

National Screening Unit

**Quality
Framework
2015**

Delivering screening programmes

Acknowledgements

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Foreword

Quality is an integral and essential component of screening programmes. This Framework builds on and replaces the previous Quality Framework published by the National Screening Unit (NSU) in 2005, *Improving Quality: A framework for screening programmes in New Zealand*.

Review of the Framework has given the NSU the opportunity to refresh and refocus the way quality assurance and quality improvement occurs for screening programmes.

Quality is not a static concept; rather, organisations should continuously work to generate and maintain it. Organisational culture should reflect this. Following the new trajectory in this quality framework is intended to lead to a greater impact for screening programmes and activities.

The core principles in this Framework provide a foundation for achieving the NSU's strategic vision: high-quality, equitable and accessible screening programmes.

The Framework focuses on five components that are essential to the safe and effective practice of organised screening.

These are:

1. a central agency to lead and coordinate the screening pathway
2. clinical governance
3. infrastructure and systems to manage a screening programme
4. monitoring and evaluation
5. a quality cycle.

The Framework defines a set of key quality requirements, achievement of which will lead to:

- integrated quality assurance and quality improvement in screening programmes
- screening services that are flexible and responsive to continuous quality improvement.

The NSU sits within the National Services Purchasing (NSP) group in the Ministry of Health. This Framework is designed to align with the NSP's Quality Framework, currently in development. Our Quality Framework also contains the six core components identified in He Korowai Oranga – Māori Health Strategy as necessary to achieve pae ora (healthy futures) – the Government's vision and overarching aim for Māori health (Ministry of Health 2014b).

The Framework is designed for all people working in NSU screening programmes and providers of services on the screening pathway.

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Introduction

The *Quality Framework* is like a fishing net that screening programmes use to 'catch' the right screening outcomes. All the different parts are woven together. If the net is too loose or has holes, we might miss some important fish. Likewise, we can make our net too tight and restricting, wasting our resources. There's an art in getting it right.

– Key informant

Purpose of the Framework

The purpose of this Framework is to define a set of key quality principles and requirements to ensure the best possible outcomes from screening programmes in New Zealand. It will be used to enhance the quality culture in screening in New Zealand.

The Framework is intended to:

- set the platform of expectation for quality screening programmes
- guide those who plan, provide and evaluate the quality of screening services funded by the National Screening Unit (NSU)
- be broad enough to be applicable to the various levels of maturity of different screening programmes, but detailed enough to be a working tool that can be applied to all screening programmes currently managed by the NSU
- be a dynamic framework for action that can be updated regularly, published online on the NSU website, rather than a static document.

Setting the scene

The Mid-Staffordshire tragedy in the United Kingdom in 2013¹ dramatically highlighted the importance of organisational culture in achieving safer and more consumer-centred health care. The resulting Berwick Report summarised the lessons learned and the actions needed to respond (National Advisory Group on the Safety of Patients in England, 2013).

At the outset, the report commented:

The only conceivably worthy honour due to those harmed is to make changes that will save other people and other places from similar harm. It would add tragedy to tragedy if the nation failed to learn from what happened, and to put those lessons to work.

The report found that the tragic circumstances were attributable to a culture of blame, a focus on fiscal rather than clinical outcomes and leadership that had ignored warning signs and whistle-blowers. It concluded that the most important single change required in the National Health Service (NHS) was for it 'to become, more than ever before, a system devoted to continual learning and improvement of patient care, top to bottom and end to end'.

The report emphasised the importance of seeing patient safety as an ever-present concern and the top priority of every person working within the health care system. It noted the need to embrace a culture of learning, recognising that 'the battle for safety is never 'won'; rather, it is always in progress'.

¹ Between 2005 and 2008, hospital-wide substandard patient care in the Stafford Hospital in Mid-Staffordshire, England, led to higher than expected mortality rates.

The lessons identified in the Berwick Report are applicable to other health care systems, including New Zealand's. The Report identified that safe and effective health system cultures:

- empower staff, and patients, to raise concerns and ask questions
- support staff to learn and develop in order to continuously improve their skills
- recognise and accept where something has gone wrong
- abandon blame as a tool
- learn from mistakes
- recognise that transparency is essential, and expect and insist on transparency at all levels and with regard to all types of information
- acknowledge the value of involving patients in planning, providing and evaluating care.

