



National Screening Unit

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## Strategic Plan 2010 to 2015



Published in June 2010 by the National Screening Unit,  
of the Ministry of Health.  
PO Box 92522, Wellesley St, Auckland.

ISBN 978-0-478-35968-8 (online)

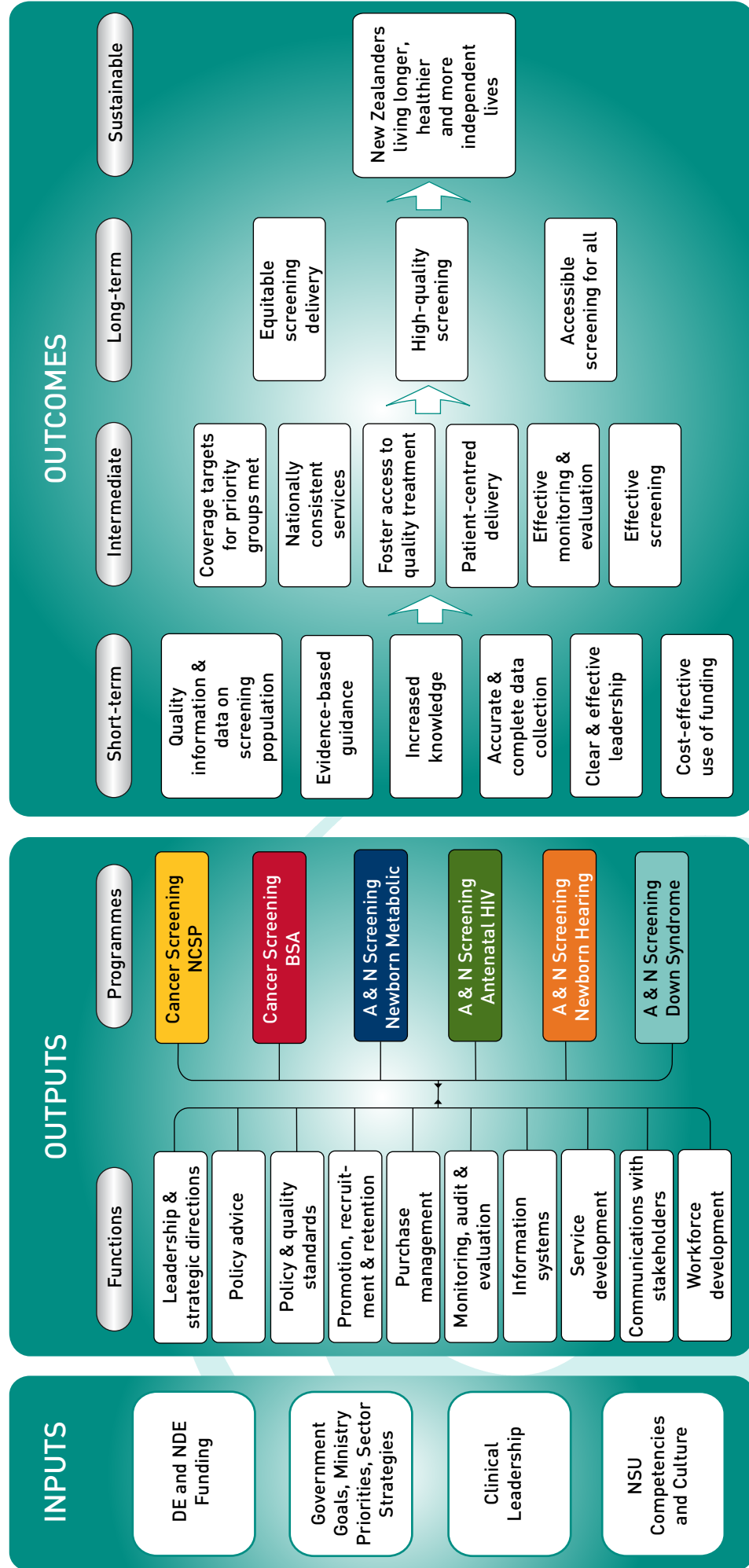
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# NSU Intervention Logic Model 2010 to 2015

NSU Vision: High-quality, equitable and accessible national screening programmes



## Background

The National Screening Unit (NSU) was established in 2001 to deliver safe, effective and equitable screening programmes. The NSU now manages five national screening programmes and one quality improvement initiative.

