Health Service Delivery Profile

Cook Islands

2012

Compiled in collaboration between WHO and Ministry of Health, Cook Islands
Cook Islands health service delivery profile

Demographics and health situation

The population numbers of the Cook Islands continues to decline. Following the 2011 population census the resident population was 15,000 showing a decrease of 2.3% when compared to 2006 Census. Over 50,000 Cook Islanders reside in New Zealand and approximately 30,000 in Australia. Cook Islands has a relatively young population, with a median age of 29, 30 years for male and 28 years for female according to the Population Census 2011.

Cook Islands are geographically and demographically dispersed (see Annex 1). Approximately three-quarters of the population live in urban settings; the majority residing on Rarotonga (72%), followed by other Southern Group islands (21%), and the Northern Group (7%). The largest island, Rarotonga, is also the capital and is the country’s dominant driver of economic growth. The Southern Group islands are situated within 300 kilometres off Rarotonga, while the remote Northern Group islands are more than 1,250 kilometres from the capital and have little arable land for farming.

Cook Islands environment is relatively fragile and is being impacted by coastal erosion, development growth and susceptibility to climate change. The country is prone to cyclones and natural disasters and this has an impact on service delivery, due to re-routing of money to disaster recovery programs. The geographically dispersed islands and relatively small numbers of people on isolated islands provide a challenging environment in which to plan and develop health services. Despite this, in 2008, 98% of the urban population had access to a clean, safe water supply, and 100% of urban while rural areas had adequate sanitation facilities.

Table 1 Key development indicators, Cook Islands

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Measure</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human development index</td>
<td>0.8</td>
<td>2008</td>
</tr>
<tr>
<td>Adult literacy rate (%)</td>
<td>99.0</td>
<td>2009</td>
</tr>
<tr>
<td>Total health expenditure (% of GDP)</td>
<td>2.9</td>
<td>2012</td>
</tr>
<tr>
<td>Proportion of population living below the poverty line (%)</td>
<td>28.4</td>
<td>2009</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>72.0</td>
<td>2009</td>
</tr>
<tr>
<td>Crude birth rate (per 1,000 population)</td>
<td>23.8</td>
<td>2010</td>
</tr>
<tr>
<td>Crude death rate (per 1,000 population)</td>
<td>8.1</td>
<td>2010</td>
</tr>
<tr>
<td>Infant mortality rate (per 1,000 live births)</td>
<td>7.1</td>
<td>2009</td>
</tr>
<tr>
<td>Maternal mortality rate (per 100,000 live births)</td>
<td>0.0</td>
<td>2010</td>
</tr>
</tbody>
</table>

Sources: WHO 2011; SPC 2010; WHO 2012; MOH 2011

The health status of the population is steadily improving, and the country has some of the best MDG indicators and Human Development Index (0.83) rating in the Western Pacific Region. Services provided by the Ministry of Health have helped maintain a very good level of maternal health, low infant mortality and high childhood immunisation coverage (over 90%). With recent improvements in water supply and sanitation and regular drinking water testing, infectious diseases are becoming rarer. Vaccine preventable diseases are eliminated and usually occur as imported cases. However, condom use is low, and a number of sexually transmitted infections are common. Non-communicable diseases such as cardiovascular, cancer, diabetes, respiratory problems and risk factors such as hypertension, obesity and injuries are the leading causes of morbidity and mortality in the Cook Islands. Diseases of the circulatory system continue to be the leading cause of mortality, and accounted for 36% of deaths in 2009.
Health strategies, objectives and legislation

The Government has given priority to education, health, human resources and outer island development, and there are a number of government strategies in place to address the challenges of environmental health, communicable and non-communicable diseases. The Ministry of Health has a well-developed strategic plan, annual business plan and a number of strategies that guide investments in the sector. The Ministry’s vision is “All Cook Islanders living healthier lives and achieving their aspirations” and the mission is, ‘to provide accessible and affordable health care of the highest quality, by and for all, in order to improve the health status of the people living in the Cook Islands’.6

