-12 Cost / Source	2012-13 Cost / Source	2013-14 Cost / Source	2014-15 Cost / Source
services	<p>properly trained staff</p> <ul style="list-style-type: none"> Conduct an audit of renal dialysis service to ensure efficient planning and management of services Coordinate partner agencies and governments offers for specialist visits and services in the various clinical fields Support scheduled visits of specialist for services in the various clinical fields Support and facilitate cost effective evacuation and referral of patients for overseas medical treatment 	(25,000)	-	-	-
		Internal \$121,000 PPD	Internal \$121,000 PPD	Internal \$121,000 PPD	Internal \$121,000 PPD
		\$716,000 GoN	\$716,000 GoN	\$716,000 GoN	\$716,000 GoN
3.3 Clinical support services	<ul style="list-style-type: none"> Provide and strengthen physiotherapy services to cater for patient needs Strengthen Community Based Rehabilitation (CBR) programme including networking Provide assistance for basic access and mobility requirements in disable peoples' houses Introduce hydro therapy for mobility improvement Reactivate and maintain hyperbaric service and management system to support prescribed function and also patient care Develop prosthesis services at RON to cater for the need of amputees 	Internal Internal 8,000 GON - 300,000 (NZAid) 50,000 (PPD)	Internal Internal 8,000 GON (50,000) (PPD) Internal Internal	Internal Internal 8,000 GON Internal Internal Internal	Internal Internal 8,000 GON Internal Internal Internal
3.4 Diagnostic services	<ul style="list-style-type: none"> Maintain and strengthen current services in haematology, biochemistry and related services in the laboratory Establish microbiology diagnostic capability at RON Pathology diagnostics Strengthen blood bank services to incorporate voluntary blood donor services including related support mechanisms Maintain and strengthen current radiologic diagnostic services Strengthen radiologic and scanning services to cater for breast examination and diagnosis Strengthen radiology services to include Radiological Information System (RIS) 	Internal (50,000) \$40,000 PPD Internal Internal Internal Internal	Internal (10,000) \$40,000 PPD Internal Internal Internal Internal	Internal Internal \$40,000 PPD Internal Internal (50,000) Internal	Internal Internal \$40,000 PPD Internal Internal Internal (50,000)

Key Result Area 4: Support Services and Networking

Strategic Area	Key Objectives	2011-12 Cost / Source	2012-13 Cost / Source	2013-14 Cost / Source	2014-15 Cost / Source
4.1 Administration	<ul style="list-style-type: none"> Manage human resource issues of the Ministry especially in terms of staff recruitment and engagement Administrative management of the hospital and public health service functions to ensure ease of operations Manage transportation and communication requirements of the Ministry Establish medical department registry for record keeping of the role, function and work of the Ministry and departments. 	\$287,470 GON	Internal \$287,470 GON	Internal \$287,470 GON	Internal \$287,470 GON
		\$60,297 GON	\$60,297 GON	\$60,297 GON	\$60,297 GON
		\$53,425 (50,000)	\$53,425 (50,000)	\$53,425 (50,000)	\$53,425 (50,000)
4.2 Equipment	<ul style="list-style-type: none"> Manage equipment requirements of the health services Establish a baseline minimum equipment requirement in all sections and units of the hospital to ensure that basic service can be maintained in the phase of severe resource constraints. Ensure the maintenance of all medical equipment including the safe disposal of non serviceable items 	\$231,000 PPD Internal	\$231,000 PPD Internal	\$231,000 PPD Internal	\$231,000 PPD Internal
		\$145,405 PPD	\$145,405 PPD	\$145,405 PPD	\$145,405 PPD
4.3 Infrastructure	<ul style="list-style-type: none"> Maintenance of existing health facility infrastructure Appropriate infrastructure development to cater for service expansion and accommodation Master planning completed for new Hospital development 	\$165,000 PPD Internal	\$165,000 PPD Internal	\$165,000 PPD Internal	\$165,000 PPD Internal
		\$350,000 PPD	\$350,000 PPD	-	-
4.4 Networking	<ul style="list-style-type: none"> Working with partners in the government sector and Non Government Organisation to promote and advance health based programme and initiatives in Nauru Networking and partnership with countries and institutions of the region to address local health issues and issues common to the region 	Internal	Internal	Internal	Internal
		Internal	Internal	Internal	Internal

Note

1. Internal = funding either provided by Government of Nauru or as part of the function of the unit / department
2. PPD = AusAID funding to health
3. Bracketed budget is still uncommitted / unfunded allocation

28. Cost Analysis of Strategic Plan by Year and Source (Australian \$)

Table 1: Cost Analysis of Strategic Plan by Year and Source (Australian \$)