This document provides a strategic framework for the work of the NSU as illustrated in the intervention logic diagram on page two. The NSU sets its strategic direction within the Ministry of Health's overall strategic framework as illustrated on page 17.

The strategic direction of screening, including the identification of potential new national screening programmes, is undertaken by the Ministry, with advice from the National Screening Advisory Committee (NSAC)<sup>1</sup>, and in consultation with the sector. The Minister makes decisions on new screening programmes or substantial changes to existing programmes.

## Achievements to Date

Since its establishment the NSU has made a significant contribution to health outcomes for New Zealanders through:

- establishing the Universal Newborn Hearing Screening and Early Intervention Programme, Antenatal HIV Screening Programme, and Antenatal Screening for Down Syndrome and Other Conditions – Quality Improvement Measures
- taking on the national leadership of newborn metabolic screening
- increasing the coverage of cancer screening programmes and achieving gains in equity of access (as shown below)
- introducing the age extension for BreastScreen Aotearoa (BSA) in 2004-2005 to include 45 to 49 and 65 to 69 year olds, resulting in a two-thirds increase of the eligible screening population and reconfiguring the breast screening services in the Auckland and Northland region (from one provider to three) to improve coverage for eligible women
- implementing the new NCSP-register which has centralised data entry, includes colposcopy reporting and provides on-line access for stakeholders
- implementing the new NCSP *Guidelines for Cervical Screening in New Zealand* including HPV testing and liquid-based cytology technology
- establishing quality and performance management systems
- raising awareness of screening through a range of health promotion initiatives
- implementing a number of workforce initiatives including development of training for smear takers, cytology laboratories, new health promoters and newborn hearing screeners; and on-line education modules for antenatal and newborn health practitioners
- improving performance management of contracted providers
- providing advice on strategic screening issues.

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<sup>1</sup>The purpose of the NSAC is to provide independent advice to the Director-General of Health on health and disability screening policy, practice and research.

## The Programmes

### BreastScreen Aotearoa

Biennial mammography and any necessary follow-up tests, up to the point of a breast cancer diagnosis, are provided free to eligible women aged 45 to 69 years.

In 2008/09 a total of 207,756 screens were undertaken as part of the programme. Coverage rates for women aged 50 to 69 years for the two-year periods ended June 06 and June 09 are shown below.

Women aged 50-69	Coverage June 06	Coverage June 09
Māori	42.4%	52.4%
Pacific	40.9%	56.5%
All other ethnicities	63.5%	67.5%
<b>Total</b>	<b>61.1%</b>	<b>66%</b>

### National Cervical Screening Programme

Three-yearly cervical smears are offered to women aged 20 to 69 years to detect precancerous changes to the cells of the cervix before they develop into cancer. Modelling of NCSP effectiveness demonstrates a 75 percent prevention rate of cervical cancers in New Zealand. Since the NCSP's inception in 1990 there has been a reduction of approximately 60 percent in mortality from cervical cancer.

In 2008/09 approximately 430,000 women were screened. Coverage rates for women aged 20 to 69 years for the three-year periods ended June 06 and June 09<sup>2</sup> are shown below.

Women aged 20-69	Coverage June 06	Coverage June 09
Māori	46.8%	53%
Pacific	42.9%	56.9%
Asian	41.6%	49.6%
All other ethnicities	79.8%	85%
<b>Total</b>	<b>69.1%</b>	<b>74.6%</b>

<sup>2</sup>Figures are hysterectomy adjusted.

## Antenatal HIV Screening Programme

HIV screening of pregnant women was rolled out nationally between 2006 and 2010. Uptake levels have been steadily increasing, with the first areas to implement the screening reporting coverage levels close to 100 percent. Screening can reduce the chance of HIV being passed to the baby. When HIV is diagnosed and treated appropriately during pregnancy, birth and the early post natal period, the risk of perinatal transmission reduces from up to 31 percent to less than 1 percent.

