

### **Acknowledgements:**

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## Takai'anga Angaanga Tutara A Te Marae Ora

Cook Islands National Health Strategic Plan | **2017-2021**

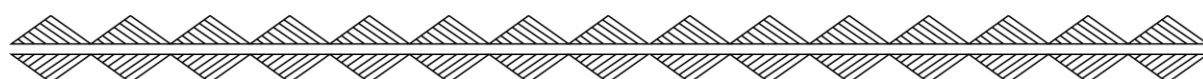




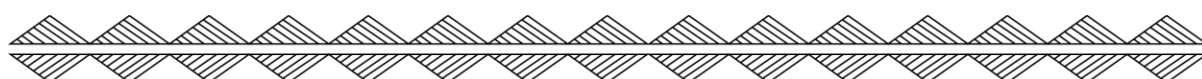
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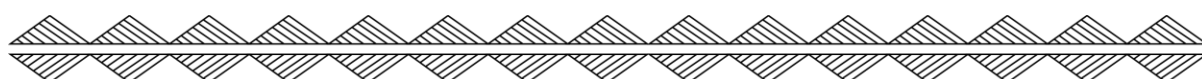
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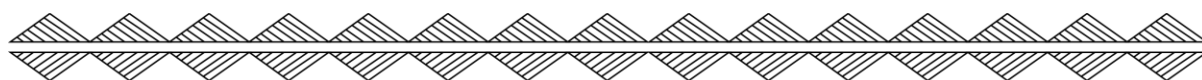
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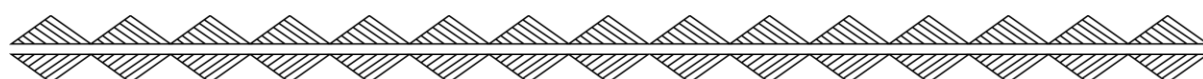
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# Message from the Minister of Health:

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## Honourable Nandi Glassie

I am pleased to present to the nation the strategic direction of health services for the years 2017 to 2021. Te Marae Ora's strategic plan seeks to operationalise both Government's health goals as outlined in the National Sustainable Development Plan 2015-2020 and its commitments to Global and Regional undertakings for population health and protection.

Indeed, the National Sustainable Development Plan 2015-2020, which places significant emphasis on preventive health for improved health outcomes has provided direction to the various objectives outlined in this strategic plan.

The vision of Te Marae Ora ("TMO") is *'All people living in the Cook Islands living healthier lives and achieving their aspirations'*. The National Health Strategic Plan 2017-2021 outlines Te Marae Ora's strategies for health care and health services to all people living in the Cook Islands. The plan was formulated after wide consultations that included discussions with political and traditional leaders, government agencies and development partners, and NGOs. A national health seminar, that included participants from the Pa Enua, community representatives and the general public, was also conducted as part of the consultative process.

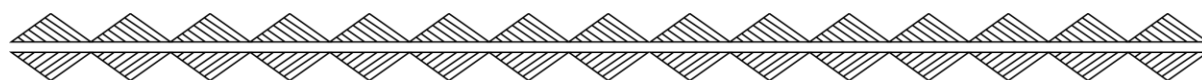
My role in this health strategy is in the area of governance. With the assistance of senior management, health legislation and health finance are two health system governance issues that I would like to advance in this plan. Indeed, health protection through laws and regulations are important instruments for the Ministry of Health and consideration will be made for the revision of at least the Public Health Act 2004. There are also associated regulations to these and other Health Acts that will require updating to meet the changing environment.

Ensuring adequate annual financial resources is made available for health services is the duty of my office. With around 3% of GDP allocated for health expenditure in the past few years, government through the TMO is able to sustain a reasonable level of quality service that meets the health care needs of the population. I will continue to advocate for improved levels of funding for Te Marae Ora especially as we aspire to achieve a broader scope and greater standards of health care services in our long term planning.

I would like to recognise with appreciation the role and partnership of the New Zealand Government, all Development Partners, World Health Organization, Civil Society and Non-Government Organisations in the provision and advancement of health care and health services in the country. Indeed, such close partnerships have made it possible for all people living in the Cook Islands to enjoy the current level of health services provided and to be assured of further advancement of health in the future.

Last but not least, I would like to acknowledge all health staff for their commitment and contribution to the health services in the country. In their various roles, health staff are crucial to the mandate of the Ministry of Health and I thank you all most sincerely. I am confident that through a multi-sectoral approach to delivering quality health services we will achieve our goals, objectives and ultimately our vision of "All people living in the Cook Islands living healthier lives and achieving their aspirations"

Kia Rangatira.



# Message from the Secretary for Health:

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## Mrs. Elizabeth Iro

I am pleased to share with all stakeholders Te Marae Ora's strategies for health services for the next five years. Supporting the noble Vision statement of the health strategies, the Mission of the Ministry is: *'To provide accessible, affordable health care and equitable health services of the highest quality, by and for all in order to improve the health status of people living in the Cook Islands'*. We strongly uphold our Mission statement as we strive to adhere to and practice our Values of *Respect, People focused, Equity, Quality, Integrity and Accountability*.



Through technical support from the World Health Organisation, Te Marae Ora is pleased that the evaluation and review of the NHSP 2012-2016 has been undertaken and completed. It is comforting to note from the evaluation report that the Ministry achieved 68% of its set target indicators for the period and with 22% activities still ongoing at the time of assessment. Needless to mention, the findings of the evaluation have been used to guide health service provision and also the formulation of this new health strategy.

I wish to state that the formulation of the new NHSP 2017-2021 was undertaken with a very thorough in-country consultative process. Comments and suggestions from the various consultation forums have been considered in the planning process of this strategy. The health strategic plan has been formulated to meet the aspirations of the health goals of the National Sustainable Development Plan 2015-2020 and the various national and regional health strategies such as the NCD (Ngaki'anga Kapiti Ora'anga Meitaki), Oral Health, Sexual and Reproductive Health, Workforce Plan, Health Information, to name a few.

Furthermore, the structure of the new health strategy has also been changed to reflect a consolidation of work strategies under Key Result Areas (KRA). There are a total of 6 KRA, with one outlining and acknowledging the contribution of our health partners both in government and NGOs. Moreover, for the Ministry's KRA, the health strategy has now itemised and identified the key Deliverable Areas (DA) of its work and where objectives, activities and targets are outlined. Notable new inclusions in this plan are the strategies for patient care services such as medicine, surgery, anaesthesia, paediatrics, obstetrics and gynaecology. The total cost of this NHSP implementation is estimated at \$4.5million and is above and in addition to the annual baseline appropriations

In relation to health status, the 2015 Health Information Bulletin again highlighted NCDs as still the major causes of morbidity and mortality in the country. Uncontrolled diabetes and its complications of renal failure now contributes to significant morbidity and mortality. Rheumatic heart disease as well as mental illnesses are identified priority of the Strategy. Undertaking disease control at best requires a good understanding of the risk factors and the proven means of reducing such risks. The Ministry is serious about addressing the risk factors for NCDs and government's policy interventions in legislations on tobacco control, alcohol and sugar sweetened beverages are good examples of such commitment.

I hope that the health strategy will be a source of inspiration and guidance to the provision of quality health services to all. The strategy will be operationalised yearly through funding linked to Business Plans and with implementation progress reported in the Annual Health Reports to Parliament and key stakeholders.



I believe with the appropriate level of commitment and support from government and cooperating partners, health workers, key stakeholders and the people we serve the success of this Health Strategy will be guaranteed.

Kia Manuia.



# Executive Summary

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The National Health Strategic Plan 2017-2021 (“NHSP”) was formulated through several consultation processes within the various departments of Te Marae Ora and with key stakeholders. The NHSP is expected to be operationalised through the yearly Business Plans that are aligned to a budget and available resources.

The strategic plan has retained the noble vision of *‘All people living in the Cook Islands living healthier lives and achieving their aspirations’*. The plan has also linked mission, commitments and undertakings to the main vision statement.

Standard functions, priority interventions and new development activities and programs of the Ministry have been grouped under six Key Result Areas (“KRA”). For ownership and management accountabilities, the KRA are aligned to existing organisational and the operational structure of the Ministry. The KRA include the following;

Key Result Area 1:	Health Administration and Management
Key Result Area 2:	Community Health Services
Key Result Area 3:	Hospital Health Services
Key Result Area 4:	Allied Health Services
Key Result Area 5:	Pa Enua Health Services
Key Result Area 6:	Health Partners

Similar to the NHSP 2012-2016, the new health strategy is aligned to goal 7 of the National Sustainable Development Plan 2016-2020: *‘Improving health and promoting healthy lifestyles’*. Incorporation of the key NSDP targets and key activities are included in the Key Result Areas of the health strategy. Moreover, 2015 marked the conclusion of the MDG milestone and targets and the formulation of the replacement development goals - a progression which is welcomed by the Ministry of Health. The health goals of the MDG have been largely achieved by the country especially with its mortality and morbidity targets. Infectious diseases remain a priority for the country. Although there is no confirmed case of HIV, sexually transmitted infections require close monitoring. Water borne diseases are managed through improved water supply and improved sanitation and TB management is strengthened.

Major health issues and causes of significant mortality and morbidity relate to non-communicable diseases are targeted in this health strategy. Cardiovascular diseases, diabetes and related complications are the major causes of morbidity and mortality in the country. Rheumatic heart disease as well as mental illnesses are also targeted for better diagnosis and management. Chronic renal disease mostly due to diabetes is also a growing concern. In relation to NCD, smoking and over-weight/obesity are the most common preventable risk factors. Ongoing challenges still exists for teenage pregnancies.

The Public Health Act 2004 is proposed for revision. Apart from ensuring that appropriate Regulations are issued for the various Acts, enforcement of legislations requires strengthening.

Family planning acceptance and uptake are targeted for improvement along with safe motherhood initiatives such as breastfeeding, maternal nutrition and the promotion of the Baby Friendly Hospital Initiative. Targets for adolescents health is also emphasised especially in relation to reproductive health and teenage pregnancies. With regards to human resource development, the re-establishment of the



nursing school provided a basis and avenue for addressing and meeting the nursing workforce requirement for the Cook Islands. Up skilling and training nurses to degree level and the training of nurse practitioners are future plans for the Cook Islands Nursing School.

Improved diagnostic capability within the Medical Laboratory is planned along with the laboratory's build up to International Organisation for Standardisation (ISO) recognition. Improved laboratory capabilities will reduce expensive overseas laboratory test requests. Similarly, the radiology department plans to introduce advanced diagnostic capabilities in the service i.e. Computed Tomography (CT) scan, ultrasound and echocardiogram. This service will greatly boost early diagnosis and early intervention.

With the proposed procurement of diagnostic and surgical instruments, wider options for surgical treatment will be readily available. Such improved diagnostic and treatment options can reduce international referrals on identified conditions.

Institutional strengthening for NCD control is strategized in the NHSP in line with the National Strategy for the prevention and control of NCD 2015-2019. Urgent review will be required for infrastructure setup, staffing, clinical diagnostic equipment and patient management and follow up. Community based health care mobile clinic, fixed community clinics or health centres are strategized in the plan especially for the Pa Enua.

Due consideration has been made in relation to funding the health strategy. The projected total cost of the NHSP is around NZD4.5 million. Noting baseline funding commitment from the Government of NZD12 million. The bulk of this funding is directed at human resource and with various amount allocations for equipment purchases and health program support. Funding contributions from other development partners vary each year and are usually program specific.

The strategy will be operationalised through Annual Business Plans and with implementation progress reported in the Annual Health Reports to Parliament and key stakeholders. It is important that Annual Business Plans are prepared every year and that the Annual Reports are completed in a timely manner.

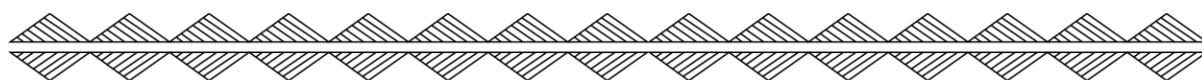
Standard measures for monitoring and evaluation is a crucial part of the strategic plan. Each KRA have measurable targets and these will be used in the final evaluation exercise. Reporting of the progress of objectives implementation including budget expenditure will be made 6 monthly to senior management during the years of the plan.



## Acronyms / Abbreviations

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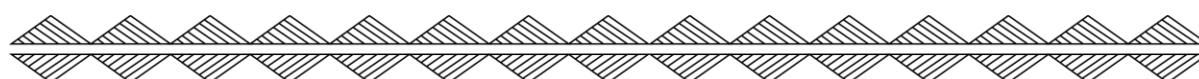
<b>ABP</b>	Annual Business Plan
<b>A&amp;E</b>	Accident & Emergency
<b>AH</b>	Allied Health
<b>AN</b>	Ante Natal
<b>ANC</b>	Ante Natal Care/Clinic
<b>BFHI</b>	Baby Friendly Hospital Initiative
<b>CBA</b>	Child Bearing Age
<b>CBHFA</b>	Community Based Health and First Aid
<b>CD</b>	Communicable Disease
<b>CIG</b>	Cook Islands Government
<b>CMO</b>	Chief Medical Officer
<b>CNO</b>	Chief Nursing Officer
<b>CPR</b>	Contraceptive Prevalence Rate
<b>CT scan</b>	Computerised Tomographic Scan
<b>CVA</b>	Cardio Vascular Accidents
<b>DDM</b>	Data for decision making
<b>DFP</b>	Director of Funding and Planning
<b>DCHS</b>	Director of Community Health Services
<b>DHHS</b>	Director of Hospital Health Services
<b>DOTS</b>	Direct Observed Treatment Short Course
<b>ECHO</b>	Echocardiogram
<b>EML</b>	Essential Medicine List
<b>ESR</b>	Emergency Surveillance and Response
<b>PHI</b>	Public Health Inspectors



## Acronyms / Abbreviations

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<b>FY</b>	Financial Year
<b>FCTC</b>	Framework Convention on Tobacco Control
<b>GFATM</b>	Global Fund AIDS, Tuberculosis and Malaria
<b>GOPD</b>	General Outpatient Department
<b>GONZ</b>	Government of New Zealand
<b>HDU</b>	High Dependence Unit
<b>HIU</b>	Health Information Unit
<b>HOD</b>	Head of Department
<b>HOM</b>	Head of Ministry
<b>HPU</b>	Health Promotion Unit
<b>IMCI</b>	Integrated management of childhood illness
<b>IMR</b>	Infant Mortality Rate
<b>ISO</b>	International Organisation for Standardisation
<b>JD</b>	Job Description
<b>KRA</b>	Key Result Area
<b>LIS</b>	Laboratory Information System
<b>MCH/FP</b>	Maternal child health/ Family Planning
<b>MI</b>	Myocardial Infarction
<b>MMR</b>	Maternal Mortality Ratio
<b>MO</b>	Medical officer
<b>TMO</b>	Te Marae Ora, Ministry of Health
<b>MOU</b>	Memorandum of Understanding
<b>NCD</b>	Non-Communicable Disease
<b>NHSP</b>	National Health Strategic Plan

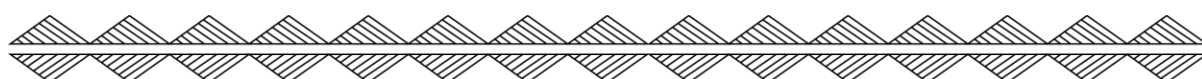




## Acronyms / Abbreviations

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<b>NSDP</b>	National Sustainable Development Plan
<b>PMR</b>	Perinatal Mortality Rate
<b>POBOC</b>	Payments on Behalf of the Crown
<b>POHLN</b>	Pacific Open Learning Health Network
<b>RH</b>	Rarotonga Hospital
<b>RHD</b>	Rheumatic Heart Disease
<b>RMNCAH</b>	Reproductive, Maternal, Newborn, Child and Adolescent Health
<b>SDG</b>	Sustainable Development Goals
<b>SOH</b>	Secretary of Health
<b>SMT</b>	Senior Management Team
<b>SPC</b>	Secretariat of the Pacific Community
<b>STI</b>	Sexually Transmitted Illness/Infection
<b>STG</b>	Standard Treatment Guideline
<b>TB</b>	Tuberculosis
<b>TOR</b>	Terms of Reference
<b>UNICEF</b>	United Nations Children's Fund
<b>WHO</b>	World Health Organisation
<b>WHS</b>	WHO World Health Statistics

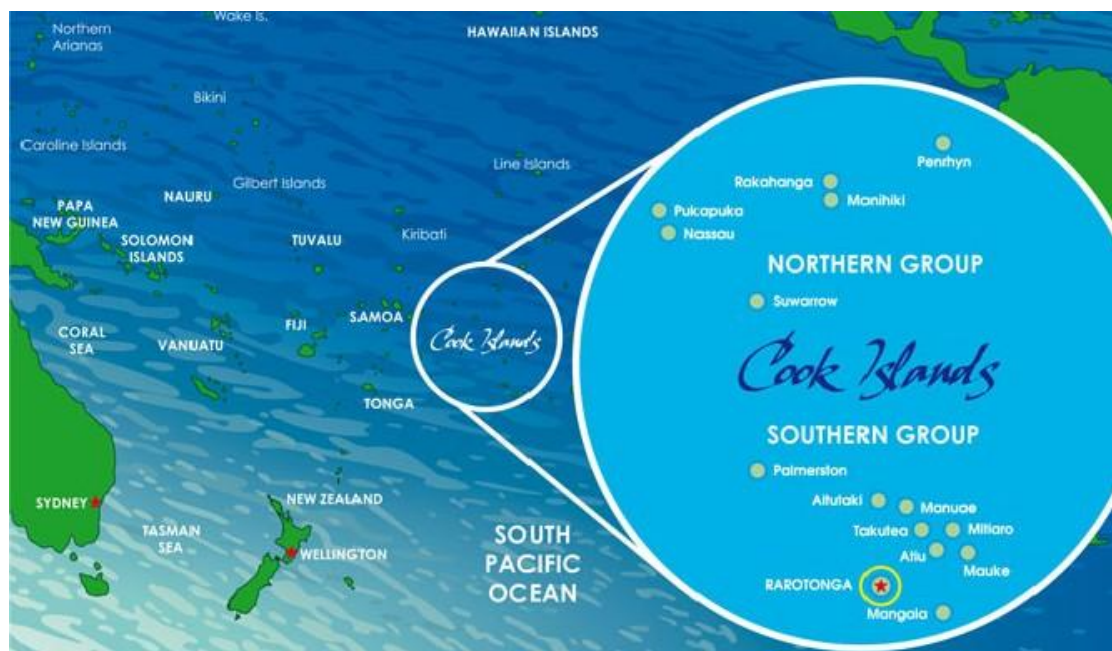


# Situation Analysis

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## Country and Demographic Characteristics

The Cook Islands is located in the Southern Pacific Ocean between French Polynesia and Fiji. Cook Islands consists of 15 islands and atolls spread over 2 million km<sup>2</sup> of the Pacific Ocean. The islands are geographically divided into two groups, commonly referred to as the Northern and Southern Group islands. The two groups of islands portray marked differences in their social, cultural and economic activities. The Northern Group islands remain relatively isolated from the Southern Group islands. The northern Cook Islands include Manihiki, Nassau, Penrhyn, Pukapuka, Rakahanga and Suvarrow, while Aitutaki, Atiu, Mangaia, Mauke, Mitiaro, Palmerston, Takutea, Manuae and the main island of Rarotonga comprise the southern Cook Islands. Avarua, located on Rarotonga, is the nation's capital.



## Population Census and Structure

The most recent census was conducted in the country in 2011 and with a total population of 17,794 enumerated. Of the total resident population (14,977), 81 per cent are Cook Islands Maori, 7 per cent were Part Cook Islands Maori, and 12 per cent were of foreign descent. The New Zealand European made up the bulk of the other ethnic group. The distribution of the total population varied considerably by region. Seventy-four per cent lived on Rarotonga, 20 per cent lived in the Southern Group islands and 6 per cent in the Northern Group islands. The population density varied widely by island. While there were about 347 people per km<sup>2</sup> in Pukapuka, only 8 people per km<sup>2</sup> inhabited Mitiaro Island. The population density of Rarotonga was 195 people per km<sup>2</sup>.



Chart 1: Population Pyramid from Census 2011

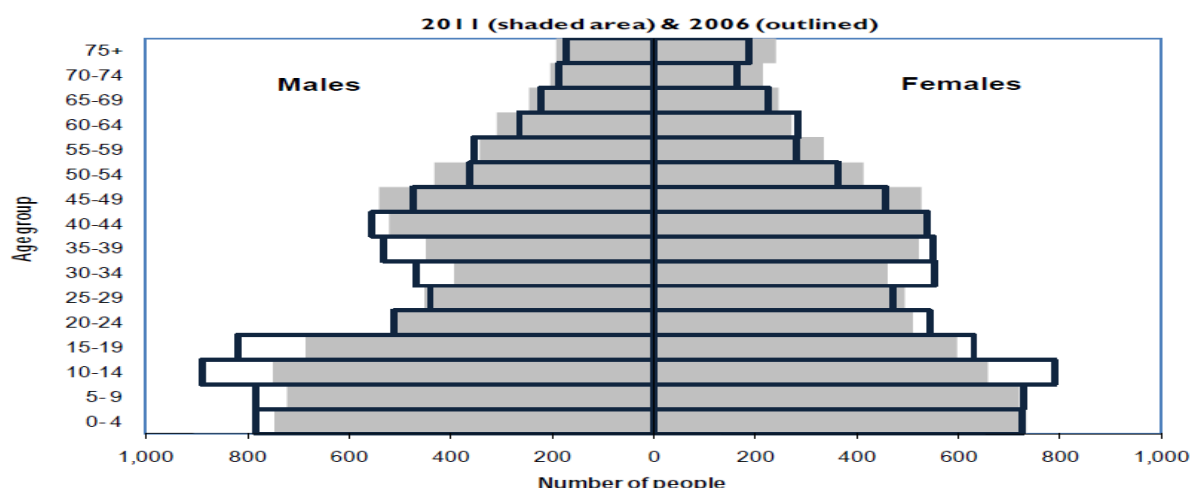
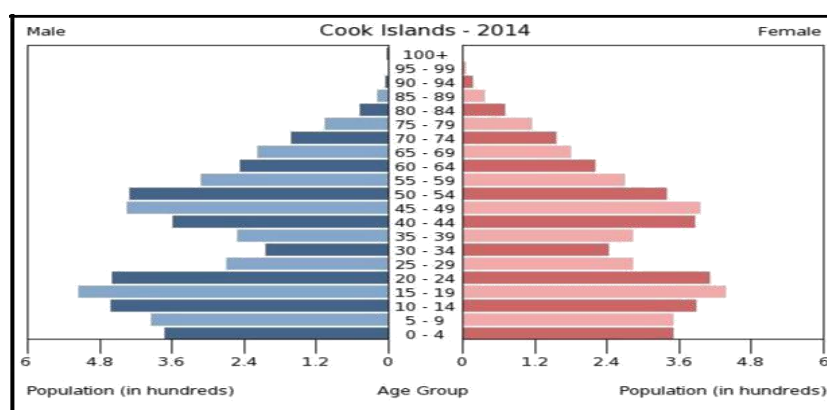


Chart 2: As Projected Population 2014



Source: United States Census Bureau. Population Pyramids: Cook Islands 2014

Comparing the CI population pyramid for 2006 and 2011 census, it is obvious that there is a decline in the overall population over the ten year period among the young age groups from 0-39 years. There is also the shift of the 15-39 year age groups, showing the continuous sign of outward migration at the young ages. Outward migration of the population could be related to higher wages and more employment opportunities overseas.

The current population trends indicate that there will be a growing older population - therefore the Ministry of Health has to be mindful of this trend. The projected figure for 2014 was around 21,000 residents with similar age distributions as recorded in 2011. It should also be noted that a lot more of the older population is living more than 65 years indicating a shift to a decade of a healthier and active population. This is an increase from six percent in 2006 to nine percent in 2011 census. This percentage is expected to increase further in the next five years post census. The growing older population will require additional and special planning process to address their welfare needs particularly that on health.



## Political, Socio-economic Characteristics

The Cook Islands is a self-governing entity in free association with New Zealand. The government is an independent parliamentary democracy consisting of 24 elected members, with a separate *House of Ariki* made up of 24 members that advise the Government on various issues.

The Human Development Index (HDI) is a composite indicator used to assess long-term progress in three basic dimensions of human development: long and healthy life (measured by life expectancy), access to knowledge (measured by mean years of schooling and expected years of schooling) and a decent standard of living (measured by Gross National Income per capita). In 2008, Te Marae Ora estimated that the country had an HDI of 0.83 which positioned the Cook Islands in the high human development category. The 2011 census determined that the social development indicators related to health and education are high in comparison to other Pacific countries. GDP per capita is high, and citizens have good access to essential services and benefit from New Zealand job markets and welfare systems.

The average annual income of all Cook Islands residents is around \$15,028 with income level for males at \$16,848 and \$13,243 for females. Residents living on Rarotonga earn more than those in the Pa Enua and over 13 per cent of the population 15 years and older had no income. At the higher income level, 3.7 per cent had an income of more than \$50,000 per annum. Most males were in the income group \$10,000-\$14,999, while most females were in the income group 'less than \$5,000'.

