



Public Health
England

Screening Quality Assurance visit report

NHS Antenatal and Newborn Screening Programmes Hull and East Yorkshire Hospitals NHS Trust, Hull Royal Infirmary

6 October 2016

Public Health England leads the NHS Screening Programmes

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-class 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 are a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner.

Public Health England, Wellington House, 133-155 Waterloo Road, London SE1 8UG
Tel: 020 7654 8000 www.gov.uk/phe Twitter: @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 four UK countries. The Screening Quality Assurance Service ensures programmes are safe and effective by checking that national standards are met. PHE leads the NHS Screening Programmes and hosts the UK NSC secretariat.

PHE Screening, Floor 2, Zone B, Skipton House, 80 London Road, London SE1 6LH
www.gov.uk/topic/population-screening-programmes Twitter: @PHE_Screening
Blog: phescreening.blog.gov.uk. Prepared by: Screening Quality Assurance Services – QA North, Pam Tarn. For queries relating to this document, including details of who took part in the visit, please contact: PHE.NorthQA@nhs.net or p.tarn@nhs.net

© Crown copyright 2017

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.ogil.io) 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: August 2017

PHE publications
gateway number: 2017255

PHE supports the UN
Sustainable Development Goals



Executive summary

Antenatal and newborn screening quality assurance (QA) 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 (QA) visit of the Hull and East Yorkshire Hospitals NHS Trust (HEYHT) screening service held on 6 October 2016.

Purpose and approach to quality assurance (QA)

Quality assurance aims to maintain national standards and promote continuous improvement in antenatal and newborn 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 SQAS North as part of the visit process

Description of local screening service

HEYHT provides care for the population of Kingston upon Hull (258,000) and East Ridings of Hull (336,000). The health of people in Hull is generally worse than the England average¹. Hull is predominantly white British (73%) with only 7% of the population from non-white UK groups. Of these, 2% do not understand English².

In 2015 to 2016, 5500 women booked for maternity care at HEYHT and there were 5573 births. 99% of births were from Hull, East Riding or North Lincolnshire Clinical Commissioning Groups (CCGs). HEYHT is working collaboratively with neighbouring maternity providers, namely Vale of York, to address the cross boundary issues for bookings. HEYHT is currently not able to provide robust cohort data and give assurance of all screening pathways.

HEYHT offers all six NHS antenatal and newborn screening programmes. Antenatal, intrapartum and postnatal care is provided at Hull Royal Infirmary.

HEYHT provides laboratory services for infectious diseases screening in pregnancy (IDPS), sickle cell and thalassaemia screening (SCT), ultrasound, fetal medicine and audiology and child health services. Sheffield Teaching Hospital NHS Foundation Trust (STHFT) provides Down's, Edward's and Patau's syndrome screening and genetics, whilst Leeds Teaching Hospital NHS Trust (LTHT) provides newborn bloodspot laboratory services.

There are no recent/imminent mergers or pending service reconfigurations at the time of the QA visit.

NHS England Yorkshire and Humber (North Yorkshire locality team) is the lead commissioner for antenatal and newborn screening programmes. Co commissioning arrangements are in place with NHS Hull, NHS East Riding and NHS North Lincolnshire CCGs.

Findings

This is the first QA visit to this service. This antenatal and newborn screening service is a well-led woman focussed service with a strong ethos for quality improvement. It is delivered by a team, which is motivated and works well across all disciplines. The commitment to address areas falling short of standards, maintain patient safety and drive programme quality was clearly evident.

Immediate concerns

The QA visit team identified no immediate concerns.

High priority

The QA visit team identified eight high priority findings as summarised below:

- failure to provide robust cohort data to assure the antenatal and newborn screening programmes
- failure to offer first trimester screening to women who attend without hand held notes
- failure to meet the acceptable threshold for the following KPIs: ST2, NH2, NP1, NP2, NB2 and NB4
- no checking process for first and second trimester screening results reported as 1:500 or less
- no process to identify that women complete the fetal anomaly scan within the correct gestational timescale
- no formal process for the notification of 'new registrants' and transfer in between services

- no standard operating procedure for 'send away samples'
- no annual audit schedule to demonstrate failsafe and monitor performance against national programme standards and key performance indicators

Shared learning

The QA visit team identified several areas of practice for sharing, including:

- the LCO is a Datix handler and a 'trigger system' has been developed for recording ANNB screening incidents
- the weekly 'snapshot' of 'hot topics' shared electronically across maternity services, dissemination of a monthly newsletter and analysis of themes discussed at corporate level to provide learning from incidents to all staff
- quality improvement and risk management is reflected within the governance structure for the ANNB screening programmes
- monthly multidisciplinary team meetings for IDPS and FASP, so that screening programmes are not solely dependent on the LCO
- use of a local NBS competency training package and 'peer assessors' have improved performance of NB2
- the pathology laboratory receive hard copies of aneuploidy screening results which are logged on the pathology system as a failsafe
- child health and health visiting teams use the SystemOne task function to inform health visiting of all NBS results. This includes notification that no letter will be sent to parents for babies with outcomes marked as declined/suspected and carrier results
- ultrasound have access to an 'iPad' with a translation pack. This is available for use within ultrasound and maternity in the absence of face to face/language line translation services
- the IDPS laboratory send an auto email from the LIMS system to the LCO, which outlines the previous three weeks' reactive results/samples processed (rolling report). In addition, repeats samples or second samples required have a 'dummy test' added onto the request that can be reviewed through an outstanding worklist. This is reviewed and communicated on a fortnightly basis to antenatal clinic and LCO

