



# **The Cook Islands**

## **National Cancer Control Plan 2022-2027**

**Te Marae Ora Ministry of Health Cook Islands**

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## **Introduction**

Non-communicable diseases (NCDs) are the leading cause of premature illness, death and disability in the Cook Islands, the Pacific region, and globally. The burden of NCDs is accelerating with consequential non-sustainable escalating health system pressures and health care costs, further compounded by an ageing population.

This plan provides the impetus for the elevation of the cancer issue to a priority level aimed at creating interventions at all levels of the health system with particular emphasis on components of cancer care including prevention, early detection, diagnosis and treatment services and other needed health system support services.

Cancer control requires the involvement of all partners and stakeholders to work together for a common cause guided by a national cancer leadership structure, essentially the Clinical Governance Committee at Rarotonga Hospital.

The NCD and obesity epidemic in the Cook Islands is established but poorly quantified. Efforts to prevent, control and mitigate the impact of NCDs in current resource-constrained settings requires the prioritisation of innovative interventions to address the complex myriad of risk factors shared between cardiovascular disease, diabetes and cancer. Some of these risk factors are obesity/overweight, physical inactivity, alcohol consumption, smoking, and unhealthy diet.

Te Marae Ora has identified NCDs as one of five priority areas – others being health security, workforce development, digital health and mental health.

Regarding cancer specifically, as a WHO Member State the Cook Islands government has committed to elimination of cervical cancer as a public health problem within a century, by achieving three key targets by 2030, outlined in the Global Strategy to Accelerate Elimination of Cervical Cancer as a Public Health Problem.

The development of this plan further reflects the Cook Islands' commitments from the 13<sup>th</sup> Pacific Health Ministers Meeting: striving to improve cancer surveillance, screening, diagnostic, treatment and palliative care capacity. Te Marae Ora also supports appropriate collaborative approaches for cancer control at the regional, sub regional and country levels.<sup>1</sup>

## **Cancer control**

Cancer control in the Pacific region is poorly resourced. Most Pacific countries lack the human and technological resources to address the burden of cancer. In 2019, at the 13<sup>th</sup> Pacific Health Ministers meeting, the Pacific islands component of the Lancet oncology series on Cancer control in small island developing states was launched. The ministers committed to advocating

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<sup>1</sup> Outcome of the Thirteenth Pacific Health Ministers Meeting. Tahiti, French Polynesia 6-8 August 2019.

for appropriate collaborative approaches for cancer control including improving cancer surveillance, screening, diagnosis, treatment and palliative care capacity. The ministers also committed to implementing human papilloma virus (HPV) vaccination programmes as a priority.

The Hepatitis B vaccination and HPV vaccinations are both in the national immunisation schedule. To protect against cervical cancer in adulthood, the HPV vaccine is given in two doses to females beginning at nine years of age. Coverage of this vaccination is reported as being more than 80%. To achieve targets recommended in the Global Strategy to accelerate the elimination of cervical cancer as a public health problem, coverage will need to exceed 90% and be maintained.

The HBV vaccinations are given routinely at birth and the HPV vaccine is provided to all young girls in the Cook Islands with plans to extend this to young boys.

## **Summary of cancer in the Cook Islands**

According to registry data from the last five years, there are 180 records. Of this number there are 146 are malignancies.

The most common entry is skin cancers, including non-melanoma skin cancers (NMSC; 25.7%). For those which stage at diagnosis is known, 60.2% were diagnosed while the lesion was in situ or localised. Excluding NMSC, this figure drops to 45.5% so improved early detection can have considerable impact.

Only 25.2% of these (excluding NMSC) were diagnosed and treated in-country. Only one skin cancer patient was referred overseas – clearly NMSC are more easily detectable and treatable in the Cook Islands.