The private sector including sole proprietors and partnerships were the largest employers, employing 65 per cent of all employees followed by the public sector with 31 per cent. The biggest industry was the 'Trade, Restaurants and Accommodation' industry with 36.6 per cent, closely followed by 'Community, Social and Personal Services' with 34.5 per cent and 28.9 per cent in the rest of the sectors. Females dominated the 'Trade, Restaurants and Accommodation' industry and the 'Finance and Business Services' industry presumably working as shop assistants and bank tellers. Males dominated the 'Construction' and 'Agriculture and Fishing' industry.<sup>1</sup>

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<sup>1</sup> Cook Islands Census 2011 Report. MFEM. Cook Islands Government



**Table 1: Health and Social Indicators**

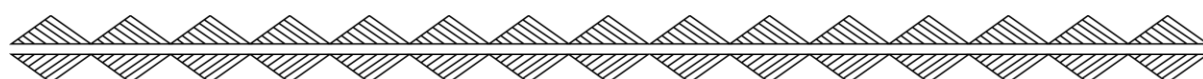
INDICATOR	VALUE	YEAR	SOURCE
Total Population	17,794 (14,977 Resident)	2011	Census
Male Pop	8,815	2011	Census
Female Pop	8,979	2011	Census
Crude birth rate (CBR)	16.6	2015	TMO Stats
Total Fertility Rate	2.1	2015	TMO Stats
Crude death rate (CDR)	7.5	2015	
Infant mortality rate (IMR)	4.8	2015	TMO Stats
Neonatal Mortality Rate	0	2015	TMO Stats
Child Mortality Rate	0	2015	TMO Stats
Maternal Mortality Rate (MMR)	0	2011-2015	TMO Stats
Fully Immunised Child at one year	98%	2015	TMO Stats
Life Expectancy - Both sexes	75.6	2016	Country Digest
Life Expectancy – Male	72.7	2016	Country Digest
Life Expectancy – Female	78.6	2016	Country Digest
Enrolment – Primary	100	2011	Census
Sex Ratio – Primary M/F	1.03	2011	Census
Enrolment – Secondary	66	2011	Census
Sex Ratio – Secondary	1.0	2011	Census
Labour Force Participation Rate (LFPR)	71%	2011	Census
Employment Population Ratio (EPR)	64%	2011	Census

Source: Census 2011 Data and TMO Information Bulletin 2015; Country Digest: <http://countrydigest.org/cook-islands-population/>

## Health System

The Government through Te Marae Ora is the main provider of health care services in the Cook Islands. Services of the Ministry are complemented by a range of Civil Society and Non-government Organisations such as the Red Cross Society, Te Vaerua, Te Kainga, Cook Islands Family Welfare Association, Cook Islands Child Health and Welfare Association, Punanga Tauturu and the Creative Centre.

Apart from health care services, the Ministry has statutory functions of at least 10 key legislations under its administration. The Ministry of Health Act 2013 is a *principal act* that provides for key areas and functions of the Ministry. Te Marae Ora has enforcement officers that are tasked with enforcing health laws and regulations i.e. tobacco, food, water, sanitation etc.



Addressing global health issues and agendas are intricate to the role of the Ministry. Improvements in physical infrastructure for the delivery of health services will continue to be pursued by the Ministry in partnership with key stakeholders, including the private sector and development partners. The Ministry will continue the training of personnel to address critical staff shortages in health institutions, together with improved provision of pharmaceuticals and bio-medical equipment. The Ministry of Health is also involved in cross cutting agendas such as disability, gender, the aged/elderly, chronic illnesses, disaster management, climate change and other national interests as mandated by Government.

## Health Legislation<sup>2</sup>

### 1. Ministry of Health Act 2013:

- 1. a Ministry of Health (Mental Health) Regulations 2013
- 1. b Ministry of Health (Pharmacy and Therapeutic Products) Regulations 2013
- 1. c Ministry of Health (International Health Regulations Compliance) Regulations 2014

### 2. Tobacco Products Control Act 2007:

- 2a. Tobacco Products Control Regulations 2008

### 3. Public Health Act 2004:

- 3.a Public Health (Sewage and Wastewater Treatment and Disposal) Regulations 2014
  - 3.a.i Approved Standards applicable to the Design and Construction of Sewage Systems- *The Design and Construction Standards*
  - 3.a.ii Approved Standards and Codes of Practice applicable to the Registration of Designs and Personnel- *Standards for Registration*
  - 3.a.iii Approved Standards and Operating Procedures applicable to the Operation of Sewage systems- *The Operation, Testing and Reporting Standards*
  - 3.a.iv Approved Sewage and Sanitation Forms

### 4. Food Act 1992-93:

- 4.a Food Amendment Act 2005;
- 4.b Food (Fish Export Processing) Regulations 2006;
- 4.c Food Regulations 2014

### 5. Nurses Act 1986

### 6. Medical and Dental Practices Act 1976:

- 6.a Medical and Dental Practices Amendment Act 1977;
- 6.b Medical and Dental Practices Amendment Act 1981

### 7. Dental Act 1970-1971.

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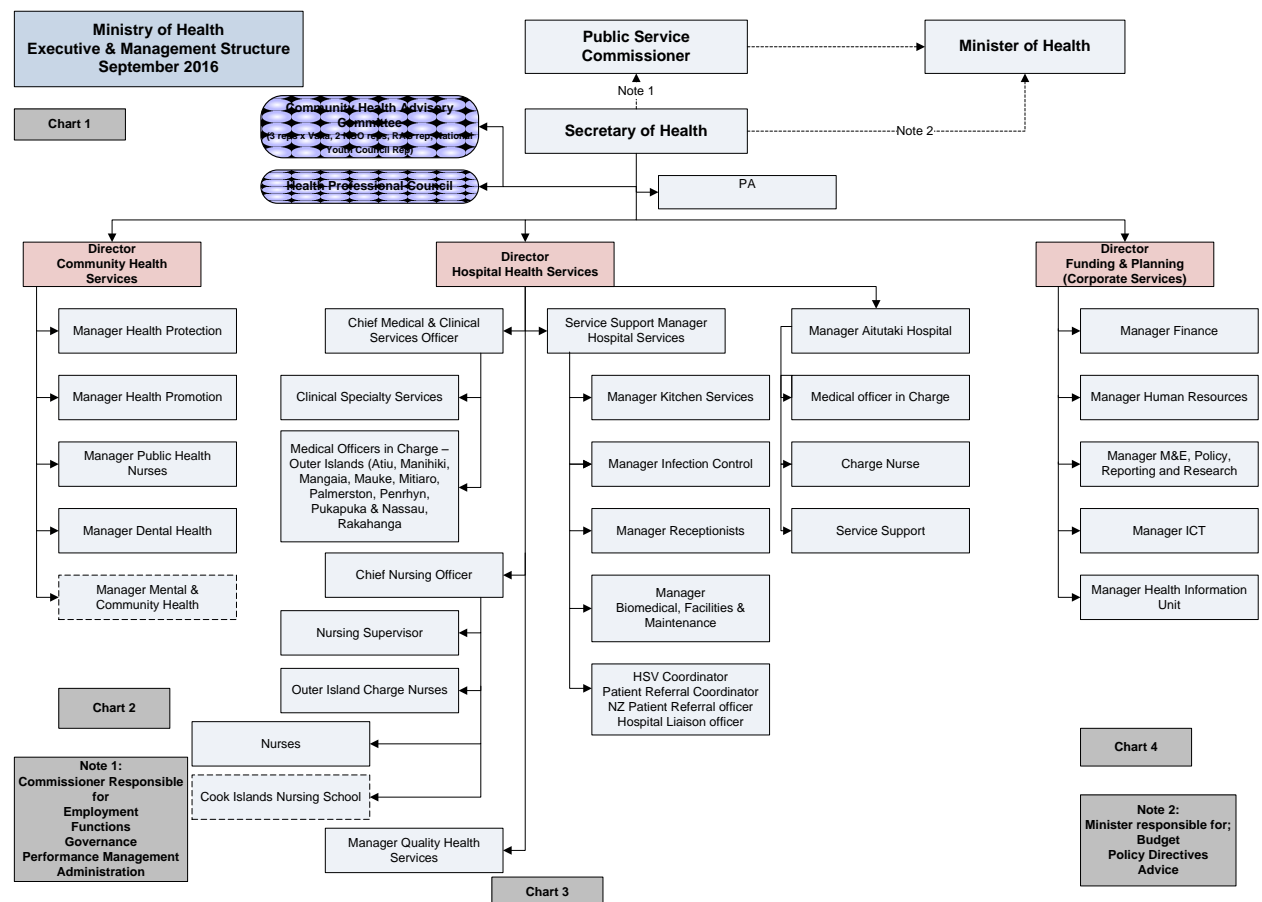
<sup>2</sup> It must be noted that there are other cross sectoral Legislation that the Ministry of Health is involved with.



## Organisational Structure

The management and organisational structures of the Ministry of Health are divided and reflected under 3 directorates, Community Health Services, Hospital Health Services and Funding and Planning. The Ministry recognises that there may be changes to the organisational structure dependent on the needs and environment at a certain point in time.

Chart 3: TMO Organisational Structure



## Millennium Development Goal / Sustainable Development Goals (MDG/SDG)

The Cook Islands has mostly achieved the health goals of the MDG. In September 2015 the CIG along with the international community made renewed commitments to implementing the new Sustainable Development Goals (SDGs) of 17 goals and 169 targets. The SDGs seek to build on the MDGs and complete what these did not achieve, particularly on improving equity to meet the needs of women, children and the poorest, most disadvantaged people. The SDGs aim to tackle emerging challenges including the growing impact of non-communicable diseases, like diabetes and heart disease, and the changing social and environmental determinants that affect health, such as increasing urbanization, pollution and climate change. An overarching health goal to “ensure healthy lives and promote well-being for all at all ages”, impacts on or are impacted by almost all of the other 16 SDGs.





**Table 2: Sustainable Development Goals 2030**

- Goal 1.** End poverty in all its forms everywhere
- Goal 2.** End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Goal 3.** Ensure healthy lives and promote well-being for all at all ages
- Goal 4.** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- Goal 5.** Achieve gender equality and empower all women and girls
- Goal 6.** Ensure availability and sustainable management of water and sanitation for all
- Goal 7.** Ensure access to affordable, reliable, sustainable and modern energy for all
- Goal 8.** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 9.** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10.** Reduce inequality within and among countries
- Goal 11.** Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12.** Ensure sustainable consumption and production patterns
- Goal 13.** Take urgent action to combat climate change and its impacts
- Goal 14.** Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15.** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Goal 16.** Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Goal 17.** Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development



## Health Services

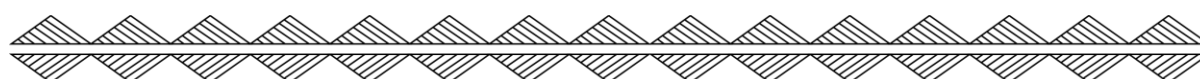
Te Marae Ora is the main provider of health care in Cook Islands and has a regulatory function through various legislations in protecting Public Health. Health services range from Public Health (inclusive of primary care) to secondary care. Overall, the Cook Islands are relatively well equipped to provide basic primary and secondary level care.

The Cook Islands delivers an adequate range of general clinical services in the core areas of surgery, medicine, anesthesia, obstetrics, gynecology, ophthalmology and pediatrics. These services are supplemented by visiting specialist teams and access to tertiary services is through referral to overseas health providers. There are a small number of private providers<sup>3</sup>. For administrative and management purposes, health facilities and health services can be determined in all health care centres and hospitals as indicated below.

**Table 3: Health Services**

Health centre	Services Available and Rendered
<ul style="list-style-type: none"> <li>• Rakahaga</li> <li>• Manihiki</li> <li>• Penrhyn</li> <li>• Nassau</li> <li>• Mauke</li> <li>• Palmerston</li> <li>• Mitiaro</li> <li>• Mangaia</li> <li>• Atiu</li> </ul>	<ul style="list-style-type: none"> <li>• Nurse Practitioner or Registered Nurse provide onsite cover during normal working hours and on call 24/7.</li> <li>• No laboratory or radiology services available however specimens can be obtained and transferred to Rarotonga for testing.</li> </ul>
<b>Tupapa Clinic-Rarotonga</b>	<ul style="list-style-type: none"> <li>• Onsite General Medical Doctor and nursing staff during normal working hours only.</li> <li>• Laboratory and Radiology services available at Rarotonga Hospital.</li> </ul>
<b>Pukapuka</b>	<ul style="list-style-type: none"> <li>• Onsite General Medical Doctor during normal working hours and on call 24/7.</li> <li>• Nursing staff.</li> <li>• No laboratory or radiology services, however specimens can be obtained and transferred to Rarotonga for testing.</li> <li>• Inpatient beds available.</li> </ul>
<b>Aitutaki</b>	<ul style="list-style-type: none"> <li>• Onsite General Medical Doctor during normal working hours and on call 24/7</li> <li>• Nursing staff</li> <li>• Primary and secondary care to level of domestic transfer to Rarotonga</li> <li>• Radiology services are limited and often involve non radiographers working under limited scope supported by Medical Doctor</li> <li>• Laboratory services are limited;</li> </ul>

<sup>3</sup> WHO 2012 Cook Island Service Delivery Profile



Health centre	Services Available and Rendered
	<ul style="list-style-type: none"> <li>In-patient beds available.</li> </ul>
Rarotonga	<ul style="list-style-type: none"> <li>Specialist doctor on call 24/7 in areas of anaesthesia, O&amp;G, internal medicine, paediatrics, surgery, ophthalmology.</li> <li>Onsite specialist doctor covering during normal working hours.</li> <li>Onsite 24 hour General Medical Doctor (covers all presentations both acute and chronic at least initially, including emergencies; they are sole onsite doctor at night).</li> <li>24 hour access to radiology and laboratory services.</li> <li>Inpatient beds available in wards for O&amp;G, internal medicine, paediatrics and surgery.</li> </ul>

## Hospital Services

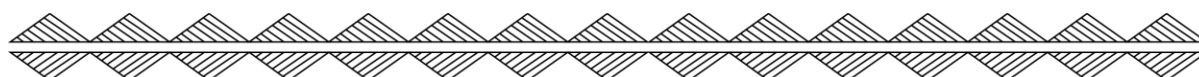
### Rarotonga Hospital

The 70 bed Rarotonga Hospital is the principal curative health facility and also offers an Outpatient, General Practice and Emergency Services. The Clinical departments and services include; Surgical, Medical, Paediatrics, Ophthalmology, Obstetrics and Gynaecology, Anaesthesia, High Dependency Unit. Allied Health Services include Radiology, Laboratory; Pharmacy; Physiotherapy and Ambulance. The Hospital is well equipped for a facility of its size in the Pacific and also accommodates training centers for the nursing school and the POHLN facility.

### Aitutaki Hospital



Aitutaki Hospital is a 28 bed facility that caters for primary and secondary health care. Clinical departments and services include GOPD, ward areas for adults, paediatric and maternity patients. There is limited diagnostic (X-ray and Laboratory), dental and ambulance capability and a fully functional pharmacy which complement the services. **Photo 1: Aitutaki Hospital**



## Primary Health Care Services

### Tupapa Community Clinic

This primary health care facility is located in the town area and close to the TMO Headquarters. Primary healthcare services include Outpatients, Maternal Child Health, Family Planning, Rheumatic Heart Disease, Mental health and NCD clinic. Counselling services for Nutrition, Tobacco and family health (child, youth, men and women) are also provided.



### Dental Health Services:

Dental services are located within the Tupapa Community Clinic. Dental clinical services includes the diagnosis of oral disease entities and the delivery of a broad range of restorative (fillings) care, minor oral surgery procedures such as simple tooth extractions, impacted third molar extractions, simple periodontal treatments and provision of removable prosthesis.

Most recently, the prosthetic care, orthodontic, endodontic and less complicated oral maxillo-facial surgery services has been expanded to cater the demand for such care here in the Cook Islands. The public health arm of the service deals with preventative aspect of care in schools and the wider community. This is a crucial component in addressing oral health issues at the community level.

### Other Health Services

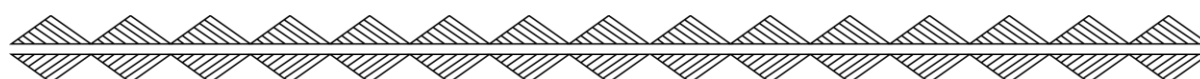
Other key services include school health programs, health promotion, public health nursing services, food safety, water safety and quality, sewage and sanitation, emergency surveillance response, border control, and vector borne diseases. As the countries health system moves towards a more preventative focus the Community Health Services will become even more important. Non Communicable Diseases is a focus area of concern and priority and funding for services that will help in this area will continue to be directed as appropriate.

### Pa Enua Health Centers

Pa Enua health centers provide basic services in primary health care. Patients with serious or complicated medical conditions are transferred to Rarotonga.

### Referral services, secondary and tertiary care

Rarotonga Hospital is the primary referral centre in the Cook Islands for further secondary care. Non-urgent cases requiring tertiary care or a specialist opinion may be placed on a waiting list to be seen by an overseas visiting medical, surgical or other specialist. Patients with more serious conditions or requiring urgent treatment not available in-country may be eligible for international referral to Auckland, New Zealand. The TMO has a policy to guide decisions on eligibility of international referrals funded by government. Domestic transfers from the Pa Enua are catered for in Rarotonga Hospital and if needed, referred to Auckland following standard procedures.



## Private Health Providers

The private health providers in the Cook Islands are mainly located on Rarotonga. There are four medical practices, four pharmaceutical outlets and one dental clinic in operation. There is one medical practice in Aitutaki. Over-the-counter medications (but not prescription drugs) are available in the supermarket and in many small stores. The Ministry of Health (Pharmacy & Therapeutic Products) Regulation 2013 governs the procurement, sale and use of medicinal drugs in health facilities, private clinics and commercial outlets.

## Health situation; Access, Morbidity, Mortality and Health Needs of the population

Over the past 10 years, Cook Islands health profile and child health indicators have remained close to developed country levels. However, as common to the developing world, the incidence of communicable diseases has generally declined but the re-emergence of old infectious diseases are a concern. The tuberculosis number although low continues to be reported, whilst periodic diarrhoeal illness still occur.

For 2015 a total of 31,401 consultations or an average of 2,616 consultations per month was recorded at GOPD / A&E. This figure represents an overall annual *per capita* health service utilisation of 2.1. Health service utilization is often 0.5 - 1.0 new consultations per person per year in stable populations. This rate represents a well utilised health service by global standards, and compares favorably in countries of a stable population. Use of health services during a disease outbreak or emergency will differ substantially from that of a stable population and could average 4 new consultation per person per year.

For Hospital Health Services, patient admissions are accommodated in Rarotonga and Aitutaki Hospitals. Pa Enua health centers have a small number of beds mainly for maternity, day care observation and for patients awaiting emergency referrals. In 2015 Rarotonga Hospital admissions totaled 1,504 and 1,487 discharges. Bed days used equaled 5,712 while bed days available were 25,550 resulting in a 22.4% bed occupancy rate. In 2013 – 2015, the main causes of admissions were patients with heart diseases, hypertension, diseases of the digestive system and diabetes mellitus.

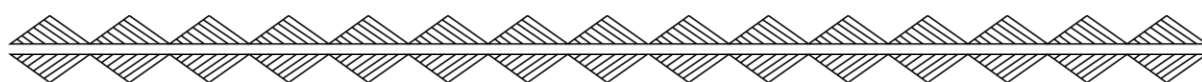
Non-communicable diseases, such as hypertension, diabetes, cancer, cardiovascular diseases and their risk factors, are major community health problems in the Cook Islands. Cardiovascular diseases (CVD) are reported as the highest NCD condition in the Cook Islands with an average of over 200 cases a year (2009-2015). Majority of these cases also have other non-communicable diseases. Diabetes followed with an average of about 100 new cases a year. In 2015, a total of 4,312 patients were registered in the Ministry of Health's NCD registry. An incidence rate of 2.7% and prevalence of 37.2% was noted for the four major (cardiovascular diseases, diabetes, cancer and chronic respiratory disease) NCD in 2015.

Of the risk factors, the 2014 STEPS survey preliminary results reported that in the adult population aged 25 to 64 years, the prevalence rates of obesity was 72.2%; raised blood pressure 32.9%; raised blood sugar 26.8%; and elevated blood cholesterol 50.9%<sup>4</sup>.

The cancer registry records reported that since 2005 there have been a cumulative number of 276 people diagnosed with cancer. In the last four years, prostate cancer is the most common type of cancer in men. In women, breast cancer is the most common and it is worth noting that cancer detection is very much

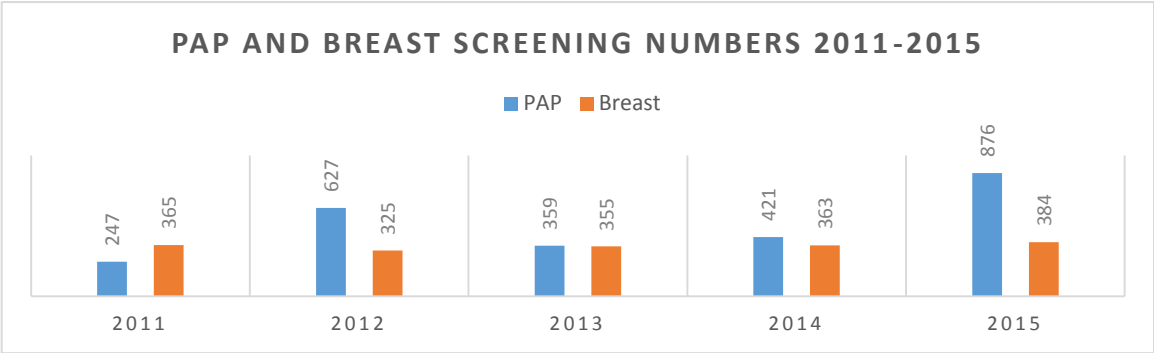
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<sup>4</sup> Cook Islands NCD Risk Factors STEPS Report. Te Marae Ora Ministry of Health, World Health Organisation 2011.



linked to screening programs undertaken during the period. Of the total 876 PAP smears taken in 2015, 1 case of cervical cancer was detected. Similarly for the 363 breast screenings done in 2014, 1 case of breast cancer was identified.

Chart 4: PAP and Breast Screening 2011-2015



Source: TMO O&G Report 2016.

Sexually transmitted infections (STI's) continued to decline in numbers over the last eight years (2008-2015) with a total of 312 cases in 2008 to 38 in 2015. Chlamydia remains the most prevalent type of STI throughout the years comprising half of the total diagnosed. There is no recorded case of a Cook Islands resident diagnosed with HIV and awareness and preventive health programs are ongoing. Moreover, chlamydia detection is also linked to the screening program undertaken. In general, condom use rates are below 50% for people engaging in high-risk sexual activity despite Government and NGO efforts to raise awareness about their use. This creates a potentially high-risk situation in the Cook Islands for the spread of HIV/AIDS and other STIs.

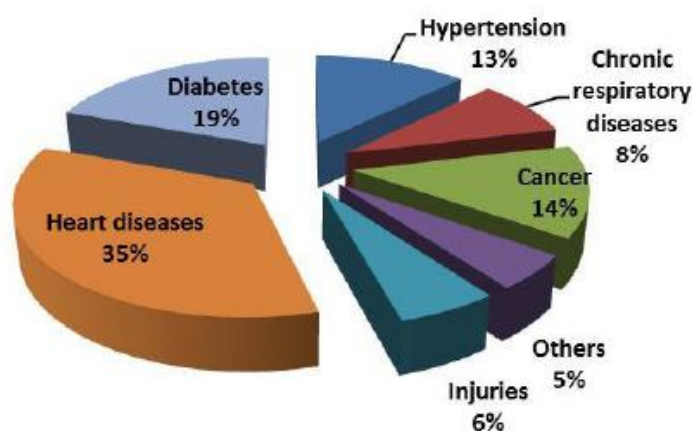
There had been a high number of road traffic crashes occurring in the Cook Islands mainly from driving on motor bikes and as a result of speeding, driving carelessly on the road and driving under the influence of alcohol. In 2013, 2014 and 2015 the total number of road traffic crashes were 61 / 60 / 41 respectively. For 2015, 39% of road traffic crashes were alcohol related. Of the reported 41 road traffic crashes in 2015, 5 fatalities were recorded resulting in road traffic crash fatality rate of 33/100,000 (resident population).

Mortality classification by cause of death is reported using the WHO International classification of diseases (ICD-10). For the years 2011 – 2015, the maternal mortality ratio remained at zero as there were no recorded maternal deaths during these years. There was one infant death in 2015 which is calculated as 4.8 per 1000 live births for the year. For the years 2012-2014, there were no deaths for infants <1yr recorded. The low infant mortality rate is a major achievement for Public Health.



Chart 5: Main Causes of Death 2015

**Percentage distribution of main causes of death  
COOK ISLANDS 2015**



Source: Health Information Bulletin 2015

The overall crude death rate of 9.1 is recorded by the Ministry of Health for 2015 and reflected an increase from 7.3 in 2011. NCDs represent 79% of all deaths in the Cook Islands. Of the NCDs heart diseases accounts for 35% of deaths in 2015, with diabetes, cancer and hypertension following closely at 19%, 14% and 13% respectively.

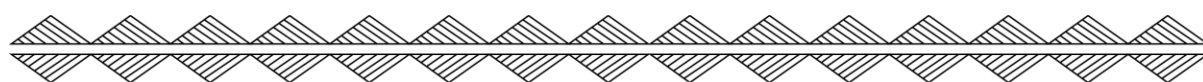
A functional and well organized patient referral system is in use by Te Marae Ora. Domestic Transfers from the Pa Enua to Rarotonga and international referrals from Rarotonga to New Zealand are governed by the Patient Referral policy 2015 and is managed by the Chief Medical Officer and the Referral committee.

In 2014 and 2015, patient transfers from the Pa Enua were 280 and 237 respectively. The drop in patient referrals could be linked to improved patient care in the islands and supported by medical outreach programs conducted from Rarotonga Hospital. International referrals recorded a slight increase from 134 in 2013 to 155 in 2015.

In relation to 2015-2016 referral costs, of the \$550,000 budget allocation \$357,166 was utilized for international referrals representing 64% of the annual patient referral POBOC budget.