The Cook Islands Health Strategy (2012-2017) identifies the Government’s priority areas for health, including a strong focus on prevention, health promotion and healthier environments. The priority focus of the strategy includes enhancing the infrastructure of the health system and supporting ongoing health governance and organisational reforms, promoting partnerships for institutional capacity development; strengthening health sector policy, planning and regulations, improve data collection, monitoring and evaluation, promoting gender sensitive research and gender analysis, strengthening community capacity and capability on social determinants of health. Improving information, communication and technology systems and strategies, to provide accessible and accurate information on health promotion and disease prevention so that people are empowered to take ownership and responsibility for their health and the environment we live in to reduce future health risks.

Te Kaveinga Nui, the Cook Islands long-term development vision to 2020, summarises the national development vision as, ‘to enjoy the highest quality of life consistent with the aspirations of our people, and in harmony with our culture and environment’.13 Within Te Kaveinga Nui sits the three-year National Strategic Development Plan, which aims to strengthen health preventative programs, develop human resources and medical personnel, improve health facilities and equipment, and strengthen the Ministry of Health.11

Service delivery model

The Ministry of Health is the main provider of health care in Cook Islands, has a regulatory function in protecting public health, and is engaged in environment, water and sanitation.10 Health services range from public health (inclusive of primary care) to secondary care. Overall, Cook Islands is relatively well equipped to provide basic primary and secondary level care. Cook Islands delivers an adequate range of general clinical services in the core areas of surgery, medicine, anaesthetics, obstetrics, gynaecology, ophthalmology and paediatrics.6 These services are supplemented by visiting specialist teams and access to tertiary services is through referral to overseas providers. There are a small number of private providers.

The provider network

Health services in Cook Islands are provided through a system of child welfare clinics, dental clinics, health centres, and one general hospital on the main island of Rarotonga.7,8 Four private outpatient clinics, three private pharmaceutical outlets and one private dental clinic also operate in Rarotonga.6,7,9,14 While emergency departments in the hospitals are open 24/7, most community health services are open Monday to Friday, from 8am until 4pm.15
<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Essential (core) services</th>
<th>Clinical services</th>
<th>Expanded Services</th>
</tr>
</thead>
</table>
| Child welfare clinics (52) | • Family planning and nutrition, and promotion of breastfeeding, child health weighing, physical health assessment  
• Sanitation and hygiene  
• Health promotion and education  
• Immunization, deworming | • Child health  
• Primary health care  
• Maternal and child health and family planning  
• Patient referral | |
| Dental clinics (14) | • School Dental Services, Health promotion and education (limited) | • Dental care (minor surgery, extraction, broad range of restorative care and removable prosthesis (dentures) | Orthodontics, fixed prosthesis (crown & bridges and veneers (recent), endodontics, dental visit programs to the outer islands, maxillo-facial trauma management (limited)) |
| Health centers (6) | • Community and mental health  
• Reproductive health including access to contraceptive methods, family planning and nutrition, and promotion of breastfeeding  
• HIV/AIDS and STI prevention  
• Community and patient counseling  
• Environmental Health surveillance  
• Programs for the reduction of tobacco, alcohol consumption and substance abuse  
• Management and treatment of NCDs  
• Violence and injury prevention programs | • As for child welfare clinics  
• Family planning services  
• Management of antenatal care, birthing and postnatal care  
• Management, treatment and care of STIs including HIV/AIDS  
• Medical and minor surgical emergencies  
• Tupapa Community Clinic  
  o Medical  
  o Antenatal  
  o Family planning  
  o Mental health clinic  
  o Youth clinic  
  o Eye clinic  
  o Patient referrals | |
| Outer Island hospitals (1)  
44 beds | • As for child welfare clinics and health centers | • As for health centers  
• Outpatient care  
• Consultations  
• Minor operations  
• Home visits  
• Management of antenatal care, low risk birthing and postnatal care  
• Dental care  
• Pharmacy  
• Laboratory  
• Radiology | |
| General hospital (1)  
100 beds | As for child welfare clinics and health centers  
• Cancer register  
• Hypertension and diabetes clinic | • As for district hospitals  
• Accident and emergency  
• Medical services  
• Obstetrics and gynecology  
• Pediatrics  
• General surgical services  
• Ultrasound  
• Mental health services (limited)  
• Treatment for chronic diseases including follow-up care  
• Patient referrals  
• Physiotherapy and rehabilitation  
• Eye clinic | • Health Specialists Visits  
  o Mental health  
  o O & G  
  o Paediatrics  
  o Orthodontics  
  o Neurology  
  o Cardiology  
  o Diabetes Management  
  o Orthopaedics  
  o Ophthalmology  
  o Ear, nose and throat  
  o Gastroenterology (Urology, Endoscopy)  
  o Mammography  
  • Overseas referrals |
Health financing

