Universal Newborn Hearing Screening and Early Intervention Programme (UNHSEIP)

2017

Final report on the implementation of quality improvements



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# 1 Introduction

The purpose of this report is to provide a final update on the implementation of the 21 recommendations from the *Quality Improvement Review of a Screening Event in the Universal Newborn Hearing Screening and Early Intervention Programme, December 2012* (Ministry of Health 2012) – the *Quality Improvement Review*.

## Background

Following a screening incident in 2012 where some newborn hearing screeners did not screen babies according to the nationally accepted screening protocol, the National Screening Unit (NSU) of the Ministry of Health (the Ministry) led a review of screening processes set out in the Universal Newborn Hearing Screening and Early Intervention Programme (UNHSEIP). The *Quality Improvement Review* (Ministry of Health 2012) is a report outlining the results of that review, which was released to the public in February 2013.

The review outlines 21 recommendations, which the NSU worked with district health boards (DHBs) and expert advisors to implement.

## Overview of the UNHSEIP

Universal newborn hearing screening is an international standard of care. The early detection of hearing loss and initiation of early medical and educational interventions have been demonstrated to significantly improve a child’s long-term language skills and cognitive ability, thereby having a positive impact on children with hearing loss and their families and whānau.

The UNHSEIP is jointly overseen by the ministries of Health and Education. The Ministry of Health, through the NSU, is responsible for screening for and diagnosing hearing loss and instigating medical interventions, and the Ministry of Education is responsible for setting up appropriate early intervention services.

All parents/guardians are offered hearing screening for their newborns, and approximately 54,000 babies nationally are screened through the UNHSEIP each year.

The programme’s aim is to provide: ‘early identification of newborns with hearing loss so that they can access timely and appropriate interventions, inequalities are reduced and the outcomes for these children, their families and whānau, communities and society are improved’(Ministry of Health 2011)*.*

The core goals of the UNHSEIP are to identify all children with moderate or above hearing loss early in life and offer timely intervention. These are described as ‘1–3–6’ goals and are based on international best practice. The goals are:

1: Babies to be screened by one month of age.

3: Audiology assessment completed by three months of age.

6: Initiation of appropriate medical and audiological services, and early intervention education services, by six months of age.[[1]](#footnote-1)

In 2015, the UNHSEIP identified a total of 121 babies in New Zealand with a permanent congenital hearing loss (Ministry of Health 2015).

# 2 Implementation of the 21 recommendations

All 21 recommendations from the Quality Improvement Review have now been implemented. Two of the recommendations (numbers 13 and 20) have been superseded by the development of a hearing information management system and will be managed as part of the implementation of a national information system for newborn hearing screening.

The activities generated by the recommendations are, in many cases, now standard NSU and DHB operating procedures. These activities are monitored through routine audits, annual service delivery planning, human resource processes and contractual reporting for DHBs and through ongoing screener performance monitoring.

Details of the activities and actions undertaken by the NSU and DHBs to address and close each of the 21 recommendations are outlined below.

### Recommendation 1

#### The NSU must reassess the screening protocol with a view to changing to an aABR‑only protocol.

Following the 2012 screening incident, the NSU contracted an independent company, Young Futures, to undertake a review regarding the optimal newborn hearing screening regime for the UNHSEIP within the New Zealand context. Young Futures released their report in March 2014. In that report, Young Futures recommended implementing an automated auditory brainstem response (aABR) only protocol and standardised equipment for newborn hearing screening. Throughout 2015, the NSU implemented the revised aABR-only protocol and standardised screening equipment across all 20 DHBs.

This recommendation is now closed.

### Recommendation 2

#### The NSU must operationalise the data monitoring requirements in the updated UNHSEIP National Policy and Quality Standards (NPQS) within the next three months and monitor their effectiveness.

The NSU has operationalised the data monitoring requirements in the updated National Policy and Quality Standards (NPQS) (Ministry of Health 2016), and DHBs haveimplemented weekly, monthly and annual data monitoring requirements for all screeners.

A screener Annual Competency Exercise (ACE) has also been implemented. The ACE contains a screener data monitoring component, which DHBs submit quarterly to the NSU. The first data monitoring reports were received from DHBs in October 2013.

This recommendation is now closed.

### Recommendation 3

#### The NSU must continue to provide resources and regular training to ensure programme coordinators are skilled in the monitoring of screening data downloads.

The NSU has provided regular training and written resources on monitoring screener data downloads to coordinators. Regional and national workshops were held in 2014 and 2015. Screener advisors were also appointed for additional one-on-one training sessions with programme coordinators in monitoring and reporting on screening data downloads.

This recommendation is now closed.

### Recommendation 4

#### DHBs must make screeners aware they are being monitored through openness about the routine monitoring processes.

The Young Futures report identified effective monitoring and an open-door policy as being essential components of all screening programmes (Young Futures 2014).