## Newborn Metabolic Screening Programme

This programme offers screening of newborn babies for certain metabolic disorders. The programme ensures that informed consent is gained from parents, the screening test is performed, analysed and any referral and follow-up is undertaken as required. During 2008/09 approximately 64,000 first screens were undertaken which represents 99 percent coverage of all eligible newborns.

## Universal Newborn Hearing Screening and Early Intervention Programme

Universal newborn hearing screening is the standard of care internationally and has been introduced in New Zealand. The programme will ensure that newborn hearing screening, and follow-up treatment and early intervention when required, can be offered to all eligible babies, with informed consent. During 2008/09 approximately 10,000 babies were screened for hearing loss; during the first two quarters of 2009/10 alone this had increased to over 11,700.

## Antenatal Screening for Down Syndrome and Other Conditions Quality Improvement Measures

The purpose of the Antenatal screening for Down syndrome and other conditions quality improvements is to ensure the screening practise in New Zealand is consistent with international practice, and to improve the quality and safety of screening for women. Women need to be informed about the screening options, and if they choose to participate in screening being provided with balanced information and supported with the decisions that they make. The two screening options are:

1. First trimester combined screening (nuchal translucency and first trimester blood combined into a single risk result) or
2. Second trimester Maternal Serum Screening, which now includes a fourth analyte.

## Current and Future Challenges

The NSU operates within a sector that faces many challenges, not least the ever-increasing demands and expectations to be satisfied from a limited pool of resources. There are a number of the key challenges likely to be faced by the NSU over the next five years. Responding to these challenges will require a screening system that is adaptive, innovative and continually improving.

## Achieving Equity and Coverage

Despite the progress being made, achieving equity and coverage for Māori and Pacific populations remains the biggest challenge for the NSU. A changing demographic profile and population distribution will further impact on our ability to achieve and maintain coverage targets for these populations.

Māori and Pacific populations have poorer health outcomes for breast and cervical cancer. These outcomes result from both under-screening of the population and higher mortality statistics for these particular diseases within these populations<sup>4</sup>. Inconsistent practice and variable access to some screening activities reduces the efficacy of national screening programmes. Finding ways to realise Māori and Pacific potential to help improve screening outcomes will be key in addressing these inequities.

## Improving Performance and Quality

Quality variations exist both regionally and across providers. Development of quality standards, based on international best practice and appropriate to the New Zealand environment, needs to continue, with the incorporation of changes where appropriate. Quality improvement is a continuous process.

## Maximising Value for Money

In an environment where there are expectations of an increasing range of patient-centric and tailored services and treatments, efficient and effective purchase and delivery of screening will be required to ensure the maximum benefits from screening accrue to the populations we serve.

## Leadership of Screening

If the ongoing development of national screening is to meet the external expectations of what screening can deliver and achieve, a whole-of-screening view is needed. Local, regional and national roles and functions need to be determined and understood; further infrastructure planning and workforce development needs to be undertaken; and a greater understanding of screening in the wider sector and population needs to be developed. Establishing strong clinical governance and leadership at a national level is required to support a focus on clinical safety, quality and performance improvement.

## Technological Advancements

Screening technology is constantly changing. As new methods are developed, and outcomes of screening trials become known, national responses are needed. Screening programmes with the capacity to deliver into the future are required, ones that are nimble enough to respond appropriately to the opportunities and challenges arising from new health technologies. Increasingly, sustainable information systems are a necessity to both enable and support national programmes.

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<sup>4</sup>Evidence shows that Māori and Pacific women are twice as likely to die from cervical cancer compared with other ethnic groups.