The Mental Health (MH) service in the Cook Islands is mainly provided by 1 trained staff nurse, 1 Medical officer and Clinical Psychologist. This service is supplemented by a Non-Government organisation and annual visits of Mental Health specialists. Currently, there are 424 patients in the mental health register with 192 on active treatment. There are no specialized facilities for the treatment and care of persons with mental illness. Patients needing immediate psychiatric services are treated at the primary care level. Patients who are violent or aggressive and considered a risk to themselves or others, are cared for in the Arorangi Prison complex. The Cook Islands Mental Health and Wellbeing Strategy 2015 has identified the need for a safe environment at Rarotonga Hospital to cater for cases of acute psychosis.

There is growing concern over the rising levels of dependency and abuse of alcohol and other substances (mostly cannabis) in the Cook Islands. Among adult alcohol drinkers in the Cook Islands, 66.3% of males consume 60 grams or more of pure alcohol on at least one occasion every week, and while the numbers are nearly half that for women (38.2%), they remain relatively high. A significant portion of mental health





illness are due to problems associated with alcohol dependency and abuse, including the use of home-brew<sup>5</sup>.

Rheumatic heart disease (RHD) is a neglected disease of poverty and overcrowding. A screening Program for RHD was initiated in 2016 and directed at children 5-15 yrs. Using Echo cardiogram, the Program identified 61 (2.3%) of the 2,593 children screened with definite valvular problems and 18 (3%) on disease borderline. Plans have been made to repeat the mobile screening program every 5 years and fixed Echo cardiogram screening and diagnostic capabilities for the radiology department. Appropriate staff training and acquisition of equipment are considered in this health strategy.

**Table 4: 2016 Rheumatic Heart Disease Screening on Children 5-15 years**

Zone / Island	Total Screened	Definite RHD		Borderline RHD	
		Number	Percent	Number	Percent
<b>Southern Group</b>	317	13	4.1	10	3.1
<b>Northern Group</b>	225	5	1.9	8	3
<b>Rarotonga</b>	2020	43	2.1	-	-
<b>Total CKI</b>	2593	61	2.3	18	3

*Source: Dr Aung, RHD ECHO Screening Report 2016.*

In the Cook Islands dental caries, periodontal disease and tooth loss is prevalent. Findings from the Cook Islands National Oral Health Survey (CINOHS-2014) revealed dental caries in the five year old age group is high with the national mean decayed, missing and filled teeth (dmft) score of 6.6 with decay dominating the three measures assessed. In contrast, the mean DMFT status =1.7 for the 12 year olds were shown to be low, but this decline is negated by the sharp increase observed in the mean DMFT status (3.9) in 15 year olds with decay featuring strongly in the three components assessed<sup>6</sup>. The oral health plan strategies focus on strengthening services in the Pa Enua including preventive oral health action in all schools.

The 2015 health bulletin reported that around 100% of pregnant women attend at least 1 Ante Natal care check-up and that 100% of deliveries is attended by trained personnel. The caesarean section rate in 2015 at Rarotonga Hospital was 14%. WHO considers the ideal rate for caesarean sections to be between 10-15% and the Cook Islands falls within this range. Delivery to a teenage mother accounts for around 11% of all births for 2015, a decrease from 15% in 2013.

<sup>5</sup> CI Mental Health and Wellbeing Strategy 2015

<sup>6</sup> CI Oral Health Strategy 2014-2018

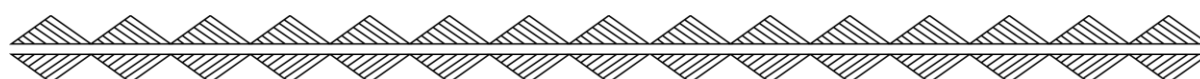
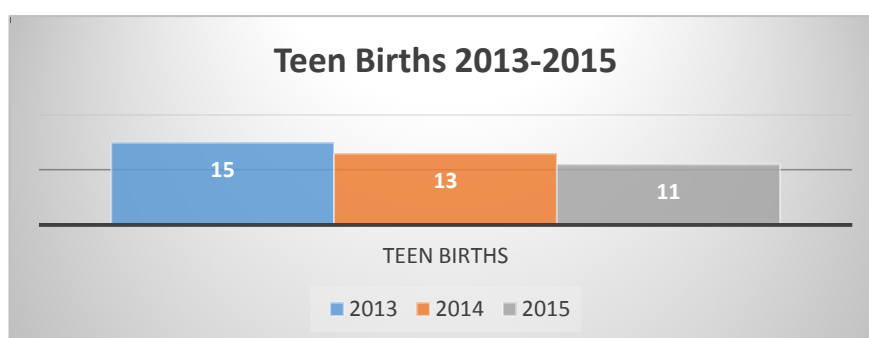




Chart 6: Teen Births 2013-2015



The youngest age of teenage delivery was 14 years in 2013.<sup>7</sup> Pregnancy to teenage girls warrants attention in all sectors of the community aside from assurance of adequate access to reproductive health service from the Ministry of Health. Maternal anaemia is not well documented in the Cook Islands and this status needs to be determined through research. Separately, exclusive breastfeeding rate is not properly determined and proper weaning practices needs ongoing support. Surveillance, diagnosis and treatment of reproductive tract infection, urinary tract infection, and lower genital tract infection in pregnancy are important as disease complications can lead to premature labour and births. Prematurity and associated complications are common causes of early neonatal deaths and are identified in this strategy.

Physical disability is the highest form of disability according to statistics and majority of the physically disabled have been a result of NCD particularly Diabetes. The other main cause of disabilities is congenital in origin or early childhood developmental problems due to diseases or genetics.

The top five infectious diseases reported in the Cook Islands between 2011 and 2015 were skin sepsis, gastroenteritis/diarrhea, pneumonia, bronchitis, influenza and viral illness. The two main recent infectious diseases outbreaks were the dengue outbreak in 2009 with 1,335 reported cases and the Chikungunya in 2015 with 11 reported cases. Diseases, such as the parasitic intestinal worm disease, have been reduced due to improved water and sanitation quality<sup>8</sup>

## Health Work Force

The Cook Islands has 1.47 doctors per 1,000 population. The Cook Islands Health Workforce Plan (2016-2025) is in existence and highlighted the need for Continuing Medical Education strengthening for all cadres of the health workforce. The Plan states that the focus of staff development should be on the expansion of the number of specialists in most disciplines including paediatrics, building nurse practitioner workforce on all islands and increasing the number of nursing, dental and allied health workforce.

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<sup>7</sup> Health information Bulletin 2015.

<sup>8</sup> WHO 2012 Cook Island Service Delivery Profile

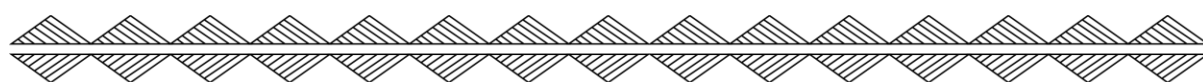
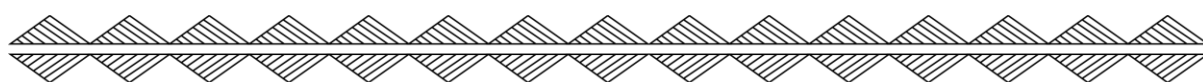


Table 5: 2016 Staff Establishment by Station and Cadre

Island	Allied health	Dental	Medical Officer	Midwives	Non-clinical	Nursing	Specialist	Total by island
Aitutaki	2	2	2	3	12	6		27
Atiu		1		1	3	2		7
Mangaia					2	5		7
Manihiki					2	2		4
Mauke		1			2	2		5
Mitiaro						2		2
Palmerston						1		1
Penrhyn					2	2		4
Pukapuka			1		2	4		7
Nassau		1				1		2
Rakahanga						1		1
Rarotonga	20	15	19	26	89	58	4	231
<b>Total by clinical area</b>	<b>22</b>	<b>20</b>	<b>22</b>	<b>30</b>	<b>114</b>	<b>86</b>	<b>4</b>	<b>298</b>

Source: Clinical Workforce Plan 2016-2025

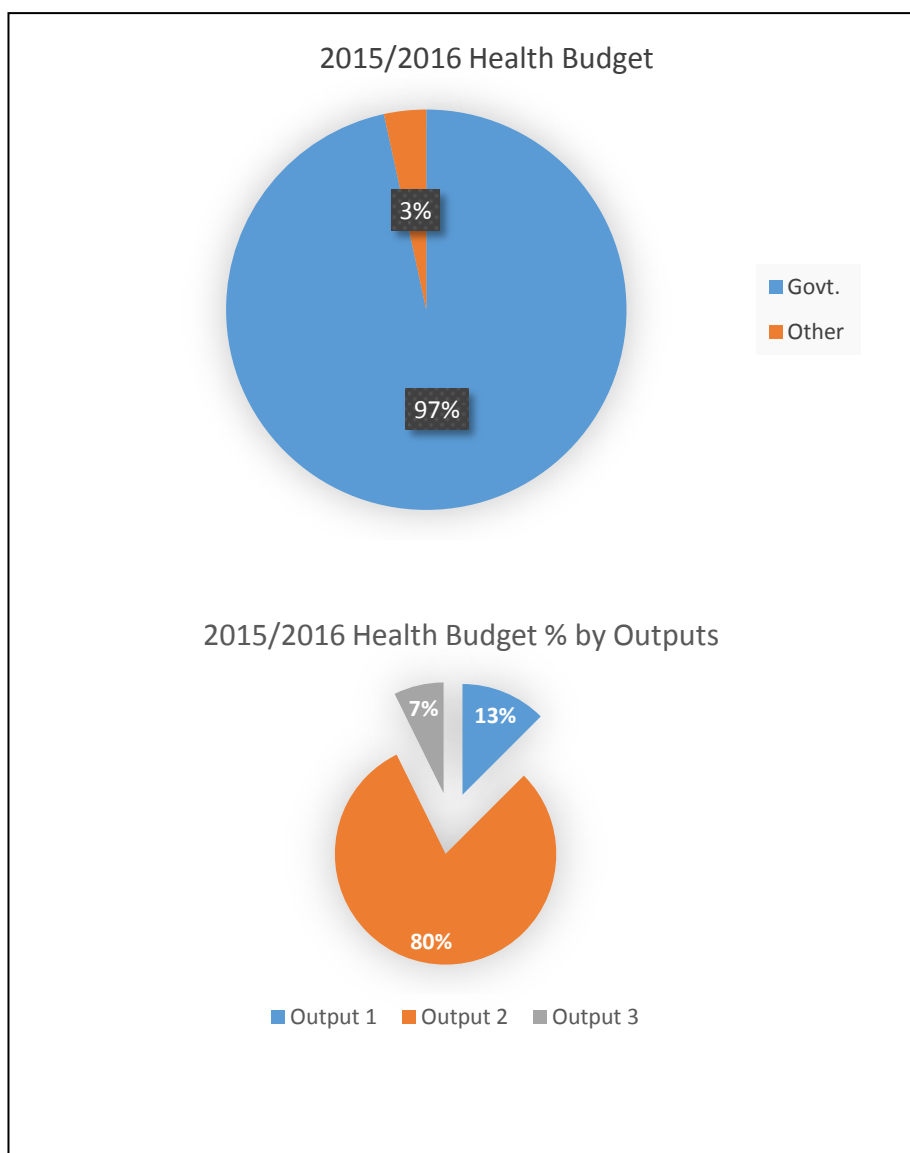
If CME funding is taken up at the level proposed, this would cost approximately \$306,000 in 2017, increasing to \$1.6m in 2025 (again using 2016 dollars). Funding for human resource development is included in the current health strategy as a major cost component. This funding level, once approved by Cook Islands Government will need to be managed efficiently.



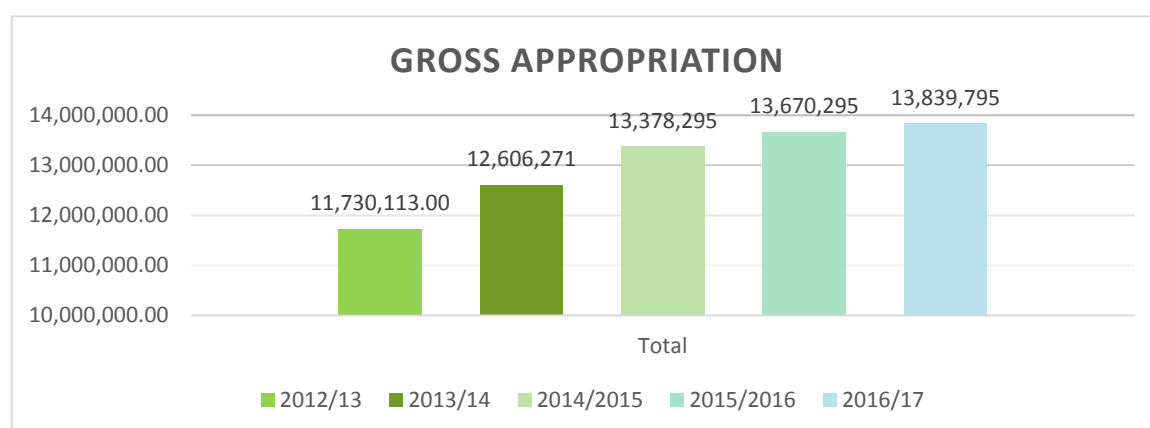
## Health Financing

Government funding to the health service has been steady at 6% of total government annual budget appropriation for the past 5 years (2013-2016). Compared against GDP, the health budget averages 2014/15 (3.7%), 2015/16 (3.85%) and 2016/17 (3.45%). The most favourable year being 2015/2016.

**Chart 7: Health Budget 2015/2016 by Source and Outputs Allocation**

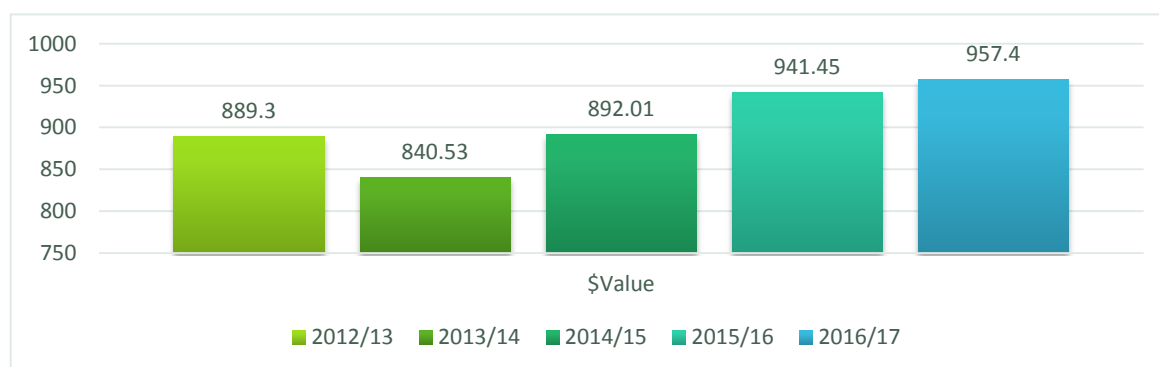


**Chart 8: Health Budget 2012-2017**



*Source: TMO and MFEM Budget Summary 2016/2017*

**Chart 9: Health Spending per Capita**

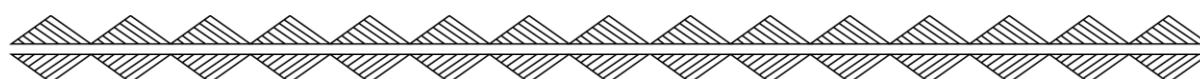


*Source: TMO and MFEM Budget Summary 2016/2017*

For the Te Marae Ora's 2016/2017 budget the following allocation / percentage distribution was noted for key expenditure items;

Operating Expenditure	\$2,506,330	18%
Personnel	\$8,207,307	60%
Depreciation	\$654,788	5%
Capital Expenditure	\$744,500	4.7%
Patient Referrals	\$550,000	4%
NCD control	\$195,000	1.4%
Nursing School	\$234,070	1.7%
Pharmaceutical	\$667,800	4.8%

Notable in the past 3 years' annual health budget is the provision of costs for the establishment and operations of the nursing school. The nursing school funding is related to human resource development and supports the overall HR strategy of the TMO. The funding for NCD control has been maintained and reflects government commitment to reducing NCDs. Compared to most PIC, Te Marae Ora's funding for



overseas referral is low at 4%. With its unique relationship to New Zealand, effective and efficient overseas medical referral mechanisms have been maintained at a fairly reasonable cost to CIG.

## Funding Support from Development Partners

### New Zealand

Since 1994, the New Zealand Government has funded and initially managed medical specialist visits to the Cook Islands. Patient referral and case management through contracted agencies in New Zealand is also an important component of assistance. Between 2004 and 2008, these visits took place under the Medical Specialists Visits (MSV) scheme and from 2008 to the present, under the Health Specialist Visits (HSV) scheme. Both schemes provided funding under tripartite arrangements between the New Zealand Agency for International Development (now the New Zealand Aid Program), Te Marae Ora and the Cook Islands Ministry of Finance and Economic Management (MFEM), with management of the schemes now delegated to the CI TMO. The scheme aims to improve the health status of Cook Islanders through equitable access to specialists' health services. The 2009/10 allocation to the HSV was \$350,000 and represented just over 3 percent of the total Cook Islands health budget. For 2015, the funding level to this program was around \$500,000 and is about 4% of the TMO annual budget. In 2016, the funding level increased to \$760,000 as a budget support funding arrangement. This funding includes support to the Cook Islands Fellowship in General Practice training program.

### World Health Organization

The Cook Islands TMO 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 TMO activities through a biennial budget process that allows the TMO considerable latitude in addressing national priorities.

The Program budget 2016–2017 will be the second of the three biennial budgets to be formulated within the Twelfth General Program of Work, 2014–2019. Special emphasis has been given to the further strengthening of the institutional, international and country capacities for emergency preparedness, surveillance and response, as well as the continued focus on strengthening regulatory capacity, health systems information, polio eradication and RMNCAH.

### UNFPA

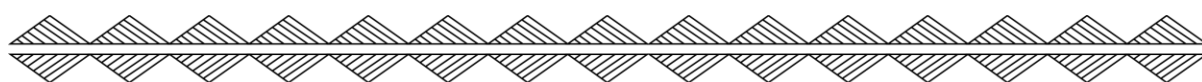
**UNFPA** is committed to ensuring that reproductive health and women's empowerment are central to development plans, health sector reforms and programming efforts to reduce inequities and to achieving universal access to quality reproductive health services, commodities and information.

### UNICEF

Country Program 2013-2017 of **United Nations Children's Fund (UNICEF)** provides the framework for its ongoing Program and technical assistance to the Ministry of Health in relation to newborn, child and maternal health, infant nutrition, HIV Program. The Expanded Program on Immunisation (EPI) and the cold chain are major areas of technical assistance along with breastfeeding promotion and the Baby Friendly Hospital Initiative. UNICEF also provides assistance to other government ministries particularly Education.

### Secretariat of Pacific Community (SPC)

SPC technical support to the Cook Islands is identified in the joint country strategy.



## **UNDP-(Global Funds)**

The Global Fund is a 21st-century partnership organization designed to accelerate the end of AIDS, tuberculosis and malaria as epidemics.

Founded in 2002, the Global Fund is a partnership between governments, civil society, the private sector and people affected by the diseases. The Global Fund raises and invests nearly US\$4 billion a year to support programs run by local experts in countries and communities most in need.

Separately, SPC previously administered the Global Fund projects on HIV and TB, the HIV/STI Response Fund and small grants schemes under the regional NCD Framework. Current financial management arrangements for Global Funds have shifted to UNDP.

## **Australian Government**

The Australian Government provides a contestable fund of NZD10,000 per year to support an established mechanism for health specialist visits to Pacific island countries (PICs) by the Royal Australasian College of Surgeons (RACS) Pacific Islands Program (PIP). AusAID has funded the RACS PIP since 1995. The Strengthened Specialists Clinical Services in the Pacific (SSCSiP) program was created to address some of the challenges in coordinating specialist health visits by supporting Pacific island countries to plan for, access, host and evaluate specialized clinical services, and strengthening health worker skills, capacity and capability to meet in country clinical service needs.

## **Gap Analysis of Health System**

### **Governance**

#### **Health Planning**

Capacity for health and strategic planning remains a challenge within the current workforce. Strengthening capacity in this area will ensure that strategic objectives outlined in the various health Programs and plans are operationalised.

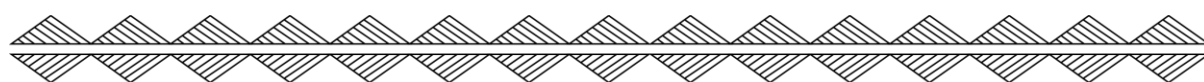
#### **Human Resource**

The Cook Islands health services will continue to depend on expatriate specialised doctors in the years to come. A steady recruitment and engagement of this specialised workforce both in the clinical and Community Health Services areas are often a challenge. Specialised training of the local workforce is important and is planned in this health strategy. In relation to the nursing services, the development of the local Nurse practitioner training program is planned.

### **Community Health Services**

#### **NCD Control Structure**

Undoubtedly, NCD is the main contributor to morbidity and mortality in the country. NCD funding allocation from the Cook Islands Government should be maximised. Infrastructure, staff strengthening along with supplies and equipment will be required for improved outcomes.



## **Community Base Follow Up and Care**

Community based follow up of chronic cases needs strengthening. Poor patient compliance on treatment and follow up is a major cause of disease complications.

## **Clinical Patient Care**

### **Specialised clinical services**

Diagnostic capabilities need to be upgraded to meet requirements for patient management.

### **Specialised diagnostic service**

Diagnostic capability for radiology and screening purposes particularly Echocardiogram (ECHO) needs strengthening and will require investment in equipment and staff training to improve services.

### **Displaced patients**

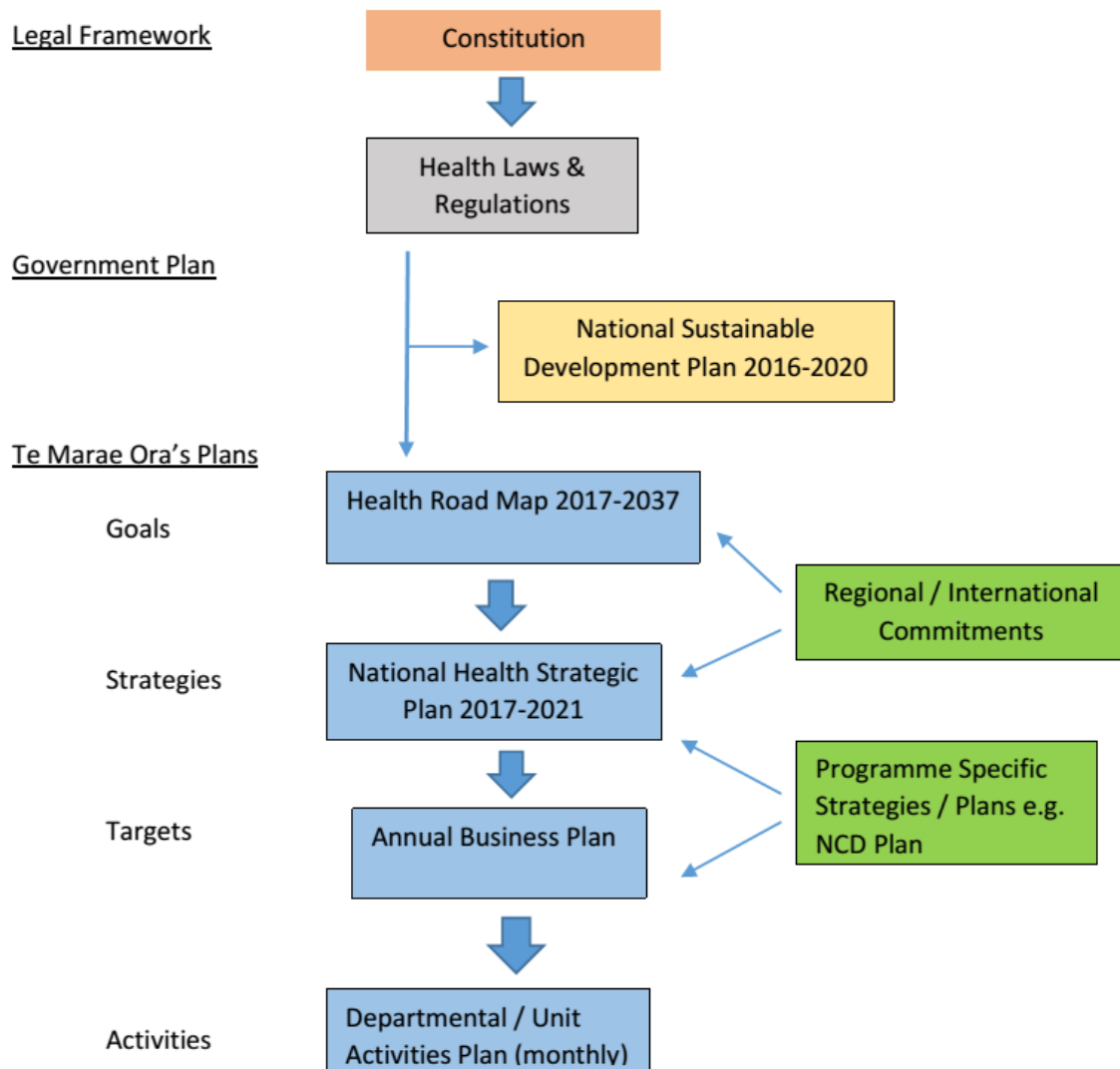
Elderly patients left by families after medical treatment or discharge become a burden to the Ministry. The term 'granny dumping' has been used to describe these patients. National planning and strategies have to be adopted for the care of these elderly citizens.



# Health Strategy 2017 - 2021

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## Health Strategy Linkages





## Linkages

The Cook Islands 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 through legislation and the NSDP. Sector plans are formulated by Government Ministries for medium term periods of 5-10 years to prioritise and align to the NSDP. The Annual Business Plan is a budget linked document that sets out to operationalise the Sector Plan or Strategic Plans. The Ministry of Health key planning document and linkages is presented and discussed below.

