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England

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Screening Quality Assurance visit report

Nottingham University Hospitals NHS Trust Antenatal and Newborn Screening Programmes

7 and 8 October 2019

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About PHE screening

Screening identifies apparently healthy people who may be at increased risk of a disease or condition, enabling earlier treatment or 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. PHE advises the government and the NHS so England has safe, high quality screening programmes that reflect the best available evidence and the UK NSC recommendations. PHE also develops standards and provides specific services that help the local NHS implement and run screening services consistently across the country.

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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 Nottingham University Hospitals NHS Trust (NUH) screening service held on 07 and 08 October 2019.

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 collected during pre-review visits
- information shared with the Midlands and East regional SQAS as part of the visit process

Local screening service

Nottingham University Hospitals offers all 6 antenatal and newborn screening programmes across 2 sites:

- Queens Medical Centre (QMC)
- Nottingham City Hospital (NCH)

In 2018 to 2019 there were 9233 women booked for delivery across Nottingham University Hospitals and there were 8641 babies born. Nottingham University Hospitals is the fourth largest acute trust in England and provides services to more than 2.5 million residents of Nottingham City and parts of Nottinghamshire County.

Nottingham University Hospitals is a regional tertiary referral centre, providing specialist fetal medicine and paediatric services to women and families from surrounding counties.

NHS England and NHS Improvement (NHS E/I) Midlands is the lead commissioner for the antenatal and newborn screening programmes. Co-commissioning arrangements are in place with NHS Nottingham North and East Clinical Commissioning Group (CCG), NHS Nottingham West Clinical Commissioning Group and NHS Nottingham City Clinical Commissioning Group.

Nottingham University Hospitals provide laboratory services for sickle cell and thalassaemia screening, infectious diseases in pregnancy screening and Down's syndrome, Edwards' syndrome and Patau's syndrome screening. United Kingdom Accreditation Service (UKAS) will assess both ISO 15189:2012 requirements and the screening QA requirements as an integrated process. United Kingdom Accreditation Service will share the screening assessments in reports to PHE and manage non-conformance. The interfaces between the laboratory and the provider were reviewed at the QA visit and are included in the scope of this report.

Nottingham University Hospitals antenatal and newborn screening services interface with the following external providers:

- Sheffield Children's Hospital NHS Trust (SCH) provides newborn blood spot screening laboratory services
- Nottingham Citycare Partnership provides child health information services (CHIS)

Findings

This is the second QA visit for the antenatal and newborn screening programmes at Nottingham University Hospitals. The first took place on 13 July 2016. An action plan was produced in collaboration with the commissioners to address the recommendations made. Progress against the action plan was monitored by SQAS for 12 months in line with the Programme Specific Operating Model (PSOM) for antenatal and newborn screening programmes. Any outstanding recommendations are incorporated into this second visit.

Immediate concerns

The QA visit team identified no immediate concerns.

High priority

The QA visit team identified 2 high priority findings as summarised below:

- not all current risks to the antenatal and newborn screening programmes are recorded on the divisional risk register
- there is a delay of up to 6 weeks between a woman's booking appointment to appearing on the antenatal and newborn screening cohort tracking failsafe records

Shared learning

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

- sexual health letters and reports uploaded to the electronic patient record, improving management of pregnancies with positive infectious diseases screening in pregnancy results
- joint maternity and public health nursing newborn blood spot screening training sessions
- creation of a screening request form 'mask' to improve performance against the key performance indicator FA1 (completion of laboratory request forms)
- involvement of hearing screeners in the daily postnatal ward safety 'huddles'
- preceptorship programme for ultrasonographers
- adoption of the Nottinghamshire 'traffic light' system to support women with learning disabilities consenting to antenatal screening

Recommendations

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

Governance and leadership

No.	Recommendation	Reference	Timescale	Priority	Evidence required
1	Implement a process for the regular reporting and monitoring of all antenatal and newborn screening programme standards	NHS screening programmes service specifications 15 to 21	6 months	Standard	National programme standards as a standing item on the antenatal and newborn screening programme board agenda Action plans presented to the programme board to address any identified gaps
2	The provider and commissioners should work together to undertake a health equity audit and develop an action plan to identify and reduce inequalities	NHS screening programmes service specifications 15 to 21 Guidance for NHS commissioners on equality and health inequality duties 2015	12 months	Standard	Summary of the audit and findings presented at the antenatal and newborn screening programme board Action plan(s) presented to the programme board to address any identified inequalities

No.	Recommendation	Reference	Timescale	Priority	Evidence required
3	Review the screening quality group terms of reference to include monitoring of the antenatal and newborn programme standards, incidents and risks to the screening programmes	NHS screening programmes service specifications 15 to 21	6 months	Standard	Revised terms of reference presented to the programme board
4	Improve internal governance of antenatal and newborn screening programmes to assure the trust board of their quality and integrity	NHS screening programmes service specifications 15 to 21	6 months	Standard	Revised governance structure for all antenatal and newborn screening programmes presented to the programme board
5	Amend the incident reporting and management policy to include reference to managing screening incidents in accordance with Managing safety incidents within national screening programmes	Managing safety incidents in NHS screening programmes	6 months	Standard	Ratified and published guidelines presented to the programme board
6	Review and update the divisional risk register to reflect current risks to the antenatal and newborn screening programmes	NHS screening programmes service specifications 15 to 21	3 months	High	Updated risk register presented to the programme board
7	Review and update all screening guidelines and operational policies to make sure that they meet national guidance	Screening programmes standards NHS screening programmes service specifications 15 to 21	12 months	Standard	Ratified and published guidelines presented at the antenatal and newborn screening programme board Local governance group minutes documenting publication Evidence of

