



National Screening Unit

Strategic Plan
2003–2008



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Foreword

The National Screening Unit has developed a clear vision for the future:

“Saving lives, reducing inequalities, and building the nation’s health by leading the delivery of screening programmes, uncompromising in their quality, and trusted by the communities we serve”.

This 2003-2008 Strategic Plan will guide us towards realising the vision over the next five years. Much has been achieved in the past, from the early work done by groups and individuals, action following the 1988 Cartwright Inquiry, to the establishment of the National Screening Unit (NSU) in 2001. Concurrently, many changes have occurred in the New Zealand health system.

Our work will focus on the achievement of two key outcomes – health improvement and reducing inequalities – through delivery on three strategic objectives; sustainability, maximising benefits, and building understanding. Six key areas of work will contribute to the accomplishment of these strategic objectives.

The NSU is committed to implementing this Strategic Plan over the next five years. We are likely to face a number of key challenges over the period, and these have informed the development of this plan. The document provides a structure within which we can respond to issues that arise and drive forward toward our vision.

The delivery of safe and effective screening programmes requires the combined efforts of many individuals and organisations. This strategy represents a commitment by the NSU to continue to work in partnership with all stakeholders to deliver, develop, and further build upon the gains already achieved by these programmes. In particular, we will work in partnership with Māori to ensure that screening programmes are reducing health inequalities between Māori and non-Māori.

We welcome your interest and involvement in working together to improve the nation’s health through the delivery of quality screening services in Aotearoa New Zealand.

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Mihi

“Whakarongo ki te tangi o te manu

Tui, tui, tuituia!

Tuia ki runga, tuia ki raro

Tuia ki roto, tuia ki waho

Ka rongo te ao, ka rongo te pō

Tuia te muka tangata i takere mai

i Tawhitinui, i Tawhitiroa, i Tawhiti pamamao

Hui te mārāma, hui te ora e!”

Tēnā koutou i runga i ngā aitua o te wā.

Kō rātou te hunga i hikoingia atu rā ki tua o Paerau.

Rātou mai i Te Hiku o Te Ikanui a Maui Tikitiki a Taranga, tae noa ki tōna Upoko, whakawhiti atu ra i Raukawa moana ki te Wāhi Pounamu, ki Murihiku, whakarere tonu rā ki Te Wharekauri.

Nō reira, haere atu ra koutou katoa te hunga kua tiraha mataotao noa, moe mai ra, okioki ai.

Ko koutou ki a koutou, ko tātou ka mau tonu i ngā moemoeā o koutou mā ki a tātou

Tēnā tātou katoa!

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Executive Summary

“Saving lives, reducing inequalities, and building the nation’s health by leading the delivery of screening programmes, uncompromising in their quality, and trusted by the communities we serve”.

This Strategic Plan outlines the way in which the NSU vision (above) will be realised over the years 2003-2008.

The NSU vision aligns with the strategic direction of the New Zealand Health Strategy and assists in working toward its aim of improving health and reducing health inequalities, particularly for Māori, and for Pacific peoples and building the health of all New Zealanders.

Screening programmes aim to reduce the risk of developing or dying from a particular disease, even though they are not always a guarantee of prevention or cure to the individual. This strategic plan outlines a coordinated approach to reducing the burden of breast and cervical cancer through screening programmes in order to achieve two strategic outcomes: health improvement and reduced inequalities. Three strategic objectives support these outcomes; sustainability, maximising benefits, and building understanding. There are six key areas for action; service development, partnership and understanding, overall management, research and development, quality improvement and workforce development, which will be the focus of NSU efforts towards achieving its strategic objectives. An explicit recognition of the Treaty of Waitangi in our work, combined with a constant focus on providing leadership for the screening sector, will help us realise the vision. Figure 1 shows the relationship between these various components.

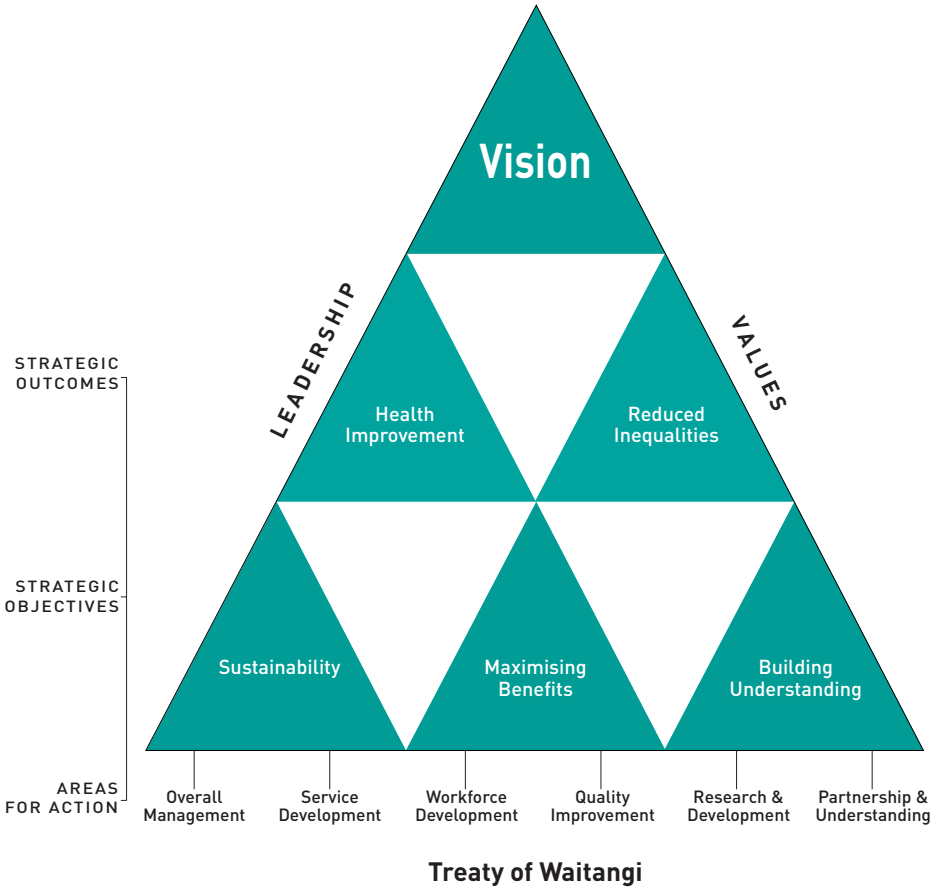
This strategic plan will help create an environment that encourages partnership between the various stakeholders, communities and participants involved in screening to ensure the best possible outcomes. The NSU will seek to provide opportunity for all eligible people, particularly those who are Māori, or who are Pacific, to participate in organised screening programmes that best meet their needs. This includes working with the sector to plan, fund, deliver and monitor screening programmes from a population health perspective. Screening programmes must be of high quality to ensure that the benefits are maximised and potential harms are minimised. Important activities include quality assurance and improvement, workforce development to maintain a skilled and responsive workforce, and ongoing assessment of outcomes and costs.

Sustainable, well-supported screening programmes are people-centred, safe, effective, and a good use of health care resources.

The achievement of the NSU’s strategic objectives will be achieved by the continued efforts of a capable national organisation with clear national direction where the day to day operation is carried out effectively and efficiently. To ensure successful implementation this strategic plan will align with annual business planning, budgets and key performance indicators. Activities and achievements will be published in annual review documents and monitoring reports.

Building upon the knowledge and expertise that the NSU possesses in relation to the cancer screening programmes, the NSU is in an appropriate position to provide ongoing national leadership, oversight and coordination of organised screening programmes within New Zealand.

FIGURE 1:
THE NATIONAL SCREENING UNIT STRATEGIC FRAMEWORK



The aim of screening is to reduce the number of people suffering and/or dying from a specified health condition. New Zealand has two organised cancer screening programmes, the National Cervical Screening Programme (NCSP) and BreastScreen Aotearoa (BSA). Nationally, these two programmes are under the stewardship of the National Screening Unit (NSU), an autonomous unit within the Public Health Directorate of the Ministry of Health.

The NSU has adopted a definition of screening based upon that of the National Screening Committee of the United Kingdom, and adapted by the New Zealand National Health Committee.

'Screening is a health service in which members of a defined population, who either do not necessarily perceive they are at risk of, or are already affected by a disease or its complications, are asked a question or offered a test, to identify those individuals who are more likely to be helped than harmed by further tests or treatment to reduce the risk of a disease or its complications'. (*National Health Committee 2003*)

In order for a screening programme to be successful, a coordinated approach is required. The essentials of such an approach include clear lines of accountability, high quality service provision, effective monitoring of defined policy and quality standards, the timely availability and appropriate integration of screening services with diagnostic and treatment services, and high levels of programme enrolment and participation. In addition, it is important to identify priority groups who are most likely to benefit from screening and to ensure that the programme is accessible to these groups.

1.1 Purpose of this plan

The purpose of this strategic plan is to outline how the NSU will contribute toward the particular population health goals and objectives that have been outlined by the Government within the New Zealand Health Strategy (Ministry of Health 2000), namely:

- reduce the incidence and impact of cancer
- reduce inequalities in health status
- encourage healthy lifestyles
- achieve better physical health
- ensure accessible and appropriate health care services.

Screening programmes are population health programmes. In its work, the NSU defines population health as “the health outcomes of a group of individuals, including the distribution of such outcomes within the group.” The scope of population health includes the definition and measurement of health outcomes, patterns of determinants that influence such outcomes, and the policies that influence the optimal balance of determinants (Kindig and Stottart 2003).

This strategic plan will ensure the sustainability of the core functions of the NSU for the next five years to assist the NSU to progress toward achieving its vision and thus improve the health of the nation. The plan prioritises core business and developmental work in order to minimise the impact of external pressures on the completion of such work. In subsequent years it will inform business planning and budget processes.

1.2 The National Screening Unit's vision, strategic outcomes and key objectives

The NSU vision is:

"Saving lives, reducing inequalities, and building the nation's health by leading the delivery of screening programmes, uncompromising in their quality, and trusted by the communities we serve".

This vision will be realised over the five-year period 2003-2008 by the achievement of two strategic outcomes, improving health and reducing inequalities. These strategic outcomes align with the government's commitment to health. They will be achieved through a focus on three strategic objectives: sustainability, maximising benefits, and building understanding, each of which incorporate areas for action. The six key areas for action are:

- service development
- workforce development
- overall management
- quality improvement
- research and development
- partnership and understanding.