## The NSU Vision

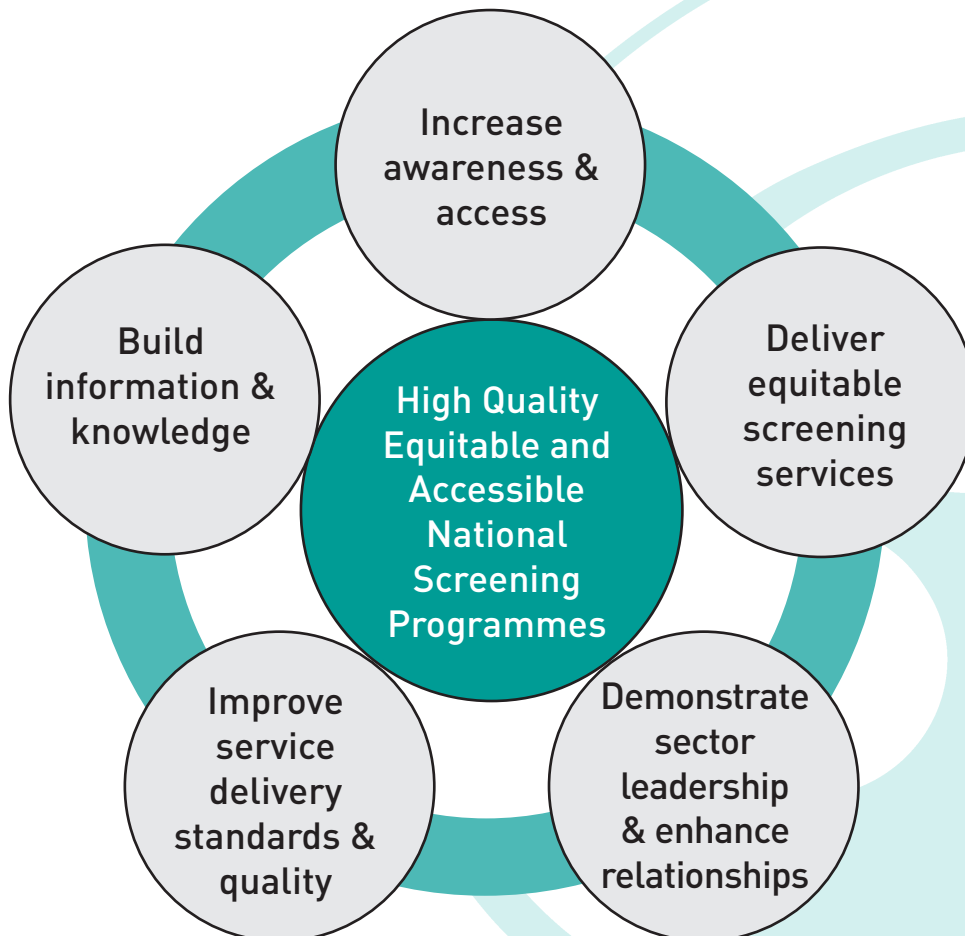
The NSU's vision is for **'high-quality, equitable and accessible national screening programmes'**.

Over the next five years the NSU will be putting in place a range of specifically focused strategies and actions to achieve this vision.

The achievement of this vision contributes to the achievement of the Government's Goal "New Zealanders living longer, healthier and more independent lives" and to the Ministry's priority outcomes that support the achievement of this goal. The NSU's intervention logic model to achieve this vision and contribute to the priorities and goals is shown on page two.

## Strategic Framework

To address these challenges whilst working towards the NSU vision of *high-quality, equitable and accessible national screening programmes*, the NSU will focus its work over the next five years on the following five strategic objectives:



## Increase awareness and access

Public awareness and accessibility of screening programmes is crucial if we are to achieve the coverage necessary to maximise health outcomes.

*By 2015 we will:*

- increase coverage to 70 percent for 50 to 69 year old Māori and Pacific women within the BreastScreen Aotearoa programme
- increase coverage to 80 percent for both Māori and Pacific women in the National Cervical Screening Programme
- ensure that 100 percent of families are fully informed about antenatal and newborn screening programmes and support the programmes in their communities.