Historically, quality improvement in New Zealand screening programmes has largely been incident- and crisis-driven. Significant programme resources have been expended on quality initiatives in response to recommendations from certain inquiries, audits and monitoring reports, including:

- the Cartwright Inquiry, 1987–1988
- the Ministerial Inquiry into the Under-reporting of Cervical Smear Abnormalities in the Gisborne Region, 2000
- the Report of the Parliamentary Review Committee regarding the New Zealand Cervical Screening Programme, 2011
- the Review of the BreastScreen Aotearoa Programme, 2011
- the quality improvement review of a screening event in the Universal Newborn Hearing Screening and Early Intervention Programme, 2012.

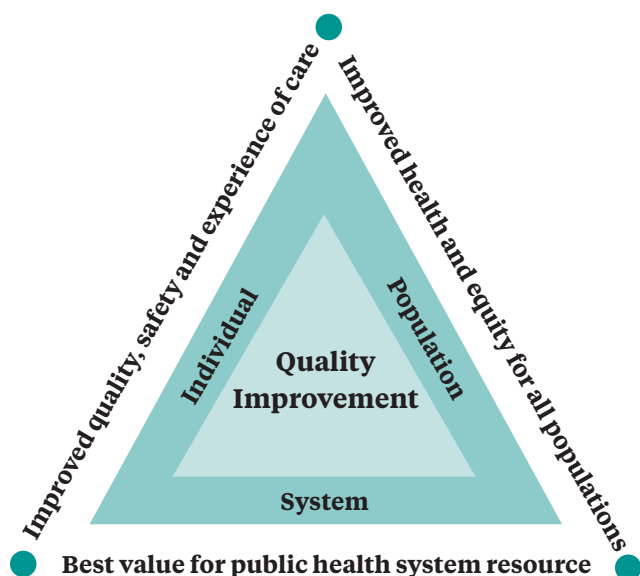
The starting point for quality improvement is current service delivery. In this regard, screening services continue to build on lessons learned and previous successes from across the health sector.

Many of the NSU's screening programmes are now achieving good overall coverage (participation) rates. Achieving equitable coverage is the emphasis for quality improvement.

The Triple Aim

The Institute for Healthcare Improvement's 'Triple Aim' concept has been adapted for the New Zealand context by the Health Quality and Safety Commission (HQSC). The Triple Aim envisages quality improvement that benefits the individual, the population and the system, as follows.

Figure 1: HQSC Triple Aim for quality improvement



The Triple Aim sits beside this Quality Framework. Each requirement in this Framework has been aligned to an aspect of the Triple Aim, although arguably every side of the triangle can be seen in every requirement.

In line with the direction of the HQSC and in acknowledgement of the fact that screening programmes in New Zealand have reached a certain level of maturity, the focus of the NSU Quality Framework has shifted from quality assurance to quality improvement. Quality assurance activities will become part of a wider quality system that focuses more on continual improvement, in which new knowledge and changes in technology or expectations are incorporated incrementally.

Implementation

This Quality Framework is a renewal of the previous version, and therefore builds on and enhances activities already happening.

Every member of an organisation has a responsibility to help create a workplace culture that improves quality. The NSU's screening activities happen in a variety of settings. Accordingly, staff will contribute to the requirements of this Quality Framework in a variety of ways. In particular:

- all staff in the NSU or in provider organisations should be aware of the Quality Framework and have an understanding of the particular responsibilities of their role in the context of the Framework
- staff in management or governance roles will have additional responsibilities to make sure their team, service or organisation is meeting its requirements
- each NSU programme should develop an action plan to implement the Framework, and these plans should be coordinated across the NSU
- all staff have a responsibility to raise any concerns they have about quality, and they have the right to have those concerns addressed.

Quality principles

This section presents the six core principles that underpin this Quality Framework. These principles provide a foundation for achieving the NSU's strategic vision for achieving high-quality, equitable and accessible screening programmes.

1. The overall benefits of screening must outweigh the harm.
 - There should be regular review of the evidence on which the programmes are based.
 - There is transparency around significant decisions, major changes to screening programmes and serious adverse events.
2. National screening programmes are people centred.
 - Screening should be acceptable to individuals, whānau and the populations being screened.
 - Advisory groups seek appropriate consumer representatives with experience of the condition(s) screened for and the health system.
 - Screening programmes are delivered in an ethically and culturally competent manner for New Zealand.
3. National screening programmes will achieve equitable access to screening and equitable outcomes for all population groups.
 - Screening programmes should incorporate the principles of The Treaty of Waitangi.
 - Solutions to access are focused on improving processes and adapting systems to meet the needs of individuals and under-screened populations.
4. Informed consent is a priority throughout the screening pathway.
 - Screening programmes should provide full information to people. This includes detail on benefits and harms of screening.
 - Screening programmes must ensure that cultural and health literacy differences are addressed when providing information to support informed consent.
5. Screening programmes are monitored and evaluated on a regular basis.
 - Information systems should be set up to enable timely monitoring, audit and evaluation of screening programmes and providers.
6. National screening programmes are committed to continuous quality improvement in programme management and clinical service delivery.
 - Policy makers, providers and all those involved in screening programmes are accountable and responsible for maintaining capacity and capability in delivering screening programmes and services of the highest possible quality.