The strategic framework for achieving the vision is underpinned by a commitment to the Treaty of Waitangi (Figure 1). The framework enables the NSU to provide a nationally consistent and systematic focus for the screening programmes for which it has stewardship.

1.3 The National Screening Unit's role and function

1.3.1 RESPONSIBILITY AND ACCOUNTABILITY

In November 2000, the Director General of Health approved the establishment of the NSU with particular responsibility for the national operational function and strategic management of the two current cancer screening programmes, the NCSP and BSA. It became operational in July 2001. The NSU's accountabilities for these programmes are in line with the key organisational requirements for the delivery of successful population-based screening programmes, as determined by the World Health Organization (WHO) (Wilson and Jungner 1968).

Each year the Ministry of Health agrees a set of outcome measures with the Minister of Health as set out in the Statement of Intent. The NSU is responsible for specific outcome measures (Output Class D10 – Management of National Screening Programmes) related to breast and cervical screening and these are reported on quarterly.

1.3.2 CORE FUNCTIONS

Implementation of this strategic plan will ensure delivery of the core functions of the NSU, which are to:

- provide national leadership and strategic direction for specific screening programmes
- provide advice to Government regarding screening programmes
- ensure development and management of nationally consistent policy and quality standards for national screening programmes
- develop and manage effective national health promotion, recruitment and retention strategies for national screening programmes
- provide national monitoring, audit, evaluation and quality improvement processes for national screening programmes
- monitor, analyse and review international experience of screening programmes and advances in detection and treatment approaches on an ongoing basis
- maintain effective and efficient information systems supporting all aspects of programme operations and monitoring
- facilitate effective communications with all screening programme participants and stakeholders
- purchase programme services in accordance with provider agreements and robust financial and contract management
- develop and maintain nationally high levels of competency and expertise in screening programmes
- administer the legislation and regulations related to screening programmes.

2.1 Screening

Screening is an important part of the disease prevention continuum. Three widely-accepted levels of disease prevention are:

- primary prevention, which aims to stop a disease developing in the first place, i.e. reduce its incidence
- secondary prevention, which aims to detect and treat actual disease or its precursor in pre-symptomatic individuals, i.e. reduce its prevalence
- tertiary prevention, which involves preventing complications of established disease and minimising disability through appropriate treatment and care, i.e. reduce the number and severity of complications.

Screening occurs at each level of prevention but is most commonly a secondary prevention activity. Screening reduces the risk of disease or its complications through early detection and treatment but is not a guarantee of prevention, or diagnosis and cure. Thus, for example:

- the breast screening programme reduces the risk of dying from breast cancer
- the cervical screening programme reduces the risk of developing and dying from cervical cancer.

Screening has become a common health care activity and there are several reasons why it is being paid increasing attention (National Health Committee 2003):

- its potential to improve public health
- the (usually) fine balance between benefits and harms
- the need to demonstrate cost-effectiveness and fair access
- the increasing focus on an informed decision by participants.

Health professionals and the community commonly believe that 'early diagnosis' of disease is beneficial and therefore screening will invariably be effective. However, it cannot be assumed that each individual who is screened or diagnosed within a screening programme will benefit from their participation. Rather, sufficient lives will be altered by the early detection of the disease, thus resulting in a significant improvement in the health outcomes for the overall population in question (Cancer Council of Australia 2001).

2.1.1 SCREENING PROGRAMMES AND OPPORTUNISTIC SCREENING

The NSU has adopted the definitions and terminology agreed by the National Health Committee (National Health Committee 2003). Screening refers not only to the initial test but also the sequence of events that comprise the screening pathway. Screening occurs in two ways – through screening programmes and opportunistically.

Screening programmes are population health programmes and, as such, they are planned, funded, delivered and monitored from a population health perspective. Thus, screening programmes have resources committed to the development, implementation, monitoring and evaluation of all aspects of the programme, from the identification of the population at risk, to the diagnosis of the disease or its precursor in certain individuals, to the treatment of those individuals (Gray 2001).

Population screening programmes, such as the New Zealand cervical and breast cancer screening programmes, involve screening entire populations or a large and easily identifiable target group within a population, which may be defined geographically or by some other characteristic such as gender, age or ethnicity.

A *population-based screening programme* is one in which screening is systematically offered by invitation to a defined, eligible population: this requires a way of identifying and inviting the population such as through a population register. Work is currently underway to upgrade the National Health Index, which could then assist screening programmes to identify and invite eligible individuals. However, the development of Primary Health Organisations, with their enrolled populations, may provide better opportunities for identifying and inviting eligible people.

Opportunistic screening is not a screening programme. It occurs when a person presenting to the health system for another reason is asked a question or offered a test in order to detect the presence or confirm the absence of a specific disease. Such opportunistic screening occurs in New Zealand for a wide range of conditions and risk factors (Appendix 1) with varying degrees of organisation, but there is no formal co-ordination, monitoring or evaluation of the process. Significantly, opportunistic screening has no inherent quality improvement processes and its safety, effectiveness and cost-effectiveness for the participants cannot be assessed and guaranteed. Sometimes, people are recruited 'opportunistically' to participate in an organised screening programme.

The size of the reduction in the incidence or mortality of the condition being screened for depends, in part, on the level of participation in a screening programme. Participation should be preceded by the provision of full information by well-informed health professionals. In addition, other factors need to be considered such as accessibility to services, affordability, cultural preference and the wider context in which people live. Recognising the diverse needs and preferences of people who are invited to participate is a critical success factor for screening programmes.

Quality assurance and quality improvement are key components of organised screening programmes, linked to the need to balance the benefits of screening and the potential harms. The development of organised screening programmes encompasses not only the provision of effective overall screening programme organisation and co-ordination, but also ensuring access to high quality follow-up services for diagnosis and treatment. In addition, because screening is resource-intensive and affects many areas of the health sector, cost issues need to be carefully considered (National Health Committee 2003).

Important trends and developments in screening programmes, both nationally and internationally, include:

- balancing the population health objective of high coverage in screening programmes with the need for participation based on informed choice/consent
- the need for rigorous evaluation of screening programmes
- the development of new technologies such as genetic susceptibility testing, digital mammography, liquid-based cytology, and human papilloma virus (HPV) testing.

There is also a widely acknowledged need to bridge the ‘expectation gap’ between what screening programmes are able to achieve and what professionals and the public expect of them. The problem of poorer access to screening by some population groups is widely recognised. This has led to specific initiatives in New Zealand to address the barriers to screening for Māori and also for Pacific people, and will continue to be a major focus for NSU work.

2.2 Current Screening Activity in New Zealand

2.2.1 CANCER SCREENING PROGRAMMES

The two national cancer screening programmes, the NCSP and BSA, are distinctive in that they are both underpinned by a well-woman focus. The history of these programmes has been influenced by the valuable role that individuals, women’s health organisations and Māori groups have played in advocacy, education and identification, and communication of women’s health issues related to screening. It is important for such consumer-focused organisations to continue to have input into these programmes and to be involved in policy and standard development, audit and programme evaluation. One such initiative is the establishment of a consumer reference group in 2003.

National Cervical Screening Programme

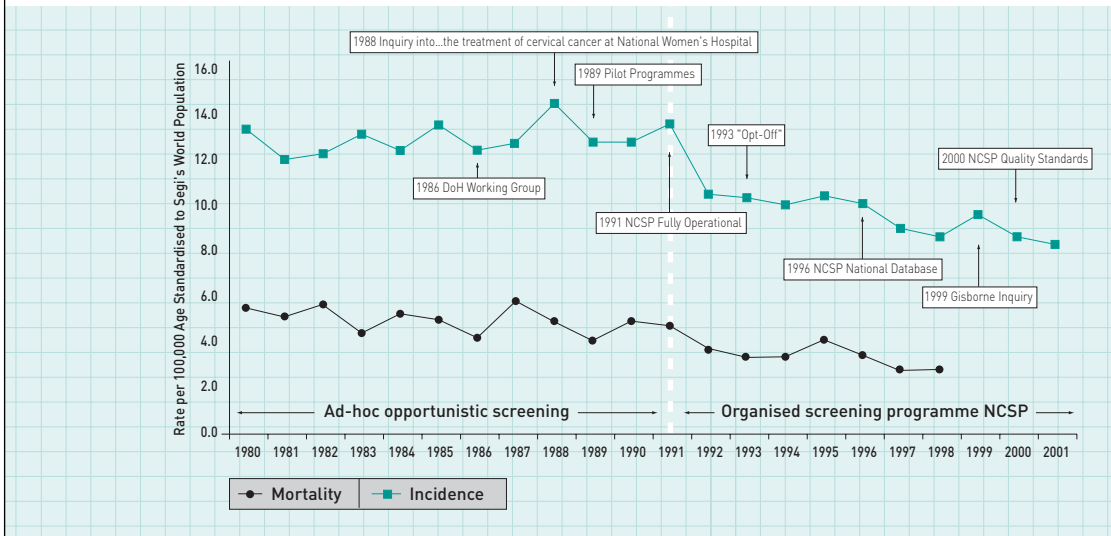
Prior to 1990, opportunistic cervical screening occurred throughout New Zealand. The 1988 Cartwright Inquiry report recommended the introduction of a nationwide cervical screening programme. The aim of the NCSP is to reduce the incidence and mortality rate of cervical cancer among women by the early detection and treatment of precancerous squamous cell changes. By the end of December 2001, in excess of one million women, (92.7% of women aged 20 to 69 years, excluding those who have had a hysterectomy) were enrolled in the NCSP (NCSP Annual Monitoring Report 2001). Over 400,000 cervical smears are taken annually and processed via contracted community and hospital-based laboratories.

One result of the health reforms of the early 1990s was the fragmentation of some health services. For the NCSP, this meant that responsibility for the programme was split between various teams and agencies resulting in confusion regarding accountability for programme performance. In its report of April 2001, the Ministerial Inquiry into the Under-Reporting of Cervical Abnormalities in the Gisborne Region confirmed that during the early to mid 1990s, the NCSP lacked the necessary organisation, coordination and some of the constituent parts required to ensure the programmes' safety and effectiveness. Many of these issues had been identified by the time of the Inquiry and work had commenced to strengthen the NCSP.

