



Public Health
England

Protecting and improving the nation's health

Screening Quality Assurance visit report

NHS Antenatal and Newborn Screening
Programmes, Shrewsbury and Telford
NHS Trust

15 and 16 October 2018

About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. We do this through world-leading science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy. We provide government, local government, the NHS, Parliament, industry and the public with evidence-based professional, scientific and delivery expertise and support.

Public Health England, Wellington House, 133-155 Waterloo Road, London SE1 8UG

Tel: 020 7654 8000 www.gov.uk/phe

Twitter: [@PHE_uk](https://twitter.com/PHE_uk) Facebook: www.facebook.com/PublicHealthEngland

About PHE Screening

Screening identifies apparently healthy people who may be at increased risk of a disease or condition, enabling earlier treatment or better informed decisions. National population screening programmes are implemented in the NHS on the advice of the UK National Screening Committee (UK NSC), which makes independent, evidence-based recommendations to ministers in the 4 UK countries.

Twitter: [@PHE_Screening](https://twitter.com/PHE_Screening) Blog: phescreening.blog.gov.uk

Prepared by: Screening QA Service (London)

For queries relating to this document, please contact: phe.screeninghelpdesk@nhs.net

© Crown copyright 2019

You may re-use this information (excluding logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0. To view this licence, visit [OGL](http://www.nationalarchives.gov.uk/ogl/) or email psi@nationalarchives.gsi.gov.uk. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

Published June 2019

PHE publications

gateway number: GW-433

PHE supports the UN

Sustainable Development Goals



Executive summary

Antenatal and newborn screening quality assurance covers the identification of eligible women and babies and the relevant tests undertaken by each screening programme. It includes acknowledgement of the referral by treatment or diagnostic services as appropriate (for individuals/families with screen-positive results), or the completion of the screening pathway.

The findings in this report relate to the quality assurance visit of the Shrewsbury and Telford Hospital NHS Trust (SaTH) screening service held on 15 and 16 October 2018.

Quality assurance purpose and approach

Quality assurance (QA) aims to maintain national standards and promote continuous improvement in antenatal and newborn (ANNB) screening. This is to ensure that all eligible people have access to a consistent, high-quality service wherever they live.

QA visits are carried out by the PHE screening quality assurance service (SQAS).

The evidence for this report comes from the following sources:

- routine monitoring data collected by the NHS screening programmes
- data and reports from external organisations
- evidence submitted by the provider(s), commissioner and external organisations
- information shared with the Midlands and East regional SQAS as part of the visit process

Local screening service

SaTH offers all 6 NHS antenatal and newborn screening programmes, including:

- sickle cell and thalassaemia and infectious disease screening
- sonography services for first-trimester screening and the 18 to 20+6-week fetal anomaly scan
- laboratory services based at Birmingham Children's Hospital for the analysis of newborn blood spot screening samples
- newborn hearing screening

There is a named screening coordinator and deputy to oversee each of the 6 screening programmes. However, there is no administrative support for the delivery and planning of the screening service. There is no strategic newborn hearing team leader in-post to conform to national standards and service specification (20).

Maternity services are provided to the population of Shropshire using a 'hub and spoke model'. The Princess Royal Hospital in Telford is the hub, with midwifery-led units (MLUs) operating as spokes in Shrewsbury, Ludlow, Oswestry, Bridgnorth and Wrekin.

Between 1 April 2017, and 31 March 2018, 5130 women booked for maternity care with the trust, with 4655 births recorded.

Antenatal and newborn screening services, including the child health information service, are commissioned by NHS England North Midlands.

Findings

This quality assurance visit was the second to the trust. The first was in December 2014, there were 15 recommendations made, 12 are closed, 1 was not completed, and 2 remain on the risk register. The outstanding recommendations are addressed in this quality assurance report.

Since the last visit to the antenatal and newborn screening service, there have been independently commissioned reports and maternity reviews to inform the future development of the maternity service. The published reports have focused on strengthening governance arrangements, the midwifery leadership has since changed with a newly appointed head of midwifery and a new leadership structure in place.

The trust was well prepared for the quality assurance visit, and appropriate evidence was submitted for all 6 screening programmes. The evidence demonstrated a robust review process for guidelines, including the control, ratification and sign-off process. All screening guidelines are in date and in-line with national standards.

Key performance indicator (KPI) compliance is consistently met for 11 out of 13 indicators; they reach the higher achievable threshold for 5 of the KPIs.

The screening service is delivered by a team of dedicated and committed staff. There was evidence of good working relationships between staff across the screening programmes.