Essential components of screening programmes and quality requirements

Quality needs to drive screening. If adequate quality components are not in place, screening programmes should not operate, and new screening programmes should not be started.

–Key informant

Screening reflects the public health goal of improving the health of populations through early detection. Screening is not the same as testing during diagnosis or treatment. Before screening, the individual tested usually has no symptoms and is undiagnosed.

Five components of organised screening systems have been identified as essential to the safe and effective practice of organised screening (adapted from Hale 2012). These are:

1. a central agency to lead and coordinate the screening pathway
2. clinical governance
3. infrastructure and systems to manage a screening programme
4. monitoring and evaluation
5. a quality cycle.

Well-designed screening programmes ensure that all the essential components are interrelated and consistent. This gives organised screening the ability to maximise benefits and reduce harms associated with screening.

Together these five essential components help to distinguish organised screening programmes from other opportunistic and routine screening. Opportunistic screening relies on a patient or health practitioner raising the issue during a consultation. Routine screening sets out to offer a test to all those in a defined population but may lack some or all of the components listed above. Shifting routine screening to an organised screening approach means that all aspects that build quality can be addressed.

This Framework assigns a number of ‘requirements’ to each of the five components listed here. The following section sets these out in full, and Appendix 4 summarises them. Meeting the requirements will help to ensure screening programmes are doing the right thing, at the right time, in the right way, for the right person – and achieving the best possible results.

This Framework identifies the HQSC Triple Aim outcome(s) that each requirement best supports, assigning it with a label as follows:

Individual	Improved quality, safety and experience of care
Population	Improved health and equity for all populations
System	Best value for public system resources

A central agency to lead and coordinate the screening pathway

The World Health Organization and European Research Organisation on Genital Infection and Neoplasia recommend that screening programmes be governed by a ‘central office or individual for planning, coordinating and monitoring and evaluating the programme’ (Monsonego and Franco 1997). Such an office can ensure all the essential components of a screening programme are in place, coordinated and functioning to a high standard.

All screening programmes have a range of practitioners working in both community and hospital settings and in public and private organisations. This creates specific challenges for implementing quality initiatives across the screening pathway and developing a programme-wide quality culture. Strong leadership and direction from the central agency is required to ensure the system is cohesive.

The NSU was established in 2001 within the Ministry of Health to deliver safe, effective and equitable screening programmes. The NSU is the central agency with responsibility for the national operational function and strategic management of four national screening programmes and one quality improvement initiative:

- the National Cervical Screening Programme (NCSP)
- BreastScreen Aotearoa (BSA)
- the Newborn Metabolic Screening Programme
- the Universal Newborn Hearing Screening and Early Intervention Programme
- the quality improvement initiative for antenatal screening for Down syndrome and other conditions.

Requirement: Leadership on equity

Population

Equity is the absence of avoidable or remediable differences among groups of people (World Health Organization nd). For the NSU, achieving equity involves identifying and then eliminating unfair, avoidable and fixable differences in screening access and outcomes. The NSU has made gains in this context over the last decade, but further effort is required. The NSU must lead the screening sector to achieve equity; this is the absolute focus for the future.

Health inequities in New Zealand are generally greatest between Māori and non-Māori, followed by differences between Pacific and non-Māori/non-Pacific peoples. Inequities also exist based on socioeconomic status and disability and for other ethnic groups. In some areas of health, geographical inequities are also an issue.

The NSU’s aims of achieving equity and improving Māori health align with the wider health and disability sector goals mandated by the New Zealand Health Strategy and the New Zealand Disability Strategy (Minister of Health 2000; Minister for Disability Issues 2001) and the refreshed He Korowhai Oranga: Māori Health Strategy (Ministry of Health 2014b).

The NSU is committed to applying an equity lens to all its policy and operational decisions. The Health Equity Assessment Tool (Signal et al 2008)² and *Equity of Health Care for Māori: A framework* (Ministry of Health 2014a)³ provide consistent approaches to think broadly about equity issues and the impact of initiatives.