The programme delivery includes a number of providers across the screening pathway from health promotion to treatment. The National Screening Unit contracts four independent service providers to provide health promotion to Māori, Pacific and other women in the Auckland and Hamilton regions. Across the country there are approximately 5300 smear takers, including general practitioners and nurses, and 12 laboratories providing cytology services to the NCSP. The 21 DHBs are contracted by the NSU to provide colposcopy services and 13 provide the NCSP Regional Services. The NCSP Regional Services provide health promotion, smear taking to priority women, and Provider coordination while eight NCSP Regional Services provide data entry of laboratory results onto the NCSP-Register.

The most important indicators of programme effectiveness are incidence and mortality rates. The incidence of cervical cancer had been relatively stable until 1991. Following the introduction of the NCSP in 1990 a marked decrease in incidence rates occurred as the number of women having a smear in the Programme increased (Figure 2). The mortality rate of cervical cancer has been declining slowly reflecting general improvements in cancer treatment and also the fall in incidence during the 1990s. Between 1987 and 1997 the incidence of cervical cancer dropped by 39 percent and the death rate for cervical cancer dropped by 44 percent (NZHIS).

FIGURE 2:
CERVICAL CANCER SIGNIFICANT MILESTONES AND INCIDENCE AND MORTALITY SINCE 1980



[Source: NZHIS]. Note: the inclusion of milestones is for interest only and this does not imply a direct relationship between particular events and mortality rates.

BreastScreen Aotearoa

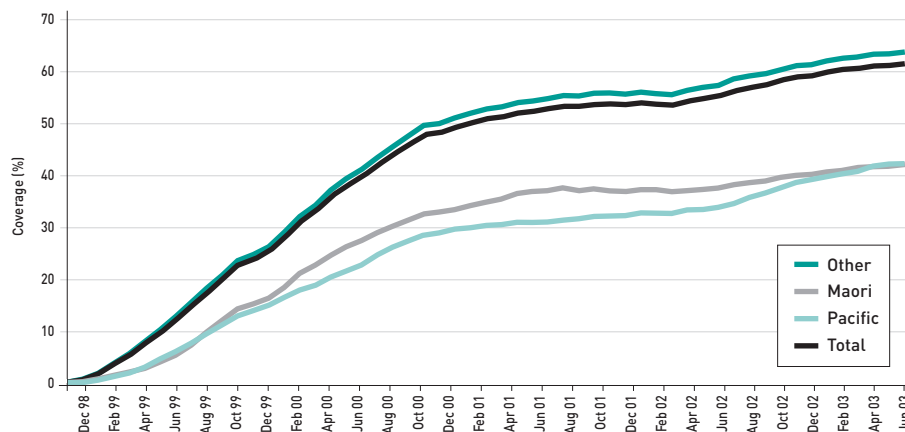
In December 1998, BSA was established nationally to provide free mammograms and follow-up for asymptomatic women aged 50 to 64 years. Along with the NCSP, BSA was administered by the Health Funding Authority (HFA) until the merging of the HFA and the Ministry of Health in December 2000.

The aim of BSA is to reduce women's morbidity and mortality from breast cancer by identifying cancers at an early stage, allowing treatment to be commenced sooner than might otherwise have been possible. The current coverage target is for two-yearly screening of 70% of eligible women. The programme is delivered throughout the country by lead providers, their sub-contracted providers, and mobile units that deliver services to rural and some urban communities. Working alongside the lead providers are nine independent service providers in defined geographical areas providing health promotion for Māori and Pacific women. In the 24 months to June 2003, the overall coverage for BSA was 61.1 % of women aged 50-64 years. (NSU Internal Analysis for BSA Women screened between January and June 2003) (See Figure 3).

The age-standardised incidence of breast cancer has been increasing over recent decades, and projections indicate that this will continue. Increases in the incidence of breast cancer are expected following the introduction of organised

breast screening programmes as initially more cancers are detected as a result of screening. Age standardised mortality rates from breast cancer have fluctuated over time and modelling indicates that the numbers of women identified with breast cancer will increase, but death rates will decrease over the next decade (Ministry of Health 2002). Due to the changing demographic profile of New Zealand women, initiatives to increase population coverage within BSA, and the extension to the age range for BSA, it is expected that the number of women participating in BSA will increase.

FIGURE 3:
BREASTSCREEN AOTEAROA COVERAGE, DECEMBER 1998 TO JUNE 2003



2.2.2 OTHER CANCER SCREENING

Some work has been undertaken by *ad hoc* working groups established by the National Health Committee (NHC) to assess the value of other cancer screening programmes, namely prostate cancer screening and colorectal cancer screening. However, New Zealand has not had an organised approach to regular evaluation and review of the appropriateness of existing cancer screening programmes, nor for assessing potential new screening programmes (Expert Working Group to the Cancer Control Steering Group 2002).

Prostate Cancer Screening

An independent prostate cancer screening working party was established in 1996 to assess the potential benefits and risks of prostate cancer screening, based on evidence current at that time. This working party reported significant potential risks associated with confirmatory tests and treatment, and that the risks outweighed the as then unproven benefits of earlier intervention that would be achieved by screening asymptomatic men for prostate cancer (Low 2001).

Despite the lack of evidence for benefit from prostate screening, in practice opportunistic prostate specific antigen (PSA) testing has become widespread in New Zealand over recent years (Durham 2003). This involves testing asymptomatic men for prostate cancer and has resulted in large increases in the number of men requiring further diagnostic and treatment services (Ministry of Health 2002a). The NHC has reconvened the working party to examine the most recent evidence, and provide information to professionals and men regarding the benefits, harms and costs of prostate cancer screening. However regular evaluation of the evidence for prostate screening is needed to monitor this gap between evidence and practice, and the NSU is well-placed to undertake such a role.

Colorectal Cancer Screening

Colorectal cancer is common to both males and females, and the second most common cause of cancer death for both sexes. Projections for mortality as well as age-standardised incidence indicate declining rates for both males and females over the next decade when compared with rates from the mid-late 1990s. There have been calls for colorectal screening over recent years, and evidence needs to be continually assessed, including that from overseas pilot colorectal cancer screening programmes, to determine benefits and costs within the New Zealand context. In 1998 a separate NHC working party examined the evidence on colorectal cancer screening. This group advised that “given the modest potential benefit, the considerable commitment of health sector resources, and the small but real potential for harm, population-based screening for colorectal cancer... is not recommended in New Zealand” (National Health Committee 1998). Subsequent work is being undertaken to identify the appropriate surveillance and management of groups at increased risk of colorectal cancer. As with prostate cancer, opportunistic screening for colorectal cancer does occur in New Zealand.

2.2.3 NON-CANCER SCREENING

Other organised screening programmes exist in New Zealand, for example national metabolic screening of newborns, and child hearing and vision screening. Other non-cancer screening programmes have also been advocated, for example universal newborn hearing, diabetes, and antenatal HIV screening. The NSU does not oversee other existing screening programmes, which have their own governance and monitoring processes, nor does it currently advise on opportunistic screening. The NSU has the capability to undertake such an oversight and advisory role and is examining options for how this role might be fulfilled in future.

2.3 The Health Sector Environment

2.3.1 THE HEALTH AND DISABILITY SECTOR

The New Zealand health care environment has undergone significant change over the past decade. Structural changes are inevitable within an environment that is continuously evolving. Changes include shifting professional boundaries, increased specialisation, the re-orientation of the sector to manage chronic disease and multiple co-morbidities in different and sometimes non-conventional settings, the increasing acuity but shorter lengths of stay within hospitals, ongoing technological advances, and the acknowledgement that capped resources for healthcare require prioritisation of services. An emphasis on quality improvement, evidence-based practice and evidence-informed policy is likely to strengthen, with a greater focus on research and development to inform decisions. At a time of increasing demand for safe and effective services, the cost of healthcare has continued to grow along with rising expectations of healthcare. In addition, there is an awareness of the need to respond effectively to the poorer health status of Māori, Pacific and low income people compared with others in New Zealand.

2.3.2 THE TREATY OF WAITANGI AND HEALTH

The Treaty of Waitangi is the founding document of New Zealand. The Treaty of Waitangi acknowledges the unique relationship of Māori as Tangata Whenua and the Crown. The Government is committed to fulfilling this special relationship under the Treaty of Waitangi. The Government encourages all agencies and organisations involved in health to work together to create a system with defined processes and mechanisms to achieve improved health outcomes. The Treaty of Waitangi principles of Partnership, Participation and Protection underpin the relationship between the Government and whanau, hapu, iwi and Māori communities.

Partnership

Working together with whanau, hapu, iwi and Māori communities to develop strategies for Māori health gain and appropriate health and disability services.

Participation

Involving Māori at all levels of the sector, in decision-making, planning, development and delivery of health and disability services.

Protection

Working to ensure Māori have at least the same level of health as non-Māori, and safeguarding Māori cultural concepts, values and practices. (He Korowai Oranga (2002, p.2))

The framework for achieving the NSU vision is grounded upon these Treaty of Waitangi principles and is integral to the success of this Strategic Plan.

- The NSU acknowledges that the successful implementation of this strategic plan involves the recognition of the status of Māori as Tangata Whenua, ensuring protection, partnership and participation, improving the health status of Māori, and the reduction of barriers to services in order to meet the needs of Māori.
- The NSU will adhere to the principle of utmost good faith and transparency in dealings with internal and external Māori stakeholders.
- The NSU will further develop specific strategies to improve Māori health outcomes through screening via the development and implementation of this strategic plan and other ongoing work.
- The NSU is establishing a Māori Advisory Group to ensure that Māori needs are defined and prioritised.

2.3.3 THE STRUCTURE OF THE NEW ZEALAND HEALTH CARE SYSTEM

The structure of New Zealand's health care system is governed by the New Zealand Public Health and Disability Act (2000). This legislation defines the configuration and specific functions of each part of the health and disability sector including the establishment of District Health Boards (DHBs), and mandates a population-based approach to health (Ministry of Health 2002). Health and disability services in New Zealand are guided by two overarching strategies – the New Zealand Health Strategy and the New Zealand Disability Strategy.

Public health is a key component of the New Zealand health sector. Public health activities aim to influence the determinants of health that have major impacts upon the overall health status of the population (Ministry of Health 2001). A reorientation towards primary health care and the adoption of a population health focus aim to maintain and improve the overall health outcomes of entire populations and reduce inequalities in health between different groups.