## National Sustainable Development Plan (NSDP) 2016-2020

The National Sustainable Development Plan is the development strategy of Government covering a period of 5 years and is part of the 20 year Kaveinga Nui (“Kaveinga”) 2000-2020. The NSDP has the vision of *“To enjoy the highest quality of life consistent with the aspirations of our people, and in harmony with our culture and environment”*. The NSDP has 16 development goals that outlines individual, community, business and government partnerships for a sustainable quality of life for all Cook Islanders. The NSDP has been aligned to the Sustainable Development Goals (SDG). Goal 7 of the NSDP relates to health care and services and is tabled below.

### Indicator # 7 NSDP (2016-2020)

#### Improve health and promote healthy lifestyles

##### Reduce non-communicable diseases

**Indicator 7.1** Rate of premature deaths from non-communicable diseases

This indicator measures the rate of premature deaths from non-communicable diseases, with the intent to reduce this rate over time. Non-communicable diseases or NCD’s are our largest health challenge with high rates of heart disease, diabetes and other lifestyle diseases affecting the lives of many Cook Islanders every year and putting a strain on our health system.

##### Increase investment in health care

**Indicator 7.2** Health spending as a percentage of Government expenditure

This indicator looks at how much Government spends on health. As our health system is almost exclusively publicly funded, the amount of the Government spend is crucial for improving the health of our people.

##### Promote sexual health

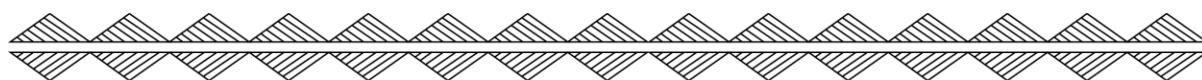
**Indicator 7.3** Prevalence of sexually transmitted infections (STI’s)

Sexually transmitted infections have become a significant health issue in the Cook Islands. A reduction in STI’s is a key priority for the Ministry of Health and serves as a key indicator of safer sexual practices and better sexual health.

##### Promote healthier lifestyles through exercise and sports

**Indicator 7.4** Youth engagement in physical activity and sports

Exercise, sports and other physical activities are crucial for a healthy lifestyle. Lifestyle habits are usually engrained at an early age which is why it is crucial that we measure the extent to which children, young people, and adults engage in physical activities on a daily and weekly basis (the Ministry of Health recommends at least half an hour per day for adults and an hour per day for young people).



### Achieve healthier longer lives

#### Indicator 7.5 Average life expectancy

Life expectancy is the most widely used measure of the general health of a society. Health care spending, standards of living, environmental improvements, lifestyle changes, Public Health, disease prevention, and education all contribute to improved life expectancy and quality of life.

### Improve mental health care

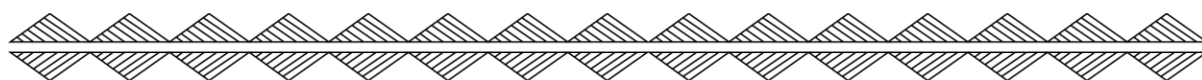
#### Indicator 7.6 Percentage of population diagnosed/screened with mental health disorders

This indicator looks at the percentage of diagnosed mental health cases that have been treated in the last year. Though not a new issue, efforts to address mental health in the Cook Islands are relatively new as we look to draw attention to the issue, and moreover, tackle the stigma that has kept those suffering from mental health conditions from getting the attention and treatment required

## Alignment of NSDP to NHSP

Table 6: Alignment of NSDP 2016-2020 to NHSP 2017-2021

NSDP Strategies for Short, Medium and Long Term Goals	NHSP Key Result Area Strategies	Comments
<p><b>Indicator 7.1</b> Rate of premature deaths from non-communicable diseases.</p> <p>This indicator measures the rate of premature deaths from non-communicable diseases, with the intent to reduce this rate over time. Non-communicable diseases or NCD's are our largest health challenge with high rates of heart disease, diabetes and other lifestyle diseases affecting the lives of many Cook Islanders every year and putting a strain on our health system.</p>	All KRAs	<ul style="list-style-type: none"><li>• NCD Strategy in existence.</li><li>• Funding for Program interventions provided.</li><li>• Preventive health activities on risk factors formulated.</li></ul>
<p><b>Indicator 7.2</b> Health spending as a percentage of Government expenditure</p> <p>This indicator looks at how much Government spends on health. As our health system is almost exclusively publicly funded, the amount of the Government spend is crucial for improving the health of our people.</p>	All KRAs	<ul style="list-style-type: none"><li>• Current level of funding meeting most needs.</li><li>• Advocacy for improved level to cater for new strategy.</li></ul>
<p><b>Indicator 7.3</b> Prevalence of sexually transmitted infections (STI's)</p> <p>Sexually transmitted infections have become a</p>	All KRAs	<ul style="list-style-type: none"><li>• STI prevalence is low.</li><li>• Intervention needed for Chlamydia infection through community</li></ul>



NSDP Strategies for Short, Medium and Long Term Goals	NHSP Key Result Area Strategies	Comments
significant health issue in the Cook Islands. A reduction in STI's is a key priority for the Ministry of Health and serves as a key indicator of safer sexual practices and better sexual health.		screening and treatment.
<p><b>Indicator 7.4</b> Youth engagement in physical activity and sports</p> <p>Exercise, sports and other physical activities are crucial for a healthy lifestyle. Lifestyle habits are usually engrained at an early age which is why it is crucial that we measure the extent to which children, young people, and adults engage in physical activities on a daily and weekly basis (the Ministry of Health recommends at least half an hour per day for adults and an hour per day for young people).</p>	KRA 2. Community Health Services	<ul style="list-style-type: none"> <li>• Strategy included under health promotion.</li> <li>• School health based Program promoting healthy lifestyles and ending childhood obesity.</li> </ul>
<p><b>Indicator 7.5</b> Average life expectancy</p> <p>Life expectancy is the most widely used measure of the general health of a society. Health care spending, standards of living, environmental improvements, lifestyle changes, Community Health Services, disease prevention, and education all contribute to improved life expectancy and quality of life.</p>	All KRAs	<ul style="list-style-type: none"> <li>• Impact (long term) indicator for whole of system and intervention.</li> <li>• Socio economic factors also play a role in improving lifestyles.</li> </ul>
<p><b>Indicator 7.6</b> Percentage of population diagnosed/screened with mental health disorders</p> <p>This indicator looks at the percentage of diagnosed with mental health disorders that have been treated in the last year. Though not a new issue, efforts to address mental health in the Cook Islands are relatively new as we look to draw attention to the issue, and moreover, tackle the stigma that has kept those suffering from mental health conditions from getting the attention and treatment required</p>	<p>KRA 2. Community Health Services</p> <p>KRA 3. Hospital Health Services</p> <p>KRA 5. Pa Enua Health Services</p>	<ul style="list-style-type: none"> <li>• Multi-sectoral strategy.</li> <li>• Community care of mental health patients need emphasis.</li> </ul>

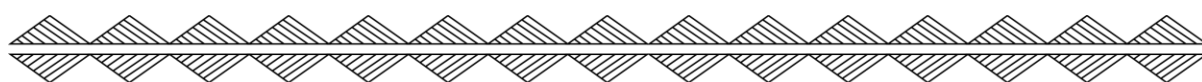
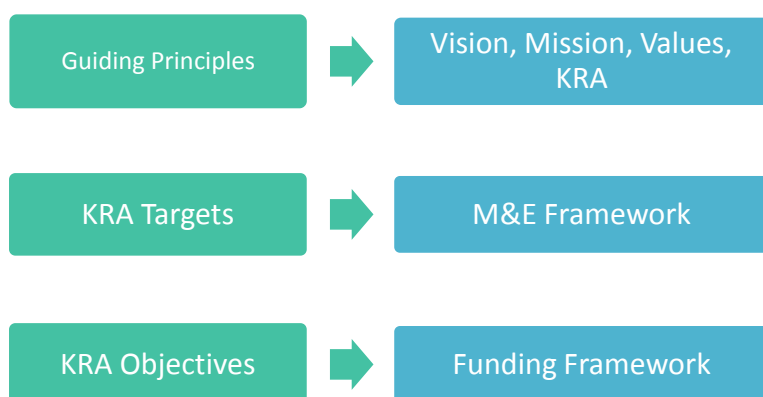


## Addressing Crosscutting Issues

Carrying on from the past NHSP 2012-2016, this NHSP also targets key cross cutting issues such as gender, disability, climate change adaptation, disasters mitigation and the environment. Indeed identifying gender associated morbidity and mortality has been an ongoing activity of the Ministry. Segregation of data into sex classification is important for analytic purposes and for targeted intervention.

Working with partners, the TMO is currently addressing issues and Programs for those with disabilities and vulnerable populations. Population aging and its related social and health implications are also concerns for the TMO and collective actions will be strategised by all partners. Furthermore, climate change adaption is a whole of government strategy with the Ministry of Health contributing on issues related to disease occurrence, NCD, nutrition and food security. Similarly, disaster mitigation is a whole of government activity with the Ministry of Health contributing its role and function in the national plan developed.

## Key Health Strategy Components Alignment



## NHSP Guiding Principles

### Vision

*“All people living in the Cook Islands living healthier lives and achieving their aspirations”*

### Mission

*“To provide accessible, affordable health care and equitable health services of the highest quality, by and for all in order to improve the health status of people living in the Cook Islands”*

### Values

**Respect** Acknowledging a person’s dignity, integrity and rights with compassion, trust, privacy and confidentiality;

**People focused** Ensuring that the welfare of men and women, boys and girls remain our priority, guided by the human rights principles of empowerment, gender equality, non-discrimination, participation and accountability;

**Equity** Promoting human rights principles and providing timely and equitable access to quality, affordable healthcare services for all people in the Cook Islands;

**Quality** Striving for best practice and excellence in all aspects of our work. Client focused, delivering safe, responsive, sensitive, sustainable, well resourced, evidence based healthcare services provided by qualified and competent workforce including careers and advocates;

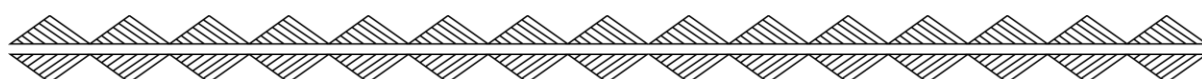
**Integrity** Maintaining professionalism, honesty, respect and confidentiality;

**Accountability** Our systems are transparent and reflect responsible governance and management, ensure gender equality, non-discrimination and the participation of men and women in decision making at all levels.

## Strategic Focuses of Ministry under Key Result Areas

The six Key Result Areas are as follows:

Key Result Area 1:	Health Administration and Management
Key Result Area 2:	Community Health Services
Key Result Area 3:	Hospital Health Services
Key Result Area 4:	Allied Health Service
Key Result Area 5:	Pa Enua Health Services
Key Result Area 6:	Health Partnerships



### **NHSP 2017-2021 Policy Goals**

The following policy goals are reflected under the KRAs in the NHSP.

1. To strengthen administrative and management capacity and capability to meet the health systems and health service needs, demands and expectations for the Ministry of Health.
2. To strengthen and improve community health services under the principles of Primary Health Care and Healthy Islands context.
3. To provide quality clinical care and services to meet the needs and expectations of patients, that are in line with the policies and resources of the Ministry of Health.
4. To provide quality pharmaceutical service, diagnostics and support services to meet clinical needs in line with the policies and resources of the Ministry.
5. To work collaboratively, complement and support health partners in the implementation of agreed health related interventions and activities.



# Key Result Area 1: Health Administration and Management

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## A. Policy Goal:

To strengthen administrative and management capacity and capability to meet the health systems and health service needs, demands and expectations for the Ministry of Health.

## B. Delivery Areas (DA):

Delivery Area 1:	Leadership, Governance and Policy
Delivery Area 2:	Health Finance
Delivery Area 3:	Human Resources for Health
Delivery Area 4:	Health Information and Communication Technology (ICT)
Delivery Area 5:	Health Research
Delivery Area 6:	Health Infrastructure

## C. Policies and Planning Strategies Linked to KRA

The following specific plans are in existence and have been considered in the planning process of the KRA.

### C1. Program Specific Strategies and Plans related to KRA

- C1.1 Cook Islands Health Workforce Plan 2016-2025
- C1.2 National Health Information Strategy 2015-2019
- C1.3 TMO Research Policy & Procedures
- C1.4 TMO ICT Policy and Procedures
- C1.5 National Service Fee Schedule 2015
- C1.6 TMO Finance Policy and Procedures
- C1.7 TMO Personnel Policy and Procedures Manual

### C2. Sector-wide Policies and Planning Strategies Linked to KRA

- C2.1 Road Safety Strategy 2016-2020
- C2.2 Sanitation (Wastewater Management) Policy 2016
- C2.3 National Water Policy 2016
- C2.5 Cook Islands Government Financial Policy and Procedures Manual
- C2.6 Cook Islands National Sustainable Development Plan 2016-2020
- C2.7 Climate Change and Health Adaptation Plan
- C2.8 Public Financial Management Roadmap 2016 – 2020
- C2.9 NCD Strategy

### C3. Regional / Global Strategies

- C3.1 Healthy Islands Strategy and Vision
- C3.2 Regional Strategy for NCD
- C3.3 International Health Regulation



## KRA 1 Objectives

### DA 1. Leadership and Governance

- 1.1. Enforce, support and strengthen the health mandate including the core roles and functions of Te Marae Ora.
- 1.2. Provide support to strengthen general administrative and management responsibilities of the hospital and Community Health Service.
- 1.3. Provide support to strengthen general administration and management responsibilities for support services areas particularly kitchen, laundry, and maintenance to ensure ease and efficiency of operations.
- 1.4. Strengthening capabilities for health strategy development, policy reviews and formulation.
- 1.5. Formulate and review legislations to address and to be abreast with health service needs, demands and responsibilities.
- 1.6. Strengthen and support compliance and enforcement of health laws and regulations.

### DA 2. Health Finance

- 2.1. Strengthen financial control and monitoring of all health funding sources according to set standards.
- 2.2. Advocate for improved funding and budget allocation to TMO.
- 2.3. Support and facilitate annual budget planning and auditing processes.
- 2.4. Obtain and maintain an unqualified audit opinion on the Ministry annual financial reports.
- 2.5. Support and facilitate a feasibility study on financing options for health services.

### DA 3. Human Resource Development

- 3.1. Support and facilitate staff development as outlined in the Cook Islands Health Workforce Plan 2016-2025.
- 3.2. Facilitate specialist training of staff especially in Paediatrics and Medicine.
- 3.3. Support training in echocardiogram diagnostic capability and ultrasound training for Medicine and Radiology service staff.
- 3.4. Support in-service training for Pa Enua nurses in both Community Health Services, patient care services, dental health, leadership and management.

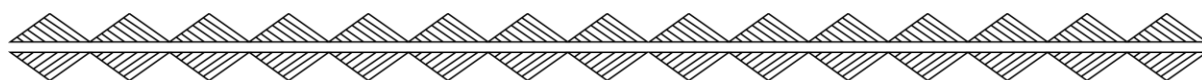
### DA 4. Health Information

- 4.1. Strengthen resources which includes legislative, regulatory and planning frameworks required for an efficient health information system.
- 4.2. Strengthen and support enhanced institutional capacity and workforce development for sustainable infrastructure.
- 4.3. Improve data sources through capacity building activities and supervision mechanisms.
- 4.4. Enhance data management through written procedures and utilisation of a metadata dictionary.
- 4.5. Improve quality of health information products through accessible and improved dissemination of information on various electronic platforms, formats and through group forums.
- 4.6. Strengthen the application of information and communication technologies (ICT) which includes the introduction and use of “zoom” in all Pa Enua Health centers.

### DA 5. Health Research and Policy

- 5.1. Strengthen health research capability of the Ministry through appropriate institutional capacity building (human resource and financial).
- 5.2. Formulation a research plan that identifies and prioritize health research for the Ministry of Health and partners.

### DA 6. Health Infrastructure





- 6.1. Ongoing assessment of health infrastructure and facilities including related support systems such as waste management and disposals.
- 6.2. Maintenance and renovation of existing hospitals and health centres including health residences.
- 6.3. New construction and extension to existing health facilities and related support systems to cater for expanding health services.

## KRA 1 Targets

*Certain targets have been selected and included in the monitoring and evaluation framework.*

### DA 1. Leadership and Governance

- 1.1. Public Health Act 2004 revised by 2021
- 1.2. Formalised compliance and enforcement regime established
- 1.3. Review and formulate standards for sewage reticulation systems
- 1.4. Review of Nursing Clinical Guideline by 2018
- 1.5. Review Doctors Clinical Guidelines

### DA 2. Health Finance

- 2.1. Health appropriation improved to 5% of GDP;
- 2.2. Unqualified Financial Audit Reports obtained;
- 2.3. Maintained Performance Indicator as per the PEFA Framework
- 2.4. Feasibility study on health finance options

### DA 3. Human Resources for Health & Human Resource Development

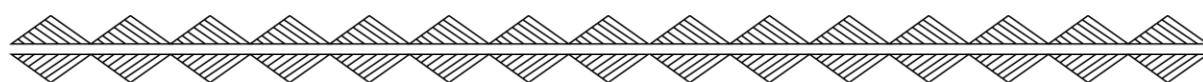
- 3.1. Nurse Practitioners training Program established (2017/18).
- 3.2. Nursing bachelor degree completion training Program established with a recognised academic institution.
- 3.3. Training for new Pharmacy Technicians completed (2017/18)
- 3.4. POLHN training for 20 staff in the various cadre
- 3.5. Training for new Dental Therapists completed (2017-2018/19)
- 3.6. Training of new Public Health Inspectors completed (2017-18)
- 3.7. Post Graduate Public Health Nursing Training commenced

### DA 4. Health Information

- 4.1. Integrated 'data warehouse' created and functional at the national level.
- 4.2. Training on death certification for all medical officers and nurse practitioners and ICD code training.
- 4.3. Scoping Medtech evolution

### DA 5. Health Research and Policy

- 5.1. Health Research priorities for the Cook Islands developed.
- 5.2. Health Research Policy 2015 reviewed.
- 5.3. Conduct / facilitate anaemia prevalence survey in ante-natal women by 2018.



## Key Result Area 2: Community Health Services

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### A. Policy Goal:

To strengthen and improve community health care services under the principles of Primary Health Care and Healthy Islands context.

### B. Delivery Areas (DA):

- Delivery Area 1: Health Protection
- Delivery Area 2: Health Promotion
- Delivery Area 3: Family Health Services (Public Health Nursing)
- Delivery Area 4: Oral Health (Dental)
- Delivery Area 5: Mental Health

### C. Policies and Planning Strategies Linked to KRA

The following specific plans are in existence and have been considered in the planning process of the KRA.

#### C1. Program Specific Strategies and Plans

- C1.1 CI Integrated National Strategic Plan for Sexual and Reproductive Health 2014-2018
- C1.2 National Strategy for NCD 2015-2019
- C1.3 Tobacco Action Plan 2012-2016
- C1.4 National Immunisation Policy
- C1.5 National Deworming Policy 2015
- C1.6 Mental Health Policy 2015
- C1.7 Mental Health and Wellbeing Strategy 2016-2021
- C1.8 Suicide Prevention Strategy 2016-2021
- C1.9 Oral Health Strategic Plan 2014-2018
- C1.10 Sanitation (Wastewater Management) Policy 2016

#### C2. Sector-wide Policies and Planning Strategies Linked to KRA

- C2.1 Road Safety Strategy 2020 – 2025
- C2.2 Sanitation (Wastewater Management) Policy 2016
- C2.3 National Water Policy 2016

#### C3. Regional / Global Strategies

- C3.1 Healthy Island Strategy and Vision
- C3.2 Regional Strategy for NCD
- C3.3 International Health Regulation
- C3.4 Convention on the Rights of Persons with Disabilities
- C3.5 Community Based Rehabilitation guidelines
- C3.6 Convention on the Rights of a Child



- C3.7 Convention to eliminate all forms of discrimination against women (CEDAW)
- C3.8 WHO Community Rehabilitation Guidelines
- C3.9 Suva Declaration on improving oral health in the Pacific Islands Region
- C3.10 WHO Framework Convention on Tobacco Control

## **KRA 2 Objectives**

The strategic objectives are operationalised yearly through the TMO Business Plan. The Business Plan will itemise the activities linked to the strategic objective.

### **DA 1. Health Protection Strategic Objective**

#### **Environmental Health**

- 1.1. Implement Regulations in relation to the enforcement of health legislation.
- 1.2. Enforce Food Safety and Tobacco Control Regulations.
- 1.3. Improve and strengthen vector control.
- 1.4. Enforce sewage and sanitation regulation 2014.
- 1.5. Strengthen food safety and food standards.
- 1.6. Maintain and strengthen pollution control measures especially sewerage and medical waste management.
- 1.7. Maintain and strengthen water standards through monitoring, analysis and treatment of water storage.
- 1.8. Maintain and strengthen quarantine and border control support services at ports of entry.
- 1.9. Maintain and strengthen the International Health Regulations framework, ESR, Public Health Surveillance Network, Climate Change impacts, and disaster risk management.

### **DA 2. Health Promotion Strategic Objectives**

#### **NCD**

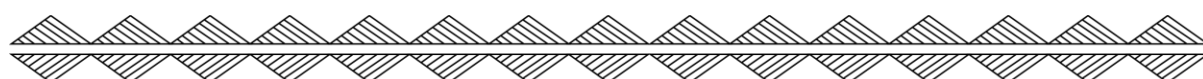
- 2.1. Support and facilitate the implementation of activities outlined in the NCD Strategic Plan 2015-2019.
- 2.2. Support and strengthen prevention and management services for diabetes, hypertension and cardiovascular diseases.
- 2.3. Support and strengthen ongoing prevention activities against NCD risk factors.
- 2.4. Strengthen and support health communication strategies covering key risk factors.
- 2.5. Support research activities in NCDs and their risk factors.

#### **Nutrition**

- 2.6. Support prevention of childhood obesity through nutrition Programs targeting school based approaches.
- 2.7. Support the Baby Friendly Hospital initiative.
- 2.8. Advocate for household food security and good nutrition through home/school gardening and healthy food preparations.
- 2.9. Develop a profile of nutrient intake for Cook Islanders using import data and Household expenditure survey data.

#### **STI/HIV**

- 2.10. Implement activities and strategies outlined in the Sexual and Reproductive Health Strategy 2014-2018.



- 2.11. Support national and regional efforts to prevent the spread and minimise the impact of HIV/STIs on individuals, families and communities.
- 2.12. Strengthen the early detection of HIV and other STIs to reduce further infections and facilitate timely management and treatment.

#### **Tuberculosis**

- 2.13. Support local TB control Program under the Global Fund strategies.
- 2.14. Strengthen and support awareness TB activities and management of TB in the community.

#### **Tobacco Control**

- 2.15. Implement and strengthen Tobacco Control measures as outlined in the current Tobacco Control Action Plan and NCD Strategy.

### **DA 3. Family Health Services (Public Health Nursing) Strategic Objectives**

#### **Maternal and Child Health**

- 3.1. Support and strengthen safe motherhood initiatives and Programs.
- 3.2. Strengthen Family Planning awareness.
- 3.3. Support and strengthen cancer screening and prevention Programs especially PAP smear and breast examination / screening.

#### **Immunisation**

- 3.4. Support the maintenance of a strong EPI Program including good management of the cold chain to ensure high vaccine antigen coverage.
- 3.5. Support EPI disease surveillance and research.

#### **Child Health**

- 3.6. Promote exclusive breastfeeding up to 6 months.
- 3.7. Maintain and strengthen Maternal Child Health Clinic for follow up and care of children.
- 3.8. Maintain and strengthen School health programs and services.
- 3.9. Early Identification of developmental problems in children under 5 and referred.

#### **Rheumatic Heart Disease**

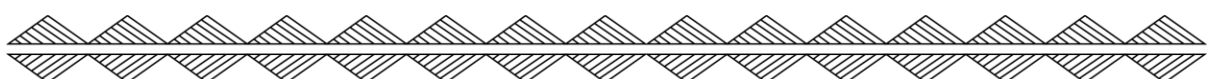
- 3.10. Support screening Program for RHD.
- 3.11. Support referral and follow up treatment of RHD cases.
- 3.12. Ensure monthly injections for identified children are given.

#### **Family Health**

- 3.13. Strengthen home visits to provide support for ongoing care of patients discharged from Hospital to prevent readmission within 28 days for the same diagnosis.
- 3.14. Strengthen palliative care services.

### **DA 4. Oral Health Strategic Objectives**

- 4.1. Strengthen current oral health services especially in schools and Pa Enua.



- 4.2. Strengthening specialised oral health services to meet needs in the country.
- 4.3. Increase capacity and capabilities to meet needs in Rarotonga and Pa Enua.
- 4.4. Facilitate equipment and infrastructure procurement and development.
- 4.5. Implement activities identified in the Oral health Strategy 2014-2018.

#### **DA 5. Mental Health Strategic Objectives**

- 5.1. Strengthen advocacy and awareness on alcohol and substance abuse.
- 5.2. Implementation of Mental Health and Well Being Strategy (2016-2021) and Suicide prevention strategy (2016-2021).
- 5.3. Support and strengthen community and institutional care and treatment.
- 5.4. Provide post-traumatic stress syndrome support/referral.

## **KRA 2 Targets**

*Certain priority targets have been selected and included in the monitoring and evaluation framework.*

#### **DA 1. Health Protection**

##### **Environmental Health**

- 1.1. 100% of non-compliance issues are addressed within 48 hours of receipt.
- 1.2. Annual training in compliance and enforcement.
- 1.3. Less than 10 complaints received for non-compliance to Food Act and Regulation per annum.
- 1.4. Less than 10 complaints received for water borne related illnesses per annum.
- 1.5. Annual training on IHR and border security.
- 1.6. Zero vector borne outbreak.
- 1.7. 40% of all private dwellings inspected and assessed according to the Sewage Regulation 2014.
- 1.8. 50% commercial properties on Rarotonga and Aitutaki comply with the Sewage Regulation 2014.
- 1.9. Community Health Services Geographic Information System established.
- 1.10. At least 10 staff undertake and complete Pacific Data for Decision Making (DDM) Training program.