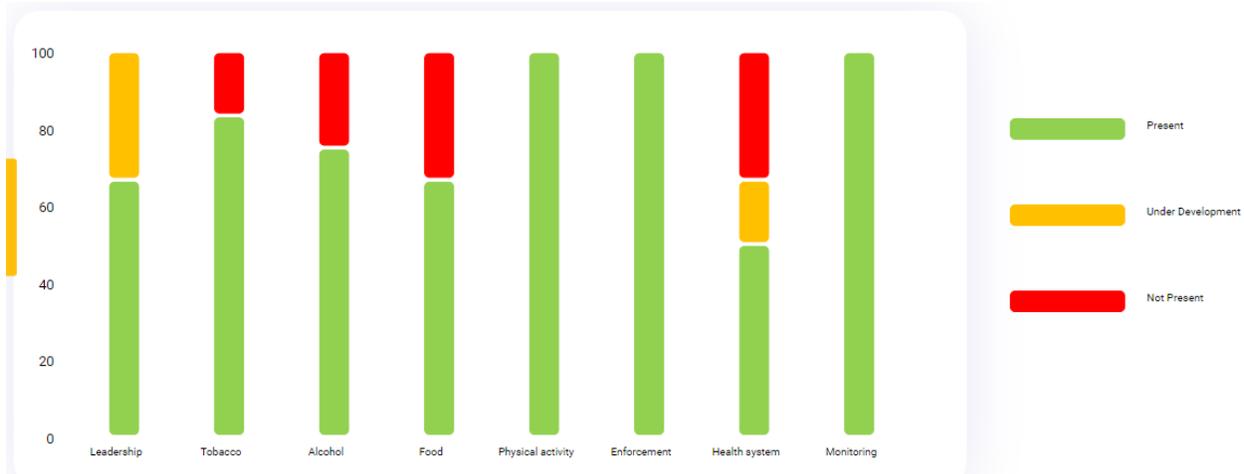
The other most commonly recorded cancers (excluding NMSC) were breast (26.6%), prostate (12.8%), uterine and lung cancers (both 9.2%) and colorectal cancer (2.8%). Cervical cancer is suspected to be under-reported as described below.

### **Prevention**

The Cook Islands has a reasonable suite of public health measures to maintain an environment which supports reduction of risk factors for cancer. Described in the Pacific MANA dashboard, the health system response measures which are classified as under development are relating to breastfeeding, which also has some impact on cancer prevention as it is estimated that breastfeeding reduces the risk of breast cancer by up to 28% in women who have breastfed for 12 months or more, cumulatively<sup>2</sup>.

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<sup>2</sup>Anothaisintawee T, Wiratkapun C, Lerdstitthichai P, et al. Risk factors of breast cancer: a systematic review and meta-analysis. *Asia Pac J Public Health*. 2013;25(5):368–387. doi: 10.1177/1010539513488795



Summary of status indicators across categories of NCD policy and legislation response measures, from Pacific MANA (<https://www.pacificdata.org/dashboard/health-dashboard/country/cook-islands>)

### Early detection

Te Marae Ora data shows that in the last five years, of malignancies with a known behaviour and stage (67% of all records), most malignancies are diagnosed in early stages (27.5% excluding NMSC). There are a higher than expected proportion of skin cancers in the registry, while very few cervical cancers, indicating suspicious data which needs dedication to improving systems for case detection and reporting. Furthermore, of those who died only 11% were diagnosed in early stages.<sup>3</sup> Stage at diagnosis is an important predictor of cancer outcomes.

The WHO estimates that in 2019, 569 women aged 30-49 were screened for cervical cancer using cytology at least once in their lifetime, representing 54% of this population. However, WHO guidelines recommend that women have cytology screening every three years, and the estimated proportion of women aged 30-49 who had a pap smear screening in the previous three years was 35%.

There are no documented guidelines, policies or plans surrounding screening programmes. While Te Marae Ora is guided by the New Zealand's policy for eligibility for cervical cancer screening there are plans to adapt these guidelines to the Cook Islands context. The adapted guidelines will be updated in light of changed global guidelines to progress the *Global Strategy to Accelerate the Elimination of Cervical Cancer as a Public Health Problem*, alongside guidelines for screening programme implementation to improve screening coverage and follow-up. Since there is little documented understanding of women's knowledge, attitudes and behaviours surrounding cancer screening, it may be useful to investigate these cultural factors and include provision for this in any policy-making.

### Diagnosis and treatment

Providing a definitive diagnosis for cancer is mainly done in New Zealand, so delays may be incurred from sending samples/tests or the patient overseas. The laboratory in Rarotonga is

<sup>3</sup> Data generated from MedTech records.

limited to biochemical studies (including PSA), so pap smear samples (using liquid-based cytology) are sent from health facilities to the laboratory and then forwarded overseas. The results return to the requesting physician and laboratory.

Pathology for cancer diagnosis is reported as being 'generally available'<sup>4</sup>, although this is understanding that there is no pathologist in the Cook Islands so tissue specimens must be sent to New Zealand for definitive diagnosis, adding to the diagnostic delay.

Diagnostic capacity is being improved within Cook Islands, evidenced by the introduction of computed tomography scanning in late 2020. Ultrasound is available in the Cook Islands, which supports breast cancer diagnosis. Criteria to outline eligibility for breast screening are used: ultrasound for women <40 years of age and annual mammography for women 40 to 60 years of age.