Table of consolidated recommendations

Governance and leadership

No.	Recommendation	Reference	Timescale	Priority *	Evidence required
1	Improve linkage between Trust screening service and contracting to inform escalation processes between NHS England and CCG commissioning	5 to 11	6 months	S	Assurance processes in place that involve the HoM in contract review meetings. Minutes from meetings
2	Review membership, attendance and function of the local ANNB screening steering group to track attendance and ensure inclusion of performance and work plans as standing agenda items	2 and 3 to 14	6 months	S	Terms of reference, agendas, action plans, performance monitoring and meeting notes
3	Develop a standing operating procedure for 'send away samples' that is risk assessed to monitor turnaround time and includes reference to storage of samples	5, 14	3 months	H	Ratified and revised SOP in place
4	Develop an overarching SOP for IDPS and include within clinical reporting guidelines	14	6 months	S	Clinical reporting guidelines contain Overarching IDPS SOP
5	Review CHRD policies to reflect current practice to include an agreed process for transfer in and new registrations	9	6 months	H	Ratified guideline/policy implemented by staff including responsibilities for child health, health visiting and GP

No.	Recommendation	Reference	Timescale	Priority *	Evidence required
6	Produce an annual action plan to describe how the ANNB screening audit schedule will be monitored and communicated to NHS England	5 to 11 and 18	12 months	H	<p>Audit schedule ratified. Action plan and progress monitored through SSG and NHSE</p> <p>KPIs, annual audit of mandatory training and completion of NSC e-learning modules included in the action plan</p>
7	Produce an annual action plan as part of the CSIP for all screening programmes to describe how KPI achievable thresholds will be met	5 to 11 and 18	Annually	S	Action plan incorporated into CSIP. Reviewed at ANNB PB issues escalated through contract review meetings. Action plans and minutes
8	Undertake a pathway review for Down's, Edward's and Patau's syndrome screening to improve access to first trimester screening, understand uptake and check failsafe processes	7, 13, 15	6 months	S	Actions from the review reported at SSG and to NHSE
9	Complete an annual user survey and take action to address findings	5 to 11	12 months	S	Outcomes from survey reported. Action plan monitored through SSG

Infrastructure

No.	Recommendation	Reference	Timescale	Priority *	Evidence required
10	Review screening team (LCO, deputy LCO, administrative support, NHSP) capacity and resilience to provide assurance of the safety of screening services	5 to 11	3 months	S	Review outcome with action plan ratified by operational group monitored by programme board including benchmarked staffing against service specification requirements
11	Assurance of the continued provision of sonography service in line with national requirements	6, 7, 13	12 months	S	Benchmarked service maintained via progression of business case
12	Implement the planned IT system to provide an auditable cohort tracking system for the eligible cohort of women and babies through the screening pathway supporting KPI submission	5 to 11	12 months	H	Action plan implemented to deadline Assurance of system functionality to provide cohort data
13	Ensure business continuity plans mitigate risk for operational impact on the provision of the ANNB screening programmes	5 to 11	3 months	S	Business continuity plans are finalised and communicated across HEYHT

Identification of cohort – antenatal

No.	Recommendation	Reference	Timescale	Priority *	Evidence required
14	Progress collaborative working with neighbouring maternity providers to resolve cross boundary booking issues and support cohort data submission	5 to 11 and 18	3 months	H	Relevant documentation available. Action plan in place monitoring progress. Cross border process agreed. Confirmation of auditable tracking of eligible cohort across the screening pathway. KPIs reported as matched cohort by 2017/18
15	Embed a 10 day failsafe audit to ensure all women who consent to screening receive a concluded result	5 to 11	6 months	S	Process ratified. Audit available and demonstrates compliance
16	Progress implementation of an electronic FOQ	8, 17, 18	12 months	S	Action plan and any progress reported through SSG

Identification of cohort – newborn

No.	Recommendation	Reference	Timescale	Priority *	Evidence required
17	CHRD to review the reporting function available from SystemOne to establish electronic data quality checks and reports replacing use of spreadsheets	9	3 months	S	Reporting function and electronic data quality checks available, in use, meet requirements described in national guidance
18	CHRD to engage with NHS England and primary care to formalise a process for notification of all babies/children who move into or register with a GP in their area	9	3 months	H	Options reviewed and agreed. Process ratified meeting requirements described in national guidance. Improvement in NB4 KPI demonstrated