Funding for health services in Cook Islands comes primarily from Government (93% in 2012) with minimal overseas donor assistance (7%).\textsuperscript{1} The total health budget for 2012 was approximately NZD $11.3 million (NZD $755 per capita) and funds are primarily used for hospital health services (58%); outer islands health services (20%); community health services (16%); and funding and planning (6%).\textsuperscript{6}

As the health budget is not adjusted for inflation there has been a decline in its purchasing power, and it continues to be less than the WHO recommended 5% of gross domestic product (GDP).\textsuperscript{12} The budget bears the risk of the cost of travel for patients referred to New Zealand and from the outer islands. In 2010/2011, a total of NZD213,000 was spent for referral of 240 patients to overseas hospitals (an average of NZD $888 each).\textsuperscript{6}

Donors in the sector are predominantly made up of the New Zealand bilateral aid program; WHO and SPC.\textsuperscript{1,10} In 2001, overseas development assistance accounted for 21% of Cook Islands GDP, with 10% of such funds allocated to the health sector. This had decreased to 8.9% of GDP by 2008, with 6.6% allocated to health.\textsuperscript{10} Based on allocation trends to sectors and overall development assistance as a percentage of GDP, development assistance is predicted to decline.

User fees

The User Fees Policy applies to all users who are identified and managed through the health system, or through registered private general practitioners in Cook Islands. User fees are collected to improve the efficiency of health care delivery and to partly recover the costs of health care provision.\textsuperscript{15} There are three different levels of charges:

1. **No charge.** Children aged less than 16 years, and adults aged 60 years and above are exempt from all user chargers providing they meet specific residency criteria
2. **Partial charge.** Cook Island adult residents aged between 17 and 59 years must contribute towards the cost of outpatient services (ranging from USD $4 to $24); inpatient services ($4 to $8 per night); clinical support services ($8 to $40); and radiology services ($4 to $16). All alcohol-related hospital admissions incur a cost, which ranges from $40 to $1,600 depending on residency status and services provided
3. **Full charge.** All Cook Islanders residing overseas; visitors and others who don’t meet residency criteria must pay the full fee for all services provided.\textsuperscript{6,14,15}

Human Resources

As of September 2012, Cook Islands has approximately 294 medical staff distributed throughout the population.\textsuperscript{4} Nurses, much like many other Pacific nations, are the largest workforce within the Cook Islands. There are currently 64 nurses at Rarotonga hospital, comprising of six charge nurses, 48 registered nurses, two enrolled nurses and eight nurse-aid positions. There are 36 nurses on the outer islands, which includes five nurse practitioners.

The development of the allied health workforce has been steady over the past five years, and continuous professional development has been key to address the gaps that impacts on the ability of the health sector to meet the needs of its population.