People in the Cook Islands who require advanced medical treatment benefit from free access to the health care system in New Zealand. As a result, tertiary care services in-country do not offer a large range of options and, furthermore, records of procedures that patients receive overseas are incomplete. The main hospital in Rarotonga offers basic therapeutic surgical procedures such as mastectomy, hysterectomy and lumpectomy. Reconstructive ability after these surgeries are limited and so patients might seek treatment in New Zealand. Treatment is readily available for most skin cancers. Between 2017 and 2022 97% of skin cancers received treatment in the Cook Islands, while only 25% of all other cases received in-country treatment in the same time period (4% unknown).<sup>5</sup>

The majority of patients with treatable cancer in the Cook Islands are referred overseas for treatment. The aim of the TMO is to have diagnosed patients sent to New Zealand within one month. In some cases, especially late presentations, one month needs to be reduced to get favourable treatment outcomes. In 2017 there were 153 overseas referrals, costing the Cook Islands Government NZ\$700,669; averaging NZ\$4,579 per patient. Compared to most other Pacific Islands nations this is low, because no treatment costs are required<sup>6</sup>.

### **Rehabilitation and palliative care**

In early 2022, Standard Operating Procedures were written for palliative care in the community, along with clinical guidelines for early identification of patient presenting with symptoms requiring palliative care. A registry of essential drugs for managing pain and respiratory

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<sup>4</sup> Data from: Progress on the prevention and control of noncommunicable diseases in the Western Pacific Region: country capacity survey 2019. Manila: World Health Organization Regional Office for the Western Pacific; 2021. Licence: CC BY-NC-SA 3.0 IGO.

<sup>5</sup> Data generated from MedTech records

<sup>6</sup> World Health Organization, Pacific Community and Nossal Institute for Global Health. Mapping of OMRS and VSMT in Pacific Island Countries: A pathway for Regional Cooperation towards UHC. 2019 [draft version] available from:  
[http://www.spc.int/DigitalLibrary/Doc/PHD/HOH/7\\_2019/IP\\_6\\_Item4\\_Technical\\_Report\\_Mapping\\_of\\_OMRS\\_and\\_VSMT.pdf](http://www.spc.int/DigitalLibrary/Doc/PHD/HOH/7_2019/IP_6_Item4_Technical_Report_Mapping_of_OMRS_and_VSMT.pdf)

symptoms has also been completed. A small number of clinical staff in TMO have had some training in New Zealand, but there is no formal palliative care group or association. This is likely, in part, due to patients receiving required rehabilitation in New Zealand, and/or returning directly from New Zealand to communities towards the end of life. There is growing stakeholder interest in establishing a respite care facility in the Cook Islands, made clear during consultations for this cancer plan.

### **Health system surroundings and support**

Information is a critical component to drive accurate decision-making in cancer control planning. Cancer case data is being collected in a MedTech-based register which has now developed to a point where specific software would be necessary to accommodate changes which move closer towards becoming a population-based cancer registry. The registry already collects most essential variables for a cancer registry, and others which are important for local use. However, the proportion of cases with missing data is high (31%) and the sources of information are not recorded. A deficiency which has been reported is the loss of patient details after overseas referral, especially if diagnosed overseas. As of 2022 TMO has implemented a policy of non-repatriation unless a discharge summary is available to TMO.

Disruptions in cancer services due to Covid-19 are being observed worldwide. In the Cook Islands, with strict travel bans enforced, OMR and repatriation becomes challenging. Some people requiring urgent treatment are waiting too long. The full effects of this are currently unknown, but it is expected that as a result of Covid-19 there will be a rise in mortality as patients are unable to access timely, comprehensive treatment. Morbidity is also expected to rise, as a result of ceased cancer screening and/or public reluctance to approach health care facilities.

There are important local partners that express interest in supporting implementation of this plan. Local non-government agencies such as Cook Islands Family Welfare Association (CIFWA), and Cook Islands Breast Cancer Foundation (CIBCF) support cancer awareness and encourage engagement with cancer screening.

## **The Cancer Control Plan**

### **Purpose**

The purpose of this document is to outline TMO's strategy and actions to prevent, control and manage the impact of cancer. The most common factors that contribute to the cancer burden are not fully known, without a fully functioning cancer registry – itself a key strategy in this plan. However, some key risk factors for the most prevalent cancers currently understood by the TMO are known and need immediate action, while health system changes can improve the successful management of cancers.

### **Vision**

All people living in the Cook Islands to live healthier lives and achieving their aspirations.