Previously, internationally-agreed requirements for the safe and effective delivery of organised screening programmes have not fitted easily into New Zealand's changing health system structures. The present health system however, with its population health focus is a supportive context for the future of organised screening programmes in New Zealand. As public health services funding devolves to DHBs over time, an appropriate balance needs to remain between local, regional and national screening programme functions.

Whilst some aspects of screening are best managed at a local or regional level, some high-level screening functions are best delivered nationally in order to prevent fragmentation of services and to ensure that there is a cohesive overall approach to screening within New Zealand. These national functions include:

- national coordination and leadership, strategic direction and advice to Government regarding screening and screening programmes
- ensuring that Treaty of Waitangi obligations are addressed
- research and development including evaluation of new evidence related to organised screening programmes (both existing and potential), and evidence-based appraisal of technological advances in screening
- development of quality frameworks, standards and policy along with associated monitoring of performance and service evaluation
- coordination and leadership of workforce development
- administration of legislation
- identification of under-screened groups and development of effective strategies to improve their participation.

- The NSU will work with the health sector to plan, fund, deliver and monitor screening programmes from a population health perspective.
- The NSU is in an appropriate position to provide national oversight and coordination of organised screening programmes over time. A national screening advisory body will be established in 2003 to assist with the oversight of screening programmes and other screening in New Zealand.
- The NSU will work closely with the health sector to ensure that core functions for existing screening programmes continue to be delivered nationally where this is most appropriate.
- The NSU has already taken steps to build the cancer screening workforce through workforce development initiatives and these will continue to be implemented.

Broader demographic and social changes in New Zealand will impact upon the health sector and therefore on screening in the future. A major demographic change in the New Zealand population is the ageing population. Further influences include the increasing proportions of Māori, Pacific peoples and the Asian population (Ministry of Health 2002). Through the New Zealand Disability Strategy, New Zealand is moving towards being a more inclusive society, eliminating the barriers to people with disabilities participating in and contributing to society. A further structure change is the requirement to support whanau, hapu, iwi and Māori communities to determine their own aspirations and priorities (rangatiratanga) to achieve Whanau Ora (Māori families supported to achieve their maximum health and wellbeing).

2.3.4 THE NEW ZEALAND HEALTH STRATEGY

The New Zealand Health Strategy (2000) sets the strategic direction for all New Zealand health services. There is a strong focus on population health and on tackling health inequalities, particularly for Māori, Pacific and those on low incomes (Ministry of Health 2000). The Government's priority areas are identified and these are based on seven fundamental principles.

- Acknowledging the special relationship between Māori and the Crown under the Treaty of Waitangi.
- Good health and wellbeing for all New Zealanders throughout their lives.
- An improvement in health status for those currently disadvantaged.
- Collaborative health promotion and disease and injury prevention by all sectors.
- Timely and equitable access for all New Zealanders to a comprehensive range of health and disability services, regardless of ability to pay.
- A high-performing system in which people have confidence.
- Active involvement of consumers and communities at all levels.

Screening programmes worldwide tend to have poorer participation by ethnic minority groups and people of low socioeconomic status. This situation – an example of the so-called 'inverse care law'² – presents a particular challenge for those charged with managing screening programmes. The NSU will be highly focused on ensuring that our screening programmes do not perpetuate or even worsen health inequalities.

He Korowai Oranga: the Māori Health Strategy (Ministry of Health 2002) and Whakatātaka Māori Health Action Plan 2002-2005 (Ministry of Health 2002) give guidance for the achievement of health gains for Māori at both the local and national levels. This signifies the Government's commitment to improving Māori Health and the relationship between the Crown and Māori under the Treaty of Waitangi. Māori have lower participation rates than non-Māori in both cancer screening programmes, and this presents a real challenge to the NSU and those involved in delivering screening services.

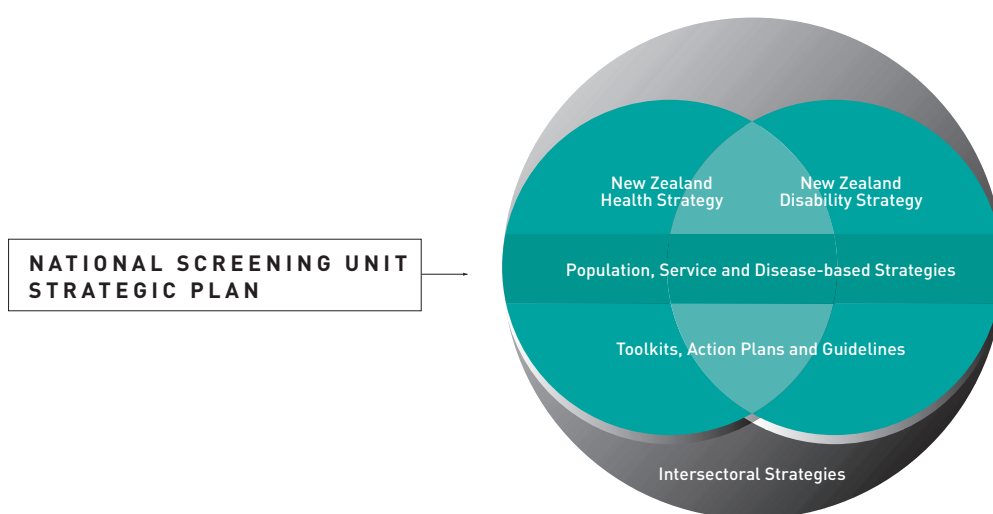
The Ministry of Health has developed a framework (Achieving Health for All People – Whakatutuki te Oranga Hauora mo ngā Tāngata Katoa: A Framework for Public Health Action for the New Zealand Health Strategy) that builds upon the population focus of the New Zealand Health Strategy. The vision for public health in New Zealand of achieving health for all people will be achieved by progress toward three goals: improving the overall health status of the New Zealand population, improving the health status of Māori, and reducing inequalities in health (Ministry of Health 2003).

- The NSU's vision aligns with the strategic direction of the New Zealand Health Strategy in its aim of reducing inequalities, particularly for Māori and Pacific peoples and building the health of New Zealanders.
- In implementing this strategic plan, the NSU will adhere to the guidance and will follow the principles and pathways outlined in He Korowai Oranga.
- The public health approaches outlined in the framework 'Achieving Health for All People – Whakatutuki te Oranga Hauora mo ngā Tāngata Katoa: A Framework for Public Health Action for the New Zealand Health Strategy', will help guide the work of the NSU in delivering existing screening programmes and also in assessing potential new screening programmes.
- The NSU strategic plan will also contribute to the overall goals and objectives of this public health framework, namely improved population health, improved health for Māori and reduced inequalities by ensuring the delivery of high quality screening programmes.

2.3.5 CONSISTENCY AND LINKS WITH OTHER STRATEGIES

There are several other important strategies and action plans (Figure 4) that have informed the development of this strategic plan. These key documents link with this strategic plan through common goals and objectives, and through implementation of initiatives to improve health and reduce inequalities.

FIGURE 4:
FRAMEWORK OF STRATEGIES IN THE HEALTH AND DISABILITY SECTOR



The Pacific Health and Disability Action Plan

The Pacific Health and Disability Action Plan details key activities to improve overall health outcomes for Pacific peoples and reduce inequalities between Pacific and non-Pacific peoples (Ministry of Health 2002).

- The NSU is actively supporting the development of Pacific models of population-based health promotion, including issues related to early detection, screening and prevention and accessing treatment (Ministry of Health 2002).
- The NSU will continue to contract with Pacific providers delivering health promotion and primary health care services to progress the vision of the Pacific Health and Disability Action Plan, particularly around promoting healthy lifestyles and well-being, primary healthcare and preventative services, and provider and workforce development.

The Primary Health Care Strategy

The Primary Health Care Strategy provides direction for the future of primary health care and aims to re-orientate the primary care sector towards population health approaches. Primary health care services will be required to work to reduce inequalities between different groups and focus on increasing the health status of their population. This approach encompasses functions such as screening, in which primary care practitioners play a key role (Ministry of Health 2002). Increased involvement with the primary care sector is necessary to advance the NSU vision by meeting participation and coverage requirements and ensuring programme quality and information dissemination regarding the purpose, benefits and limitations of screening. The new structure for primary health care, incorporating Primary Health Organisations (PHOs) with an emphasis on preventative services, will assist in achieving these goals. This strategic plan will in turn assist PHOs to work with the screening sector toward common goals such as high levels of informed participation.

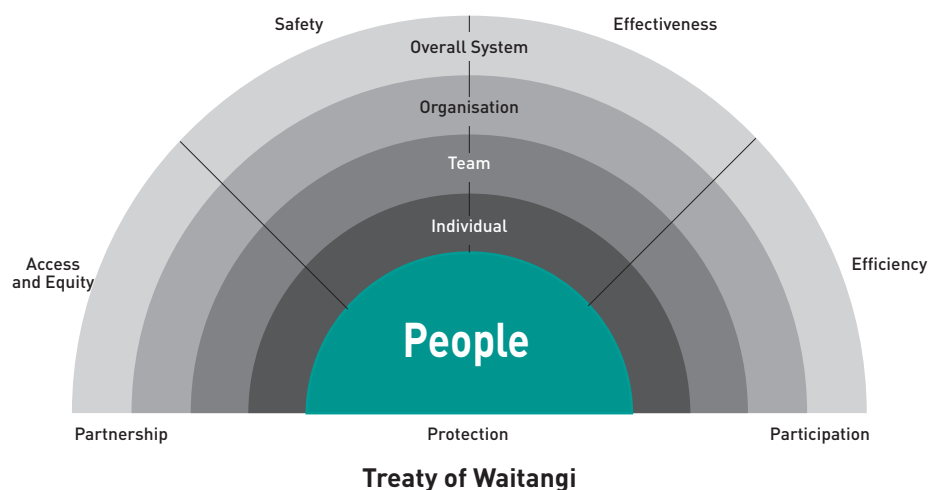
- The NSU is actively involved in initiatives linking with the Primary Health Care Strategy and will also work with primary care services in order to progress and further develop initiatives that improve Māori access to primary care services.
- The development of PHOs provides an excellent opportunity to improve the health status of populations and to reduce inequalities. The NSU will assist primary health practitioners and PHOs to reduce inequalities and increase the health status of their populations through health promotion initiatives and a focus on disease prevention and early detection through screening.