*We will do this by:*

- assessing the best approaches to delivery of national screening on an ongoing basis, ensuring screening delivery remains adaptive, innovative and continually improving
- adopting a Whānau Ora approach to service delivery for Māori and others as appropriate
- identifying key performance indicators for Whānau Ora in screening
- reviewing and refining our regional coordination activities to maximise investment in target/priority groups
- strengthening linkages with primary care
- reviewing and refining our health promotional activities
- developing provider capability to ensure informed consent is gained
- implementing a process to identify and invite eligible women for breast screening, with a focus on priority women
- implementing an electronic interface between the NCSP-register and smear takers
- increasing our focus on primary care as a means of increasing awareness and access to screening
- working across the health sector to ensure timely access to post-screening treatment
- developing the understanding of screening in the wider sector.

## Deliver equitable screening services

Understanding and addressing equity issues within screening programmes is critical if we are to meet the needs of our screening populations and ensure that those who are most in need are those who are screened.

*By 2015 we will:*

- have no significant variation in coverage and access between priority population groups and the rest of the eligible population
- have no significant variation by ethnicity or area of residence in screening and access to treatment.

*We will do this by:*

- gathering evidence of inequalities across the screening pathways to support decision making
- improving systems to identify and recruit underscreened and unscreened populations, sharing examples of good practice nationally
- identifying and providing incentives to encourage screening of under-screened populations who are at a higher risk of developing the conditions being screened for
- adopting an approach which involves Māori and Pacific peoples in programme planning, development and review
- targeting health promotion and recruitment initiatives at priority groups
- facilitating a reconfiguration of service delivery, developing flexible and accessible regionalised and localised service delivery initiatives.

## Demonstrate sector leadership and enhance relationships

To achieve our vision we need to provide leadership to, and work collaboratively with, individuals, agencies and organisations across New Zealand to ensure quality screening is available to all.

*By 2015 we will:*

- have improved the system's capacity to deliver into the future
- have developed cohesive innovative approaches to national planning
- have established regional leadership roles in antenatal and newborn screening where applicable
- have a national screening workforce that reflects the screening population distribution and is able to deliver high-quality screening
- have internationally recognised and acknowledged screening programmes.

*We will do this by:*

- determining local, regional and national roles and functions and developing our understanding of the needs of key stakeholders
- developing and maintaining strong links with non-government organisations, Primary Health Organisations, District Health Boards and cancer, antenatal and newborn clinical networks
- strengthening regional coordination between providers
- coordinating approaches to increase opportunities to communicate effectively
- implementing a clinical governance framework that provides leadership and informs programme development
- developing workforce strategies and plans for all screening programmes to meet future capacity requirements
- responding to the opportunities and challenges arising from the development of new health technologies
- matching external expectations of what screening can deliver with what can actually be achieved.

## Improve service delivery standards and quality

Advances in technology are not enough to guarantee improvements in screening outcomes; we need to ensure high-quality and consistent delivery no matter where the screening occurs or who undertakes it.

*By 2015 we will:*

- have nationally consistent and auditable integrated policies, information systems and data management where applicable
- have age range and screening intervals consistent with international best practice/evidence
- be implementing state-of-the-art screening practice and technologies.

*We will do this by:*

- maintaining a strong quality improvement focus whilst ensuring value for money across all programmes
- ensuring service delivery and standards are informed by the latest clinical best practice research and evidence
- providing comprehensive, regularly updated clinical management guidelines and operational policies, standards and procedures
- actively managing the performance of providers
- developing information systems that support the monitoring of antenatal and newborn screening
- implementing an interconnected digital mammography service
- supporting laboratories to automate their testing processes
- having a highly developed and effective NCSP-register acting as a key monitoring tool for NCSP, providers and women
- further developing our highly skilled and specialised screening workforce
- supporting external reviews of our screening programmes and implementing recommendations.

## Build information and knowledge

Information and knowledge are vital for developing our screening programmes and growing our providers' ability to deliver value for money services.

*By 2015 we will:*

- be operating a robust research and development programme to inform the development of existing and any future programmes
- be able to demonstrate the effectiveness of our screening programmes, having completed clinical and economic evaluations of both the BSA and NCSP programmes and having completed planning for effectiveness studies of all antenatal and newborn programmes
- have well-informed stakeholders who understand our programmes.