Immediate concerns

The quality assurance visit team identified 2 immediate concerns. A letter was sent to the trust's chief executive asking that the following items be addressed within 7 days:

Ultrasound scanning machines in use were showing signs of image deterioration due to age and lack of machine upgrades or service arrangements. Suboptimal images can impact on detection rates and increase inconclusive reports and recall rates. All images obtained should be recorded, stored on an electronic archiving system and attached to the ultrasound scan report. However, the machines do not link to a picture archiving system

One midwife sonographer did not hold the minimum qualification required for performing medical and screening ultrasound scans in-line with the NHS Fetal Anomaly Screening Programme Handbook August 2018.

The trust provided a prompt response and assurance that risks were being mitigated by:

- re-evaluating the risk register score which increased from 16 to 20
- agreeing a capital bid
- allocating older machines to non-screening functions
- establishing a contingency plan to hire new scanners in the event of machine failure
- reallocating the midwife sonographer to non-screening duties

The quality assurance review team remain concerned that the older scanners are still being used in maternity.

High priority

The quality assurance team identified 2 high priority findings as summarised below.

The maternity's incident strategy does not incorporate national guidance for 'Managing Safety Incidents in NHS Screening Programmes' (August 2017). Implementing this guidance is a requirement for all screening programme so that safety issues are handled in line with SQAS advice

There is no administrative support to facilitate timely failsafe checks and audits. The section 7a service specifications state that providers will ensure administrative support for the screening team

Shared learning

The quality assurance visit team identified areas of practice for sharing, including:

- the telephone maternity referral system promotes early booking, reducing delays between referral and screening
- following a telephone consultation to discuss high chance results, the screening ultrasound midwives send a follow-up email with appointment details, and links to further information and support groups
- the screening coordinator has completed an approved haemoglobinopathy counselling course – this is in addition to the named haemoglobinopathy counsellors providing this service
- the trust collects demographic profile data of women who use the maternity service. The profile information is being used to improve access to screening

Recommendations

The following recommendations are for the provider to action unless otherwise stated.

Governance and leadership

No.	Recommendation	Refere	Times	Priority	Evidence
1	Recruit a team leader for the newborn hearing screening programme (NHSP) to provide strategic leadership	NHS screening programmes service specification (20)	3 months	High	A named newborn hearing team leader in place to oversee the quality and governance of the service
2	<p>The trust to improve the management of screening incidents by:</p> <ul style="list-style-type: none"> including the national PHE reference 'Managing Safety Incidents in NHS Screening Programmes' in all trust local screening guidelines and policies reporting all suspected screening incidents to screening and immunisation team (SIT) and SQAS following PHE advice to manage the incident and implement agreed actions 	<p>NHS screening programmes service specification (15 to 21)</p> <p>National PHE guidance Managing Safety Incidents in NHS Screening Programmes (August 2017)</p>	12 months	High	<p>Updated and ratified trust incident guidelines and policies</p> <p>Updated maternity risk management strategy</p> <p>Evidence of quality concerns and incidents reported to the screening and immunisation team (SIT) and (SQAS)</p>

No.	Recommendation	Refere	Times	Priority	Evidence
3	<p>Perform regular audit of screening pathways to monitor conformity</p> <p>The first audit should explore why women are screened late</p> <p>Develop an action plan to reduce screening inequalities for those women who book late</p>	NHS screening programmes service specification (15 to 21)	12 months	Standard	<p>Annual audit schedule in place</p> <p>Late booking audit completed, and report and action plan presented to the programme board and a trust screening steering group (TSSG)</p>
4	Record and store all departmental ultrasound images and reports on an electronic archiving system in-line with fetal anomaly screening programme standards	NHS screening service specification (17)	12 months	Standard	Ultrasound images captured, stored and archived on an electronic reporting system and linked to the scan report
5	Complete antenatal and newborn screening user experience surveys/feedback	NHS screening service specification (15 to 21)	6 months	Standard	<p>Completed user survey that focuses on the issues pertinent to the trusts antenatal and newborn screening programmes</p> <p>User experience surveys and action plans for screening services are a standard agenda item at a trust screening steering group (TSSG)</p> <p>Evidence of user surveys is provided to the programme board</p>

Infrastructure

No.	Recommendation	Refere		Priorit	Evidence
6	Implement a staffing continuity plan for the antenatal and newborn screening team to ensure administration cover so that checking/failsafe systems are consistently implemented	NHS screening service specification (15 - 21)	12 months	High	<p>Continuity plans agreed and implemented</p> <p>Administration support embedded</p> <p>A weekly failsafe/checking process in place so that screening results are followed in-line with standards</p> <p>Evidence of a written failsafe/checking guideline or standard operating procedure</p> <p>Assurance is provided to the programme board</p>
7	Ensure all screening sonographers providing fetal anomaly screening have appropriate national qualifications and training	<p>NHS screening programmes service specifications (16 to 17)</p> <p>NHS FASP Programme Handbook</p>	7 days	Immediate	<p>A training record held of all screening sonographer's ultrasound qualification and awarding body</p> <p>The record is monitored by the screening support sonographer or department lead</p>