The New Zealand Health Sector Quality Improvement Strategy

The report *Improving Quality (IQ): A Systems Approach for the New Zealand Health and Disability Sector* aims to develop an environment that supports an ethic of shared quality improvement, practised by all participants in the health sector. Aspects of quality include safety, effectiveness, efficiency, equity, access and people-centredness (see Figure 5) (Ministry of Health 2003). The NSU is using this broad quality approach to develop a framework that defines the principles and key requirements for quality improvement in screening programmes. The framework builds on existing quality systems for the programmes. Both cancer screening programmes have systems in place to monitor and evaluate quality that are at the forefront of quality standard implementation and monitoring in the health sector, and these assist providers to monitor and maintain their own quality and safety.

- The NSU has a number of initiatives in place to assure and measure programme safety and effectiveness, and quality improvement is integral to the two national cancer screening programmes.
- The NSU quality improvement approach draws on the New Zealand Health Sector Quality Improvement Strategy and will guide existing and future quality improvement initiatives for screening in New Zealand.

FIGURE 5: QUALITY FRAMEWORK FOR THE NEW ZEALAND HEALTH SECTOR



[Source: Improving Quality (IQ): A Systems Approach for the New Zealand Health and Disability Sector. Wellington: Ministry of Health.]

The New Zealand Cancer Control Strategy

A New Zealand Cancer Control Strategy was developed in 2003 with the goal of reducing cancer-related morbidity and mortality. The aim of this strategy is to provide a framework for an integrated, comprehensive set of activities to address the burden of cancer across the country, and so contribute toward improving population health. These activities include primary prevention, screening and early diagnosis, treatment and symptom control, rehabilitation and support, and palliative care. The two existing population screening programmes, the NCSP and BSA, are an important part of a co-ordinated approach to the reduction in the incidence, morbidity and mortality of cancer.

As the organisation that has stewardship for the two existing cancer screening programmes, the NSU is committed to reducing the incidence and impact of cancer. This requires the screening programmes to work in conjunction with the wider sector. In particular, the screening programmes rely on safe and effective diagnostic and treatment services in order to achieve the desired benefits of the screening programmes and minimise the harms.

The NSU supports the New Zealand Cancer Control Strategy and has a key role in achieving the goal of reducing death and disability through effective screening, early detection and treatment. The NSU will participate actively in the implementation of this strategy.

The NSU supports, and will participate in, an agreed process for oversight and co-ordination of activities across the cancer control continuum to help ensure the best use of resources to reduce the burden of cancer.

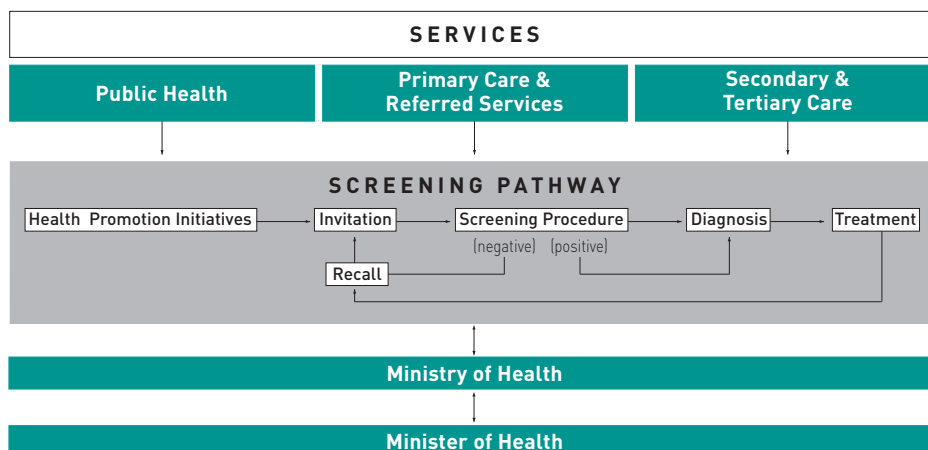
- The NSU is a significant contributor to cancer control activities through its oversight and management of cancer screening programmes.
- The NSU supports the objective for a systematic approach to cancer screening, familial risk assessment and surveillance at a national level through high-level strategic oversight and the development of evidence-informed guidelines and recommendations, and will work with the sector to this end.

2.4 Implications of this strategic plan for the wider health sector

As both a public health service that benefits populations and a personal health service, screening straddles traditional health boundaries. Screening services are therefore well placed to deliver health benefits across the sector both in the public and personal health arenas. Increased integration with treatment and diagnostic services will further enhance this overlap.

Figure 6 illustrates how the screening pathway overlaps health services.

FIGURE 6:
HEALTH SERVICES, THE SCREENING PATHWAY AND THE NSU'S RELATIONSHIPS



2.5 Key strategic issues for the National Screening Unit for the next five years

Several wider health sector issues are relevant to screening programmes, namely:

- continuing workforce challenges
- the need for effective information systems and management
- increased consumer participation in decision-making
- inevitable structural change within the health sector
- a stronger focus on primary health care.

There are already NSU initiatives to respond to these issues and future initiatives are outlined in chapter three of this plan. In addition, the NSU has identified five key issues that are of specific importance to screening programmes, and which are key strategic priorities for the next five years. Existing NSU initiatives have started to address these issues.

1. Clearly orienting screening programmes as population health programmes that are planned, funded, delivered and monitored from a population perspective.
2. Reducing inequalities in participation in and outcomes of screening for Māori to meet Treaty of Waitangi obligations, and reducing inequalities in screening for Pacific and low-income people.
3. Maintaining strong quality improvement processes and monitoring that demonstrate the safety and effectiveness of New Zealand's organised screening programmes and that the programmes are a wise use of health care resources.
4. Using evidence to inform screening decisions and supporting quality activities with ongoing research and development initiatives, including systematic assessment of technological advances and incorporating new knowledge in a timely manner.
5. Bridging the 'gap' between expectations that health professionals and the public have of screening programmes and what they can actually deliver.

In addition, there are wider screening issues that go beyond the existing cancer screening programmes. These have been identified in discussions with Ministry staff, the National Health Committee, professionals, providers, NGOs and consumer organisations. These include:

- a lack of clear policy on many screening activities, leading to wide variations in practice and access to some screening and follow-up services, e.g. Down's syndrome screening, newborn hearing screening
- no clear process for making, promulgating and reviewing policy decisions about screening
- a lack of understanding of screening in the sector, in particular how it differs from other health care practice
- inadequate informed consent for many screening activities, e.g. most antenatal screening.

The NSU has found consistent support for clearer screening policies and a national process for decisions about screening, an issue flagged by the National Health Committee in its report (NHC 2003). A national-level process would, inter alia:

1. advise on the establishment of new screening programmes
2. regularly evaluate and review the appropriateness of existing cancer (and other) screening programmes to clarify and update national policies
3. provide high-level oversight of existing non-cancer screening
4. identify strategies to target at-risk groups within populations.

The proposed establishment in 2003 of a national screening advisory body by the NSU will create a national process to fulfil this role in New Zealand. The NSU has the capacity and skills to support such a body. Priorities for ongoing evaluation and oversight by such a body will include:

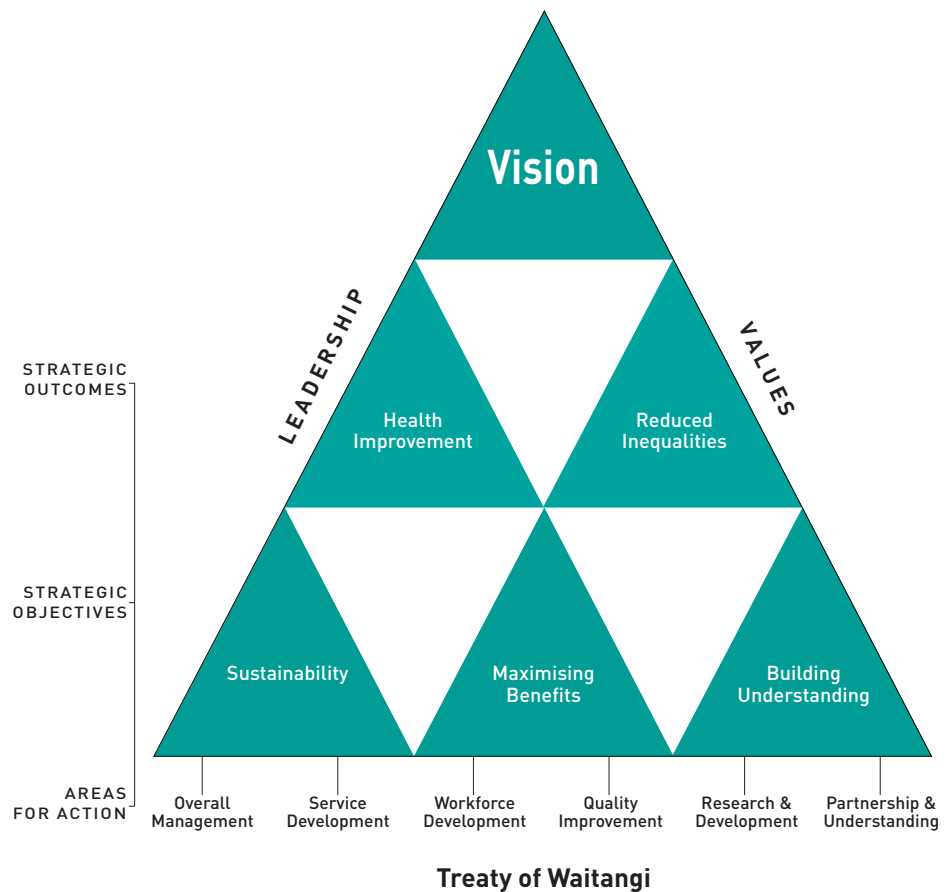
- prostate cancer screening
- newborn hearing screening
- antenatal screening, in particular for Down's syndrome
- colorectal cancer screening, including people at high risk of colorectal cancer.

The exact role and composition of a national screening advisory body will be discussed with the wider sector during its establishment.

Achieving the vision 2003–2008

Annual planning will determine Key Performance Indicators (KPIs) for each area of operation and achievement of service objectives. Through these KPIs, progress towards achievement of strategic objectives, and ultimately the strategic outcomes for screening services in New Zealand, will be measured each year. The National Screening Unit’s work will be prioritised to ensure that it is able to meet service and strategic objectives. (See Figure 7)

FIGURE 7:
THE NATIONAL SCREENING UNIT STRATEGIC FRAMEWORK



3.1 Core values

These values will guide the NSU in its delivery of the strategic objectives over the next five years.