Requirement: Evidence-based information

Population

As screening is offered to healthy people, a high level of evidence is particularly important for making decisions about screening programmes and must consider the potential harms as well as the benefits of screening. Evidence comes from a range of sources, including peer-reviewed journals, grey literature and expert opinion. The most robust evidence available will be used to inform decisions, including those concerning new screening programmes (refer to Appendix 3).

Screening programmes are also required to provide eligible populations and their whānau with evidence-based information to allow them to make informed decisions about participation. In developing resources, providers should consider differing levels of health literacy and cultural differences.

Given public expectations, discussing the known harms of screening alongside the benefits can be challenging, especially following incidents where harm has occurred. Providers should always offer clear explanations in plain English.

Requirement: Research

Individual

Research creates opportunities to increase knowledge through systematic study. The definition of research in the context of screening can be broad and may range from clinical outcomes and interventions to service evaluation.

A comprehensive research agenda is important to the NSU and is outlined in the NSU's *Research and Evaluation Strategy*, to be published in 2015. Research can help to improve the quality of service delivered throughout screening programmes. It also recognises and respects the extremely valuable information our screened populations can share with us.

Research informs screening and wider health practices both nationally and internationally. New Zealand should contribute to international discussion and review in the sphere of screening; for example, policy discussion on breast screening age eligibility criteria. The NSU is obliged and committed to undertake all research in an ethical way and in accordance with national legislation and international best practice.

Collaborating with research partners provides an opportunity for staff to develop professionally, can enhance their engagement in the workplace and can attract staff with a wide range of skills. The NSU therefore encourages screening providers to participate in research. The discipline required to be good at screening is compatible with the research culture, and vice versa.

Requirement: Policy framework

System

Each screening programme should work to a comprehensive set of policies that guides its operation and continuing development. These policies will sit under the broader NSU policies. The policy development cycle has defined steps; each one is important. For the purposes of continual quality improvement, the final step is just as critical as the first; policies should be regularly reviewed and updated.

² For further details, refer to www.health.govt.nz/publication/health-equity-assessment-tool-users-guide

³ For further details, refer to www.health.govt.nz/publication/equity-health-care-maori-framework

Requirement: Quality management systems

To provide high-quality screening programmes, the NSU needs to function efficiently and effectively as an organisation. A number of international management best practice models, standards and criteria provide guidance for achieving high-quality management systems. The NSU is committed to drawing on these resources to continue to improve its performance as an organisation within the central government environment.

High-quality management systems are desirable for any organisations, not just within screening or the broader health sector. They encourage a systems approach to management. The NSU has chosen quality management systems as a quality requirement to underscore the ongoing importance of quality improvement across all its activities.

Requirement: Standards and indicators

Standards define performance expectations within a screening programme that are generally considered to represent acceptable or optimal practice. They must be in place to enhance the safety and quality of care with regards to structure, process and outcomes for screening programmes.

Each NSU screening programme has a set of standards that reflects the individual nature and maturity of that programme.

Standards should be regularly revised to keep them up to date with new evidence and technology, to reflect changes in best practice and to respond to incidents. International best practice is that standards are developed and revised in consultation with stakeholders following principles that include encouraging quality improvement, taking a service-user focus and ensuring consistency (ISQua 2007).

Arising from each set of standards is a range of indicators that each programme reports against. Indicators need to be carefully selected to provide a concise, but comprehensive, overview of the performance of the programme. In addition, each programme and the NSU overall should work to two or three key performance indicators, chosen to ensure the specific programme meets its public health goals.

Requirement: Appropriate use of resources

Resources for screening programmes, including diagnostic and treatment services, must be appropriate to provide safe, efficient, effective and equitable services for the eligible populations. Resources include funding for the workforce, workforce training and development, equipment, comprehensive data systems and monitoring.

Programme changes, including new technologies and ways of working, should be analysed for their value for money. If screening coverage targets are not achieved, the value of screening will diminish, and consideration should be given to whether the resources being allocated to the screening programme could more effectively target other interventions to improve outcomes.

Requirement: Uptake of new technology

The NSU coordinates the use of new technology within its screening programmes to ensure national consistency, equity and quality, particularly in the use of diagnostic tools. In this context, the NSU considers all dimensions of quality; individual patient safety and experience; population health outcomes; and best value. It also takes into consideration what is happening in other parts of the health system.