No.	Recommendation	Refere		Priorit	Evidence
8	<p>Make sure that ultrasound machines used for fetal anomaly screening comply with international standards so that scans are of adequate quality</p> <p>Develop options and actions in the event of ultrasound machine break down</p>	<p>NHS screening programmes service specification (16 to 17)</p> <p>NHS FASP Programme Handbook</p> <p>European Council Directive, enforced by the Medicines and Healthcare Regulatory Agency</p>	7 days	Immediate	<p>Immediate risk register score re-evaluated, and capital bid agreed</p> <p>Machines configured and monitored in accordance national standard requirements</p> <p>Immediate contingency plan in place</p> <p>Formal equipment review and replacement programme in place – review undertaken between 4 to 6 years</p> <p>Assurance is provided to the programme board</p>
9	<p>Ensure that the newborn hearing screening (NHSP) equipment meets manufacturer specification and NHSP equipment protocols</p>	<p>NHS screening service specification (20)</p>	6 months	Standard	<p>Screening equipment is capable of electronic transfer of screening data</p> <p>Calibration and equipment checks are in place</p> <p>Assurance is provided to the programme board</p>

Identification of cohort – antenatal

No recommendations

Identification of cohort – newborn

No recommendations

Invitation, access and uptake

No recommendations

Sickle cell and thalassaemia screening

No.	Recommendation	Refere	Timescal	Priorit	Evidence
10	<p>Enhance and monitor the plan to meet key performance indicator:</p> <ul style="list-style-type: none"> ST2: antenatal sickle cell and thalassaemia screening – timeliness of test 	<p>NHS screening programmes service specification (18)</p> <p>NHS sickle cell and thalassaemia screening programme standards</p>	12 months	Standard	<p>Enhanced action plan that is agreed and monitored by the programme board</p> <p>Submission of quarterly data for ST2 showing sustainable achievement of the acceptable standard</p> <p>Action plan in place and monitored at the programme board</p>

Infectious diseases in pregnancy screening

No.	Recommendation	Refere	Timescal	Priorit	Evidence
11	Strengthen internal governance processes to ensure regular monitoring of programme standards	NHS screening service specification (15)	6 months	Standard	<p>Trust screening steering group (TSSG) to review and monitor standards set up</p> <p>Terms of reference for the group with reporting arrangements demonstrating trust board level oversight</p> <p>Screening guidelines state standard timescales recommended by the national screening programmes</p> <p>Assurance is provided to the programme board</p>

Fetal anomaly screening

No.	Recommendation	Refere	Timescal	Priorit	Evidence
12	Implement a multi-disciplinary clinical review of the screening pathway process when a baby is born unexpectedly with a fetal anomaly	NHS screening service specification (17)	12 months	Standard	Implemented and embedded multidisciplinary clinical review process in place to monitor fetal anomaly screening outcomes

Newborn hearing screening

No.	Recommendation	Refere	Timescal	Priorit	Evidence
13	<p>Implement and monitor a plan to consistently meet the acceptable level for KPIs:</p> <ul style="list-style-type: none"> NH2: newborn hearing screening test - timeliness of audiology assessment 	<p>NHS screening service specification (20)</p> <p>Newborn hearing screening standards</p>	12 months	Standard	<p>Audit reason for delay</p> <p>Action plan that is agreed and monitored by the programme board</p> <p>Completed audit</p> <p>Submission of data that shows consistent achievement of the acceptable standard</p>

Newborn and infant physical examination

No.	Recommendation	Refere	Timescal	Priorit	Evidence
14	Amend the newborn infant physical examination (NIPE) guideline to set out referral pathways to internal and external tertiary services	NHS screening service specification (21)	12 months	Standard	<p>Minor amendment made to the newborn infant physical examination (NIPE) guideline</p> <p>Assurance is provided to the programme board</p>

No.	Recommendation	Refere	Timescal	Priorit	Evidence
15	<p>Ensure equitable access to screening</p> <p>Implement and monitor a plan to consistently meet the acceptable level for KPI:</p> <ul style="list-style-type: none"> NP1: to offer screening within 72 hours 	NHS screening service specification (21)	6 months	Standard	<p>Process in place to facilitate early identification and appropriate management for all eligible babies</p> <p>Babies that are identified as not having a newborn physical examination are followed up locally and the examination completed as soon as possible</p> <p>Assurance is provided to the programme board</p>

Newborn blood spot screening

No recommendations.

Next steps

Shrewsbury and Telford Hospital NHS Trust is responsible for developing an action plan in collaboration with the commissioners to complete the recommendations contained within this report.

SQAS will work with commissioners to monitor activity / progress in response to the recommendations made for a period of 12 months after the report is published. After this point SQAS will send a letter to the provider and the commissioners summarising the progress made and will outline any further action(s) needed.