- **Responsive to the Treaty of Waitangi** – we will take action to ensure the principles of the Treaty of Waitangi are fully incorporated in all aspects of screening programmes.
- **People centred** – people are at the heart of screening programmes, including both participating individuals and eligible population groups, as well as family/whanau of people receiving services.
- **Open** – we will be open and honest in our dealings.
- **Work in partnership** – we will work to create a sense of programme ownership among stakeholders, including the community and people involved in programme delivery.
- **Equity** – we will strive to ensure fair access to screening services in relation to need and the ability to benefit.
- **Evidence-informed** – we will base decisions about screening on the best available evidence and screening programmes will include ongoing research and development.
- **Working for the public good** – we will work constantly to improve the health and well-being of New Zealanders and to benefit wider society.
- **Ongoing development** – we will assist individuals within the screening workforce to develop and maintain their knowledge and skill.

3.2 Strategic Outcomes

3.2.1 HEALTH IMPROVEMENT

The primary aim of screening programmes is to reduce the number of people dying from or affected by a particular health condition. Therefore, while the benefits of screening programmes can be measured in a range of ways, the ultimate concern for the NSU is reduced disease incidence and reduced disease-specific mortality. However, these are not simple to assess for several reasons: screening programmes initially lead to an increase in the recorded incidence of disease; reductions in mortality cannot be measured in the early years of a screening programme, and; it can be difficult to attribute mortality reductions specifically to screening.

If the National Cervical Screening Programme is safe and effective with good levels of participation, we would expect to see a continued impact on cervical cancer incidence and death rates over the next five years, and new incidence and mortality targets are being developed for 2006 and 2011 (Paul et al 2003). Therefore, the NSU will continue to monitor incidence and death rates in addition to important programme quality indicators.

An effective breast cancer screening programme is but one part of an overall approach to reduce breast cancer mortality. While it can be difficult to separate out the effect of breast screening from other influences, e.g. improved treatment, by 2008 we should begin to see an effect on breast cancer mortality from BSA. This effect will be most obvious in women aged over sixty years. Meanwhile, we will continue to monitor other programme performance indicators to help ensure that the potential population benefits of breast cancer screening are actually realised. (See Table 1)

TABLE 1: KEY PERFORMANCE INDICATORS FOR BREAST AND CERVICAL CANCER SCREENING PROGRAMMES

BSA	
Early detection performance	<p>Effectiveness</p> <ul style="list-style-type: none"> ■ programme participation rate ■ recall to assessment rate ■ small invasive cancer detection rate ■ all cancer detection rate ■ interval cancer rate ■ all cancer and small invasive cancer standardised detection ratio (by 2006, these will replace the preceding three indicators) <p>Efficiency</p> <ul style="list-style-type: none"> ■ cost per woman screened
Intervention/treatment performance	<p>Effectiveness</p> <ul style="list-style-type: none"> ■ ratio of breast conserving surgery to mastectomy
Overall performance	<p>Effectiveness</p> <ul style="list-style-type: none"> ■ mortality rate from breast cancer <p>Efficiency</p> <ul style="list-style-type: none"> ■ cost per life year saved
NCSP	
Early detection performance	<p>Effectiveness</p> <ul style="list-style-type: none"> ■ programme enrolment, participation (smear within last six years) and coverage rates (smear within last three years) ■ NCSP-register opt-off rate ■ abnormal cytology reporting rate ■ cytology predicting HSIL rate ■ unsatisfactory smear rate <p>Efficiency</p> <ul style="list-style-type: none"> ■ short interval rescreening rate ■ cost per woman screened
Intervention/treatment performance	<p>Effectiveness</p> <ul style="list-style-type: none"> ■ waiting time for colposcopic assessment ■ abnormal histology reporting rate
Overall performance	<p>Effectiveness</p> <ul style="list-style-type: none"> ■ incidence of cervical cancer ■ mortality from cervical cancer <p>Efficiency</p> <ul style="list-style-type: none"> ■ cost per life year saved

Based on following references. Steering Committee for the Review of Commonwealth/State Service Provision. 2003. *Report on Government Services 2003. Chapter 11: Health management issues*. Canberra: Productivity Commission. p 11.17; International Agency for Research on Cancer. 2002. *Breast Cancer Screening*. Lyon: IARC Press. pp 121-9.

3.2.2 REDUCED INEQUALITIES

Unequal participation in screening programmes is an international problem that can lead to widening inequalities in health. In New Zealand, the Government recognises that specific improvements in Māori health are critical and is seeking to reduce inequalities in health status between different population groups with a focus on Māori and on Pacific peoples.

Both Māori women and Pacific women have lower participation rates in the two screening programmes, yet have higher rates of cervical cancer and similar rates of breast cancer to non-Māori. The NSU will continue to work to ensure that all eligible people, particularly those isolated by geography, who have low income, are disabled, and who are Māori or Pacific, have the opportunity to participate in organised screening programmes that best meet their needs. This includes ensuring that there are specific initiatives for Māori in relation to screening, as well as ensuring that mainstream services are appropriate for Māori.

In addition, the NSU will ensure that the imperative to reduce health inequalities informs all areas of its work. This is consistent with a population perspective, which is concerned with health outcomes and differences in outcomes between groups. It is clear that this will need to be a major focus for current and potential new screening programmes.

Indicators:

The effectiveness indicators in Table 1 on page 33 will all be monitored for Māori, Pacific and 'Other' ethnic groups to identify and respond effectively to ethnic differences in participation, detection, treatment and outcomes.

3.3 Strategic Objectives

3.3.1 SUSTAINABILITY

Sustainable, well-supported screening programmes have well developed quality improvement processes, and are people-centred, safe, effective, and a good use of health care resources. Such programmes will continue to deliver benefits to populations. In addition to good quality assurance and improvement processes, screening programmes require strategies to develop and maintain a skilled and responsive workforce, and ongoing assessment of outcomes and costs. A key challenge is to ensure that screening programmes are planned, funded, delivered and monitored as population health programmes. For a sustainable screening programme, cost-containment issues need to be considered: screening interval, the management of screen-detected abnormalities and new technologies are important cost drivers.

3.3.2 MAXIMISING BENEFITS

Screening programmes provide benefits to populations and some individuals, but they also have inherent harms. Fully realising the benefits requires high levels of participation, while minimising harms demands constant attention to quality.

Ongoing programme monitoring and evaluation identify potential problems and areas for attention. Screening programme evaluation must specifically assess the effectiveness of programmes in addressing the needs of groups with low participation rates, and Māori in particular. Decisions within and about screening programmes should be informed by the best available external evidence and an internal cycle of research and development.

3.3.3 BUILDING UNDERSTANDING

The differences between screening and other health care services and the nature of screening programmes as population health programmes need to be more widely understood. Improving this understanding among those delivering services, eligible population groups and individual participants is more likely to lead to realistic expectations of screening programmes.

Eligible people should have the opportunity to make an informed decision to participate in organised screening programmes, with particular attention to participation by Māori, Pacific and low-income groups to ensure that inequalities are reduced. If individuals understand screening and have confidence in the programmes and the quality of services that are delivered to them, this will assist informed decision-making regarding programme participation.

Provision of high quality, educational resources developed in conjunction with those they intend to inform, enables a fuller understanding of the purposes of screening programmes, including their limitations and expected health gains for specific communities. Different approaches may be required to build understanding and create messages that respond to differing cultural beliefs and values.

3.4 Areas for Action and Service Objectives

3.4.1 SERVICE DEVELOPMENT

A national focus on service development is crucial in the delivery of high quality screening programmes. Service development encompasses a broad range of service objectives covering all component parts of screening programmes. They support the achievement of all the NSU's strategic objectives and provide direct measures of progress towards health improvement and reducing inequalities strategic outcomes.

Maximising the benefits of screening requires high participation, attention to quality and consistency of service provision.

Sustainable screening programmes require ongoing evaluation, appropriate service configuration and appropriate accountability arrangements. Service objectives associated with the service development area for action relate to all these areas.

Māori service providers have a unique role to play in reaching Māori to increase participation rates. The ongoing development of Māori service providers will assist the NSU to progress toward the strategic outcomes of health improvement and reduced inequalities.

SERVICE OBJECTIVES FOR SERVICE DEVELOPMENT

Service Objective	Key Outputs/Performance Indicators – Year One to Two	Key Outputs/Performance Indicators – Year Three to Five
To support service providers to meet direct accountability requirements for provision of high quality screening services including attention to reducing inequalities.	<ul style="list-style-type: none"> Accountability agreements are in place with all providers and routinely monitored. 	<ul style="list-style-type: none"> Provider accountability agreements are routinely monitored.
To develop, monitor and evaluate resources and communication strategies aimed at improving participation and understanding.	<ul style="list-style-type: none"> Health Promotion Strategy implementation commenced with a priority on those activities targeted to Māori. 	<ul style="list-style-type: none"> Continued implementation and evaluation of Health Promotion Strategy initiatives.
To develop, implement and evaluate explicit strategies for reducing health inequalities through screening programmes in collaboration with the wider health sector.	<ul style="list-style-type: none"> Tools are routinely developed to ensure a focus on health inequalities. New service specifications are implemented for providers targeting under-screened populations. PHOs and other sector providers are engaged to identify effective ways of increasing participation. 	<ul style="list-style-type: none"> Work with PHOs and other sector providers is evaluated and informing new initiatives.
To ensure up-to-date policy and quality standards are established, implemented, monitored and reviewed as part of national service delivery expectations.	<ul style="list-style-type: none"> Revised BSA policy and quality standards are implemented. New legislation governing the NCSP is implemented. BSA age range extension commenced. NCSP operational policy and quality standards are revised and no longer interim. 	<ul style="list-style-type: none"> Policy and quality standards reviewed regularly. Policy and quality standards developed prior to the implementation of new screening programmes.
To ensure that eligible individuals are identified so that they are given opportunities to participate in screening programmes.	<ul style="list-style-type: none"> The NSU has participated fully in the NHI system upgrade. 	<ul style="list-style-type: none"> The upgraded NHI system is routinely used to support the identification and invitation of eligible people.
To ensure that service configuration supports safe and effective delivery of screening programmes.	<ul style="list-style-type: none"> BSA northern regional service reconfigured. Both programmes are integrated into the Cancer Control Strategy implementation plan. Stage two integration of regional and central NCSP functions completed. Establishment and evaluation commenced for additional Independent Service Providers covering both BSA and NCSP. Review of NCSP laboratory services completed and new models considered. 	<ul style="list-style-type: none"> Development of structural and service configuration models for new screening programmes are appropriate for effective service delivery depending upon the nature of the programme.