In 2010 the Ministry of Health published a Workforce Development Plan for 2010-2020. The plan recognizes that in order to meet the health needs of the population a well-trained, highly skilled and competent health workforce is required. The mission statement is, ‘to have a workforce with the capacity and capability to provide excellent health care services to achieve better health outcomes for the people of the Cook Islands’\textsuperscript{6}
Table 3 Health professionals, Cook Islands, 2012

<table>
<thead>
<tr>
<th>Registered healthcare professional</th>
<th>Total</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Protection</td>
<td>22</td>
<td>2012</td>
</tr>
<tr>
<td>Health Promotion</td>
<td>10</td>
<td>2012</td>
</tr>
<tr>
<td>Public Health Nurses/Mental Health</td>
<td>15</td>
<td>2012</td>
</tr>
<tr>
<td>Dentists</td>
<td>6</td>
<td>2012</td>
</tr>
<tr>
<td>Dental technicians/</td>
<td>1</td>
<td>2012</td>
</tr>
<tr>
<td>Dental Nurses</td>
<td>4</td>
<td>2012</td>
</tr>
<tr>
<td>Dental Therapist</td>
<td>2</td>
<td>2012</td>
</tr>
<tr>
<td>Primary Oral Health Care Providers</td>
<td>6</td>
<td>2012</td>
</tr>
<tr>
<td>Dental Assistants</td>
<td>4</td>
<td>2012</td>
</tr>
<tr>
<td>Dentists</td>
<td>6</td>
<td>2012</td>
</tr>
<tr>
<td>Dental technicians/</td>
<td>1</td>
<td>2012</td>
</tr>
<tr>
<td>Physicians</td>
<td>26</td>
<td>2012</td>
</tr>
<tr>
<td>Nursing and midwifery</td>
<td>93</td>
<td>2012</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>3</td>
<td>2012</td>
</tr>
<tr>
<td>Pharmaceutical technicians/assistants</td>
<td>5</td>
<td>2012</td>
</tr>
<tr>
<td>Laboratory technicians</td>
<td>9</td>
<td>2012</td>
</tr>
<tr>
<td>Radiographers</td>
<td>2</td>
<td>2012</td>
</tr>
<tr>
<td>Physiotherapists</td>
<td>1</td>
<td>2012</td>
</tr>
<tr>
<td>Dieticians</td>
<td>1</td>
<td>2012</td>
</tr>
<tr>
<td>Paramedics</td>
<td>12</td>
<td>2012</td>
</tr>
<tr>
<td>Kitchen</td>
<td>9</td>
<td>2012</td>
</tr>
<tr>
<td>Infection Control cleaners</td>
<td>17</td>
<td>2012</td>
</tr>
<tr>
<td>Reception</td>
<td>11</td>
<td>2012</td>
</tr>
<tr>
<td>Maintenance/Security</td>
<td>12</td>
<td>2012</td>
</tr>
<tr>
<td>Medical assistants</td>
<td>1</td>
<td>2012</td>
</tr>
<tr>
<td>Other health workers</td>
<td>11</td>
<td>2012</td>
</tr>
<tr>
<td>Health management</td>
<td>8</td>
<td>2012</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>294</strong></td>
<td></td>
</tr>
</tbody>
</table>

Sources: SPC 2010; MOH 2012; HRH Hub 2009

Referrals and linkages through the provider network

There are two main referral processes operating in Cook Islands: (1) internal referrals between islands and/or health facilities (including collaboration with the Health Specialists Visits Scheme); and (2) overseas referrals to tertiary care specialists as part of the Patient Referrals Programme. The Patient Referral Policy (2010) sets the direction for future enhancement of the health system, increased efficiency and access to quality, safe, seamless and sustainable services, and improved population health outcomes. In 2010, 194 patients were referred from the various outer island health centres to Rarotonga’s general hospital.