## **Mission**

To be the premier provider of quality and equitable health care services for cancer

## **Aim and overall goals**

To reduce the burden of morbidity, mortality and disability due to cancer, in order to achieve the national health vision for *All people living in the Cook Islands to live healthier lives and achieving their aspirations*. This will be achieved by:

1. Significantly increased population understanding signs and symptoms of priority cancers (endometrial, prostate, breast, cervix and colorectal) and reduced hesitancy to seek health care as measured by population survey<sup>7</sup>
2. Reduced prevalence of priority cancers (and cervical precancer) by 25% by 2027 through health promotion and prevention activity
3. Increased proportion of cancers presenting in situ or localised to site of origin by 25% by 2027
4. Reduced mortality from cancer by 25% by 2027

## **Values**

- Partnerships, participation, cross-sectoral action, and accountability
- Universal health coverage
- Equity-based approach to reverse health disparities
- Right to Health
- Evidence-based strategies and best practice
- Guard against conflicts of interest

## **Principles**

- Cancer control needs should have organised governance and administrative arrangements for cancer services including legal and regulatory requirements
- Long-term strategies for capacity building and human resource development must be present
- Scaling up cancer prevention is one of the most important and effective ways to address the burden of cancer in the Cook Islands
- Establishment of screening and early detection interventions must be within the mechanisms of the entire health care system, not operating independently
- Strengthening a system to deliver palliative care services will improve independence and productivity
- The data collected by cancer registry is critical to accurate national planning and decision-making.
- Maximum population health impact with efficient, effective community engagement cannot be achieved without trusted partnerships with other agencies.

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<sup>7</sup> Baseline measurement to be in Cook Islands STEPS survey report 2023

## Strategic Actions

The Cancer Control Plan provides a range of actions with health impact and targets identified. There are six Strategic Action Areas with actions, outcomes, and impact on cancer control.

Strategic Action Area	Objective	Impact	Indicative costing
Health promotion, health literacy and community empowerment	Reduce the incidence of preventable cancers through primary prevention and health promotion	Reduced prevalence of lifestyle-related cancers and cervical cancer	10K
Early detection	Increase the proportion of cancers diagnosed in early stages (SEER summary stages 0 and 1); and include cancer screening within a national health screening unit	Improved survival and reduced morbidity from breast and cervical cancers	100k
Diagnosis	Objective 3: Reduce the time between referral from PHC to receiving definitive diagnosis	Earlier diagnosis of cancers and earlier action on diagnosis	10k
Treatment	Build an evidence base and plan to support the development of appropriate treatment capacity over 10 to 15 years	Appropriately implemented cancer treatment services in 10-15 years	See referral cost
Palliative care	Provide quality end of life care for palliative patients	People with terminal disease remain independent and productive longer	100k
Health system	Implement effective legislation and policy for safer and healthier environments	Reduced prevalence of preventable cancers	50k
	Improve cancer data management through upgrading cancer registration systems	Ability to make evidence-based, informed decisions in national planning, resource mobilisation and advocacy inter alia.	50k

	Cancer control sustainability throughout health emergencies	Public health emergencies having little impact on invasive cancer diagnoses and treatment outcomes (morbidity and mortality)	50k
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## Strategic action area 1: Health promotion, health literacy and community empowerment

### Objective 1: Reduce the incidence of preventable cancers through primary prevention and health promotion

Actions	Indicator	Baseline	Targets	Timeframe	Output	Outcome	Impact	Responsible
<b>Social marketing campaign for physical activity</b>  <b>Include healthy lifestyles in education curriculum</b>  <b>Mandatory labelling of unhealthy foods</b>	Prevalence of adults with BMI $\geq$ 30	69.8% (STEPS 2013-15)	No increase	2026	Increased physical activity  Greater awareness of healthy diets and unhealthy food products	Reduced prevalence of obesity and sedentary behaviour	Reduced prevalence of obesity-related cancers including priority cancers: endometrial, breast, colorectal cancers	Manager Health Promotion in collaboration with CIBCF and CIFWA
<b>Create a package of cancer awareness multimedia available for use in multiple public health programmes and broadcast, with training on use if necessary, for priority cancers</b>	Proportion of population understanding signs and symptoms of priority cancers	Baseline knowledge, attitude, practice (KAP) survey to be conducted 2022 in STEPS	Statistically significant increase measured by KAP survey	2024	Package of cancer awareness multimedia available for use	The public have greater awareness of cancer, prevention, signs, symptoms and action to take.	Reduced prevalence of cancers including priority cancers: endometrial, breast, prostate, colorectal cancers  Increased early-stage presentations	

<b>Alcohol control policy</b>	Existence of policy	No	Yes	2022	Strengthened governance and regulation of alcohol control	Reduce harmful use of alcohol	Reduced prevalence of alcohol-related cancers including priority cancers: colorectal and breast cancer	Manager Policy and Planning
<b>Organised outreach programme to cover girls not in school</b>	Percentage of eligible girls aged 15 fully covered by 2-dose HPV vaccination	85% <sup>1</sup>	95% 100%	2024 2027	HPV vaccination programmes access all eligible girls and boys in Cook Islands	Increased coverage of HPV vaccinations	Reduced incidence of cervical cancer, on track for elimination by 2022	Community Nurse Manager
<b>Mandatory annual reporting of HPV coverage.</b>	Percentage of eligible girls in school covered by 2-dose vaccination	85%	No decrease	2027				Charge nurse Public Health
<b>Expand HPV vaccination programme to include young boys</b>								
<b>Maintain high coverage for girls in school</b>								