In November 2015, the NSU invited all newborn hearing screeners to complete an anonymous online survey about the impact of the changes to the screening protocol which included a question about their awareness of their screening practice being monitored and their understanding of why monitoring occurs. Nearly all screeners (98%) who responded reported that they had been made aware that their screening data would be reviewed. The majority of respondents (94%) also indicated that they either agreed or strongly agreed with the statement that monitoring of screener data was important to ensure the high quality of the programme.

Routine data monitoring is now a standardised process, and this recommendation is now closed.

### Recommendation 5

#### The NSU should lead an assessment of residual risk to the programme from screener performance.

The NSU has led an assessment of residual risk to the programme. Poor communication skills, data entry errors or inaccurate screening techniques were identified as the main risks to the programme from screener performance.

A resource has been prepared for the UNHSEIP coordinators’ manual that includes preventative factors that can minimise residual risks. These factors include communications training, data monitoring and effective governance of the programme.

The NSU requires DHBs to have service delivery plans that include governance and risk structures. The NSU audits these plans on a regular basis to ensure there are mechanisms in place to reduce potential risks to the programme.

This recommendation is now closed.

### Recommendation 6

#### The NSU should develop a guide for recruitment of newborn hearing screeners.

The NSU, together with DHB coordinators, has developed a screener recruitment guide. The guide includes details on essential and desirable screener competencies and sample interview questions. It also reinforces the importance of screeners understanding from the start how their screening will be monitored regularly, with the routine monitoring processes discussed openly. The guide has been included in the UNHSEIP coordinators’ manual and disseminated to DHBs.

This recommendation is now closed.

### Recommendation 7

#### DHBs should be proactive in providing training opportunities for screeners and reducing stress that may impact on screeners’ ability to do their work.

The NSU funds annual regional screener workshops to ensure regular training and networking opportunities for screeners. Workshop topics include: updates on protocols, discussions around equity and sharing examples of good practice. All DHBs have demonstrated in their service delivery plans that continuing education opportunities are in place for screeners and that they are managing screeners’ workloads to help reduce stress.

The NSU reviews DHB service delivery plans on a regular basis.

This recommendation is now closed.

### Recommendation 8

#### DHBs should consider the remuneration framework for screeners in relation to comparable roles and level of responsibility and skill, looking at opportunities for consistency in screener pay scales nationally as well as options for a career path for screeners who are keen to further develop their skills.

The New Zealand Qualifications Authority (NZQA) has reviewed its *National Certificate in Health, Disability, and Aged Support (Newborn Health Screening)* (Level 3) (NZQA 2015). The revised qualification will be made part of a *New Zealand Certificate in Health and Wellbeing (Level 3) Health Assistance* strand, which is expected to improve career choices for screeners.

The NSU cannot influence the DHBs’ remuneration framework, however, this has been discussed with the coordinators, and the consideration of additional levels of responsibility are now included in the screeners’ annual appraisal process.

This recommendation is now closed.

### Recommendation 9

#### The NSU must implement the Newborn Hearing Screener Competency Framework for all screeners within the next six months.

The first draft online screener competency assessment was tested with the screener trainers in March 2013, and the Annual Competency Exercise (ACE) was implemented in March 2014. The three-part annual competency assessment framework involves a quiz, observation of screening practice and a review of data and recordkeeping. The ACE is overseen by the coordinator and provides an opportunity for screeners to reflect on their practice and receive feedback. All screeners are required to undertake an ACE.

This recommendation is now closed.

### Recommendation 10

#### NSU must review the material in screener training and continuing professional development with a view to including more about ethics and theory of screening.

Information on ethical behaviour in screening, the State Services Commission *Standards of Integrity & Conduct* (State Services Commission 2007) and more content on screening theory have been included in the UNHSEIP coordinators’ manual, the orientation resource for new screeners, NZQA screener training and the screeners’ manual.

This recommendation is now closed.

### Recommendation 11

#### The NSU should reconsider operational policies for daily checking of screening equipment and provision of results of the screen to parents.

The NSU has implemented an operational policy for daily checking of screening equipment, and the process for communicating results to families has been updated in the screeners’ manual and screener training. The coordinators audit the daily checking of screening equipment and report to the NSU on actions taken where the daily equipment check has not occurred.

This recommendation is now closed.

### Recommendation 12

#### The NSU must lead the updating of the screener scripts to be more concise, clear and in plain English, and/or investigate other modes of delivering information about the programme to families.

The NSU has updated the screener scripts that provide the basic information parents need in order to make an informed decision about newborn hearing screening. These scripts are now more concise and clear and use plainEnglish language that is easier for the common reader to understand. A DVD has also been developed to inform caregivers about newborn hearing screening where English is not their first language. The DVD has been provided to all DHBs and is also available on the NSU website.

This recommendation is now closed.

### Recommendation 13

#### The NSU and DHBs need to ensure that coordination of the UNHSEIP is adequately resourced.

The NSU conducted a survey of coordinators in April 2014, and 11 of the 16 respondents to that survey flagged a major challenge as being a lack of time for the coordinator role. This was often associated with the time required for auditing/monitoring and reporting. The NSU anticipates that the implementation of a national database will assist with the auditing/monitoring and reporting components of their role.