#### **DA 2. Health Promotion**

##### **NCD**

- 2.1. Reduce premature mortality due to NCD by 20% (4% per year) by 2020.
- 2.2. Complete implementation of Ngaki'anga Kapiti (NCD) strategy.
- 2.3. Review and development of new Ngaki'anga Kapiti (NCD) Strategy.

##### **Nutrition**

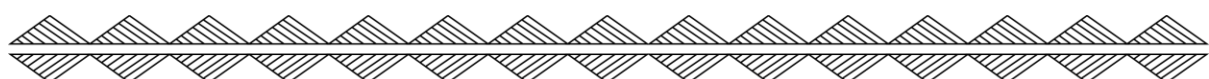
- 2.4. Increase by 30% consumption of 5 or more serves of fruit and vegetables (survey based).
- 2.5. Reduce or maintain Primary school student obesity rate at 25%.

##### **Communicable Diseases**

- 2.6. Achieve 100% Direct Observation Treatment (DOTS) coverage for Tuberculosis.
- 2.7. Maintain zero HIV.

##### **Tobacco Control**

- 2.8. Enactment of Amendments to the Tobacco Control Act 2007.
- 2.9. Tobacco Free Ministry of Health by 2021.



- 2.10. Reduce smoking by 20% of current level of smokers.
- 2.11. Percentage of Government premises compliant with current Tobacco Control Act 2007.
- 2.12. Declare one island/village as Tobacco free.

### **DA 3. Family Health Services (Public Health Nurses)**

#### **MCH/FP**

- 3.1. Increase contraceptive prevalence rate to 35%.
- 3.2. All immunisation coverage is greater than or equal to 98%.
- 3.3. Establish baseline and targets for exclusive breast feeding rate on discharge from maternity ward at 3months and 6months.
- 3.4. Complete school physical health examinations every 2 years and report to school Principals within three months.

#### **Rheumatic Heart Disease**

- 3.5. Complete screening of all children (5 to15years).
- 3.6. Completed repeat screening of high risk children subject to the initial screening.
- 3.7. Number of children receiving prophylaxis treatment.
- 3.8. Rheumatic heart disease screening in schools undertaken once every five years.

#### **Family Health**

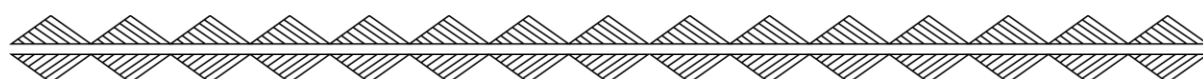
- 3.9. Reduce re-admission to the Hospital within 28days from discharge for the same diagnosis.
- 3.10. Establish a database for dependent elderly (60+) and those with disability on Rarotonga and Pa Enua.

### **DA 4. Oral Health (Dental)**

- 4.1. Implementation of the Oral Health Strategy 2014-2018.
- 4.2. Review and development of new Oral Health Strategy 2019-2022.
- 4.3. Reduction by 30% from the mean dmft 6.6 in 5 years old.
- 4.4. Reduction by 30% in tooth decay prevalence in Primary Schools (80%).
- 4.5. Reduction by 30% in the mean DMFT (7.3, 12.9 and 21.9) of the adult population of WHO indexed age groups.

### **DA 5. Mental Health**

- 5.1. Implementation of Mental Health and well-being strategy 2016-2021.
- 5.2. Implementation of Suicide Prevention Strategy 2016-2021.
- 5.3. Review and develop new Mental Health and wellbeing and Suicide prevention strategies.
- 5.4. Updated mental health register with diagnosis clearly tabulated.
- 5.5. Number of post-traumatic stress syndrome cases supported.



## Key Result Area 3: Hospital Health Services

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### A. Policy Goal:

To provide 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 of Health.

### B. Delivery Areas (DA):

- Delivery Area 1: Clinical Patient Care Services
- Delivery Area 2: Referral Services (Domestic and International referrals)
- Delivery Area 3: Specialist Care

### C. Policies and Planning Strategies Linked to KRA

The following specific plans are in existence and have been considered in the planning process of the KRA

#### C1. Program Specific Plans

- C1.1 National Strategy for NCD 2015-2019
- C1.2 TMO Patient Referral Policy 2015
- C1.3 National Health Information Strategy 2015-2019
- C1.4 TMO Research Policy & Procedures
- C1.5 ICT Policy & Procedures 2011
- C1.6 National Service Fee Schedule 2015
- C1.7 Cook Islands Mental Health and Wellbeing Policy 2015
- C1.8 Antibiotic Guidelines
- C1.9 National Action Plan on Antimicrobial Resistance
- C1.10 Infection Control Policy

#### C2. Sector-wide Policies and Planning Strategies Linked to KRA

- C2.2 Gender Equality and Women's Empowerment Plan of Action 2011-2016
- C2.3 Road Safety Strategy 2016-2019

#### C3. Regional / Global Strategies

- C3.1 Healthy Islands Strategy and Vision
- C3.2 Regional Strategy for NCD
- C3.3 Convention to rights of a Child
- C3.4 CEDAW
- C3.5 Regional Prevention for Blindness Strategy



## KRA 3 Objectives

To address the KRA priorities and targets and to meet each department's pre assigned roles and responsibilities, the directorate of Hospital Health Services will seek to implement at least the following objectives.

### DA 1. Clinical Patient Care Services

#### GOPD/A&E

- 1.1. Strengthen GOPD services through advanced level training (GP Program) and advanced emergency training.
- 1.2. Strengthen triaging of patients for early and urgent care of very sick patients.
- 1.3. Strengthen and embed PEN management for NCD control into patient consultation process.
- 1.4. Support and strengthen gender violence counselling.

#### Surgery and Anaesthesia

- 1.5. Support and strengthen existing surgical and anaesthetic services.
- 1.6. Upgrade surgical services to include interventional endoscopy.
- 1.7. Strengthening laparoscopy procedures.
- 1.8. Strengthening orthopaedic innovative procedures relating to fracture management.
- 1.9. Support Critical Care Nursing for High Dependency Unit staff.

#### Obstetrics and Gynaecology

- 1.10. Maintain and strengthen current services in obstetrics care and Safe Motherhood.
- 1.11. Strengthen ANC screening services especially for reproductive tract infection, and PAP smear.
- 1.12. Support preconception counselling especially in relation to NCD.

#### Medicine

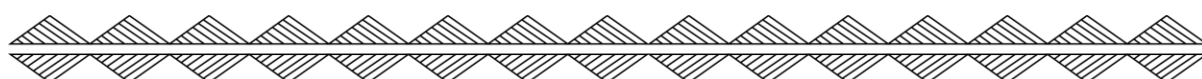
- 1.13. Support and strengthen current services in medicine and referral services.
- 1.14. Strengthen cardiac assessment such as angio-vascular risk assessment and diagnostic capabilities such as echocardiogram services and treadmill option.
- 1.15. Strengthen diagnostic capability through modern medical technology eg. CT Scanner.

#### Paediatrics

- 1.16. Strengthen paediatrics inpatient and outpatient services.
- 1.17. Strengthen neonatal care and services.
- 1.18. Support School based screening programs.
- 1.19. Initiate and support Baby Friendly Hospital Program and status recognition.
- 1.20. Support IMCI training and Program especially in the Pa Enea.

#### Ophthalmology

- 1.21. Strengthen current services provided in eye care including refraction.
- 1.22. Support awareness and interventions on preventable causes of blindness.
- 1.23. Provide treatment services for diabetes eye complications.
- 1.24. Support clinical services for visiting eye specialists.
- 1.25. Support training for Retinal Mapping provided to staff.





## **DA 2. Medical Referral Services (Domestic and International)**

- 2.1. Support and facilitate cost effective evacuation and referral of patients for overseas medical treatment as per policy.
- 2.2. Support treatment and management of Pa Enua referred patients through timely interventions.
- 2.3. Support ongoing treatment and reviews of overseas treated patients.
- 2.4. Support return treatment, care and follow up of overseas treated patients.

## **DA 3. Specialist Care**

- 3.1. Support the development of local staff as specialist as outlined in the Workforce Development Plan.
- 3.2. Coordinate and facilitate the scheduled visits of specialist in the various clinical fields.
- 3.3. Advocate for clinical and technical service support in the various disciplines including diagnostic and biomedical services.
- 3.4. Coordinate with partner agencies and island governments on specialist visits and services for the Pa Enua.
- 3.5. Implement funding support for high risk surgical referral cases in New Zealand on long waiting list.

## **KRA 3 Targets**

*Certain priority actions and targets have been selected and included in the monitoring and evaluation framework.*

### **DA 1. Clinical Patient Care Services**

#### **GOPD/A&E**

- 1.1. Reduce by 20% the current (2016) waiting time for patients (less than 99 minutes).
- 1.2. Reduce patient re-admission rate for the same ailment (Respiratory Asthma and Diabetic Control) within 28 calendar days of discharge.
- 1.3. Cardio Vascular Risk Assessment of all recommended patients 40 years and over.
- 1.4. All GOPD patients are processed through triage for early identification and management of urgent cases.

#### **Surgery & Anaesthesia**

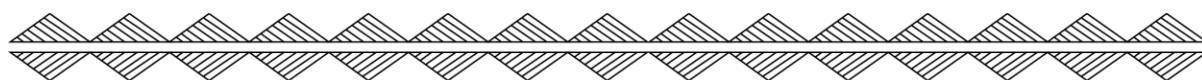
- 1.5. Perioperative mortality rate (POMR) after 30 days is maintained at Zero.
- 1.6. Post-operative infection rate (POIR) maintained below 20% of 2016 figures.
- 1.7. All department nursing staff trained in Critical Care Nursing.
- 1.8. Introduce interventional endoscopy.
- 1.9. Best practice (time and outcome) of laparoscopy procedures maintained.
- 1.10. Pre-operative checklist and consent forms implemented and monitored.
- 1.11. Qualified anaesthetic assistant nurse, recovery nurse and theatre nurse.

#### **Obstetrics & Gynaecology**

- 1.12. Incidence of premature labour and births reduced by 50% from current rate of 2.9%.
- 1.13. Increase PAP smear screening to cover 80% women in the reproductive age group and beyond (21-65 years).
- 1.14. Maintain zero maternal mortality.
- 1.15. Reduce sexually transmitted infection especially chlamydia among the antenatal women.

#### **Medicine**

- 1.16. Cardiac echo cardiogram undertaken on all (100%) patients recommended for screening.



- 1.17. Introduce treadmill stress test assessment capability.
- 1.18. Rheumatic Heart Disease Register established.
- 1.19. Minimise the number of treatment refusals for rheumatic heart cases.
- 1.20. Increase compliance to rheumatic heart disease prophylaxis treatment from 2016 level.
- 1.21. Reduce myocardial infarction by 5%.
- 1.22. Reduce cerebrovascular accidents by 5%.
- 1.23. Reduce end stage renal failure by 5%.

### **Paediatrics**

- 1.24. Rarotonga Hospital declared Baby Friendly Hospital.
- 1.25. All Paediatric nursing staff/ midwives trained in neonatal resuscitation.
- 1.26. Developmental milestones assessed on all children from birth to five years (birth, 6 weeks, 3 months, 6 months, 1 year, before Early childhood education).
- 1.27. Follow up of all babies born to all hepatitis B mothers between 9 months and 12 months.

### **Ophthalmology**

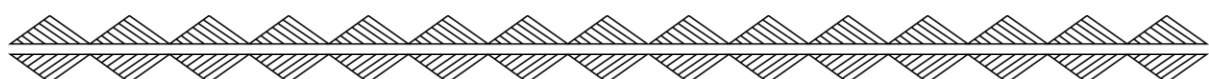
- 1.28. Diabetic retinopathy data base established and maintained.
- 1.29. Annual outreach Program implemented.
- 1.30. Preventable blindness cases identified and managed (i.e. infection, diabetic, cataract, accidental).
- 1.31. Recommended cases managed for refraction.

### **DA 2. Medical Referral Services**

- 2.1. Reduce number of chartered flights to the Pa Enua from 2016 level.
- 2.2. Reduced number of referrals to Rarotonga and New Zealand from 2016 level.
- 2.3. Reduce the number of complaints in regards to the referral and transfer processes.
- 2.4. Improve on number of follow ups from referral cases and the number that can be managed in country.
- 2.5. Improve on number of certified medical and nursing escorts.

### **DA 3. Specialist Care**

- 3.1. At least 12 HSV programs implemented yearly.
- 3.2. Establish a Radiologist service with Middlemore Hospital to report on all x-ray images from the Cook Islands.
- 3.3. Establish eligibility criteria for high risk orthopaedic cases to prioritise funding of one case per year (total hip replacement and knee replacement surgeries).



## Key Result Area 4: Allied Health Services

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### A. Policy Goal:

To provide high quality pharmaceutical service, diagnostics and support services to meet clinical care patients and the communities in line with the policies and resources of the Ministry.

### B. Delivery Areas (DA):

- Delivery Area 1: Pharmacy
- Delivery Area 2: Radiology
- Delivery Area 3: Laboratory
- Delivery Area 4: Physiotherapy/Occupational Therapy
- Delivery Area 5: Biomedical
- Delivery Area 6: Ambulance/Paramedics
- Delivery Area 7: Dietary Services

### C. Policies and Planning Strategies Linked to KRA

The following specific plans are in existence and have been considered in the planning process of the KRA.

#### C1. Program Specific Plans

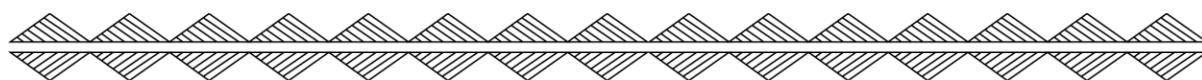
- C1.1 National Laboratory Policy
- C1.2 Strategic Plan for Laboratory Services
- C1.3 Radiology Plan;
- C1.4 Pharmacy Quality Assurance and Standard Operating Procedure
- C1.5 Antibiotic Guidelines
- C1.6 Mental Health and Well Being Strategy 2016 – 2019

#### C2. Sector-wide Policies and Planning Strategies Linked to KRA

- C2.1 Elderly and Disability Policy (INTAFF Rauti Para Policy)
- C2.2 Road Safety Strategy 2020 – 2025
- C2.3 Pharmaceutical and Therapeutics Products Regulation 2014
- C2.4 NCD Strategy 2015 – 2019
- C2.5 National Action plan for Antimicrobial Resistance
- C2.6 Cook Islands Health Workforce Plan 2016 – 2020
- C2.7 Cook Islands Mental Health and Wellbeing Policy

#### C3. Regional / Global Strategies

- C3.1 Healthy Islands Strategy and Vision
- C3.2 Regional Strategy for NCD
- C3.3 International Health Regulations
- C3.3 Convention on the rights of a Child



## KRA 4 Objectives

### DA 1. Pharmacy

- 1.1. Support and strengthen pharmaceutical services through the provision of resources (human, financial and equipment) to meet basic pharmaceutical needs and store management.
- 1.2. Have available for use a regular supply of medicines at favorable prices and that meets recognized standards of quality.
- 1.3. Review and update existing treatment guidelines, essential medicine list and national medicine policy.
- 1.4. Strengthen optimal use of medicines through improved clinical support.

### DA 2. Physiotherapy/Occupational Therapy

- 2.1. Provide and strengthen physiotherapy services to cater for expanding patient health care needs.
- 2.2. Strengthen rehabilitation Program including training and networking.
- 2.3. Scope the provision of hydrotherapy facility and service at Rarotonga Hospital.

### DA 3. Laboratory

- 3.1. Maintain and strengthen current services in haematology, biochemistry, microbiology, blood Bank, overseas lab tests referrals and related services in the laboratory.
- 3.2. Capacity building and institutional strengthening to full ISO standard.
- 3.3. Strengthen electronic laboratory information system through scoping of relevant system and training of staff for improved surveillance and reporting.

### DA 4. Radiology

- 4.1. Maintain and strengthen current radiologic diagnostic services.
- 4.2. Support human resource development for upgraded services.
- 4.3. Introduce echo cardiogram and strengthen fluoroscopy diagnostic capability.
- 4.4. Strengthen radiologic and scanning services to also cater for outreach services to Aitutaki.

### DA 5. Biomedical

- 5.1. Update baseline minimum equipment requirement in all sections and service units of the hospital.
- 5.2. Strengthen management of medical equipment especially the identification, verification, procurement, servicing and disposal.
- 5.3. Undertake standards and policy formulation to address biomedical equipment management (including the oxygen plant).

### DA 6. Ambulance/Paramedic Service

- 6.1. Manage and strengthen ambulance and emergency patient transportation service.
- 6.2. Building staff capacity and capability within the ambulance service.

### DA 7. Dietary Service

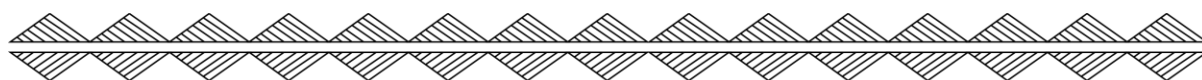
- 7.1. Manage and strengthen dietary services in the Hospital and dietary clinic.

## KRA 4 Targets

*Certain priority actions and targets have been selected and included in the monitoring and evaluation framework.*

### DA 1. Pharmacy

- 1.1. Acquire and operate a new ICT system that improves on the existing Toniq system.



- 1.2. Nil Stock out for NCD (Diabetes, Hypertension) medications.
- 1.3. Drug and therapeutic committee quarterly meetings maintained and reported.
- 1.4. Essential Medicine list reviewed every two years and align to Anti-Microbial Resistance Action Plan and Antibiotic guidelines.

**DA 2. Physiotherapy/Occupational Therapy**

- 2.1. Explore alternatives for hydrotherapy facilities and services.
- 2.2. Certified ultrasound training service for musculo-skeletal cases completed.
- 2.3. Number of disabled patients attended to in the hospital or community setting.

**DA 3. Laboratory**

- 3.1. Assess and report on best options for Laboratory Information System software (LIS).
- 3.2. Maintain quality assurance laboratory standards.
- 3.3. Unqualified audit report for laboratory inventory yearly.

**DA 4. Radiology**

- 4.1. Radiology Service Plan Formulated by 2021.
- 4.2. Develop a Radiology Equipment management policy.
- 4.3. Scope radiology capabilities in Aitutaki hospital.

**DA 5. Biomedical**

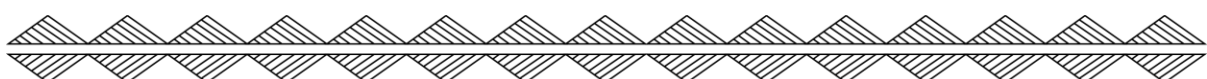
- 5.1. Medical Equipment Donation Policy developed.
- 5.2. Medical Asset Management Policy developed.
- 5.3. Oxygen Plant Management Plan developed.

**DA 6. Ambulance/ Paramedics services**

- 6.1. Ambulance dispatch time maintained at 3 minutes.
- 6.2. Advance level care delivered to all patients.
- 6.3. Establish a voluntary support service for ambulance officers/paramedics.

**DA 7. Dietary Services**

- 7.1. Develop menu plans for inpatients.
- 7.2. Dietary counselling services offered for all non-compliant cases.



## Key Result Area 5: Pa Enua Health Services

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### A. Policy Goal:

To strengthen Pa Enua Health Services and improve participation in national health care service agenda especially on primary health care and healthy islands initiatives.

### B. Delivery Areas (DA):

Delivery Area 1: Community Health Services

Delivery Area 2: Hospital Health Services

### C. Policies and Planning Strategies Linked to KRA

The following specific plans are in existence and have been considered in the planning process of the KRA:

#### C1. Program Specific Strategies and Plans

- C1.1 Islands specific Strategic Plans
- C1.2 National Strategic Plan for Sexual and Reproductive Health Strategy 2014-2018
- C1.3 National Strategy for NCD 2015-2019
- C1.4 Tobacco Action Plan 2012-2016
- C1.5 National Immunisation Policy
- C1.6 National Deworming Policy 2015
- C1.7 Oral Health Strategic Plan 2014-2018
- C1.8 Mental health and well-being strategy 2016-2021
- C1.9 Suicide prevention Strategy 2016-2021

#### C2. Sector-wide Policies and Planning Strategies Linked to KRA

- C2.1 Road Safety Strategy 2016 – 2020
- C2.2 Sanitation (Wastewater Management) Policy 2016
- C2.3 National Water Policy (TBC)
- C2.4 Infection Control policy
- C2.5 National action plan on Anti-Microbial resistance.
- C2.6 Elderly and Disability Policy (INTAFF Rauti Para Policy)

#### C3. Regional / Global Strategies

- C3.1 Healthy Islands Strategy and Vision
- C3.2 Regional Strategy for NCD
- C3.3 International Health Regulation
- C3.4 Community Based Rehabilitation guidelines
- C3.5 Suva Declaration on improving oral health in the Pacific Islands Region



## KRA 5 Objectives

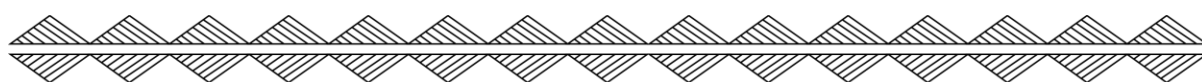
Based on available resources, the strategic objectives are operationalised yearly through the TMO Business Plan. The Business Plan will itemise the activities linked to the strategic objective.

### DA 1. Community Health Services

- 1.1. Strengthen and support implementation of primary health care activities especially on disease control.
- 1.2. Strengthen and support maternal and reproductive health services.
- 1.3. Strengthen child health services especially on immunisation and nutrition Programs.
- 1.4. Support health promotion and health protection activities at the Pa Enea level.
- 1.5. Strengthen disease surveillance and health service monitoring and reporting.
- 1.6. Strengthen domiciliary and chronic disease screening, cases follow up and management.
- 1.7. Strengthen environment health monitoring especially in relation to vector, safe water, proper sanitation and waste management.
- 1.8. Strengthen and support implementation of oral health preventative and specialist services.
- 1.9. Support research activities in health communication.
- 1.10. Strengthen IEC material production and dissemination.

### DA 2. Hospital Health Services

- 2.1. Strengthen PEN management for NCD control.
- 2.2. Support and strengthen gender violence counselling.
- 2.3. Support and strengthen current services in medicine and referral services.
- 2.4. Initiate and support Baby Friendly Hospital program and status recognition.
- 2.5. Maintain and strengthen current services in obstetrics care and Safe Motherhood.
- 2.6. Strengthen ANC screening services especially for reproductive tract infection, and PAP smear.
- 2.7. Support awareness and interventions on preventable causes of blindness.
- 2.8. Support and strengthen ongoing clinical service in Pa Enea hospitals and health stations.
- 2.9. Introduce IMCI training for all staff.
- 2.10. Introduce the Baby Friendly Hospital Initiative for Aitutaki.
- 2.11. Support ongoing skill training for all medical staff.
- 2.12. Regular ongoing support from the Chief Nursing Officer and Chief Medical Officer on all clinical issues and professional programs.
- 2.13. Coordinate and facilitate the scheduled visits of specialist in the various clinical fields.



## KRA 5 Targets

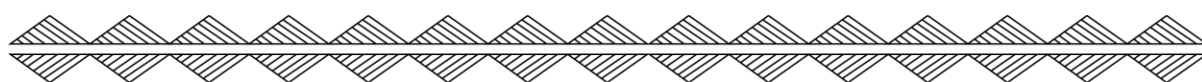
*Certain priority targets have been selected and included in the monitoring and evaluation framework.*

### DA 1. Community Health Services

- 1.1. Completed (100%) health profile of each Pa Enea (demography, health and wellbeing).
- 1.2. 40% of all private dwellings on Aitutaki inspected, assessed and meet the Sewage Regulation 2014.
- 1.3. 50% commercial properties on Aitutaki comply with the Sewage Regulation 2014.
- 1.4. Reduce smoking by 20% of current level of smokers.
- 1.5. Achieve 100% DOTS coverage (TB).
- 1.6. Minimise the number of treatment refusals for rheumatic heart cases.
- 1.7. Increase compliance to rheumatic heart disease prophylaxis treatment.
- 1.8. Improve measles vaccine coverage to 98%.
- 1.9. Establish exclusive breastfeeding rate on discharge from birth 3months and 6months.
- 1.10. Complete all school physical health examination (2yearly).
- 1.11. Pre-schoolers and Primary oral health preventive Program established in 100% of schools.
- 1.12. Identify and register all patients with a mental health illness.
- 1.13. Number of mental health patients referred for counselling or treatment.
- 1.14. Less than 10 complaints received for non-compliance to Food Act and Regulations.
- 1.15. Less than 10 complaints received for water borne related illnesses.
- 1.16. Maintain zero vector borne cases.
- 1.17. Register number/type of toilets in private dwellings.
- 1.18. Community Health Services Geographic Information System established.