No.	Recommendation	Reference	Timescale	Priority	Evidence required
					dissemination to staff
8	Update Nottingham Citycare guidelines and operational policies to include version control, publication dates, review dates and sign off by internal governance process	Screening programmes standards NHS screening programmes service specifications 15 to 21	12 months	Standard	Ratified and published guidelines presented at the antenatal and newborn screening programme board Local governance group minutes documenting publication Evidence of dissemination to staff
9	Agree and implement an annual audit schedule for all antenatal and newborn screening programmes	NHS screening programmes service specifications 15 to 21	12 months	Standard	Schedule agreed with commissioners. Annual audit schedule implemented. Completed audits presented at the antenatal and newborn screening programme board

Infrastructure

No.	Recommendation	Reference	Timescale	Priority	Evidence required
10	Review staffing of the antenatal and newborn screening team to provide adequate cover arrangements, with	NHS screening programmes service	6 months	Standard	Review of staffing structure presented to antenatal and newborn

No.	Recommendation	Reference	Timescale	Priority	Evidence required
	appropriate administrative support to ensure a sustainable screening programme	specifications 15 to 21			screening programme board
11	Ensure the screening team have suitable premises to provide the antenatal and newborn screening programmes, including desk space and a suitable area to hold confidential, sensitive conversations with parents and staff	NHS screening programmes service specifications 15 to 21	6 months	Standard	Provision of suitable workspace confirmed to the programme board
12	Complete a risk assessment for ultrasound equipment and escalate findings as appropriate	NHS screening programmes service specification No 16	3 months	Standard	Completed risk assessment and subsequent escalation confirmed to the programme board

Identification of cohort – antenatal

No.	Recommendation	Reference	Timescale	Priority	Evidence required
13	Review and revise the process of producing the antenatal cohort report to improve timeliness of cohort matching and failsafe procedures	NHS screening programmes service specifications 15 to 21 NHS population screening: Checks and audits for failsafe	3 months	High	Findings of review and action plan that is agreed and monitored presented to the antenatal and newborn screening programme board

Identification of cohort – newborn

No.	Recommendation	Reference	Timescale	Priority	Evidence required
14	Make sure effective processes are in place to manage the daily Newborn Infant Physical Examination (NIPE) work including failsafe processes for identification and tracking the eligible newborn population in line with national programme standards	NIPE screening programme standards NHS screening Service specification No. 21	3 months	Standard	Revised and ratified standard operating procedure implemented and presented to the antenatal and newborn programme board

Invitation, access and uptake

See recommendation 2.

Sickle cell and thalassaemia screening

No recommendations were made in this section.

Infectious diseases in pregnancy screening

No.	Recommendation	Reference	Timescale	Priority	Evidence required
15	Implement and monitor a plan to consistently meet the acceptable level for KPI ID2 (timely referral of Hepatitis B women) and produce an action plan to meet the acceptable level	IDPS Screening programme standards NHS screening Service specification No. 15	6 months	Standard	Improvement plan agreed and monitored by the antenatal and newborn screening programme board Submission of data that shows consistent achievement of the acceptable standard

Fetal anomaly screening

No.	Recommendation	Reference	Timescale	Priority	Evidence required
16	Continue to implement and monitor the action plan to consistently meet the acceptable level for the KPI FA1 (completion of laboratory request forms)	FASP Screening programme standards NHS screening Service specification No. 16	6 months	Standard	Action plan that is agreed and monitored at the antenatal and newborn screening programme board Submission of data that shows consistent achievement of the acceptable standard

Newborn hearing screening

No recommendations were identified in this section.

Newborn and infant physical examination

No.	Recommendation	Reference	Timescale	Priority	Evidence required
17	Implement and monitor a plan to consistently meet the acceptable level for KPI NP2 (timely assessment for DDH) and produce an action plan to meet the acceptable level	NIFE screening programme standards NHS screening service specification No. 21	6 months	Standard	Improvement plan agreed and monitored by the antenatal and newborn screening programme board Submission of data that shows consistent achievement of the acceptable standard

Newborn blood spot screening

No.	Recommendation	Reference	Timescale	Priority	Evidence required
18	Continue to implement and monitor the action plan to consistently meet the acceptable level for the KPI NB2 (avoidable repeat tests)	NBS Screening programme standards and guidelines NHS screening service specification No. 19	6 months	Standard	Improvement plan that is agreed and monitored at the antenatal and newborn screening programme board Submission of data that shows consistent achievement of the acceptable standard

No.	Recommendation	Reference	Timescale	Priority	Evidence required
19	Implement and monitor a plan to meet newborn blood spot standard 3 (use of barcoded labels)	NBS Screening programme standards and guidelines NHS screening service specification No. 19	12 months	Standard	Action plan monitored at antenatal and newborn screening programme board Submission of data that shows consistent achievement of the acceptable standard
20	Implement and monitor a plan to meet newborn blood spot standard 4 (first sample taken on day 5)	NBS Screening programme standards and guidelines NHS screening service specification No. 19	12 months	Standard	Action plan monitored at antenatal and newborn screening programme board Submission of data that shows consistent achievement of the acceptable standard

Next steps

The screening service provider is responsible for developing an action plan with the commissioners to complete the recommendations of this report.

SQAS will work with commissioners to monitor activity and progress in response to the recommendations made for a period of 12 months after the report is published. Following this, SQAS will send a letter to the provider and the commissioners summarising the progress made and will outline further actions, if needed.