This recommendation has been superseded by the project for developing a national hearing information management system and has been closed.

### Recommendation 14

#### New UNHSEIP coordinators must be provided with a coordinator manual and be required to do components of the screener training. The NSU should facilitate regular practical training and opportunities for coordinators to communicate.

The NSU has developed and disseminated a UNHSEIP coordinators’ manual to DHBs, which covers all aspects of the coordinators’ role. The NSU facilitates regular teleconferences for coordinators. DHBs are required to ensure coordinators are familiar with the screeners’ manual, the UNHSEIP coordinators’ manual and all relevant service policies, procedures, guidelines and standards, including the UNHSEIP NPQS (Ministry of Health 2016).

This recommendation is now closed.

### Recommendation 15

#### The NSU and DHBs must review processes for information dissemination to ensure coordinators are aware of all developments in the programme.

The NSU facilitates regular teleconferences with coordinators and provides ad hoc memos to disseminate programme information. In a survey of coordinators undertaken by the NSU in April 2014, two-thirds of respondents reported that they ‘feel well informed’ and one-third felt they were ‘reasonably informed’ of developments and had good links to NSU.

This recommendation is now closed.

### Recommendation 16

#### DHBs should promote the engagement of audiologists with the UNHSEIP and a supportive working relationship with screeners.

The NSU undertook a survey of DHB audiologists in May 2014. More than two-thirds of lead audiologists reported they were ‘very familiar’ with the UNHSEIP NPQS (Ministry of Health 2016) and service delivery plans. In the coordinator survey undertaken by the NSU in April 2014, most coordinators reported that audiologists supported them in their role. The NPQS requires that effective links are in place between screening and audiology services, with this being assessed through programme audits and annual review of UNHSEIP service delivery plans.

This recommendation is now closed.

### Recommendation 17

#### DHBs must have clearly defined lines of management and accountability for UNHSEIP services, as per the UNHSEIP National Policy and Quality Standards (NPQS).

Standard 1 of the UNHSEIP NPQS requires each DHB to have a current UNHSEIP service delivery plan (Ministry of Health 2016). The plan must identify the person/persons who has/have designated responsibility for managing all aspects of the UNHSEIP service. Evidence of defined lines of management and accountability is measured as part of the NSU audit process and annual review of UNHSEIP service plans.

This recommendation is now closed.

### Recommendation 18

#### DHBs need to support the programme by facilitating strong links with relevant teams within the DHB, for example, quality and maternity.

Standard 1 of the UNHSEIP NPQS requires each DHB’s UNHSEIP service delivery plan to demonstrate strong working relationships between all departments involved in providing UNHSEIP services (Ministry of Health 2016). Evidence of these links is assessed as part of the NSU audit process and annual review of UNHSEIP service plans. The NSU has provided feedback to those DHBs regarding their processes for linking relevant teams where strong links are not evident.

This recommendation is now closed.

### Recommendation 19

#### DHBs must establish a clear multi-disciplinary clinical governance framework for the UNHSEIP within the DHB.

Standard 1ii of the UNHSEIP NPQS requires DHBs to have a multidisciplinary clinical governance framework with clearly defined terms of reference approved by the NSU (Ministry of Health 2016). Effective multidisciplinary clinical governance and programme management is reviewed through programme audits and annual review of the UNHSEIP service delivery plans.

This recommendation is now closed.

### Recommendation 20

#### A national centralised database that is accessible to DHBs would facilitate streamlined and accurate quality monitoring and should be fast-tracked.

This recommendation has been superseded by the development of an information management system for newborn hearing screening. The recommendation has been closed and will be managed through the implementation of a national information system for newborn hearing screening.

### Recommendation 21

#### The NSU must develop an implementation plan in consultation with the UNHSEIP Advisory Group, who should monitor and review implementation of the recommendations.

Regular progress updates on the 21 recommendations have been provided to the UNHSEIP Advisory Group. All recommendations have now been completed, with the two remaining recommendations (numbers 13 and 20) being closed and managed as part of the implementation of a national information system for newborn hearing screening.

The UNHSEIP Advisory Group meeting, held 13 December 2016, approved the recommendation that a Health Report be submitted to formally close the *Quality Improvement Review of a Screening Event in the Universal Newborn Hearing Screening and Early Intervention Programme, December 2012.*

# 3 Conclusion

All 21 recommendations have now been completed. The activities generated by the recommendations are, in many cases, now standard NSU and DHB operating practices. They are monitored through routine NSU and DHB audits, annual service delivery planning, human resource processes, contractual reporting for DHBs and ongoing screener performance monitoring.

Systems are in place to ensure children who were part of the 2012 screening incident but have not been rescreened are picked up through routine contacts with the health system, such as at their B4 School Check, when they reach four and a half years of age.

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1. These ages are based on ‘corrected age’, that is, age adjusted for premature birth. [↑](#footnote-ref-1)