### DA 2. Hospital Health Services

- 2.1. Cardio Vascular Risk Assessment of all recommended patients 40 years and over.
- 2.2. Incidence of premature labor and births reduced by 50% from current rate of 2.9%.
- 2.3. Increase PAP smear screening to cover 80% women in the reproductive age group and beyond (21-65 years).
- 2.4. Integrated Management of Childhood Illnesses introduced to all Pa Enea stations.
- 2.5. Aitutaki Hospital declared Baby Friendly Hospital by 2021.
- 2.6. Medical equipment and assets maintained and updated annually.
- 2.7. Reduction by 30% from the mean dmft 6.6 in 5 years old.
- 2.8. Reduction by 30% in tooth decay prevalence in Primary Schools (80%).
- 2.9. Reduction by 30% in the mean DMFT (7.3, 12.9 and 21.9) of the adult population of WHO indexed age groups.
- 2.10. Receive scoping report of radiology capabilities on Aitutaki and implement relevant recommendations.
- 2.11. Nil Stock out for essential medicines especially NCD (Diabetes, Hypertension) medications.
- 2.12. Pa Enea health centres/residences at Atiu, Mangaia, Mauke and Pukapuka refurbished to appropriate standards.
- 2.13. Renovation of Aitutaki Hospital completed.





## Key Result Area 6: Health Partners

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### A. Policy Goal:

To work collaboratively to complement and support health partners in the implementation of agreed health related interventions and activities.

### B. Partnership Areas:

Partnership Area 1:	Government Agencies
Partnership Area 2:	Civil Society and Non-Government Organisations
Partnership Area 3:	Development Partners

### C. Partners Policies and Planning Strategies Linked to Health

#### C1. Education

- Inclusive Education Policy
- Education Master Plan 2008 - 2023

#### C2. Internal Affairs

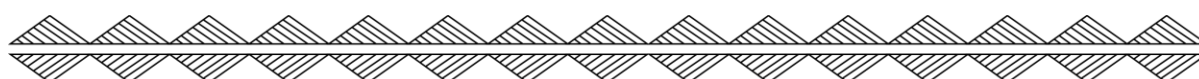
- CI National Youth Policy 2015-2020
- CI Disability Inclusive Development Policy Action Plan 2014-2019
- Family Law Bill
- CI Policy on Ageing (Rauti Para) 2012-2017
- CI National Policy on Gender Equality and Women's Empowerment & Strategic Plan of Action 2011-2016
- Suicide Prevention Strategy 2016-2021
- Pension, destitute and infirm benefits welfare system
- Convention for the Elimination of Domestic violence Against Women (CEDAW)

#### C3. Public Service Commission

- Public Sector Strategy 2016-2025
- Public Service Act 2009

#### C4. Agriculture

- Food and Agriculture Sector Master Plan 2030
- Codex Alimentarius
- Biosecurity



#### **C5. Police**

- Cook Islands Road Safety Strategy 2015-2020
- Crimes Act 1969 and Amendments
- Transport Act 1966 and Amendments
- Cook Islands Family Health and Safety Survey 2014
- Narcotics and Misuse of Drugs Act 2004

#### **C6. Infrastructure Cook Islands**

- CI Solid Waste Management Policy 2016-2026
- CI Sanitation (Wastewater Management) Policy 2016
- CI National Infrastructure Investment Plan
- National Water Policy
- Building Code
- Road Master Plan

#### **C6. Emergency Management Cook Islands**

- Cook Islands Disaster Risk Management Act 2007

#### **C7. CI Child Welfare Association**

- CI Child Welfare Association Constitution

#### **C8. CI Family Welfare Association**

- CI Integrated Sexual and Reproductive Health Strategy 2014-2018

#### **C9. Te Kainga**

- Mental Health and Well Being Policy 2015
- Mental Health and Well-Being Strategy 2016-2021
- Suicide Prevention Strategy 2016-2021

#### **C10. Te Vaerua**

- Disability Inclusive Development Policy and Action Plan 2014 – 2019

#### **C11. Mens Rota'iangā**

- CI Integrated Sexual and Reproductive Health Strategy 2014-2018

#### **C12. CI National Disability Council**

- Disability Inclusive Development Policy and Action Plan 2014 – 2019
- Disability Act 2008

#### **C 13. CI National Council of women**

- Family law Bill
- Family health and Safety Survey



- Convention for the Elimination of Domestic violence Against Women (CEDAW)
- CI National Policy on Gender Equality and Women's Empowerment & Strategic Plan of Action 2011-2016

#### **C 15. WHO**

- Statement of intent
- Cook Islands country cooperation Strategy (CCS)

#### **C 16. UNFPA**

- Statement of intent

#### **C 17. UNICEF**

- Statement of intent

#### **C 18. UNDP/GLOBAL FUND**

- Statement of intent

#### **C 19. NZ MFAT**

- Statement of intent

#### **C 20. SPC**

- Statement of intent

## **KRA 6 Objectives**

The following local health partners are recognized for their contribution to the health service and community based health care and programs for citizens. The Ministry of Health will seek to support the contribution of the partners through the following stated joint strategies. In relation to networking, overseas partnership with professional bodies and specialist services are also recognized. Any specific targets / objectives needing funding are linked back to KRA 1-5.

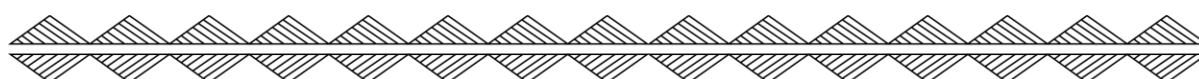
### **1. Government Agencies**

#### **Education**

- 1.1. Partnership with CITI towards establishment of tertiary Nursing and Health Faculty
- 1.2. Support school health activities especially on the coordination of school visitations
- 1.3. Support health promotion settings approach for school health

#### **Internal Affairs**

- 1.4. Support community based rehabilitation and care.
- 1.5. Contribute to the development and implementation of social policies to improve the lives of the vulnerable children, young people and their families, elderly people and people with disabilities and women.



### **Agriculture**

- 1.6. Support food security initiatives to mitigate for disaster and climate change
- 1.7. Support initiatives on ensuring nutrition values of agriculture produce including organic farming practices.
- 1.8. Ensure food standards (including Codex) as outlined in legislation are maintained.
- 1.9. Support health quarantine and biosecurity requirements.

### **Public Service Commission**

- 1.10. Support human resource development – training and performance assessment
- 1.11. Support sector wide service excellence in the Ministry.

### **Finance and Economic Management**

- 1.12. Support and implementing budget policies

### **Police**

- 1.13. Support strategies to eliminate domestic violence.
- 1.14. Support initiatives and Programs on suicide prevention.
- 1.15. Support monitoring, enforcement and reporting of motor vehicle crashes.
- 1.16. Support coroner investigations.

### **Justice**

- 1.17. Register all births and deaths.
- 1.18. Support coroner investigations.
- 1.19. Support for highly aggressive and violent mental health cases.

### **Crown law**

- 1.20. Providing legal opinion on health issues.

### **Foreign Affairs and Immigration**

- 1.21. Support with medical clearance processes for contract workers.

## **2. Civil Society and Non-Government Organisations**

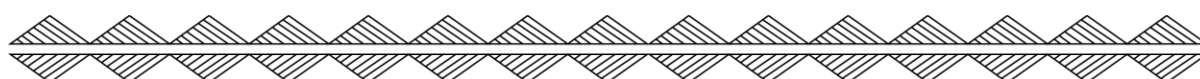
### **Red Cross**

- 1.22. Support National Blood Transfusion Committee and RC on blood donation / collection for emergencies.
- 1.23. Support community capacity building on disaster awareness and mitigation.
- 1.24. Strengthen community-based health and first aid (CBHFA) training.

### **Te Vaerua**

- 1.25. Support and strengthen rehabilitation services.

### **CI Child Welfare Association**



1.26. Facilitate and support services from maternal and child welfare clinics.

#### **CI Family Welfare Association**

1.27. Support the expanding range of SRHR services in the Cook Islands that includes family planning (FP), HIV Prevention and STI Treatment including Voluntary Confidentiality Counselling.

1.28. Support screening program for breast and cervical and other gynecological disorders.

#### **CI National Disability Council**

1.29. Support health awareness activities and interventions.

#### **CI National Council of women**

1.30. Support health awareness activities and interventions.

#### **Te Kainga O Pa Taunga**

1.31. Support the role of Te Kainga O Pa Taunga particularly in community mental health services.

1.32. Facilitate process for compensation for Te Kainga O Pa Taunga patients in respite care.

#### **Punanga Tauturu**

1.33. Support awareness activities and interventions on domestic violence.

#### **Mens Rota'ianga**

1.34. Support awareness activities on men's health particularly screening activities against prostate cancer.

1.35. Support awareness activities in reproductive health for men especially the use of male method of family planning.

#### **Development partners**

1.36. Support the implementation of the Te Papa Tutara A Te Marae Ora 2017-2036 ("Health Roadmap") and Takai'anga Angaanga Tutara A Te Marae Ora 2017-2021 ("National Health Strategy").

## **KRA 6 Targets**

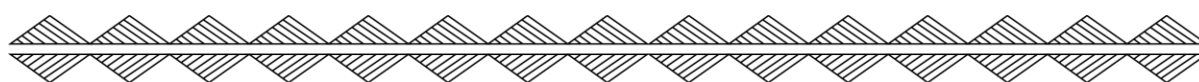
*Partnership is fostered in all priority areas. Certain priority actions and targets have been selected and included in the monitoring and evaluation framework.*

#### **Education**

- a. Establishment of tertiary Nursing and Health Training School.
- b. Biennial school health reports.

#### **Internal Affairs**

- a. Register of certified trained Care Givers.
- b. Annual report received on the vulnerable groups youth, disable (mental and physical), elderly.



**Agriculture**

- a. Register of schools with “home gardens”.
- b. Increased number of local farmers.

**Public Service Commission**

- a. Excellence award recipient.

**Finance and Economic Management**

- a. Support funding options for social health insurance for all government employees with possibility of extension to private sector employees.

**Cook Islands Audit Office**

- a. Carry out auditing of the Ministry of Health.

**Police**

- a. No drop policy for domestic violence enforced.
- b. Improved enforcement of drink driving testing / restriction.
- c. Enforcement of amendments to the Transport Act 1966.

**Justice**

- a. Register all births and deaths.
- b. Support coroner investigations.
- c. Support for highly aggressive and violent mental health cases.

**Crown law**

- a. Providing legal opinion on health issues.

**Foreign Affairs and Immigration**

- a. Support with medical clearance processes for contract workers.

**Punanga Tauturu**

- a. Provide counselling and support for victims

**CI Child Welfare Association**

- a. Service MOU established between TMO and CWA.
- b. Number of functioning maternal and child welfare clinics

**CI Family Welfare Association**

- a. Contraceptive prevalence increased to 35%
- b. Increase Pap smear screening to cover 80% women in the reproductive age group.



**Mens Rota'ianga**

- a. Support screening for prostate cancer undertaken annually.
- b. Advocacy for male methods of FP (vasectomy) and improved coverage overall.

**CI Red Cross**

- a. Number of training provided for disaster risk management and CBHFA

**Te Vaerua**

- a. Number of rehabilitative cases by sex and age.

**Development Partners**

- a. Health specific plans implemented.



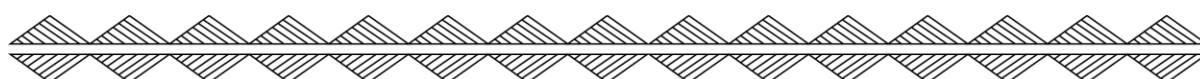
## Implementing Structure and Schedule

Achievement of the targets of the NHSP 2017-2021 will be at least dependent on resource allocation, staff availability and implementation mechanism. The Key Result Areas and the accompanying strategies and objectives are aligned to the organisational structure of the Ministry for ownership. Under each organisation directorate, 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 each Director's responsibility guided by Annual Business Plans.

**Table 7: Implementing Structure and Schedule**

Key Result Area	Organisation Structure / Program Unit	Officer Responsible
<b>KRA 1: Health Administration and Management</b>	Administration and Management	Director Funding and Planning
<b>KRA 2: Community Health Services</b>	Community Health Service	Director Community Health Services
<b>KRA 3: Hospital Health Services</b>	Hospital Health Service	Director of Hospital Health Services
<b>KRA 4: Allied Health</b>	Hospital Health Services	Director of Hospital Health Services
<b>KRA 5: Pa Enua Health Services</b>	Hospital Health services	Chief Medical Officer/Chief Nursing Officer
<b>KRA 6: Health Partners</b>	All related and aligned Departments	HOMs of Government, Partners and NGOs. At TMO, HOD of aligned program / interventions.

Noting that budget and funding allocations are also aligned to the structure, monitoring of activities implementation and challenges faced will be the responsibility of the line Directors.





## Costing the Health Strategy

The following tabulation lists the additional requirements in health budgetary provision to support the NHSP implementation. It must be noted that current provision under the government financial system and funding categories are important as it supports the key functions of the Ministry. Funding requests identified under the Objectives are special and **additional** to normal funding provisions. These funding requests are summarised as additional cost requirements for NHSP implementation.

KRA 1: Health Administration and Management						
Goal: To strengthened administrative and management capacity and capability to meet the health systems and health service needs, demands and expectations for the Ministry of Health.						
Estimated Annual Budget Requirement						
Delivery Areas	KRA Objectives	2017	2018	2019	2020	2021
Leadership and Governance	1.1	Existing	Existing	Existing	Existing	Existing
	1.2	Existing	Existing	Existing	Existing	Existing
	1.3	Existing	Existing	Existing	Existing	Existing
	1.4	Existing	Existing	Existing	Existing	Existing
	1.5	60,000	30,000	60,000	30,000	30,000
	1.6	Existing	Existing	Existing	Existing	Existing
Health Finance	2.1	Existing	Existing	Existing	Existing	Existing
	2.2	Existing	Existing	Existing	Existing	Existing

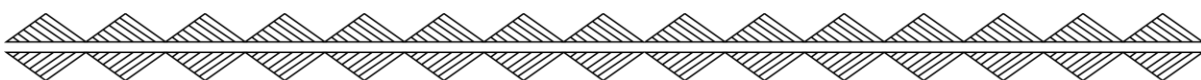


	2.3	Existing	Existing	Existing	Existing	Existing
	2.4	Existing	Existing	Existing	Existing	Existing
	2.5		10,000			
Human Resource Development	3.1	90,000	90,000	50,000	50,000	50,000
	3.2	50,000	50,000	50,000	50,000	50,000
	3.3	10,000	10,000	10,000	10,000	10,000
	3.4	20,000	20,000	20,000	20,000	20,000
Health Information	4.1	Existing	Existing	Existing	Existing	Existing
	4.2	Existing	Existing	Existing	Existing	Existing
	4.3	Existing	Existing	Existing	Existing	Existing
	4.4	Existing	Existing	Existing	Existing	Existing
	4.5	Existing	Existing	Existing	Existing	Existing
	4.6	30,000	10,000	10,000	10,000	10,000



Health Research & Policy	5.1	Existing	Existing	Existing	Existing	Existing
	5.2	5,000	65,000	Existing	Existing	Existing
Health Infrastructure	6.1	Existing	Existing	Existing	Existing	Existing
	6.2	Existing	Existing	Existing	Existing	Existing
	6.3	Existing	Existing	Existing	Existing	Existing
<b>Cost sub-total</b>		<b>265,000</b>	<b>285,000</b>	<b>200,000</b>	<b>170,000</b>	<b>170,000</b>

<b>KRA 2: Community Health Services</b>						
Goal: To strengthen and improve Community Health Services and community health care services under the principles of Primary Health Care and Healthy Islands context.						
Estimated Annual Budget Requirement						
Delivery Areas	KRA Objectives	2017	2018	2019	2020	2021
<u>H. Protection</u>	1.1	Existing	Existing	Existing	Existing	Existing
	1.2	Existing	Existing	Existing	Existing	Existing
	1.3	120,000	120,000	120,000	120,000	120,000
	1.4	Existing	Existing	Existing	Existing	Existing
	1.5	Existing	Existing	Existing	Existing	Existing



	1.6	Existing	Existing	Existing	Existing	Existing
	1.7	10,000	10,000	10,000	10,000	10,000
	1.8	Existing	Existing	Existing	Existing	Existing
	1.9	Existing	50000	50000	Existing	Existing
<u>H. Promotion</u>						
	2.1	Existing	Existing	Existing	Existing	Existing
	2.2	Existing	Existing	Existing	Existing	Existing
	2.3	Existing	Existing	Existing	Existing	Existing
	2.4	Existing	Existing	Existing	Existing	Existing
	2.5	Existing	Existing	Existing	Existing	Existing
	2.6	Existing	Existing	Existing	Existing	Existing
	2.7	Existing	Existing	Existing	Existing	Existing
	2.8	Existing	Existing	Existing	Existing	Existing
	2.9	Existing	Existing	Existing	Existing	Existing
	2.1	Existing	Existing	Existing	Existing	Existing
	2.11	10,000	10,000	10,000	10,000	10,000



	2.12	Existing	Existing	Existing	Existing	Existing
	2.13	Existing	Existing	Existing	Existing	Existing
	2.14	Existing	Existing	Existing	Existing	Existing
	2.15	Existing	Existing	Existing	Existing	Existing
	2.16	Existing	Existing	Existing	Existing	Existing
	2.17	Existing	Existing	Existing	Existing	Existing
<u>PH Nurses</u>						
	3.1	Existing	Existing	Existing	Existing	Existing
	3.2	Existing	Existing	Existing	Existing	Existing
	3.3	Existing	Existing	Existing	Existing	Existing
	3.4	Existing	Existing	Existing	Existing	Existing
	3.5	Existing	Existing	Existing	Existing	Existing
	3.6	5000	5000	5000	5000	5000
	3.7	Existing	Existing	Existing	Existing	Existing
	3.8	Existing	Existing	Existing	Existing	Existing
	3.9	Existing	Existing	Existing	Existing	Existing
	3.1					5,000



		5,000	5,000	5,000	5,000	
Child Health	3.1	Existing	Existing	Existing	Existing	Existing
	3.2	Existing	Existing	Existing	Existing	Existing
	3.3	Existing	Existing	Existing	Existing	Existing
	3.4	Existing	Existing	Existing	Existing	Existing
	3.5	5,000	5,000	5,000	5,000	5,000
	3.6	Existing	Existing	Existing	Existing	Existing
RHD	3.7	3,000	3,000	3,000	3,000	3,000
	3.8	Existing	Existing	Existing	Existing	Existing
	3.9	Existing	Existing	Existing	Existing	Existing
	3.10	Existing	Existing	Existing	Existing	Existing
	3.11	Existing	Existing	Existing	Existing	Existing
	3.12	Existing	Existing	Existing	Existing	Existing
	3.13	Existing	Existing	Existing	Existing	Existing
	3.14	Existing	Existing	Existing	Existing	Existing



Oral Health (Dental)	4.1	Existing	Existing	Existing	Existing	Existing
	4.2	Existing	Existing	Existing	Existing	Existing
	4.3	Existing	Existing	Existing	Existing	Existing
	4.4	Existing	Existing	Existing	Existing	Existing
	4.5	20,000	20,000	20,000	20,000	20,000
Mental Health	5.1	Existing	Existing	Existing	Existing	Existing
	5.2	30,000	30,000	30,000	40,000	40,000
	5.3	Existing	Existing	Existing	Existing	Existing
	5.6	Existing	Existing	Existing	Existing	Existing
<b>Cost sub-total</b>		<b>208,000</b>	<b>258,000</b>	<b>258,000</b>	<b>213,000</b>	<b>218,000</b>

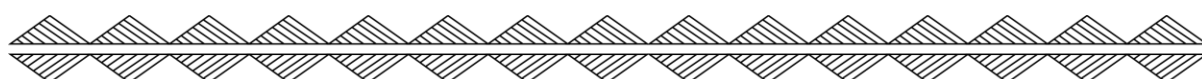


**KRA 3: Hospital Health Services**

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 of Health.

**Estimated Annual Budget Requirement**

Delivery Areas	KRA Objectives	2017	2018	2019	2020	2021
C. <u>Patient Care</u>						
GOPD / AE	1.1	Existing	Existing	Existing	Existing	Existing
	1.2	Existing	Existing	Existing	Existing	Existing
	1.3	Existing	Existing	Existing	Existing	Existing
	1.4	Existing	Existing	Existing	Existing	Existing
Surgery & Anaesthesia	1.5	Existing	Existing	Existing	Existing	Existing
	1.6	Existing	Existing	Existing	Existing	Existing
	1.7	Existing	Existing	Existing	Existing	Existing
	1.8	Existing	Existing	Existing	Existing	Existing
	1.9	30,000	30,000	30,000	30,000	30,000
O&G	1.10	Existing	Existing	Existing	Existing	Existing





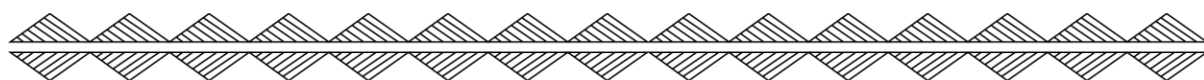
	1.11	20,000	20,000	20,000	20,000	20,000
	1.12	Existing	Existing	Existing	Existing	Existing
Medicine	1.13	Existing	Existing	Existing	Existing	Existing
	1.14	Existing	Existing	Existing	Existing	Existing
	1.15	Existing	Existing	Existing	Existing	Existing
Paediatrics	1.16	Existing	Existing	Existing	Existing	Existing
	1.17	Existing	Existing	Existing	Existing	Existing
	1.18	Existing	Existing	Existing	Existing	Existing
	1.19	20,000	20,000	10,000	10,000	10,000
	1.20	Existing	Existing	Existing	Existing	Existing
Ophthalmology	1.21	Existing	Existing	Existing	Existing	Existing
	1.22	Existing	Existing	Existing	Existing	Existing
	1.23	Existing	Existing	Existing	Existing	Existing
	1.24	Existing	Existing	Existing	Existing	Existing



	1.25	Existing	Existing	Existing	Existing	Existing
Medical Referral Services	2.1	Existing	Existing	Existing	Existing	Existing
	2.2	Existing	Existing	Existing	Existing	Existing
	2.3	Existing	Existing	Existing	Existing	Existing
	2.4	Existing	Existing	Existing	Existing	Existing
	4.1	Existing	Existing	Existing	Existing	Existing
Specialist Care	4.2	Existing	Existing	Existing	Existing	Existing
	4.3	Existing	Existing	Existing	Existing	Existing
	4.4	Existing	Existing	Existing	Existing	Existing
	4.5	Existing	Existing	Existing	Existing	Existing
		70,000	70,000	60,000	60,000	60,000
Cost sub-total						



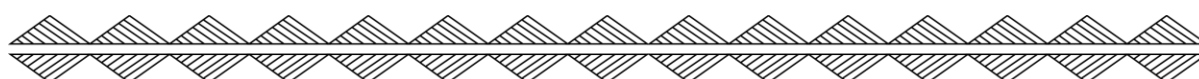
KRA 4: Allied Health Service						
Goal: To provide high quality pharmaceutical service, diagnostics and support services to meet clinical care patients and the communities in line with the policies and resources of the Ministry.						
Estimated Annual Budget Requirement						
Delivery Areas	KRA Objectives	2017	2018	2019	2020	2021
Pharmacy	1.1	100,000				
	1.2	200,000	200,000	200,000	200,000	200,000
	1.3	Existing	Existing	Existing	Existing	Existing
	1.4	Existing	Existing	Existing	Existing	Existing
	2.1	Existing	Existing	Existing	Existing	Existing
Physiotherapy	2.2	Existing	Existing	Existing	Existing	Existing
	2.3	Existing	Existing	Existing	Existing	Existing
Laboratory	3.1	Existing	Existing	Existing	Existing	Existing
	3.2	10,000	10,000	10,000	10,000	10,000



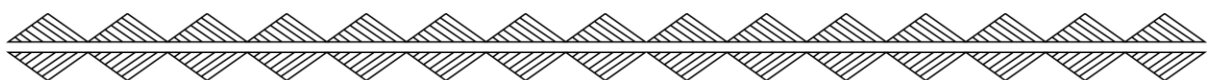
	3.3	Existing	20,000	Existing	Existing	Existing
Radiology	4.1	Existing	Existing	Existing	Existing	Existing
	4.2	Existing	Existing	Existing	Existing	Existing
	4.3	Existing	Existing	Existing	Existing	Existing
	4.4	Existing	Existing	Existing	Existing	Existing
Biomedical	5.1	Existing	Existing	Existing	Existing	Existing
	5.2	Existing	Existing	Existing	Existing	Existing
	5.3	Existing	Existing	Existing	Existing	Existing
Ambulance Service	6.1	Existing	Existing	Existing	Existing	Existing
	6.2	HR linked	HR linked	HR linked	HR linked	HR linked
Dietary Service	7.1	Existing	Existing	Existing	Existing	Existing
<b>Cost sub-total</b>		<b>310,000</b>	<b>230,000</b>	<b>210,000</b>	<b>210,000</b>	<b>210,000</b>



<b>KRA 5: Pa Enua Health Services</b>						
Goal: To strengthen and improve Community Health Services and community health care services under the principles of Primary Health Care and Healthy Islands context.						
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 of Health.						
Estimated Annual Budget Requirement						
Delivery Areas	KRA Objectives	2017	2018	2019	2020	2021
Community Health Care						
	1.1	Existing	Existing	Existing	Existing	Existing
	1.2	Existing	Existing	Existing	Existing	Existing
	1.3	Existing	Existing	Existing	Existing	Existing
	1.4	Existing	Existing	Existing	Existing	Existing
	1.5	Existing	Existing	Existing	Existing	Existing
	1.6	Existing	Existing	Existing	Existing	Existing
	1.7	50,000	50,000	50,000	50,000	500,000
	1.8	Existing	Existing	Existing	Existing	Existing
	1.9	Existing	Existing	Existing	Existing	Existing
	1.10	5000	5000	5000	10000	10000



Clinical services	2.1	Existing	Existing	Existing	Existing	Existing
	2.2	Existing	Existing	Existing	Existing	Existing
	2.3	Existing	Existing	Existing	Existing	Existing
	2.4	5,000	5,000	5,000	5,000	5,000
	2.5	Existing	Existing	Existing	Existing	Existing
	2.6	Existing	Existing	Existing	Existing	Existing
	2.7	Existing	Existing	Existing	Existing	Existing
	2.8	Existing	Existing	Existing	Existing	Existing
	2.9	5,000	5,000	5,000	555,000	5,000
	2.10	Existing	Existing	Existing	Existing	Existing
	2.11	Existing	Existing	Existing	Existing	Existing
	2.12	Existing	Existing	Existing	Existing	Existing
	2.13	Existing	Existing	Existing	Existing	Existing
<b>Cost sub-total</b>		<b>65,000</b>	<b>65,000</b>	<b>65,000</b>	<b>620,000</b>	<b>520,000</b>



**Table 8: Estimated Summary Budget.**

	2017	2018	2019	2020	2021	
<b>KRA 1: Health Administration and Management</b>	265,000	258,000	200,000	170,000	170,000	
<b>KRA 2: Community Health Services</b>	208,000	258,000	258,000	213,000	218,000	
<b>KRA 3: Hospital Health Services</b>	70,000	70,000	60,000	60,000	60,000	
<b>KRA 4: Allied Health Service</b>	310,000	230,000	210,000	210,000	210,000	
<b>KRA 5: Pa Enua Health Services</b>	65,000	65,000	65,000	620,000	520,000	
<b>KRA 6: Health Partners</b>	Existing	Existing	Existing	Existing	Existing	
<b>TOTAL</b>	\$ 918,000	\$ 881,000	\$ 793,000	\$ 1,273,000	\$ 1,178,000	<b>\$ 5,043,000</b>



# Monitoring and Evaluation

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## Introduction

The monitoring and evaluation component of the NHSP is based on a logical framework and addresses a selection of a core set of indicators; identifies the data sources for each indicator; conducting analysis, communication, and dissemination of the results.