Requirement: Workforce development

The development and maintenance of a capable workforce across the entire pathway of each screening programme is crucial and the NSU has a strategic role. This involves:

- planning or influencing the development of workforce training plans and pathways
- devising mechanisms for recruitment
- setting requirements for staff professional development
- managing transitions (such as those involving new technologies)
- making peer support arrangements
- overseeing contingency planning
- ensuring that the screening workforce is culturally competent.

Workforce capacity and development relies on relationships with many stakeholders. These include Health Workforce New Zealand, professional colleges and registration boards, and the professional groups working within screening programmes.

Clinical governance

You can get bad outcomes with everybody doing the right thing – even using their best judgement. Peers help you keep that bigger picture of the world.
– Key informant

Clinical governance is a ‘system through which there is accountability for continuously improving the quality of services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish’ (Scally and Donaldson 1998).

Leadership is a specific component of the clinical governance system (Ministerial Task Group on Clinical Leadership 2009).

Good leaders show authenticity and genuineness while setting the direction forward. They create an environment where everyone can contribute; they show integrity in how they work, interact with colleagues and manage relationships within and external to their organisation.

This section focuses on structures and relationships rather than the activities of clinical governance. Those in governance positions have responsibilities to make sure that the other quality requirements outlined in this Quality Framework are in place and working effectively. To do so, clinicians must be appropriately skilled.

Requirement: Partnership with management

A partnership between clinical governance and management (operational governance) is a necessity. This is the best way to make complex decisions with regard to both clinical safety and resources. It recognises that clinical decisions do not happen in a vacuum independent from organisational processes and demands.

Requirement: Consumer-centred partnership

A consumer-centred and partnership-orientated approach to improving quality means making sure that governance structures at all levels take into consideration the knowledge and experience of different stakeholders. Bringing in the knowledge and experience of consumers at the governance level is essential to improving acceptability, access and, ultimately, participation.

Consumer representation on governance groups brings different viewpoints to the table. The NSU recognises that being a lone consumer voice in a group can be challenging. The NSU supports having two consumer advisors on advisory groups, each with different experience. This may be either personal/family experience of a screened condition or knowledge of the health system from a consumer perspective.

Requirement: Governance – national

Population

National clinical governance is provided at a number of levels. The National Screening Advisory Committee (NSAC) provides high-level strategic governance and leadership, in particular concerning the evidence for new national screening programmes. The Māori Monitoring and Equity Group provides Māori governance and has a critical role as the NSU further increases its focus on achieving equity across all programmes.

Programme advisory groups undertake clinical governance at the programme level. These groups have a depth and breadth of expertise specific to their area, and monitor quality by looking for changes that could herald the existence of risks or issues. Programme advisory groups consider operational changes to screening programmes, and issues arising. NSAC will also consider and endorse major changes within current screening programmes as raised by NSU advisory groups.

Within the NSU, clinical governance is led by the Clinical Director, assisted by clinicians working across the programmes and supported by the Ministry of Health's Chief Medical Officer.

Requirement: Governance – service provision level

Population

The provision of strong clinical governance at the level of service provision is the responsibility of individual providers. It is essential for the delivery of safe, high-quality screening programmes. However, the NSU also guides clinical governance of specific services, through mechanisms including the NSU clinical framework and each screening programme's policy and quality standards.

Screening providers are many and varied, from small independent service providers and primary care providers through to large lead providers in breast screening. Governance groups need to understand the risks as well as the benefits associated with screening, and what makes screening different from other types of health care. They may be an existing governance board in a provider organisation; if this is the case, their role in governance of screening needs to be explicitly identified. Strong governance groups have diverse representation.

Infrastructure and systems

High-quality screening programmes are supported by high-quality infrastructure. Information systems need to meet the specific requirements of screening. Within the confines of available resources, systems should be thoughtfully developed to be as user-friendly as possible. This helps to make doing the right thing the easy thing to do.

Requirement: Information system platforms and tools

System

Information systems that support all aspects of the screening pathway underpin many of the NSU's other quality requirements. These include platforms and tools that manage the invitation process, capture test results from screening devices or laboratories, organise and transmit data, and enable data to be analysed.

Current platforms are web based. These are either transactional systems such as the National Cervical Screening Programme Register or the Concerto BreastScreening system, or data warehouse and reporting systems used to monitor, audit and analyse the quality and effectiveness of the programmes.

The NSU's information systems must continue to develop to accommodate changing technology and the changing needs of screening programmes. The processes that support the system also need to evolve; so too must the processes that the system supports.