<b>Annual cancer awareness campaign to improve early presentation of priority cancers (cervix, breast, endometrium, colorectal, prostate)</b>	Proportion of presentations to clinics which patients are concerned with cancer	-	10%	Within 3 months after campaign	General population are more aware about the signs/symptoms of cancer and are less hesitant to seek health care	Increased number/proportion of cancer diagnosed in early stages	Improved survival from cancer and decreased morbidity	Manager Health Promotion
<b>Review and operationalise a tobacco control action plan</b>	Rating of tobacco preventive policy response	83% (MANA dashboard)	100%	By December 2023	Strengthened governance and regulation of tobacco control	Reduced prevalence of current tobacco users	Reduced prevalence of tobacco-related cancers.	Manager Policy and Planning
<b>Targeted public awareness campaign for sun smart behaviour.<sup>2</sup></b>	Incidence rate of malignancies coded 44_ with any morphology	46.8/100,000	25% decrease (35.1/100,000)	2027	Greater awareness of harms of solar radiation and sun smart behaviour		Decrease incidence of skin cancers, particularly basal cell and squamous cell carcinoma	Manager Health Promotion

<sup>1</sup> Official TMO estimate from: <https://www.who.int/teams/immunization-vaccines-and-biologicals/immunization-analysis-and-insights/surveillance>

<sup>2</sup> This action is targeted towards a high-risk group of the population, guided by evidence from the cancer registry.

## Strategic action area 2: Early detection

**Objective 2: Increase the proportion of cancers diagnosed in early stages (SEER summary stages 0 and 1); and include cancer screening within a national health screening unit**

Actions	Indicator	Baseline	Targets	Timeframe	Output	Outcome	Impact	Responsible
<b>Train clinicians to teach Breast Self-Examination (BSE)</b>  <b>Public awareness campaign about breast cancer and BSE</b>	Number of women aged 40+ reporting doing a BSE in the last month	0	Increase by 50%	2027	More clinicians routinely teaching women to do BSE  General public awareness about breast cancer improves; stigma reduces  More women performing own BSE	More women conducting breast self-examination  Benign or malignant lesions being detected at early stages	Improved survival from breast cancer Reduced morbidity from cancer treatment	Manager Community Nursing  Health Promotion Manager
<b>Establish an organized cervical cancer screening programme, including:</b>  <b>Update cervical cancer screening policy and guidelines</b>	Proportion of eligible women screened for cervical cancer  Proportion of eligible women screened for HPV twice in their lifetime	Currently 50%  10%	80%  50% 70%	2027  2025 2027	All women with access to regular cervical cancer screening, as per a plan  Cervical cancer screening policy and guidelines developed to define the plan	Increase the coverage of an organized cervical cancer screen and treat programme  Eligible pre-cancers being treated, suitable	Improved survival from cervical cancer  Reduced prevalence of cervical cancer, on track for elimination (70% screening coverage by age 35 and 45, and	Manager Community Nursing  Manager Policy and Planning  Director Hospital Health Services

<p><b>Create and enact screening implementation plan.</b></p> <p><b>Establish reporting pathways and screening tracking system</b></p>	<p>Proportion of screen-positive tests receiving point-of-care treatment</p>	<p>0</p>	<p>50%</p> <p>90%</p>	<p>2025</p> <p>2027</p>	<p>Registration and call-back method in use, M and E data being collected and reported</p>	<p>referral for others</p> <p>Cervical cancers, pre-cancers being detected at early stages</p>	<p>90% coverage of treatment for those who need it)</p> <p>Reduced morbidity from treatment</p>	
<p><b>Establish a comprehensive cancer screening unit covering cervical, breast, prostate, skin and colorectal cancers, with: dedicated HR, budget, data management system, reporting pathways and KPIs</b></p>	<p>Proportion of eligible populations (to be defined) receiving screening as per protocol</p>	<p>TBD</p>	<p>Increase by 10%</p>	<p>Annually</p>	<p>Human resources dedicated to coordinating cancer screening</p> <p>Organised screening programmes for each cancer type.</p> <p>Consolidated cancer screening monitoring and recall.</p> <p>Single point of responsibility for resourcing to screening services.</p> <p>Enhanced coordination with NGO partners.</p>	<p>Proactive monitoring and action on follow-up and referrals</p> <p>Service delivery synchronised with public awareness</p> <p>Higher quality M&amp;E of screening activities</p> <p>More consistent resources available</p> <p>Effective supplies management</p>	<p>Health system is supported to detect cancers early</p> <p>Health system is responsive to quick follow-up and referral</p> <p>People have more consistent access to testing</p> <p>Cancers are detected at early stages</p>	<p>Director Hospital Health Services</p>
	<p>Number of Primary Healthcare centres who routinely conduct screening for breast, cervical and prostate cancers</p>	<p>0</p>	<p>100%</p>	<p>2025</p>				<p>Director Primary Healthcare</p>
	<p>Nationwide cancer screening policy and plan</p>	<p>-</p>	<p>In use</p>	<p>2024</p>				<p>Manager Policy and Planning</p>