Monitoring will be used as means of collating data from all relevant sources for analysis and will use the stated set of core indicators and targets to provide timely and accurate information to governments and partners. Evaluation builds upon the monitoring data but the analysis goes much deeper, taking into account contextual changes, addressing questions of attribution, and looking at counterfactual situations.

M&E of the NHSP is implemented in parallel to TMO's health information system and where it derives information from. In addition, Te Marae Ora's Health Information system has developed a core set of 20 health indicators for use by the Ministry. The indicators set which list processes, outcomes and impacts indicators is used or aligned in the NHSP.

## Te Marae Ora's NHSP Indicators

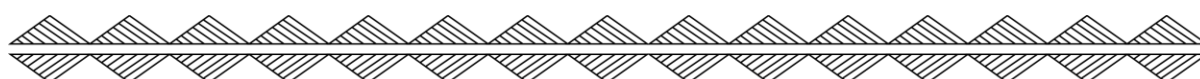
Generally, health indicators are numerous and could be difficult to collect, interpret and often do not meet basic quality criteria of relevance, reliability and validity. In the context of the NHSP it is a major challenge to select a core set of indicators that can objectively and effectively monitor progress towards the most important objectives.

Whilst there is no optimal number of core indicators, experiences suggest that for national, high-level strategic decision-making the total number of indicators should not exceed 25. It is important to keep in mind that quantitative indicators are intended to be indicative of reality, i.e. they are tracer indicators and they are not intended to describe the totality of what is happening.

Target-setting is linked to the various Program specific strategies of Te Marae Ora and aligned to the international targets of the Sustainable Development Goals (SDGs) and regional targets for Healthy Islands. For these reasons the NHSP has both national targets, regional and international health targets aligned.

## Disease / Program Specific Indicators

Most health program area and management units have their own strategic or a plan of action. NCD, Human Resource workforce Plan and HIS Strategies are examples of such action plans. In disease-specific programs, their strategies and operational plans are more detailed than what is outlined the NHSP and with more disease-specific indicators to measure process, outputs and immediate outcomes. In this NHSP, attempts have been made to align the main disease program indicators to the outcome and impact indicators of the M&E component of the NHS so as to demonstrate the effects of health system strengthening to health outcomes.





Measurement and Reporting Frequency

A certain degree of flexibility can be introduced in the periodicity of data collection for the core indicators. The frequency of measurement and reporting needs are specified below.

Yearly	Input and output indicators can change rapidly and should be measured frequently (at least annually), in conjunction with monitoring of annual operational plans.
2 yearly	Outcome indicators – intervention coverage and selected risk behaviors – should be reported every two years, though they may be reported annually if rapid changes are expected and appropriate measurement systems are available.
5 Yearly	Impact indicators should be reported once or twice every five years, which is the average duration of a national health strategy. This longer interval reflects the fact that changes in impact do not occur rapidly, and measurement is more complex and often based on recall of events.

Data Integration with Health Information System

Generally all good NHSP monitoring and evaluation framework should be linked with the national health information system (HIS) strategy and plan. A HIS strategy is broader than a monitoring and evaluation strategy, as it should cover all details of the institutional requirements and procedures required of the different producers and users of health information system. It should also include the role of information and communication technology.

The capability of the HIS is considered in this NHSP and its role mandated in the coordinating committee for M&E. Moreover, the TMO through the Health Information Unit have undertaken an inclusive process bringing together key decision-makers across disease-focused and system-specific programs to formulate and agree on set of core indicators for TMO. These indicators are included in the tables below.

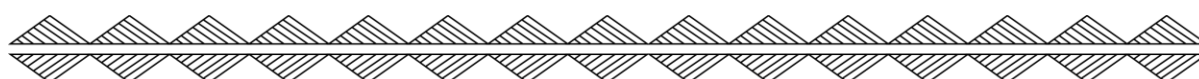


## Ministry of Health 20 Key Health Indicators

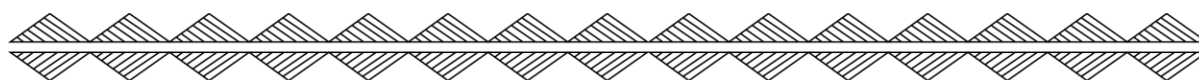
The following set of indicators was selected by the Ministry of Health following a consultative process through the assistance of WHO and Queensland University. The indicators are those that could be collected, analysed and reported by the MedTech34 software maintained by the Health Information Unit.

**Table 9: Te Marae Ora Health Indicators**

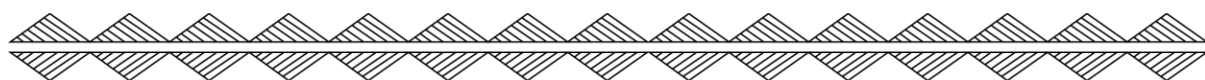
No.	INDICATOR	PURPOSE (Definition)	Indicator Use in NHSP 2017-2021
1	Total Fertility Rate(TFR)	The average number of children that would be born alive to a woman during their lifetime, if they were to pass through their childbearing years conforming to (current) age-specific fertility rates of a given year. The TFR sums up, in a single number, the fertility of all women at a given point in time	No set target for TFR but CPR and Teen Pregnancies used as proxy indicator for fertility.
2	Number of Births (by Island)	The number of live births in a given year by island of usual residence of the mother	No set target on the number of births by island.
3	Immunization Coverage (overall)	Percent of targeted population immunized in a given year (for children under 5). Summary measure of total immunization coverage for: BCG, DTP3, Polio3, Measles/Rubella and Tetanus	Measured by Measles Vaccine coverage.
4	Crude Death Rate (CDR)	The number of deaths per 1,000 population in a given year	No set target on death rate but reduction in NCD death rate quoted.
5	Top 10 causes of death (by age group and sex)	The top ten causes of death (calculated as a percent of all deaths) by sex and age group (five-year age bands)	No set target on top 10 cases of death but NCD targeted
6	Infant Mortality	Indicator refers to number of infant deaths (babies/children less than 1 year of age) per 1,000 live birth during specific time period	No set target as IMR currently zero.



No.	INDICATOR	PURPOSE (Definition)	Indicator Use in NHSP 2017-2021
7	Life Expectancy at Birth (Male/Female)	Describes the number of years person can expect to live (at time of birth), if they experienced mortality conditions prevailing at the time.	No set target. Long term measurement.
8	Top 10 causes of morbidity (by age group and sex)	The top ten causes of morbidity (calculated as a percent of all morbid cases registered) by sex and age group (five-year age bands).	No set target but general morbidity reduction especially for NCD.
9	Top 5 Notifiable Disease	Indicates burden of the Notifiable Diseases – Anthrax, Asthma, Bronchitis, Cholera, Chickenpox, Conjunctivitis, Dengue, Diarrhea, Fish poisoning (ciguatera), Food poisoning, Otitis media, Influenza, Pneumonia, Rheumatic fever, Scabies, Skin sepsis. Expressed as a percentage of all Notifiable Diseases in a given year.	No set target for notifiable diseases but general reduction in disease incidence for RHD, food poisoning etc
10	Vaccine preventable conditions (incidence)	Indicates burden of these conditions – Diphtheria, Hepatitis B, Measles, Mumps, Poliomyelitis, Tetanus, Tuberculosis (TB), Whooping cough (Pertussis).	No target set for VPD as incidence is low.
11	Maternal Deaths	The number of maternal deaths (complications of pregnancy & childbirth) related to childbearing divided by the number of live births in that year.	No target set as MMR is zero.
12	Number of positive tests for HIV/AIDS and STIs (by sex and age group)	Proportion (%) of tests that are positive for HIV/AIDS and certain STIs (Chlamydia, Gonorrhoea, Syphilis, Trichomonas, Candidiasis), by sex and age group (five-year age bands)	No target for HIV but Chlamydia incidence set for STI.
13	Domestic Patient Referrals	Number of cases referred from the Pa Enua to Rarotonga (by sex and age group)	No set target for number of referrals.
14	International Patient Referrals	Number of cases referred from Rarotonga to New Zealand (by sex and age group)	No set target for number of referrals.
15	Number of Health Professionals per	Indication of service coverage by various types of health providers. Health professionals to include: doctors,	No set target for HR. Current staff ratios are



No.	INDICATOR	PURPOSE (Definition)	Indicator Use in NHSP 2017-2021
	1,000 population (by island)	nurses and allied health.	good.
16	Number of Inpatients (by sex and age group)	Number of patients admitted in the Cook Islands in a given year by sex (male/female) and age group (five-year bands) and each island	No set target for admissions.
17	Number of consultations using Outpatient services (by sex and age group)	Number of outpatient consultations in the Cook Islands in a given year by sex (male/female) and age group (five-year bands).	No set target on outpatient numbers.
18	Total health budget as a percent of GDP	Indicator of the amount of money allocated to health. Expressed as a percentage of GDP.	Indicator for GDP used.
19	Number of Mental Disorders (by sex and age-group)	Number of mental disorder patients in the Cook Islands in a given year by sex (male/female) and age group (five-year bands) and island.	No set figure or level but prevalence survey targeted.
20	Top 5 causes for Dental Consultations (by sex and age group)	The top five causes of dental consultations (calculated as a percent of all consultations) by sex (male/female) and age group (five-year age bands)	Set target for DMFT

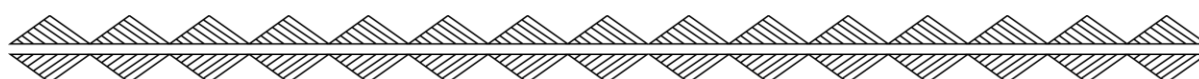


# NHSP 2017-2021 Target Indicators Framework

The following tables outline the NHSP target indicators by classification, definition and data sources. The tables are also laid out under KRAs and could be used for M&E activities including evaluation of the NHSP.

## KRA 1 Targets

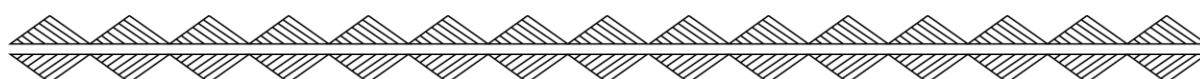
TARGET		Indicator Type	DEFINITION / DESCRIPTION	DATA SOURCE (verification)	FOCUS
<b>Leadership and Governance</b>					
1	Public Health Act 2004 revised by 2021	Output	Review of existing PH Act 2004	Parliamentary Brief /TMO	Governance
2	Formalized enforcement regime established	Output	Enforcement Regulation for related health legislation formulated.	Parliamentary Brief / TMO	Governance
3	Review and formulate standards for sewage reticulation systems	Output	Formulation of Sewage & Reticulation Standards	Parliamentary Brief / TMO	Governance / Standards
4	Nursing Clinical Guideline	Output	Review and update of Nursing Clinical Guideline	TMO	Governance / Standards
5	Doctors Clinical Guidelines	Output	Review and update of Doctors Clinical Guideline	TMO	Governance/ standards
<b>Health finance</b>					



1	Improve general government expenditure on health as a % of GDP (5%)	Input	Level of general government expenditure on health (GGHE) expressed as a percentage of GDP.	Government Annual Budget Appropriation	Financing SDG <sup>9</sup>
2	Unqualified Financial audit report obtained	Output	Audit report undertaken and reported	Audit report submitted to executive	Financing
3	Feasibility study for health finance options	Output	Conduct of feasibility study on health financing options	Report tabled with TMO Executive	Financing SDG
<b>Health Resources for health and human resources development</b>					
1	Health workers per 1 000 Population. (Doctor, nurse/ midwife; urban–rural)	Impact	The number of health workers ( <i>doctor, nurse/ midwife</i> ) country relative to the total Population	Routine administrative records; census; facility assessments	Human Resources SDG
2.	Nurse Practitioners training Program established	Output	Establishment of NP training Program.	Training Report	Human resource
3.	Nursing bachelor degree completion training Program established with NZ Polytec	Output	Establishment of Bachelor degree upgrading Program with NZ Polytec	Training Report	Human resource

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<sup>9</sup> Sustainable Development Goal



4.	Training for new Pharmacy Technicians completed	Output	Establishment of Pharmacy technician training Program	Training Report	Human resource
5.	POLHN training for 20 staff in the various cadre	Output	POLHN training strengthened with staff enrolled.	Training Report WHO	Human resource

Health Information					
1.	Integrated 'data warehouse' created and functional at the national level.	Output	Creation of software and data storage and sharing capability.	TMO Report	Health Information
2.	Training on proper death certification to all medical officers and nurse practitioners and ICD 10 coder training by HIU	Output	ICD coding for death certifying by HIU staff.	TMO Report	Health Information

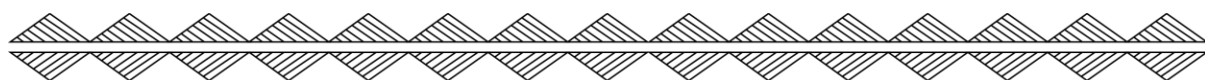


Health Research					
1.	Health research plan formulated by 2018	Output	Priority areas of research identified and planned.	TMO Report	Research
2.	Conduct / facilitate anaemia prevalence survey in ante-natal women by 2018.	Output	Anaemia survey in AN mothers	Research report.	Research UNICEF <sup>10</sup>

Health Infrastructure					
1.	Health facilities per 10 000 Population	Impact	The number of health facilities per population.	National databases of health facilities	Access
2.	Hospital beds per 1000 pop	Impact	Hospital beds per 1, 000 population	National databases of health facilities	Access

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<sup>10</sup> UNICEF (Maternal and Child Health Indicators)

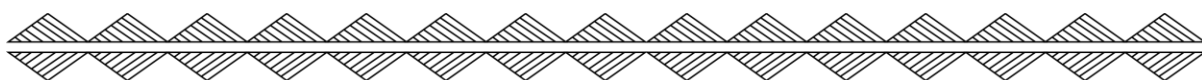




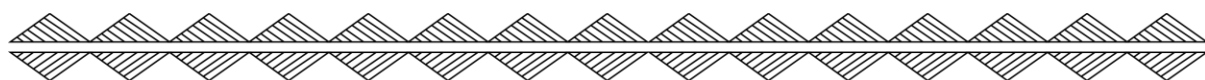
## KRA 2 Targets

TARGET		INDICATOR TYPE	DEFINITION / DESCRIPTION	DATA SOURCES (Verification)	TOPIC
<b>DA 1. Health Protection</b>					
1.	40% of private dwellings inspected to meet Sewage Regulation 2014	Output	% of private dwelling meeting SR 2014	TMO Report	Surveillance / Compliance
2	50% of commercial properties meeting Sewage Regulation 2014	Output	% of commercial property meeting SR 2014	TMO Report	Surveillance / Compliance
3.	Community health services geographic information system established	Output	Establishing a GIS System for community health service	TMO Report	Surveillance / Compliance
4.	At least 10 staff undertake and complete Pacific Data for Decision Making (DDM) Training program.	Output	Staff trained to undertake DDM	TMO Report	Research
<b>DA 2. Health Promotion</b>					
1	Reduce premature mortality due to NCD by 20% (4% per year) by 2020	Impact	NCD number by year by previous year number in %	TMO Report STEPS Survey	NCD <sup>11</sup>
2	Reduce or maintain school	Impact	Obesity number by year by	School health	NCD

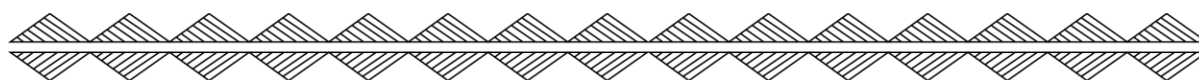
<sup>11</sup> National NCD strategy 2015-2019/NCD (Pacific MANA/WHO global NCD Monitoring Framework).



	student obesity rate at 25%		previous year number in %	survey	
4.	Reduce smoking by 20% of current level of smokers	Impact	Difference in percentage of smokers in 2016 and 2021.	TMO Report STEP Survey	Tobacco Control
5.	Enactment of amendments to the Tobacco Controls Act 2007	Output	Amending the Tobacco Controls Act to align with certain provisions of the FCTC	Parliamentary paper	Tobacco Control
6.	Tobacco Free Ministry of Health by 2021	Impact	Ministry publicly declared Tobacco Free	Ministry Declaration	Tobacco Control
7.	Percentage of premises (Restaurants, nightclubs/bars, public places) compliant with Current Tobacco Control Laws	Output / Impact	Total number that are non-compliant as a percentage of the total number of premises.	TMO report Surveillance / Enforcement Report	Tobacco Control
8.	Declare 1 island as Tobacco Free	Impact	1 Island publicly declared Tobacco free	Public declaration	Tobacco Control
9.	Maintain zero HIV	Impact	HIV incidence	Health Statistics	STI/ HIV
10.	Increase by 30% consumption of 5 or more serves of fruit and vegetables (survey based)	Impact	Percentage of fruit and vegetables consumed in 2016 and 2021.	Nutrition Report STEPS Survey	Nutrition
<b>DA 3. Family Health Services (Public Health Nurses)</b>					
1.	MCH/FP Increase contraceptive prevalence rate to 35%	Output	CPR use in 2016 and 2021	TMO Report CIFWA Report Census	Maternal Health UNICEF
2.	Improve measles vaccine coverage to 98%	Output	Percentage measles vaccine coverage in 2021	TMO Report	Child health



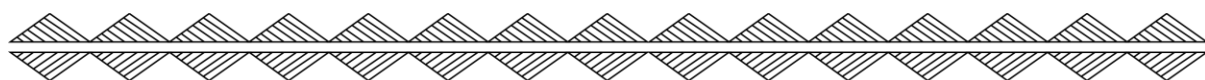
					UNICEF
3.	Establish a baseline and targets for exclusive breast feeding rate on discharge from maternity ward at 3 months and 6 months	Impact	Baseline and targets set for exclusive breast feeding rate on discharge from maternity ward at 3 months and 6 months	TMO Report Survey Report	Maternal health  UNICEF
4.	Rheumatic Heart Disease  Complete screening of all children (5-15 years)	Output	ECHO Screening of children 5-15 years	RHD report	Child Health
5.	Complete repeat screening of high risk children subject to initial screening	output	Repeat screening for high risk children completed	RHD report	Child Health
6.	RHD database updated and maintained	Output	Database updated and maintained	RHD report	Child Health
7.	All children with RHD to receive prophylaxis treatment	Output	Prophylaxis treatment received by all children with RHD	RHD report	Child Health
<b>DA 4. Oral Health</b>					
1	Implementation of Oral Health Strategy 2014-2018	Process / Output	Implementation Oral health strategy	M&E report	Oral health
2	Develop new Oral Health Strategy 2014-2018	Output	Development of new oral health strategy	Oral health strategy launched	Oral health
3	Reduction by 30% from the mean dmft 6.6 in 5 year olds	Impact	Dmft % changes in 5 year olds between 2016 and 2021	Dental Report Survey Report	Oral Health
4	Primary School tooth brush program established in at least 90% of schools	Output	Primary school with established tooth brush program.	School Health Report MOE Report	Oral Health



5	Reduction by 30% in tooth decay prevalence in Primary Schools (80%).	Impact	Percentage of tooth decay in primary schools.	Dental Report Survey Report	Oral health
<b>DA 5. Mental Health</b>					
1	Implementation of the mental health and well-being strategy 2016-2021	Process / Output	Implementation of Mental Health and Well-being Strategy	M&E Report Program Report	Mental health WHS <sup>12</sup>
2	Implementation of the suicide prevention strategy 2016-2021	Process / Output	Implementation of Suicide Prevention Strategy	M&E report	Mental health
3	Review and develop new strategies for mental health and suicide prevention	Output	Review completed and new strategies developed	Review reports and new strategies launched	Mental health WHS
4	Update mental health register with diagnosis clearly tabulated	Output	Updating of Mental Health Register	Mental health report	Mental Health WHS
5	A 50% reduction in the completed suicide rate.	Impact	Reduction in deaths from suicide attempts.	TMO Report Police Report	Mental Health Suicide Prevention WHS
6	A 20% reduction in the attempted suicide reporting	Impact	Reduction in attempted suicides.	TMO Report Police Report Punanga Tauturu report	Mental Health Suicide Prevention WHS

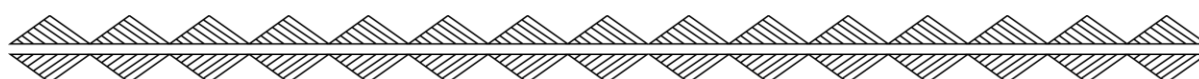
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<sup>12</sup> WHO World Health Statistics

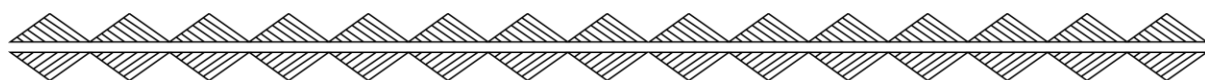


## KRA 3 Targets

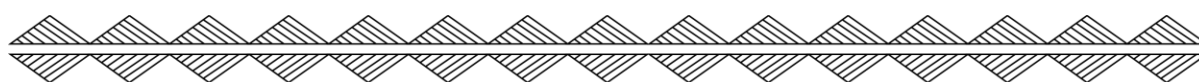
TARGET		INDICATOR TYPE	DEFINITION / DESCRIPTION	DATA SOURCES	TOPIC
<b>GOPD/A&amp;E</b>					
1.	Reduce by 20% the current (2016) waiting time for patients (less than 99 minutes).	Output	Waiting time at GOPD attendance.	Survey Report TMO Report	Access Primary Care
2.	All GOPD patients are processed through triage for early identification and management of urgent cases.	Output	Early identification and management of urgent cases	TMO report	Access Primary care
<b>Surgery and Anesthesia</b>					
1.	Perioperative mortality rate (POMR) after 30 days is maintained at Zero.	Impact	Post-operative deaths within 30 years over total surgeries.	Theatre Report HIS Report TMO Report	Secondary Care Surgical
2.	Post-operative infection rate (POIR) maintained below 20% of 2016 figures.	Impact	Percentage of post-operative infections.	HIS Report TMO Report	Secondary Care Surgical
3	All department nursing staff trained in Critical Care Nursing	Output	Nursing staff trained in critical care	HR report	HR development
4	Introduce interventional endoscopy.	Output	Interventional endoscopy introduced	TMO report	Secondary Care Surgical
<b>Obstetrics and Gynaecology</b>					



1.	Incidence of premature labour and births reduced by 50% from current rate of 2.9%.	Impact	Number of prem labor in 2021 over 2017 in %.	TMO Report	Preventive ANC Obstetrics SDG
2.	Increase PAP smear screening to cover 80% women in the reproductive age group and beyond (21-65 years).	Output	Number of PAP smear undertaken over CBA in %	TMO Report O&G Report	Preventive ANC Gynecology WHS
3.	Maintain zero maternal mortality.	Impact	No maternal deaths	Statistical bulletin	Health information unit SDG
4.	Reduce sexually transmitted infection especially chlamydia among the antenatal women.	Impact	Chlamydia infection rates are reduced from 2016 rates	TMO report	Gynecology WHS
<b>Medicine</b>					
1.	Cardiac ECHO undertaken on all (100%) patients recommended for screening.	Process / Output	Percentage of ECHO done over recommended number.	TMO Report	Secondary Care Cardiac
2.	Introduce treadmill stress test assessment capability	Process / Output	Introduction of treadmill stress test option.	TMO Report	Secondary Care Cardiac
3.	Rheumatic Heart Disease Register established for health / country.	Process / Output	Establishment and use of RHD register.	TMO Report	Preventive H Cardiac
4.	Reduce myocardial infarction	Impact	Number of MI in 2021 over	TMO Report	Secondary



	by 5%.		number of MI in 2017 in %		Care Cardiac NCD
5.	Reduce cerebrovascular accidents by 5%.	Impact	Number of CVA in 2021 over number in 2017 by %	TMO Report	Secondary Care NCD
6.	Reduce end stage renal failure by 5%.	Impact	Number of end stage renal in 2021 over number in 2017 in %	TMO Report	Preventive H Secondary Care NCD
7.	Increase compliance to rheumatic heart disease prophylaxis treatment	Impact	Increase compliance to rheumatic heart disease prophylaxis treatment from 2016 level.	TMO report	NCD
<b>Paediatrics</b>					
1.	Rarotonga Hospital declared Baby Friendly Hospital	Impact	Hospital declared under BFHI	Declaration and official plaque of commemoration	Child Health UNICEF
2.	All Paediatric nursing staff/ midwives trained in neonatal resuscitation.	Output	All nursing staff trained	HR report	Child Health UNICEF
<b>Ophthalmology</b>					
1.	Diabetic retinopathy data base established	Output	Creation of retinopathy data base.	TMO Report	Preventive H NCD
2.	Annual outreach Program implemented	Output	Outreach program every year	TMO report	Primary Eye Care