Requirement: Privacy and confidentiality of information **Individual**

A respect for individuals' privacy and ensuring confidentiality are critical to screening programmes' ongoing success. There is an imperative to meet statutory and professional requirements in this regard, and also be aware of the risk to the reputation of screening even from perceived breaches. The Health Information Privacy Code 1994 sets out the key requirements of health care workers in terms of privacy.

The concepts of privacy and confidentiality are intertwined but distinct. Privacy relates to a person's need and right to control and protect their personal, identifiable information. Confidentiality is the obligation of agencies to only use personal information in the interests of the individual. All screening programmes have mechanisms to ensure personal information is respected throughout the screening pathway.

Requirement: Fit-for-purpose population registers **System**

Screening programmes require a mechanism to identify their eligible populations. A fit-for-purpose population register does this in a fair and equitable way, thereby increasing equitable access to screening. Participation is then less dependent on an individual's level of awareness of a programme or previous exposure to health information as everyone is invited to participate.

There is no definitive agreement on what constitutes a 'population register'. However, a United Nations Statistics Division report suggests that there are four key features of such a register: it holds information on each member of the total resident population of a defined geographical location; it uniquely identifies each person; the data on the register is continuously updated; and the operation of the register is enshrined in legislation.

Population registers need to be developed to 'do the job' with the flexibility to be able to align with changed programme scope. The NSU needs to examine options for sharing common platforms and maximising the utility of national systems, such as primary health organisation registers and the National Health Index.

Requirement: Recruitment and retention **Individual**

All screening programmes need to work to set processes, supported by information systems, to invite eligible populations to participate in screening. In addition, programmes that offer repeat screening (for example, two-yearly breast screening) need to remind participants to return. Recruitment and retention processes also have to provide participants with the information they need to make an informed decision about participation.

Individuals and population groups can experience different barriers to screening. Recruitment and retention processes, and underlying information systems, must address those barriers. In line with *He Korowai Oranga: Māori Health Strategy* (Ministry of Health 2014b), the system must support achieving mauri ora and autonomous decision-making. To improve the participation rates of priority groups, some programmes fund screening services to provide additional assistance to help reduce barriers to screening.

Requirement: Information sharing within and across agencies

Individual Population System

Interacting with health care services can be difficult or stressful. Many forms that seem to ask for the same information can cause frustration. Health care providers can improve people's experiences by integrating and sharing information across health providers and other social sector agencies, when this can be done safely, accurately and within the limits of the privacy legislation.

The aim of sharing information is not limited to a seamless service for individual screening participants. There are also benefits to sharing operational experience, good practice and lessons learnt. In particular, strong relationships with other agencies let screening programmes scan for new opportunities to improve care experiences.

Monitoring and evaluation

It is not about simply whether the numbers are increasing or decreasing – it is about the performance and measuring the performance . . . If the monitoring of quality is good then sentinel events will be [just] something that occur and not the crisis of the day.
– Key informant

Monitoring and evaluation are about measuring programme performance. Both are vital in organised screening programmes. There is also an imperative to take the next step and act on the information that is provided. This cannot be overlooked.

Achieving equity in screening first requires identification of existing and potential inequities along the screening pathway. After identification, inequities can be addressed through planning and then action. Evaluation, monitoring and audit are essential for identifying inequities, identifying and measuring the success of mitigating strategies, and for documenting successful strategies so they can be replicated elsewhere.

Requirement: Programme monitoring

Population

Monitoring involves the routine gathering of timely information about screening programmes. The information is used to determine how the programme is progressing and to allow adjustments to be made as necessary. The objective of regular reporting and monitoring should be to provide the basis for collaboration and improvement – working towards sustainable change. Monitoring needs alter as programmes mature.

Monitoring should take place at all levels: within provider organisations and nationally (either by the NSU or by external organisations). Each programme should have a monitoring framework which guides this. Mechanisms to ensure data quality are part of monitoring systems.

Requirement: Programme evaluation

System

Evaluation has been defined as 'the systematic collection of information about the activities, characteristics, and outcomes of programmes to make judgments about the programmes, improve programme effectiveness, and/or inform decisions about future programme development' (CDC 2005).

There should be ongoing evaluation of the different components of each programme for effectiveness, quality and value. Evaluation should include an assessment of new evidence for the benefits and harms of particular tests, advances in treatment and changes in people's expectations and awareness of screening programmes. If a programme is not delivering on its objectives there should be a reassessment of whether the programme should continue.