A patient is considered for referral to Rarotonga for secondary and/or tertiary care provided the following conditions are met:

1. The individual has been identified and managed through the Cook Islands Ministry of Health, health care system
2. The Patient Referral Committee concludes that the patient cannot be managed successfully on their island of residence and will benefit from further secondary or tertiary health care services.

All patients seeking referral are reviewed through the Patient Referral Committee, and health specialists visiting Cook Islands are also allowed to provide referral advice. Patients must meet residency criteria; obtain approval from the Referring Officer and Patient Referral Committee.
**Overseas Referral Programme**

All Cook Islands and New Zealand citizens are eligible for treatment in New Zealand through the New Zealand publicly-funded health system. Referral of patients offshore for specialized clinical care is guided by the Patient Referral Policy. Cook Islands is the only country in the Pacific to self-manage the Patient Referral Programme and Visiting Health Specialists Programme, enabling the country to align the needs of the population with the specialist services provided. Referrals overseas varied little between 2005 and 2010, fluctuating between 140 and 160 per annum.

**Figure 1** Current referral system, Cook Islands, 2012

![Current referral system, Cook Islands, 2012](image)

**Source:** MOH 2010

**Health Specialist Visits Scheme**

The purpose of the Health Specialist Visits scheme is to ensure all Cook Islanders have access to high-level secondary and tertiary medical services not usually available on island. This happens through a series of scheduled and prioritised teams of visiting specialists from New Zealand, Australia and the wider Pacific. Visiting health specialists also provide remote support and mentoring and on-the-job training to local staff.

Management of the scheme sits with the Ministry of Health and planning is aligned with the Ministry’s core documents including the Health Strategy, Workforce Development Plan and National Sustainable Development Plan. The Ministry is responsible for the identification of the level, mix and composition of visiting teams; scheduling; briefing and monitoring of team performance; and evaluation and post-visit review. Funding is secured through tripartite arrangements between the New Zealand Aid Programme, Cook Islands Ministry of Health and Ministry of Finance and Economic Management.
**Medicines and therapeutic goods**

Cook Islands has both a public and private pharmaceutical sector. The majority of pharmaceuticals are distributed by the Central Medical Store to the Rarotonga hospital. In 2005/06, Cook Islands spent USD $1.1 million on pharmaceuticals; 67% from public funds and 33% from private out-of-pocket payments. In 2005/06, it is estimated that USD $64,000 of private funds were spent on pharmaceuticals distributed through public hospitals.

There are no local manufacturers or wholesalers of pharmaceuticals in Cook Islands. Pharmaceuticals are sourced from various overseas suppliers. There is a Narcotics Control Board that monitors or regulates the purchase or sale of pharmaceuticals.

**Quality**

In a recent (2011) patient satisfaction survey, 69% of patients said they were ‘satisfied’ or ‘very satisfied’ with inpatient services.

**Equity**

Although economically, Cook Islands is not confronted with problems facing the poorest nations in the Western Pacific, it does face similar communication, transport and infrastructure difficulties when delivering health services. Problematic disparities exist between the island of Rarotonga (and increasingly Aitutaki) and the outer islands. While health indicators show high rates of immunisation coverage, increasing life expectancy, declining infant mortality and improving maternal health; health care services, particularly in the outer islands, remain poor. The outer islands have higher rates of deaths in the under-five age group compared with Rarotonga. Despite these disparities, due to budget constraints a number of health services were cut in 2011, including reducing the hours of health services on some outer islands to 9am-1pm. Four health positions in the outer islands (one dentist and three nurses) were also not refilled.

Mental health services are often marginalised in resource allocation, resulting in a scarcity of trained personnel and facilities. In most regions there is an adequate number of primary health clinicians who treat the mentally ill, however most do so reluctantly. The prohibitive financial and time costs, and also the dangers associated with air and sea travel limit options for people to seek help through other providers, leaving them with traditional healers, or the use of police force to restrain violent or aggressive behaviours.