3.4.2 WORKFORCE DEVELOPMENT

The development of a competent and capable screening workforce is key to maximising the benefits of screening programmes and ensuring their sustainability. The NSU has an important role in developing the screening workforce through strategic policy development in conjunction with other workforce initiatives and in close co-operation with the sector. There are a number of challenges to this as many different professionals are involved and, for most, screening is only a small part of what they do.

A significant amount of work has been done by the NSU to develop the screening workforce and the implementation of the NSU workforce development strategy and action plan further contributes toward this area for action. Key aims of that strategy and action plan include the promotion of a population health focus, better meeting the needs of screening programme participants, ensuring adequate capacity across service delivery components, and ensuring that there is capability to meet quality requirements.

Workforce requirements will need to be included as an integral part of all policy development, service reconfiguration, and programme advancement considerations.

SERVICE OBJECTIVES FOR WORKFORCE DEVELOPMENT

Service Objective	Key Outputs/Performance Indicators – Year One to Two	Key Outputs/Performance Indicators – Year Three to Five
To work across the health sector to improve screening workforce capability and capacity.	<ul style="list-style-type: none"> ■ The NSU Workforce Development Strategy and Action Plan is published and implementation continues. ■ Professional, training and education agencies and organisations responsible for screening workforce capacity and capability development are engaged. ■ Screening competencies are developed and training initiatives have commenced. ■ Service provider workforce development initiatives supported. ■ Specific initiatives implemented for professional groups include smertakers, MRTs and laboratory staff. 	<ul style="list-style-type: none"> ■ Continued implementation of initiatives as outlined in the NSU Workforce Development Strategy and Action Plan.
To improve the specification, collection and analysis of information related to the screening workforce.	<ul style="list-style-type: none"> ■ Service provider accountability agreements include appropriate reporting. ■ Screening Workforce Information Project agreed and implemented. ■ Directory of education and training activities relevant to screening are published and disseminated. 	<ul style="list-style-type: none"> ■ Reliable information on the screening sector workforce is available.

3.4.3 OVERALL MANAGEMENT

Screening programmes require clear national direction supported by successful overall management. The achievement of all of the NSU's strategic objectives will require a capable national organisation where the day-to-day operation is carried out effectively and efficiently.

Effective overall management depends upon effective planning and organising and a good understanding of the nature of the work to be undertaken. It focuses primarily on activities, processes and functions that bring people and other resources together to deliver specific outputs and achieve agreed objectives. This is extremely important in the delivery of screening programmes as they require the national organisation and coordination of multiple component parts, consistency in service provision, the involvement of different organisations and many participants, as well as needing appropriate funding levels. Efficient management processes also assist in improved communication and collaboration across the NSU organisation and with providers and stakeholders. These processes **build understanding** of the purposes of screening programmes, their benefits and limitations as well as the work required to deliver them and priorities for their ongoing development.

Importantly, overall management objectives support the NSU's aim to be recognised as the public health leader in screening programmes with a highly skilled workforce, providing direction, experience and expertise in the establishment and ongoing development of screening programmes.

SERVICE OBJECTIVES FOR OVERALL MANAGEMENT

Service Objective	Key Outputs/Performance Indicators – Year One to Two	Key Outputs/Performance Indicators – Year Three to Five
To improve the NSU's operational management processes to undertake its core functions efficiently.	<ul style="list-style-type: none"> ■ Annual Plan expectations met. 	<ul style="list-style-type: none"> ■ Annual Plan expectations met.
To maintain effective and efficient information systems supporting all aspects of programme operations and monitoring.	<ul style="list-style-type: none"> ■ The NSU Information Services Strategic Plan is developed and implemented. 	<ul style="list-style-type: none"> ■ Implementation of the NSU ISSP completed. ■ Requirements for new screening programmes anticipate IS requirements.
To fulfil accountability obligations as a publicly funded organisation and a public funder of health services.	<ul style="list-style-type: none"> ■ Annual planning, monitoring, ministerial and other reporting is completed in a robust and timely manner. ■ Financial and contract management is robust across the NSU. 	<ul style="list-style-type: none"> ■ Robust and timely reporting and management is ongoing.
To develop a process for assessing other existing screening and potential new screening programmes.	<ul style="list-style-type: none"> ■ National screening advisory body established and work on priority screening areas commissioned. 	<ul style="list-style-type: none"> ■ Assessment of priority screening areas is ongoing.
To ensure that screening programmes operate in an efficient manner and that new investments in screening are cost beneficial.	<ul style="list-style-type: none"> ■ Cost-effective analyses of existing programmes are commenced. ■ Cost-benefit analyses inform decisions relating to potential new screening programmes and changes to existing screening programmes. 	<ul style="list-style-type: none"> ■ Cost-benefit analyses inform decisions relating to potential new screening programmes and changes to existing screening programmes.
To maintain a well-focused NSU team that is expert in screening, confident in their work, feels valued, and that understands its contribution to the overall objectives of the NSU.	<ul style="list-style-type: none"> ■ Individual and team learning opportunities are maximised. ■ Cooperation and collaboration within and across teams is encouraged. ■ Individual and collective understanding of inequalities and the Treaty of Waitangi and its application to our work is improved. 	<ul style="list-style-type: none"> ■ Screening expertise is applied to the assessment and evaluation of potential new organised screening programmes.

3.4.4 QUALITY IMPROVEMENT

Screening programmes must be of high quality to ensure that the **benefits are maximised** and potential harms are minimised. Quality has a number of dimensions – safety, effectiveness, efficiency and equity – that are all important for screening.

Quality assurance processes are designed to minimise the probability of harm to participants and are an essential part of screening programmes. In addition, measures are required to continuously improve performance and steadily improve the standards by which quality is judged, to ensure that the potential benefits are realised. These quality improvement processes aim to support people delivering screening programmes and are about continuous learning and adaptation to change, not control and inspection.

Quality improvement requires consumer and Māori involvement. The NSU is building on existing processes for involving consumers to ensure that its quality activities are appropriate, the programmes remain people-centred, and to improve programme participation and understanding.

Quality already informs much of the NSU's activities and the two cancer screening programmes have well-developed quality assurance processes. As in other areas of health care, the challenge now is to strengthen quality improvement approaches.

SERVICE OBJECTIVES FOR QUALITY IMPROVEMENT

Service Objective	Key Outputs/Performance Indicators – Year One to Two	Key Outputs/Performance Indicators – Year Three to Five
To apply a quality framework that guides quality assurance and quality improvement activities for screening programmes.	<ul style="list-style-type: none"> ■ Screening Programme Quality Framework completed and used as a basis for developing quality improvement approaches. ■ Consumers involved in quality improvement activities. ■ Māori involved in quality improvement activities. 	<ul style="list-style-type: none"> ■ Review and evaluation of Quality Framework is ongoing. ■ Evaluations of key programme components has commenced.
To ensure policy and quality standards are monitored and reviewed on an ongoing basis and results are followed up.	<ul style="list-style-type: none"> ■ Revised BSA policy and quality standards implemented. ■ Framework for auditing NCSP providers implemented. ■ Implementation of the Invasive Cervical Cancer Audit recommendations is commenced. ■ Monitoring is followed up with appropriate action in a timely manner. ■ BSA age range extension commenced. ■ NCSP Operational Policy and Quality Standards are revised and no longer interim. 	<ul style="list-style-type: none"> ■ Policy and quality standards reviewed regularly. ■ Audit cycle of programme service providers is ongoing.
To improve processes for monitoring the treatment and outcomes of programme participants and use this information to improve programme quality.	<ul style="list-style-type: none"> ■ Revised BSA Treatment Provider Data Indicators are implemented and measured. 	<ul style="list-style-type: none"> ■ Reporting of appropriate indicators to measure programme outcomes is ongoing.
To support providers in undertaking quality improvement activities.	<ul style="list-style-type: none"> ■ Ways to support providers to undertake quality improvement activities and adopt a quality improvement culture are identified. ■ BSA unidisciplinary groups adopt a quality improvement focus. 	<ul style="list-style-type: none"> ■ Opportunities are created for providers to share the results of their quality improvement activities.
To keep informed of international developments that may improve programme safety and outcomes.	<ul style="list-style-type: none"> ■ A process for assessing emerging technologies is established. ■ The NSU has participated in international work on measures to assess screening programme performance. 	<ul style="list-style-type: none"> ■ New technologies are incorporated into programmes where appropriate. ■ The NSU participates in relevant international initiatives.
To support the application of the screening programme quality framework to non-programme screening activities.	<ul style="list-style-type: none"> ■ A national screening advisory body is established. ■ Quality framework applied to at least two high priority non-programme screening activities. 	<ul style="list-style-type: none"> ■ The application of the screening programme quality framework is ongoing.
To ensure national performance indicators and programme outcomes are monitored and reviewed on an ongoing basis.	<ul style="list-style-type: none"> ■ Regular independent monitoring is carried out. ■ National performance indicators are regularly measured and results published. ■ Monitoring is followed up with appropriate action in a timely manner. 	<ul style="list-style-type: none"> ■ Regular independent monitoring is carried out. ■ National performance indicators are regularly measured and results published. ■ Monitoring is followed up with appropriate action in a timely manner.

3.4.5 RESEARCH AND DEVELOPMENT

Screening services must be responsive to changes in technology, understanding and consumer expectations. A research and development focus implies incorporating research into everyday practice to incrementally improve their effectiveness, efficiency and accessibility. This involves identifying issues appropriate for research, undertaking research in tandem with service delivery, incorporating relevant research from other countries, evaluating new services and changes to existing ones.

There is a range of research relevant to screening programmes including biomedical, clinical, health service, epidemiological, sociological, economic and psychological research. The role of the NSU may involve collecting original data or being part of regular analyses of routinely collected data.

Ongoing research on the delivery of screening services is also an important part of **quality improvement**, helping to generate evidence on how to improve services. It also closely informs service development. As for quality improvement activities, the NSU will actively involve consumers and Māori in its research, and will **work in partnership** with service providers, academic researchers and practitioners.