*We will do this by:*

- undertaking ongoing monitoring of each programme, using regularly reviewed performance indicators, including outcomes, successes and areas for action
- reviewing and prioritising new and existing initiatives and activities to ensure a focus on core delivery and contribution to the achievement of priority outcomes
- supporting the integration of assessment services with diagnostic services
- comprehensively monitoring and evaluating each programme
- developing improved access to performance data and outcomes of monitoring and evaluation for all providers
- developing sustainable information systems to enable and support programme development and delivery
- communicating and sharing data and knowledge effectively with stakeholders.

## Building Capability within the NSU

Achieving the outcomes outlined in this strategy will require an NSU with the capacity and capability to implement the changes identified; the flexibility to respond to a complex and moveable environment; and the ability to integrate new national programmes or devolve existing programmes cost effectively.

*This will require:*

- a culture that embraces and is responsive to change
- an increased focus on performance management and service evaluation
- a customer-centric approach to the delivery of services
- clear accountabilities matched to authorities
- flexibility in the way resources are utilised
- information systems that enable staff to undertake their work
- tools to support performance across the screening pathway.

*We will do this by:*

- involving staff in implementing a range of initiatives to develop employee engagement
- providing development and training opportunities for staff to support their contribution to the NSU
- developing a customer services ethos, internally and externally, to ensure effectiveness of service delivery
- implementing the July 2009 Structural Review that has been developed to align with the Ministry's business process flow and will deliver an enhanced focus on performance management
- working across the Ministry and with other key stakeholders to input into sector developments and to gather feedback and ideas
- ensuring roles and competencies reflect the needs of the NSU
- identifying and developing information systems to meet future requirements of the NSU.

## Managing Risk

Effective risk identification and management will be critical for ensuring the successful implementation of the strategy.

The NSU has an established risk-management strategy and comprehensive risk-management processes. These provide a systematic approach to the identification and assessment of risks that may threaten the achievement of outcomes and objectives.

Built into the NSU's risk management process is a continuous quality improvement approach ensuring lessons learnt are shared.

## Programme Specific Strategic Plans

More detailed information on the strategic direction of the programmes administered by the NSU is contained within programme specific strategic plans. These can easily be accessed, along with other screening and programme information, through our website: [www.nsu.govt.nz](http://www.nsu.govt.nz)



## Screening FAQs

### What is screening?

Screening is a process for identifying apparently healthy people who may be at increased risk of a disease or condition. As a result of the screening they may be offered information, further tests and appropriate treatment to reduce their risk and/or any complications arising from the disease or condition.

Whilst screening helps individuals to make better informed choices about their health, with the potential to save lives or improve quality of life through early diagnosis, there are risks involved. Screening does not offer protection from a condition but in some cases will greatly reduce the likelihood of getting that condition. Within any screening programme false positive results (wrongly reported as having the condition) and false negative results (wrongly reported as not having the condition) can occur.

### Why national screening?

There are a number of benefits of running screening programmes on a national basis. These include:

- leadership of sector development
- a central pool of expertise, minimising duplication and gaps
- a central point of guidance for the sector and providers
- consistent quality standards and evidence-based delivery
- population trend analysis and monitoring
- a clear view of functional similarities across programmes
- cross-programme learning and development
- effective operationalisation of Government policy into regional and local service delivery
- effective purchasing and management of quality screening delivery
- assurance of delivery to standards and performance requirements.

### What makes a national screening programme successful?

- Clear roles, responsibilities and lines of accountability.
- High-quality and timely provision of services.
- Effective monitoring of defined policies and quality standards.
- Timely availability and appropriate integration of screening, diagnostic, treatment and follow-up services.
- High levels of programme enrolment and participation across all ethnic groups represented in the screening population.
- Good information and data on the screening population and programme delivery.
- Identified, and where necessary targeted, priority groups - those who may benefit most from screening.

# National Screening Unit Strategy 2010 to 2015