Gender equality, human rights, environmental sustainability and disability are not treated as cross-cutting themes in many key government documents. Data is disaggregated by income and gender, but consistent data and systems across government agencies is not readily available, and access to information is limited.

**Demands and constraints on the service delivery model**

A key challenge faced by the health sector is the provision of health services nationwide. Depopulation in the outer islands further exacerbates the struggle to provide quality health services to fewer people. Effective governance in the outer islands remains a challenge and limited economic opportunities have restricted the achievement of equitable development. The effects of political influence, policy inconsistency, together with isolation, communication challenges, and a lack of skilled personnel, have further compounded the challenges faced by outer islands.

NCDs are placing increasing pressure on the health system, including human, pharmaceutical and laboratory services. Primary health care is being strengthened through the Rural Health program and
PEN to address the epidemic of NCDs. Priority areas for advanced specialist training include paediatrics, medicine, surgery, anaesthetics, obstetrics and gynaecology and psychiatry, to enable the Ministry to plan for long-term replacement and sustainability of the system. The system is vulnerable due to small numbers of clinical staff and the long lead-in time from undergraduate training to the completion of specialist training.6

Overall, health services in Cook Islands are limited due to the small population base, resource constraints and a shortage of health specialists and well-trained local staff.23 Other challenges to service delivery include:

- The continuing decline of the national population, especially in the outer islands
- Labour and work-skills shortages
- Increases in the unit cost of basic social and health services
- An increasing number of people affected by non-communicable diseases
- Marginalisation of people with disabilities, their families and caregivers
- Limited Government support in terms of allocating adequate funding and resources for intervention programs currently delivered by non-government organisations

Indicators of progress

The favourable social indicators in Cook Islands reflect a long history of substantial government investment in health, education and welfare, and the benefits of a close association with New Zealand. The referral of patients within Cook Islands as well as New Zealand has developed to a level where Cook Islanders are able to access an almost complete range of medical and surgical services. The Cook Islands Health Strategy (2006) committed Government to report on a range of performance indicators and benchmarks. This includes 65 indicators covering four strategic goals: 1) to improve and protect the health of all Cook Islanders; 2) to encourage healthier lifestyles and safer environments; 3) to support community development; and 4) to strengthen infrastructure and health systems.2 The Ministry of Health’s Business Plan (2011) also lists a number of key outputs under the four core outputs of: community health services, hospital health services, outer island health services; funding and planning.12

Cook Islands also has to report on a number of Aid-funded projects, including UNFPA’s Strengthening Reproductive Health; the Global Fund’s Multi-Country Fight Against Tuberculosis and National STI and HIV Program; SPC’s Prevention and Control of Non Communicable Disease; and WHO’s Programmes of Technical Cooperation. As with many Pacific nations, considerable effort has gone into monitoring progress in achieving the Millennium Development Goals. As of 2010, Cook Islands is set to achieve goals related to child mortality and maternal health, however attention is required to deal with non-communicable diseases:

- **Reduce child mortality.** The under-five mortality rate reduced by 66% between 2001 and 2008. Infant mortality rates have also declined (from 9.8 per 1,000 in 2001 to 6.8 per 1,000 in 2008) and immunization rates also improved by 14% over the same period. However, children are still dying from preventable infectious diseases such as pneumonia, respiratory and digestive illnesses
- **Improve maternal health.** There have been no recorded maternal deaths since 1995, and 100% of births are attended by skilled health personnel
- **Combat HIV/AIDS, NCDs and other diseases.** There are no officially recorded cases of HIV/AIDS; however the low rate of condom use and increasing prevalence of sexually transmitted infections is of concern. Non-communicable diseases are a growing area of concern. In 2007, cardiovascular diseases were the leading cause-of-death (26%), followed by cancer, chronic respiratory diseases and diabetes (25% combined), and other chronic diseases (14%). The remaining 35% were attributed to communicable diseases, perinatal causes, injuries and ill-defined causes.26
References