The NSU will identify priority areas for research that will help to **maximise the benefits** of the screening programmes. In doing so, it will build alliances with other research funders, including the Health Research Council, District Health Boards, non-government organisations such as the Cancer Society, and charitable bodies.

SERVICE OBJECTIVES FOR RESEARCH AND DEVELOPMENT

Service Objective	Key Outputs/Performance Indicators – Year One to Two	Key Outputs/Performance Indicators – Year Three to Five
To develop and apply a plan for research and development with identified priorities.	<ul style="list-style-type: none"> ■ Research and development priorities identified and communicated widely, and priority research commissioned. 	<ul style="list-style-type: none"> ■ Implementation of research and development plan is ongoing.
To help co-ordinate the funding of screening-related research.	<ul style="list-style-type: none"> ■ Priorities are agreed with other research funders. 	<ul style="list-style-type: none"> ■ Work continues with other research funders.
To disseminate research findings widely in New Zealand and internationally.	<ul style="list-style-type: none"> ■ Networks used to disseminate key findings. ■ Opportunities created for research findings to be shared. ■ Research findings published in international journals. 	<ul style="list-style-type: none"> ■ Participation in international conferences and forums related to screening research is ongoing.

3.4.6 PARTNERSHIP & UNDERSTANDING

Screening programmes rely on the contribution of many people to be successful. An important role for the NSU is creating an environment that encourages partnership between the different contributors to ensure the best possible outcomes. Partnership requires open and honest communication and trust and is more likely if the parties share common goals.

Screening has inherent limitations that are often not well understood. In even the best screening programmes, some participants will have false positive results and others false negative ones. Thus, there is a gap between the expectations of consumers and the public and what screening programmes are able to achieve. Differing perspectives regarding the role of screening can lead to conflicting messages.

The NSU is building collaborative relationships with service providers, Māori, consumer groups, independent service providers, and the professional bodies and colleges. The NSU aims to work with them to understand the principles of screening and the programme as a whole, so that they can carry out their screening roles effectively.

SERVICE OBJECTIVES FOR PARTNERSHIP AND UNDERSTANDING

Service Objective	Key Outputs/Performance Indicators – Year One to Two	Key Outputs/Performance Indicators – Year Three to Five
To communicate clear, consistent and appropriate messages regarding screening.	<ul style="list-style-type: none"> ■ Communications strategy finalised and key priorities underway. ■ A process is established to work with key stakeholders to minimise conflicting messages. 	<ul style="list-style-type: none"> ■ Implementation of communications strategy is ongoing.
To provide evidence-based information for practitioners and consumers.	<ul style="list-style-type: none"> ■ All programme-related information and resources are evidence-based and pre-tested. ■ Information and resources for priority groups is appropriate. 	<ul style="list-style-type: none"> ■ Evidence-based information is informed by NSU research and development initiatives.
To strengthen formal and informal relationships with consumers, professionals and other stakeholders.	<ul style="list-style-type: none"> ■ Programme specific advisory groups are established and providing strategic input to programmes. ■ External working groups and advisors are utilised on key projects. ■ Consumer reference groups are established providing input to programme priorities and developments. ■ Māori advisory groups are established and providing input into programmes. ■ Participation in relevant conferences, hui and fono is supported. ■ Surveys of consumer understanding, attitudes and awareness of screening programmes are regularly carried out. 	<ul style="list-style-type: none"> ■ An effective advisory group structure is maintained. ■ Sponsorship of and participation in relevant events is ongoing.
To provide specific opportunities for the health workforce to increase their knowledge and understanding of screening.	<ul style="list-style-type: none"> ■ The NSU presents and teaches at relevant conferences, educational and training courses ■ Information on the screening programmes is published in peer-reviewed literature ■ Generic competencies are agreed and inform training and education for professionals involved in screening. 	<ul style="list-style-type: none"> ■ Work is ongoing with education providers to ensure appropriate and consistent screening messages are delivered.

This strategic plan will guide the NSU's leadership of safe and effective screening programmes in New Zealand and thus contribute to health improvement and the reduction of health inequalities in New Zealand. The gains made in cancer screening in New Zealand since the inception of the NCSP and BSA will be protected and built upon along with the incorporation of future screening programme development. Mechanisms for achieving targets will be through the areas for action of service development, overall management, workforce development, quality improvement, research and development, and partnership and understanding. The principles of the Treaty of Waitangi will be routinely integrated into our work.

The alignment of the NSU annual plans, workplans and project scopes with the strategic outcomes, strategic objectives and key work areas, will ensure progression towards achieving the vision. To ensure successful implementation of this strategic plan, the NSU will ensure that annual planning, budgets and KPIs align with this plan and include the identification of practical mechanisms for implementation. The execution of this strategic plan will also require resource allocation and policy support, particularly in relation to the development of new screening programmes at a national level. Formal reporting upon the activities and achievements year by year will occur through the publication of annual review documents and monitoring reports.

Working toward the NSU vision over the 2003–2008 period will involve significant investment of resources and expertise in the existing screening programmes, in strategic management, and any further programmes that may be planned. However, because resources are finite, priorities will be determined based upon contribution toward health improvement and the reduction of inequalities.

References

- Durham J, Low M, McLeod D. (2003). *Screening for Prostate Cancer: A survey of New Zealand General Practitioners*. Wellington: NZ Medical J; 116(1176).
<http://www.nzma.org.nz/journal/116-1176/476/>
- Expert Working Group to the Cancer Control Steering Group (2002). *Cancer Screening and Early Detection. Report of Expert Working Group to the Cancer Control Steering Group*. Wellington: New Zealand Cancer Control Trust.
- Gray J. (2001). *Evidence-based Healthcare*. Second Edition. London: Churchill Livingstone.
- Kindig D, Stoddart G. (2003). "What is Population Health?" *American Journal of Public Health* 93(3): 380.
- Minister of Health. (2000). *The New Zealand Health Strategy*. Wellington: Ministry of Health.
- Minister of Health. (2001). *The New Zealand Primary Health Care Strategy*. Wellington: Ministry of Health.
- Minister of Health and Associate Minister of Health. (2002a). *He Korowai Oranga Māori Health Strategy*. Wellington: Ministry of Health.
- Minister of Health and Associate Minister of Health. (2002b). *Whakatātaka Māori Health Action Plan 2002-2005*. Wellington: Ministry of Health.
- Ministry of Health. (2001). *The Health and Independence Report*. Wellington: Ministry of Health.
- Ministry of Health. (2002a). *Cancer in New Zealand: Trends and Projections*. Occasional Bulletin No. 15. Wellington: Ministry of Health.
- Ministry of Health. (2002b). *Achieving Health for All People - Whakatutuki te Oranga Hauora mo ngā Tāngata Katoa: A Framework for Public Health Action for the New Zealand Health Strategy – A working document*. Wellington: Ministry of Health: 1-69.
- Ministry of Health. (2002c). *The Pacific Health and Disability Action Plan*. Wellington: Ministry of Health.
- Ministry of Health. (2003). *Improving Quality (IQ): A Systems Approach for the New Zealand Health and Disability Sector*. Wellington: Ministry of Health.
- National Health Committee. (1998). *Population Screening for Colorectal Cancer: a discussion document*. Wellington: National Health Committee.
- National Health Committee. (2003). *Screening to Improve Health in New Zealand. Criteria to Assess Screening Programmes in New Zealand*. Wellington: National Health Committee.
- Paul S, Tobias M, Wright C. (2003). *Outcome Targets of the National Cervical Screening Programme: a report for the National Screening Unit*. Wellington: Public Health Intelligence, Ministry of Health.
- The Cancer Council Australia (2001). *National Cancer Prevention Policy 2001-2003*. Sydney. The Cancer Council Australia.
- Wilson J, Jungner G. (1968). *Principles and Practice of Screening for Disease*. Public health papers No. 34. Geneva: World Health Organization.

Appendix 1: Current screening in New Zealand

TYPE OF SCREENING	CURRENT EXAMPLES
<p>Screening programmes</p>	<ul style="list-style-type: none"> ■ Breast cancer (BreastScreen Aotearoa) ■ Cervical screening (National Cervical Screening Programme) ■ Newborn blood screening for phenylketonuria, Maple syrup urine disease, galactosemia, biotinidase deficiency, congenital adrenal hyperplasia, congenital hypothyroidism, cystic fibrosis ■ Hepatitis B screening
<p>Opportunistic screening</p>	<ul style="list-style-type: none"> ■ Antenatal screening: <ul style="list-style-type: none"> • anaemia • rhesus incompatibility (to avoid newborn haemolytic disease) • gestational diabetes • serology for syphilis, rubella, hepatitis B • ultrasound screening for anatomical abnormalities e.g. neural tube defects • risk factors for HIV • chromosomal abnormalities e.g. Down syndrome (nuchal translucency +/- maternal serum screening) ■ Newborn physical examination for congenital hip dislocation, undescended testes, cardiac abnormalities, etc ■ Newborn hearing screening ■ Well Child screening for developmental delays ■ Vision and hearing testing at school entry ■ Complications of diabetes (retinal, foot and kidney) ■ Clinical breast examination ■ Breast screening outside of BSA ■ Diabetes ■ Colorectal cancer ■ Prostate cancer ■ Cardiovascular disease risk factors (smoking, serum cholesterol, hypertension) ■ Alcohol and drug misuse among adolescents and adults ■ Osteoporosis risk factors, including bone mineral density (DEXA) scanning

Source: National Health Committee 2003.

Appendix 2: Criteria to assess screening programmes

The National Health Committee has recently published criteria to assess screening programmes in New Zealand (National Health Committee 2003).

CRITERIA FOR ASSESSING SCREENING PROGRAMMES

1. The condition is a suitable candidate for screening.
2. There is a suitable test.
3. There is an effective and accessible treatment or intervention for the condition identified through early detection.
4. There is high quality evidence, ideally from randomised controlled trials, that a screening programme is effective in reducing mortality or morbidity.
5. The potential benefit from the screening programme should outweigh the potential physical and psychological harm (caused by the test, diagnostic procedures and treatment).
6. The health care system will be capable of supporting all necessary elements of the screening pathway, including diagnosis, follow-up and programme evaluation.
7. There is consideration of social and ethical issues.
8. There is consideration of cost-benefit issues.