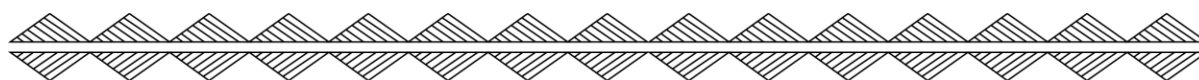
Medical Referral Service					
1.	Reduce number of chartered flights to the Pa Enua from 2016 level	Impact	Number of chartered flights in 2021 over 2016 in %	Hospital Data Administrative Records	Access Secondary Care
2.	Reduced number of referrals to Rarotonga and New Zealand from 2016 level.	Impact	Number of chartered flights in 2021 over 2016 in %	Hospital Data Administrative Records	Access Secondary Care
Specialist Care					
1.	At least 12 HSV programs implemented yearly.	Process / Output	12 or more HSV programs implemented	TMO Report ECHO Report	Preventive H Cardiac
2.	Establish a Radiologist service with Middlemore Hospital to report on all x-ray images from the Cook Islands.	Process / Output	Radiologist service established	TMO Report ENT Report	Secondary Care ENT
3.	Establish eligibility criteria for high risk orthopaedic cases to prioritise funding of one case per year (total hip replacement and knee replacement surgeries).	Process / Output	Eligibility criteria established	TMO report	Tertiary Care Surgery





## KRA 4 Targets

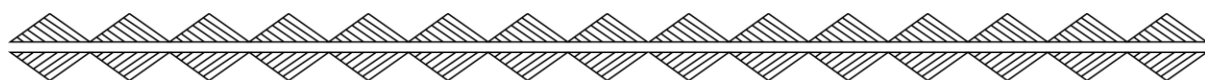
TARGET		INDICATOR TYPE	DEFINITION / DESCRIPTION	DATA SOURCES	TOPIC
<b>Pharmacy</b>					
1.	Acquire and operate a new ICT system that improves on the existing Toniq system	Process/output	ICT installed and operational	TMO Report	IT system Pharmacy
2.	Essential Medicine list reviewed every two years and align to Anti-Microbial Resistance Action Plan and Anti-Biotic guidelines	Output	Review and alignment of EML every 2 years	Department Report	Pharmacy
3.	Nil Stock out for NCD (Diabetes, Hypertension) medications.	Output	Nil stock out	TMO Report	Pharmacy
<b>Physiotherapy</b>					
1.	Explore alternatives for hydrotherapy facilities and services.	Output	Exploration of Hydrotherapy option.	TMO Report	Rehabilitation Physiotherapy
2.	Certified ultrasound training service for musculo-skeletal cases completed.	Output	Certified musculo-skeletal service in operation.	TMO Report	Rehabilitation Physiotherapy
<b>Laboratory</b>					
1.	Assess and report on best options for Laboratory Information System software (LIS).	Process / Output	Assessing options for LIS.	TMO Report	IT system Laboratory
2.	Maintain quality assurance laboratory standards.	Output	Assessing quality assurance standards.	TMO report	laboratory
3.	Unqualified audit report for laboratory inventory yearly	Output	Assessing laboratory inventory.	Audit report	Laboratory
<b>Radiology</b>					
1.	Radiology Service Plan Formulated	Output	Radiology service plan formulated and in use.	TMO Report Administrative Report	Policy & Planning Radiology
2.	Develop a Radiology Equipment management policy.	Output	Development of policy	TMO report	Diagnostic Radiology
3.	Scoping exercise on radiology capabilities in Aitutaki hospital	Output	Scoping of radiology service introduction to Aitutaki.	Department Report	Radiology Diagnostic
<b>Biomedical</b>					
1.	Medical Equipment Donation Policy developed	Output	Medical Equipment Donation Policy formulation and adoption.	TMO Report Administrative	Policy and Planning Biomedical



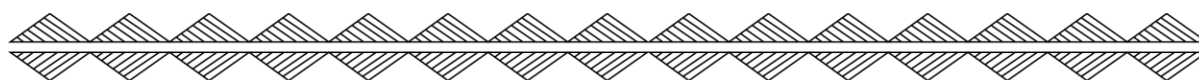
2.	Medical Asset Management Policy developed	Output	Development of Policy	TMO Report	Policy and Planning Biomedical
3.	Oxygen Plant Management Plan developed	Output	Development of Oxygen Management plan	TMO report	Policy and Planning Biomedical
<b>Ambulance/Paramedic Services</b>					
1.	Ambulance dispatch time maintained at 3 minutes.	Process / Output	Ambulance dispatch time from call to dispatch to site.	TMO Report	Med Evacuation Emergency response
2.	Advance level care delivered to all identified high risk patients	Output	Advance level care delivered to all identified high risk patients	TMO report	Med Evacuation Emergency response
<b>Dietary Services</b>					
1.	Dietary counselling services offered for all non-compliant cases.	Output	Counselling services offered	TMO report	Dietary services

## KRA 5 Targets

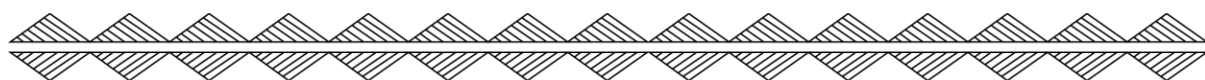
TARGET		INDICATOR TYPE	DEFINITION / DESCRIPTION	DATA SOURCES	TOPIC
<b>Community Health Care</b>					
1.	Completed (100%) health profile of each Pa Enua (demography, health and wellbeing)	Output	Community health statistics profiling of Pa Enua.	Health profile report.	Pa Enua Station Report HIU
2.	40% of all private dwellings on Aitutaki inspected, assessed and meet the Sewage Regulation 2014	Process / Output	% of total dwellings inspected, assessed and compliant	TMO report	Environmental health
3.	50% commercial properties on Aitutaki comply with the Sewage Regulation 2014	Process / Output	% of total commercial properties compliant of the total number of commercial properties.	TMO report	Environmental health
4.	Reduce smoking by 20% of current level of smokers.	Impact	Tobacco use reduction of 20% from current 2015 STEPS levels	STEPS	Tobacco control NCD
5.	Achieve 100% DOTS coverage (TB).	Output	100% coverage	TB report	TB Unit/ Health Promotion
6.	Increase compliance to rheumatic heart disease prophylaxis treatment.	Output	Treatment compliance from 2016 levels	TMO report	Pa Enua and Child Health
7.	Improve measles vaccine coverage to 98%	Output	Improved coverage from 2016 levels	TMO report	Pa Enua and Child Health
8.	Establish exclusive breastfeeding rate on discharge from birth 3months and 6months	Output	Exclusive breastfeeding rate monitoring at discharge, 3 and 6 months	TMO report Station Report	Obstetrics MCH UNICEF



9.	Pre-schoolers and Primary oral health preventive program established in 100% of schools.	Output	Oral health program established in pre and primary schools.	TMO report Pa Enua report	Dental services School health
10.	Identify and register all patients with a mental health illness	Process / Output	Registration of mental health patients	TMO report	Mental health WHS
11.	Less than 10 complaints received for non-compliance to Food Act and Regulations.	Output	Complaints in a given year under Food Act and Regulation	TMO report	Food Safety
12.	Less than 10 complaints received for water borne related illnesses	Output	Complaints in a given year on water borne illness	TMO report	Water/ environmental health
13.	Register number/type of toilets in private dwellings.	Output	Register established	TMO report	Sewage and sanitation
14.	Community Health Services Geographic Information System established	Output	System established	TMO report	Community Health HIU
15.	IMCI introduced to all Pa Enua stations.	Output	IMCI introduced to Pa Enua stations	TMO Report	Preventive H Primary Care Child Health UNICEF
16.	HSV outreach program implemented yearly.	Output	HSV services undertaken in Pa Enua.	TMO Report HSV Report	Access Secondary Care
<b>Clinical Services</b>					
1.	Cardio Vascular Risk Assessment of all recommended patients 40 years and over.	Process / Output	Assessment of all recommended patients 40 years and above.	TMO report	NCD
2.	Incidence of premature labour and births reduced by 50%	Impact	Incidence of premature labour and births reduced by 50% from current rate of 2.9%.	TMO report	Obs & Gynae MCH SDG
3.	Increase PAP smear screening to cover 80% women in the reproductive age group and beyond.	Output	PAP smear screening to cover 80% women in the reproductive age group and beyond (21-65 years).	TMO report	Obs and Gynae
4.	Integrated Management of Childhood Illnesses introduced to all Pa Enua stations.	Output	IMCI introduced	TMO report	Child Health
5.	Aitutaki Hospital declared Baby Friendly Hospital by 2021.	Output	Hospital declared under BFHI	Declaration and plaque	Administration UNICEF



6.	Medical equipment and assets maintained and updated annually.	Output	Maintained and updated annually	TMO report	Biomed
7.	Reduction by 30% from the mean dmft 6.6 in 5 years old.	Impact	Reduction by 30% from the mean dmft 6.6 in 5 years old.	TMO report	Dental
8.	Reduction by 30% in tooth decay prevalence in Primary Schools (80%).	Impact	Reduction by 30% in tooth decay prevalence in Primary Schools (80%).	TMO report	Dental
9.	Reduction by 30% in the mean DMFT (7.3, 12.9 and 21.9) of the adult population of WHO indexed age groups.	Impact	Reduction by 30% in the mean DMFT (7.3, 12.9 and 21.9) of the adult population of WHO indexed age groups.	TMO report	Dental
10.	Nil Stock out for essential medicines especially NCD (Diabetes, Hypertension) medications	Output	Nil stock out for NCD essential medicines	TMO report	Pharmacy
11	Pa Enua health centres/residences at Atiu, Mangaia, Mauke and Pukapuka refurbished to appropriate standards.	Output	Refurbishment of identified stations	TMO report CIIC Report	Maintenance Infrastructure
12	Renovation of Aitutaki Hospital completed.	Output	Renovation of Aitutaki Hospital	TMO report CIIC report	Maintenance Infrastructure



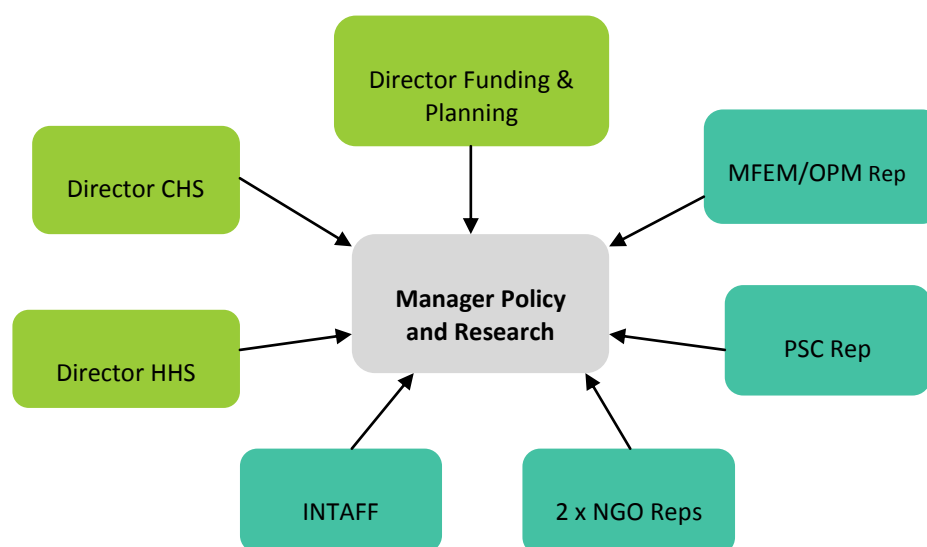
## Country Coordinating Mechanism

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The implementation of the NHSP will be supervised and monitored by the NHSP Supervisory Committee (NSC) led by Te Marae Ora (TMO), with involvement of subnational stakeholders, other ministries, CSOs, the private sector, academic institutions and development partners. The Planning Unit of the TMO will be the focal point and Chair to the CC. Regular meetings will be scheduled with minutes circulated to all senior staff and partners for information and action. Minutes will also provide input to the M&E function of the NHSP.

### NHSP Supervisory Committee

The following structure and membership of the NHSP supervisory committee is proposed under the overall supervision of the Secretary for Health.



### Country Progress and Performance Review Mechanism

Reviews are based on the evidence gathered through monitoring processes and require national institutional mechanisms involving multiple stakeholders. Existing country health-sector review processes are a key entry point for assessing progress and performance, and can influence priority-setting and resource allocation. Such reviews need to be systematically linked to actions in countries and provide the basis for mutual accountability.

#### Schedule of Reviews

1. Annual Reviews – at the end of each calendar year
2. Mid-term Review – at the end of 2019
3. Final situation analysis and evaluation – at the end of 2021.

The review will draw on information obtained from the Health Information Unit and from individual health program reviews and reports. The annual review are expected to feed into the Business Plan formulation process for funding and resource allocation.

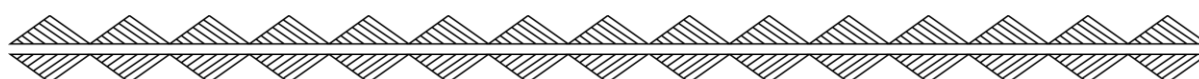
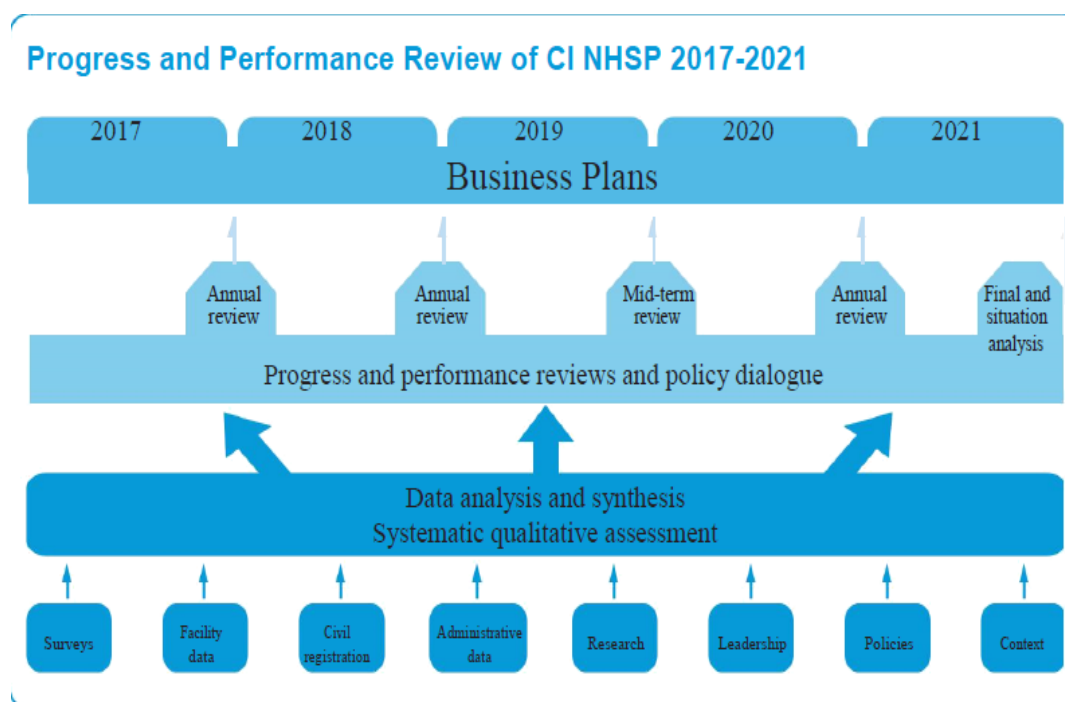


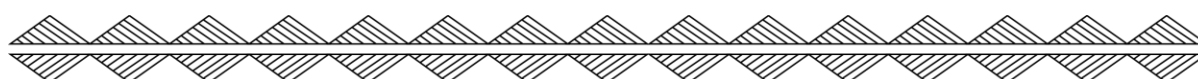
Chart 10: Progress and Performance Review Structure



## Data Sources

The use of existing data from all data sources is required to assess progress and performance of the NHSP. It is therefore essential to specify how data on all components of health systems will be generated, including inputs, processes, outputs, outcomes and impact. The main data sources include the following.

- **Census of population and housing.** This is the primary information source for determining the size of a population, its geographical distribution, and its social, demographic and economic characteristics.
- **Civil registration and vital statistics systems.** The TMO collects its own births and deaths statistics but the M&E component will include a statement on the use of vital statistics and on planned ways to improve the availability and quality of data on births, deaths and causes of death.
- **Population-based health surveys** with a focus on service coverage, equity and population health outcomes. The STEP Survey for NCD and Demographic Health Survey (DHS) are such population based surveys frequently used in the Pacific and could provide important information outside of the national census.
- **Facility generated data,** including routine facility information systems and health facility assessments and surveys. The Health Information Unit will have most statistics of facility generated data.
- **Health program generated data,** some program areas maintain their own data from outreach programs and special clinics or intervention activities. These data are more specific to interventions and should be included as data sources both for M&E and planning activities.
- **Administrative data sources** including Parliamentary briefs, financial resource flows and expenditures to all levels and includes annual reporting of expenditures by major program.



## Data Dissemination and Communication

The NHSP Supervisory Committee should determine from the M&E findings as to what specifics of the analytical outputs that will be produced as the basis for decision-making, program management, financial disbursements and global reporting. The key outputs of the health information systems that serve the basis for national and global reporting are discussed below.

### 1. Health Sector Progress and Performance Report

A health sector progress and performance report is the key input for NHSP annual reviews and is based on the analysis and synthesis work described in the previous section. This includes a systematic assessment of progress against specific objectives and goals in the national health strategy, as well as in disease-specific plans. The health sector progress and performance report brings together all data from the different sources, including the facility reporting system, household surveys, administrative data and research studies, to answer the key questions on progress and performance using the country's core indicators and health goals.

### 2. Annual Health Statistical Report

The Cook Island TMO produces annual health information bulletins. This report presents a comprehensive analysis of all health data derived from administrative and health facility reporting, including the most relevant data by island. The annual health bulleting report provides ample attention to data quality issues, including timeliness, completeness and accuracy of reporting, as well as to data adjustments and methods used, if applicable.

### 3. Policy Briefs

Policy briefs usually highlight actionable recommendations for decision-making in a 2–6 page format. The typical format identifies a problem, proposes a solution and presents a compelling and feasible recommendation. Non-academic language is used and images, quotes, photographs, and bullets are recommended. The supporting evidence is also highlighted. This format is ideal for conveying specific evidence-based policy recommended.

### 4. Colour Coding

Colour coding is a strategy used to group data and suggest action. Most commonly the colours red, green and yellow are used to depict a traffic stop light. Specific numerical ranges are pre-determined for each colour and indicator, based on progress towards a programmatic target. This technique allows decision-makers to see at a glance if action is required around a specific indicator. There are similarities with this strategy and with the grading found in health report cards.





## NHSP Consultation Process

### 1. Evaluation of NHSP 2012-2016

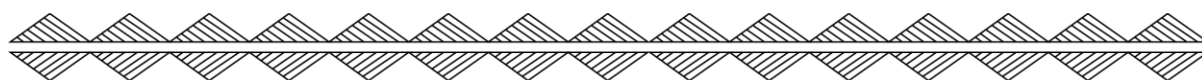


TMO participants at the NHSP 2012-2016 review meeting at Crown Beach Hotel. This meeting also served as a forum for early inputs to the new NHSP. Hon. Minister and Secretary for Health along with WHO and SPC representatives were also present at the meeting.

### 2. National Health Strategy Seminar



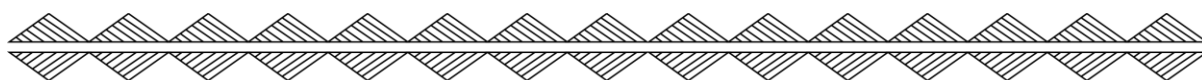
A national health strategy seminar was organised by Ministry of Health that invited stakeholders to participate in a consultative process on the new health strategy. Separately, consultations within the TMO took place with all key staff included in the discussions.



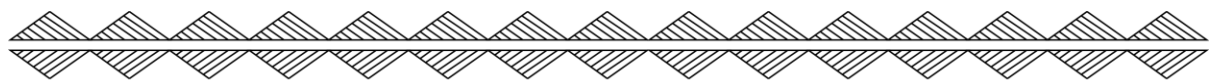


## People Consulted

Name	Name	Name
Teuvira Upokotea	All MoH Staff	Cook Islands Opposition of government members
Barbra Allpress	Vaka Ngaro	Pa Enua Executive officers
Anna Rasmussen	NZ high comm	Otheniel Tangianau
Tangata Vainerere	Creative Centre	Mens Rotaiaanga
Nooapii Tearea	Cook Islands National Disability Council	Tuaine Masters
Bredina Drollet	Taputu Mariri	Iro Rangi
Mereana Taikoko	Tingika Elikana	Shannon Saunders
Nooroa Numanga	John Strickland	Gaye Whitta
Desmond Amosa	Maara Tetava	Rongo File
John Tangi	Paul Lynch	Ngarima George
Jesse Evans	Joseph Mayhew	Ben Ponia
Eliza Puna	Alex Herman	Lydia Nga
Adam Bedouin	Rose Brown	Garth Henderson
Milly Tamaki	Tamaiva Tuavera	Niki Rattle
Russel Thomas	Daphne Ringi	Marino Wichman
Tangianau Manuel	Oropai Mataroa	Angeline Tuara
Anthony Brown	Mataitirangi Pura	Cook Islands Members of Parliament
Lydia sijn-Marsters	Elizabeth Koteka	Ruth Pokura
Claudine Henry Anguna	Halatoa Fua	Chamber of Commerce
Tutai Matenga	Anthony Turua	Tristan Metcalfe
Rimmel Poila	Nga Teinangaro	Ruby Ngavavia
Elizabeth Munro	Sieni Tiraa	Teautoa Peua
Mary Dean	Teariki Ngaoire	Tupe Tamatoa
Poko Rota	Joseph Brider	Tupa Tupa
Peria Daniel	Ngametua Pokino	Kendrick Rima
Teava Iro	Owen Lewis	Regina Potini
Losirene Lacanivalu	Tamarii Tutangata	Maeaki Hafoka
Ngatoko Ngatoko	Jane Kaina	Vavia Tangatataia
Tearuru Takai	Petero Okotai	Eirangi Masters
Donna Smith	Martha Nikoia	Elizabeth Munro
Kathleen Wilkie	Ana Tiraa	George Turia
Gail Townsend	Luke Brown	Rosita Taikakara
Danielle Cochrane	Elizabeth Nootai	George Maggie
Niki Rattle	Gill Ngatokorua	Naomi Manavaikai
Ben Ponia	Pio Ravarua	Eliu Eliu
Ngarima George	Cook Islands Child welfare association	Patrick Arioka
Polly Tongia	Religious Advisory council	Tevai Tatuava
Naomi Manavaikai	Daryl Rairi	Marino Wichman
Maeva Maeva	Cook Islands Red Cross	Turi Mataiapo



Nii Tara	Ui Ariki/Koutu Nui	Bouchard Solomona
Kimi Largering	Bredina Drollet	Lavinia Rasmussen
Amelia Borofsky	Sue Ngatokorua	Heiarii Ioaba
Vaine Wichman	Nooroa Numanga	All cook islands gov users



## Strategic Planning Process

The evaluation of the previous 5 year health strategy and the development of this 5 year health strategy was carried out under the WHO Joint Assessment of National Strategy framework (WHO JANS) by Dr. Lepani Waqatakirewa and the local team consisting of Roana Mataitini and Valentino Wichman of the Funding and Planning Directorate of Te Marae Ora. This framework provided guidance in the planning process.

Joint assessment is a shared approach to assessing the strengths and weaknesses of a national strategy, which is accepted by multiple stakeholders, and can be used as the basis for technical and financial support. There is renewed interest in joint assessments because there is strong consensus that sustainable development requires harmonized support to national processes.

In developing the current 5 year health strategy a combination of the following theoretical frameworks were utilized. It must be noted that there is no internationally recommended framework for health strategic planning and every country plans according to their situation. International best practices recommend five criteria under the WHO JANS as the basis for strategic planning.

The following are some theoretical frameworks used for general strategic planning. Aspects of these frameworks can be adapted for local planning:

### Bryson (1998)

1. Initiating and agreeing on a strategic planning process
2. Identifying organizational mandates
3. Clarifying organizational mission and values
4. Assessing the external and internal environments to identify strengths, weaknesses, opportunities and threats
5. Identifying the strategic issues facing an organization
6. Formulating strategies to manage the issues
7. Review and adopt the strategies or strategic plan
8. Establish an effective organizational vision
9. Develop an effective implementation process
10. Reassess the strategies and the strategic planning process

### Olsen and Eadie (1980)

1. The overall mission and goals statements
2. The environmental scan or analysis
3. The internal profile and resource audit
4. The formulation, evaluation and selection of strategies
5. The implementation and control of strategic plan

### Osborne and Gaebler (1992)

1. Analysis of the situation (Internal and External)
2. Diagnosis – key issues facing the organization
3. Definition of fundamental mission
4. Articulation of basic goals
5. Creation of a vision – what success looks like
6. Development of a strategy to realize vision and goals
7. Development of a time-table
8. Measurement and evaluation of results