Source	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	Total
Total Funding / Requirement	\$6,000,723	\$6.651M	\$6.8 M	\$6.8 M	\$6.8 M	\$33M
Govt. of Nauru	\$3,076,411	\$3,381,634	\$3.4m	\$3.4m	\$3.4m	16.7M
Govt. of Australia	\$2,804,312	\$2,750,755	\$2.840m	\$2.905	\$2.840	14.1M
Other Donors	\$120,000	\$518,598	\$218,598	\$40,000	\$40,000	937K
Funding Gap	0	0	\$341,402	\$460,000	\$520,00	1.32M

29. Monitoring and Evaluation

29.1 Monitoring

- Review meetings
Quarterly review meetings have been scheduled for managers and programme areas for monitoring of the implementation of the Operational Plan. The Operational Plan is linked to annual targets of the Strategic Plan. Reports generated from the review meetings are expected to be shared with key stakeholders.
- Operational Plan
Operational plan formulation is in itself, a process of monitoring of Strategic Plan stages of implementation. The annual process is a good review and planning process on the Strategic Plan
- Annual Reports
The Annual Report compilation of the Ministry is a monitoring tool for the Strategic Plan as it reports on the achievements and challenges of the health services. Health indicators for the key target areas will be included in the annual report.

29.2 Evaluation

- Surveys
Scheduled or planned surveys by the Ministry or as part of health programme activities can provide evaluation requirements for the Strategic Plan. Known programme surveys such as STEPS for non communicable diseases and MoH planned health researches (micronutrient deficiency, trachoma, STI etc) are good evaluation exercises.
- Demographic Health Survey
Demographic health surveys that can be conducted at 5-10 year intervals are

important tool for evaluation of health outcomes. The last survey was conducted in 2007. DHS preferably should be conducted between national census.

- National Census
National censuses are usually conducted every 10 years. The last census for Nauru was undertaken in 2002. The next scheduled census could include additional questions from the Ministry of Health to evaluate health services and health outcomes.

30. People Consulted

30.1 MOH

Minister for Health	-	Key Strategies and direction
Secretary for Health	-	Key Strategies and direction
Dr Alani Tangitau	-	Curative Health, Medical Services
Dr Ye Htut Soe	-	Senior Medical Officer
Dr Setareki Vatucawaqata	-	Director Public Health
Dr Saung Oo Zarni	-	Deputy Director Public Health
Mrs Marissa Cook	-	Director of Administration Health
Mrs. Gano Mwareow	-	Director Nursing
Mrs. Elizabeth Giouba	-	Assistant Director Nursing
Mr. Leweni Mocevakaca	-	Senior Pharmacist
Mr. Jiosese Mailulu	-	Senior Laboratory Technician
Mrs. Sulueti Vuanivono	-	Radiographer
Ms Isabella Dageago	-	MCH
Ms Zinnia Grundler	-	STI/HIV
Ms Jane Dowabobo	-	TB
Ms Eva Gadabu	--	Diabetes
Mr. Jioje Fesaitu	-	Dietician
Mr. Rioli Deduna	-	Health Promotion
Mr. Isireli Vuanivono	-	Snr Health Inspector
Mr. Vincent Scotty	-	Food Inspector
Ms Min Lene	-	Health Educator

30.2 AusAID -

30.3 SPC -

30.4 WHO -

31 Acknowledgement

Foremost, the contribution, commitment and dedication of medical staffs and stakeholders on and towards the protection and promotion of good health in the Republic of Nauru over the years are deeply acknowledged.

The interactions of health care beneficiaries with medical staff and stakeholders have helped shaped health services and its deliverance in the country. Progress towards the attainment of the good health and its health targets, such as, the Millennium Development Goals is possible and these are being advanced progressively through strong and continued political commitment and stakeholders' partnership.

The overall guiding principles of the strategic plan, provided by both the Honourable Minister and Secretary for Health and Medical Services, forms the basis of the key results areas, strategies and objectives of the plan and which are in conformity to the National Sustainable Development Strategy of government.

The core inputs, strategies and objectives of the Strategic Plan have been the work and contribution of the various Directors and staff. I wish to acknowledge the contribution of Dr Setareki Vatucaawaqa (Director Public Health), Dr Alani Tangitau (Director Medical Services), Ms Marissa Cook (Director Administration) and Mrs Gano Mwareo (Director Nursing) for theirs and staffs contribution to the planning exercises.

The works of Mr. Norman Powell (Health Strategic Planner 2009/2010) in the formulation of 1st version of the Strategic Plan and also the report by Mr. Rob Condon for SPC on the Framework for Health Priorities are acknowledged.

The contributions of the Ms Madeline Salton (Health Strategic Planner 2007/2008) on formulation and progression of both the Organisational Reform 2008 and Nurses Workforce Review 2008 are recognised.

May the implementation of the strategic plan bring about further improvement in the health status of the people of Nauru.

Dr. Lepani Waqatakirewa.
Health Service Adviser 2011/2012 (PACTAM / AVI)

32 Reference

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2. National Population Census Report 2002, Bureau of Statistics, Government of the Republic of Nauru (2002)
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