	Proportion of patients for follow-up who are successfully rescreened or referred.	-	Increase by 10%	Annually	Coordinated, standardised training for PHC staff.			Director Hospital Health Services
	Proportion of eligible people registered in screening systems	-	80%	2027				
<b>Monitor and improve supply chains for testing equipment and consumables</b> <b>Public awareness campaign for screening programmes</b>	Number of PHC providers who routinely conduct screening for breast, cervical and prostate cancers	0	100%	2025	Testing and asymptomatic screening services are readily available at PHC clinics when patients require.	Increased uptake of screening in PHC settings.	Earlier diagnosis of cancers  Improved survival from cancer	Director Hospital Health Services  Health Promotion Manager
<b>Ensure early detection tests available at all health care facilities: FOBT, PSA/DRE, CBE and BSE education, VIA, pap smear and HPV testing</b>	Number of tests being requested and processed	Unknown (Pap smear 53 in 2015)	Increase for each test type	Increase annually	Range of tests available at all healthcare facilities	More people receiving cancer testing earlier	Earlier diagnosis of cancers  Improved survival from cancer	Director Hospital health Services

## Strategic action area 3: Diagnosis

### Objective 3: Reduce time between referral from PHC to consultation with specialist

Actions	Indicator	Baseline	Targets	Timeframe	Output	Outcome	Impact	Responsible
<p><b>Promoting indications and limitations of use of CT scanning to prescribing physicians</b></p> <p><b>Training biomedical technicians, engineers</b></p>	Number of diagnostic scans for suspected cancers requested and completed per month (and proportion of total requests)	None	Any increase	Increasing annually	<p>Increased requests for CT scanning to diagnose or stage suspected cancers</p> <p>Decreased CT scanner downtime from malfunction or maintenance</p>	Increasing usage of CT scanner for suspected cancers	Earlier diagnosis of cancers and earlier action on diagnosis	Director Hospital Health Services
<p><b>Introduce fast-track protocols (clinical and administrative) to prioritise suspected cancers</b></p> <p><b>Provide equipment, training and partnerships for tele-diagnosis (both pathology and radiology)</b></p>	Average time (days) from any test being performed for cancer to result available to physician.	2 weeks	5 days	2023	<p>Fast-track referral system developed and utilised</p> <p>Tele-diagnosis system operating</p>	Reduced diagnostic delay in tertiary services		Director Hospital Health Services
<p><b>Improve clinical/referral guidelines to reduce barriers to quick referral</b></p>	Use of guidelines for clinical management and referral pathways of suspected cancers from PHC to treatment	Not available	Operational	2023	Clinicians and health system administration have shared understanding of the urgency to act on suspected cancers and how to do so.	Patients with suspected cancers move from first encounter to definitive diagnosis (even if it is overseas) quicker.		Director Hospital Health Services

## Strategic action area 4: Treatment

### Objective 4: Build an evidence base and plan to support the development of appropriate treatment capacity over 10 to 15 years

Actions	Indicator	Baseline	Targets	Timeframe	Output	Outcome	Impact	Responsible
<b>Conduct situational analysis of cancer diagnostics, treatment and palliative care (including cancer management in New Zealand)</b>	Situational analysis covering all cancers and services	None	Complete	2022	Situational analysis of cancer diagnostics, treatment and palliative care	Evidence base for informed decision-making regarding treatment capacity development	Appropriately implemented cancer treatment services in 10-15 years	Director Hospital Health Services
<b>Define goals for cancer diagnostics, treatment and palliative care</b>	Cancer diagnostics, treatment and palliative care goals agreed with specified timeframe	None	Complete and endorsed	2023	Roadmap to cancer treatment in the Cook Islands	TMO able to follow a sustainable approach to treatment service development and implementation.		Director Hospital Health Services Director Primary Healthcare
<b>Maintain prompt overseas referral to achieve cervical cancer elimination initiative targets</b>	Proportion of women diagnosed with invasive cervical cancer receiving appropriate treatment	Unknown	100%	2025	Women are promptly referred overseas for treatment	Women receive appropriate treatment and care for cervical cancer	Improved survival from cervical cancer, on track for elimination by 2120 <sup>8</sup>	Director Hospital Health Services