Invitation, access and uptake

No.	Recommendation	Reference	Timescale	Priority *	Evidence required
19	Evaluate the use of the self-referral website form to inform and promote access at an early gestation	5 to 11 and 18	12 months	S	Outcome of review reported at SSG. Improvement in KPI ST2 so acceptable threshold reached
20	Investigate factors which contribute to less than 50% of women having a screening result available by 10 weeks gestation and take action to improve performance	8, 18	6 months	S	Review and action plan reviewed at SGG. Improvement in KPI ST2 so acceptable threshold reached
21	Review the fetal anomaly ultrasound pathway to identify a process for reporting KPI FA2 and ensure women who accept the offer of this scan, complete the scan within the correct timeframe	6, 7,18	6 months	H	Action plan in place to monitor progress. Ability to report compliance against KPI FA2

Sickle cell and thalassaemia screening

No.	Recommendation	Reference	Timescale	Priority *	Evidence required
22	Continue the monthly ongoing audit of the new booking process to identify gaps, find solutions and ensure improvement with ST2	8, 18	12 months	S	Improvement in KPI ST2 to reach acceptable threshold

Infectious diseases in pregnancy screening

No.	Recommendation	Reference	Timescale	Priority *	Evidence required
23	Explore benefit of use of a unique request form for antenatal IDPS screening	5	12 months	S	Revisions to ANNB request form reported through local operational group
24	Strengthen process for the management of women who decline the offer of antenatal screening including LCO/deputy to discussion of screening options with all who initially decline	5 to 8	6 months	S	Outcome of review disseminated to key stakeholder. Process in place. Minutes meeting available
25	Monitor implemented revised Hepatitis B pathway to provide assurance of compliance	5	12 months	S	Hepatitis B pathway embedded. Monitored through ANNB Programme Board
26	Review current use of the screening shared drive to promote collaborative working between IDPS and SCT laboratories and the LCO		12 months	S	Outcome of review reported into local operation group
27 (link to 7)	Develop mechanisms to be able to report against the new standards for IDPS	5 and 18	12 months	S	Ability to report against new standards and KPIs

Fetal anomaly screening

No.	Recommendation	Reference	Timescale	Priority *	Evidence required
28	Ensure that women attending without notes are able to access first trimester screening	6	3 months	H	Revised pathway reported through local operational screening group. Reported compliant immediately post QA visit
29	All first and second trimester screening results to be checked	6 and 18	3 months	H	Revised process reported through local operational screening group
30	Cardiac 3VT imaging to implemented no later than Trust target timescale of January 2017	7	3 months	S	Cardiac 3VT implemented. Reported through local operational group and ANNB Programme Board
31	Screening Support Sonographer to develop individual sonographer log books with use of the FASP training codes by sonographers	6, 7, 13 and 18	3 months	S	Reported compliance through local operational screening group
32	Formalise electronic reporting of outcomes for those women referred to fetal medicine and cardiology in Leeds and monitor compliance	17	6 months	S	Outcomes of referrals known. Electronic process in place. Ongoing issues reported through SSG
33 (link to 7)	Report against the 11 auditable conditions and monitor progress	7, 13 and 18	6 months	S	Action plan in place with monitoring through local operational screening group. Able to report 11 auditable conditions

Newborn hearing screening

No.	Recommendation	Reference	Timescale	Priority *	Evidence required
34	Audit reasons why all babies do not attend for audiology assessment within the defined time scale	10 and 18	6 months	S	Audit findings reported through local operational screening group. Improved performance in NH2 demonstrated
35	Ensure NHSP policies are submitted for approval via HEYHT governance processes	10	6 months	S	NHSP policies ratified

Newborn and infant physical examination

No.	Recommendation	Reference	Timescale	Priority *	Evidence required
36 (link to 7)	Progress plans to ensure that all eligible babies complete their newborn NIPE examination within 72 hours of birth	11 and 18	6 months	S	Evidence of compliance reported through local operational screening group. KPI NP1 acceptable threshold met
37 (link to 7)	Develop and progress improvement plans to ensure that all babies identified with a positive screen for development dysplasia of the hips complete an ultrasound within 2 weeks	11 and 18	6 months	S	Audit activity to demonstrate compliance. KPI NP2 acceptable threshold met
38	Ensure that there is a robust process for reporting NIPE results and screening outcomes to child health services	11 and 18	12 months	S	Process ratified. Reported through local operational screening group

Newborn blood spot screening

No.	Recommendation	Reference	Timescale	Priority *	Evidence required
39 (link to 7)	Review factors that contribute to the reason why less than 95% babies who move into the area have NBS result recorded. Take action to meet KPI NB4	9 and 18	6 months	S	Review and develop action plans. Improvement in NB4 to reach acceptable threshold

I = Immediate

H= High

S = Standard

Next steps

Hull and East Yorkshire Hospitals Trust and NHS England, Yorkshire and Humber (North Yorkshire) are responsible for developing an action plan to ensure completion of 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 following the issuing of the final report, to allow time for at least one response to all recommendations to be made. After this point, a letter will be sent to the Chief Executive of the Trust and the commissioners summarising the progress made and asking for their direct intervention to address any remaining issues.