Requirement: Provider relationships and contract monitoring

Screening services are delivered by a range of providers who hold contracts with the NSU. The NSU ensures that these providers meet service specifications by monitoring contracts and requiring regular structured reporting. Dashboards are useful tools to assist in meeting this requirement and can include operational and clinical outcomes.

Building and maintaining good relationships with providers is important to the NSU. Trust and transparency are essential; *kanohi ki te kanohi*/face-to-face meetings facilitate this. The NSU needs to know that providers are delivering the services it contracts safely, but does not want the reporting requirement to be overly burdensome. Good relationships enable open communication about clinical concerns, timely reporting of incidents and provision of constructive feedback.

Requirement: Individual performance monitoring

Historically there has been a reluctance to monitor the performance of individuals who deliver or interpret screening tests within screening programmes. However, the importance of this systems approach has been highlighted by a small number of high-profile sentinel events in New Zealand and internationally. Problems with individual clinicians or groups of screeners who were performing outside expected parameters of practice may have been detected and addressed earlier if individual performance monitoring had been in place.

Individual monitoring provides useful feedback, and may reveal opportunities for individuals to make small changes to improve their performance. It allows clinicians to anonymously compare themselves with their peers and to reflect on their own practice. The process is not designed to be punitive but constructive; it aims to improve quality and enhance continuing education.

Requirement: Ethnicity data accuracy

Action to reduce disparities relies on the availability of good information. Good-quality ethnicity data ensures that population health can be assessed over time, service performance can be monitored and effective services can be planned. Ethnicity data in current health databases is known to be of varying quality; this often results in the undercounting of Māori, Pacific and other non-New Zealand European ethnic groups.

The Ministry of Health's *Ethnicity Data Protocols for the Health and Disability Sector* (Ministry of Health 2004) outlines standards for collecting, recording and outputting ethnicity data. The NSU requires all programmes to comply with these standards and to take action to improve data quality wherever possible. The NSU also supports the use of the *Primary Care Ethnicity Data Audit Toolkit* (Ministry of Health 2013).

A quality cycle

There is a need for the right information and feedback loops – It is not just about ‘this is what we’ve done, this is where we are at’. We need to signal the future direction. We need to keep asking the right questions . . . It’s the bit before and the bit after.

– Key informant

To maximise opportunities to make a difference and achieve change, quality needs to be integrated, organised and coordinated across the screening pathway. The ongoing nature of quality improvement processes should create a cycle of critical review of services. The system needs to generate information and then use it to inform improvement activities, take action and review the outcomes. It is essential that all components of the framework are linked, and there is a focus on quality over time rather than just in response to critical events.

The NSU continues to build continuous quality improvement principles into its way of working and develops and implements quality improvement programmes for each screening programme but does not overlook the importance of quality assurance. Quality assurance processes make sure providers meet and maintain the minimum requirements for each programme.

There is far greater value in implementing processes that systematically assure quality and assess and address emerging issues than in responding to crisis events. Organisational cultures must support and value learning.

Requirement: Consumer feedback mechanisms

Individual System

Feedback loops are critical to any professional practice system. Systems need to be capable of identifying issues or patterns and responding appropriately, whether they are complaints or compliments. The relevance of feedback loops is illustrated by human physiology: diseases occur when a system loses the ability to maintain balance. High-functioning organisations maintain their ‘health’ by listening and responding to consumers, their whānau and other advocates and seeing feedback as an opportunity to learn and improve.

Systems should provide consumers with a range of ways to conveniently and safely provide feedback (eg, in hard copy, online or verbally, individually or as a group). Providers could offer consumers the chance to submit brief satisfaction surveys or participate in more in-depth case interviews. They should seek and pay attention to the voices of those not frequently heard, from groups often not served well by the health system.

Requirement: Risk management

System

Risk management involves dealing with uncertainty. All activities entail risks that may impact on achieving objectives. A balance is needed between the potential negative consequences of taking risks and the potential benefits of achieving planned outcomes.

Organisations involved in screening need to have risk management policies and procedures. All staff should have the knowledge and tools to take appropriate responsibility for risk management. Building a culture that is open and honest, where everyone feels comfortable discussing or escalating risks, is vitally important. This is especially relevant where clinical safety may be impacted.

Requirement: Incident management

System

In alignment with the HQSC, the NSU defines an incident as ‘any event that could have or did cause harm to a consumer, and/or harm, loss or damage to a nationally-based screening programme(s)’ (Ministry of Health unpublished). Incidents range from near misses to sentinel incidents that may involve serious harm. Even a highly functioning, quality-focused service can never entirely eliminate incidents.