<sup>8</sup> 90% coverage of treatment for those who need it by 2030

## Strategic action area 5: Palliative care

### Objective 5: Provide quality end of life care for palliative patients

Actions	Indicator	Baseline	Targets	Timeframe	Output	Outcome	Impact	Responsible
<p><b>Create an awareness campaign on the benefits of palliative care and services<sup>1</sup></b></p> <p><b>Support palliative care patients and their families returning to the Cook Islands<sup>1</sup></b></p> <p><b>Training for PHC workers on palliative care pain management and counselling in the context of the WHO PEN practice points</b></p>	Proportion of PHC workers able to deliver pain management and counselling for end of life care	1%	50%	2027	<p>Raise awareness of palliative care services for families of patients</p> <p>PHC workers understand pain management and counselling for palliative care</p>	People with terminal illness have continuous access to pain relief and home-based care.	People with terminal disease remain independent and die with dignity	HHS/Primary Care
<b>Increase amount and access to funding for caregivers</b>	Value of disbursements to caregivers per capita per year	Minimum wage: NZ\$17,680	NZ\$18,720 NZ\$19,760	2024 2027	Fewer carers experiencing financial hardship	Greater finance and resources available for people at end-of-life	Higher quality end-of-life and dignity for people living with cancer	
<b>Establish operational in-country respite care facility</b>	Utilisation of respite care places (% places filled per month)	-	90%	2027	Respite care service in Cook Islands	High quality supportive care service used while carers are unavailable.		

<sup>1</sup> As per Cook Islands Palliative care plan 2020

## Strategic action area 6: Health system setting

### Objective 6: Implement effective legislation and policy for safer and healthier environments

Actions	Indicator	Baseline	Targets	Timeframe	Output	Outcome	Impact	Responsible
<b>Reviewed Public Health Act (PHA 2004) to address health promotion and NCDs</b>	NCD and health promotion clauses added to the PHA	Draft only	Final approved	2024	NCD and Health Promotion legislation ratified in the Public Health Act	Strong legislation and policy for safer and healthier environments	Reduced prevalence of cancers: including priority cancers of the breast, cervix and colon.	Director Public Health
<b>Conflict of Interest Register for NCD committees</b>	Establish four Conflict of Interest registers for NCD taskforce and Vaka committees	Draft only	Final approved	2024	Conflict of Interest registers for NCD taskforce and Vaka committees operational	Effective management of Tobacco, alcohol and food industry interference in NCD committees		
<b>Tobacco Control Plan updated</b>	Review Tobacco Control Plan, Tobacco Products Control Amendment Bill 2021	Draft only	Final approved	2024	Effective tobacco control actions implemented	Exposure to alcohol and unhealthy diets as a risk factor for cancer decreases		
<b>Tobacco Products Control Amendment Bill 2021</b>	Amendment Bill 2021				Effective legislative tobacco products control implemented			Manager Policy and Planning
<b>Develop an alcohol control action plan</b>	Percentage of people who are current drinkers	46.2% (STEPS)	40% 35%	2025 2027				
<b>Cook Islands Dietary Guidelines, food and nutrition policy</b>	One Cook Islands Dietary Guidelines 2022-2025	0	Completed and 50 health staff oriented to correct use	2024	Changes knowledge, attitudes and practices regarding diet and alcohol consumption			

**Objective 7: Improve cancer data management through upgrading cancer registration systems**

<b>Actions</b>	<b>Indicator</b>	<b>Baseline</b>	<b>Targets</b>	<b>Timeframe</b>	<b>Output</b>	<b>Outcome</b>	<b>Impact</b>	<b>Responsible</b>
<p><b>ICD-O coding by “clinical registrars”</b></p> <p><b>Conduct clinician training on data recording</b></p> <p><b>Begin collecting information source details</b></p>	Percentage of entries per year with unknown data items in the IARC minimum data set.	100%	20% 5%	2023 2027	Full and accurate details on incoming cancer case information (from local or NZ sources)	Complete cancer registry data	Ability to make evidence-based, informed decisions in national planning, resource mobilisation and advocacy inter alia.	<p>Manager policy and Planning</p> <p>Supervisor Health Information Systems</p>
<p><b>Per 2022 Cancer registry development plan:</b></p> <ul style="list-style-type: none"> <li>• <b>Improve CanReg 5</b></li> <li>• <b>Create SOPs/guidelines for the registry system</b></li> <li>• <b>Training</b></li> <li>• <b>Monitor data returning from New Zealand</b></li> <li>• <b>Draft CanReg output report</b></li> </ul>	Number of development actions in the cancer registry development plan complete	0	3 of 5 4 of 5 5 of 5	Q1 2023 Q2 2023 Q4 2023	<p>Operational cancer registry in CanReg 5</p> <p>Documented SOPs &amp; guidelines for case ascertainment and data abstraction procedures. Regular reports from cancer registry</p>	<p>Better local data capture and management systems</p> <p>Improved understanding of cancer burden and responses</p> <p>Improved understanding of cancer outcomes after referral</p>		