A critical emergency management principle applicable to all emergencies, from small incidents to natural disasters or pandemics, is to plan and practice before an event occurs. It is then the responsibility of the NSU and providers to respond quickly to every incident, with the NSU either coordinating or providing leadership for the response. Incident responses, no-blame reviews, learning and improving need to become part of 'business as usual'.

Requirement: Monitoring review recommendation implementation

System

It is important to be open to critical appraisal of screening programmes and also to act on their findings. Formal reviews occur for many reasons – for example, after sentinel incidents, because they are legislated, or in response to concerns raised internally or externally. Where recommendations for improving quality are made, processes need to be in place to ensure that changes are made in an effective and timely way. This is best supported by a quality improvement culture that is open and no-blame.

Requirement: Public reporting

Individual

Public reporting is recommended for all screening programmes. This process involves publicising the NSU and provider achievements and success stories, as well as areas that need improvement or targets that are not being achieved. Public reporting includes publishing routine monitoring reports as well as assessments of long-term clinical outcomes, such as mortality studies.

Transparent decision-making is also part of public reporting, to build a relationship with the public based on trust and confidence. Information is now easily shared publicly online. Providers have a responsibility to present that information in context, to reduce misunderstanding or confusion.

Requirement: Audit

System

Screening providers are audited in order to ensure quality in the delivery of their services and to identify risks to the public. Audits are a form of monitoring that assesses whether providers are meeting programme standards and are used in conjunction with other quality monitoring tools.

Providers should run internal audits (internal quality assurance) at regular intervals to inform continuous quality improvement, identify problems and risks, and address areas where standards are not being met. External audits should take place less frequently and be comprehensive against programme standards. In principle, effort and resources should target underperforming providers. On rare occasions, an external issues-based audit may be used to investigate a significant incident.

How programmes are audited is important. It is important that audits are viewed in the context of continuous quality improvement, rather than as a fault-finding exercise. What should matter most is taking timely action to rectify any issues identified by audit, rather than the quantity of issues identified. The NSU endeavours to undertake audits that are appropriate to each programme's stage of development.

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Appendix 1: Key concepts

Screening

The NSU has adopted the following definition of screening, based on that of the National Screening Committee of the United Kingdom, as adapted by the National Health Committee (2003).

Screening is a health service in which members of a defined population, who 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 treatments, to reduce the risk of disease or its complications.

There are two types of screening – organised screening programmes and opportunistic screening programmes. Organised screening programmes have to be of a high standard, and the screening services are checked and monitored by people from outside the programme. With organised screening programmes, everyone who takes part is offered the same services, information and support. Often, large numbers of people are invited to take part in organised screening programmes. The NSU oversees national organised screening programmes. Opportunistic screening happens when someone asks their doctor or health professional for a check or test, or a check or test is offered by a doctor or health professional. Unlike an organised screening programme, opportunistic screening may not be checked or monitored.

Quality and quality improvement

The Ministry of Health's Improving Quality (IQ) Approach has adapted the following definition of quality (Lohr 1990).

Quality is the cumulative result of the interactions of people, individuals, teams, organisations and systems. It can be defined as the degree to which the services for individuals and populations increase the likelihood of the desired outcomes.

The IQ Approach has adopted the following definition of quality improvement.

Quality improvement includes both quality assurance and continuous quality improvement (CQI) activities. While both are important, there is growing international evidence indicating that focusing on continuous quality improvement leads to better outcomes than a focus on quality assurance activities alone.

The concept of quality improvement entails:

- an explicit concern for quality
- a search for continuous improvement
- an emphasis on improving work processes to achieve desired outcomes
- a focus on developing systems and investing in people to achieve quality health outcomes.

Clinical governance

The NSU defines clinical governance as:

A system through which there is accountability for continuously improving the quality of services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish (Sally and Donaldson 1998).

This definition embodies three attributes: recognisable high standards of care; transparent responsibility and accountability for those standards; and a constant dynamic of improvement.

Health literacy

The Ministry of Health's 2010 report *Kōrero Mārama: Health Literacy and Māori* found that 56 percent of adult New Zealanders had low health literacy skills. Health literacy is defined there as:

the ability to obtain, process and understand basic health information and services in order to make informed and appropriate health decisions.

Health literacy by definition is influenced both by people and the health system with which they interact. It is about ensuring that our care systems and services are understandable and navigable for all New Zealanders, making sure the available information about health care services is in the right format and using language that is easily understood by all.

Appendix 2: National Health Committee 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.

Appendix 3: Quality Framework overview