### Objective 8: Reduce the impact of public health emergencies on cancer control

Actions	Indicator	Baseline	Targets	Timeframe	Output	Outcome	Impact	Responsible
<p><b>Maintain screening and testing availability</b></p> <p><b>Public awareness campaigns on importance of cancer screening during and immediately following natural disasters</b></p>	Percentage reduction in cancer testing during public health emergencies (if any)	No baseline	0%	Ongoing	Fewer undetected cancers during public health emergency periods	Cancers & precancers being detected at early stages	Public health emergencies having little impact on cancer treatment outcomes (morbidity and mortality)	Manager Health Promotion

### Objective 9: Effective teamwork for plan implementation

Actions	Indicator	Baseline	Targets	Timeframe	Output	Outcome	Impact	Responsible
<b>Establish a multisectoral cancer control committee.</b>	Number of meetings per year	-	4	Annually	Central point of decision-making and intelligence in TMO activity to address cancer.	Oversight of operation; coordinated, synchronised implementation	Cancer control plans are implemented with maximum effectiveness.	Manager Policy and Planning
<b>Engage with supportive partner organisations such as: CIFWA, CIBCF</b>	Number of Memoranda of Understanding with non-government agencies	-	2	2025	Agreements to work with non-government agencies on cancer control	Shared resources and responsibility	Greater reach and visibility of cancer control efforts	Manager Policy and Planning

## Monitoring and Evaluation Framework for the Plan

Overall goals	Proportion of population understanding signs and symptoms of priority cancers	Baseline KAP survey to be conducted 2022 in STEPS	Statistically significant increase measured by KAP survey	2027	Manager Policy and Planning
	Prevalence of cervical cancer/100,000 woman-years	Unknown baseline*	Decrease by 25%	2027	
	Cytology test positivity for CIN, any grade	14%	Decrease by 50%	2027	
	Proportion of cervical, breast, prostate, endometrial & colorectal cancers diagnosed in situ or localised to site of origin	36% (HIU 2018-20)*	50% 60%	2025 2027	
	Mortality from cancer	17% (HIU 2016)	13%	2027	
<b>Prevention objective:</b> Reduce the incidence of preventable cancers through primary prevention and health promotion	Combined incidence rate of priority cancers (cervix, breast, endometrium, bowel, prostate)	114.8 /100,000* (HIU 2018#)	Reduction by 20% (91.8/100,000)	2025	
<b>Early detection objective:</b> Increase the proportion of cancers diagnosed in early stages (SEER summary stages 0 and 1); and include cancer screening within a national health screening unit	(See also overall goal 3)  A health screening unit is established and staffed in TMO, overseeing TMO cancer screening programmes, collecting M and E data and reporting to Permanent Secretary	None	Established, quarterly reports being published publicly	2023	
<b>Diagnosis objective:</b> Reduce the time between	Percentage of people diagnosed with a malignancy initiating	Unreported	Increase by 25%	2025	

referral from PHC to consultation with specialist	treatment or referred overseas within 2 weeks of diagnosis.				
<b>Treatment objective:</b> Build an evidence base and plan to support the development of appropriate treatment capacity over 10 to 15 years	10-15 year roadmap to cancer treatment in Cook Islands	None	Completed and endorsed	2023	
<b>Palliative care objective:</b> Provide quality end of life care for palliative patients	Proportion of palliative care patients with constant access to required pain relief, including opioids	No baseline	Increase by 25%  100%	2023 2025	
<b>Health systems objective 6:</b> Implement legislation and enforce policies for safer and healthier environments	NCD policy response measures for tobacco, alcohol and food having MANA 2 stars or above	5 of 16	16 of 16	2027	
<b>Health systems objective 7:</b> Improve cancer data management through upgrading cancer registration systems	Number of quarterly reports issued by cancer registry	None	4 per year	End 2023	
<b>Health systems objective 8:</b> Reduce the impact of public health emergencies on cancer control	Average time from first presentation at health facility to recorded incidence date (per cancer registry)	No baseline	No reduction	At any time during plan period	
<b>Health systems objective 9:</b> Effective teamwork for plan implementation	Formal partners of TMO contributing to NCCP activities <i>and</i> returning monitoring information	-	Any	2025	

\*Baseline is uncertain: it is assumed that diagnoses are being made in New Zealand and information not returning to Cook Islands. Current data suggests between 11 to 45/100,000 woman-years for cervical cancer.

#2018 data used in order to capture data for all cancers (no malignant cervical cancer reported in 2019)