

transferred to a tertiary children's cardiac unit

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Background

- All infants born in England should have a newborn physical examination (NIPE) as part of the Public Health England (PHE) newborn NHS screening program.
- Newborns with a significant congenital cardiac defect may be too unwell to have their NIPE prior to transfer out of the neonatal unit, and are subsequently at risk of their NIPE being missed.
- Our aim was to improve NIPE practice in infants transferred to Southampton Children's Cardiac Unit (E1) from Southampton's Neonatal Unit (NICU), in keeping with Public Health England (PHE) 2016/17 NIPE standards.

Methods

PHE standards used to retrospectively assess timeliness of intervention for 3 NIPE components:

- Hips, Eyes and Testes.

Population:

- All newborns transferred to E1 from NICU in 2016.

Data analysed:

- "NIPE smart" system used to assess timing of NIPE and examination outcome.
- Online electronic record systems used to assess timelines of intervention for NIPE components.

Change implemented:

- Failsafe mechanism of regularly checking "NIPE smart" system and flagging up incomplete NIPES to nominated staff.
- Access to NIPE smart system on E1 computers.
- E1 staff training on NIPE smart.
- Handover of NIPE status encouraged.

NIPE practice retrospectively reassessed from March to July 2017.

<u>PHE NIPE Standard</u>	<u>January-December 2016</u>	<u>March-July 2017</u>
≥ 95% babies have NIPE within 72 hours of birth (excluding those with mitigating factors)	48% (16/33) 15/33 HAD <u>NO</u> DOCUMENTED EVIDENCE OF NIPE COMPLETION	89% (8/9) 9/9 HAD DOCUMENTED EVIDENCE OF NIPE COMPLETION
≥ 95% babies with abnormal eye exam seen by specialist within 2 weeks	100% (1/1)	N/A
≥ 95% babies with dislocated/dislocatable hips undergo specialist assessment within 2 weeks	N/A	N/A
≥ 90% babies with normal hip exam but risk factors for DDH have hip ultrasound within 6 weeks	100% (3/3)	100% (1/1)
100% babies with bilateral undescended testes seen by consultant/associate specialist within 24 hours of NIPE	N/A	100% (1/1)

Conclusions

- This project revealed that many newborns transferred to the cardiac unit were being discharged without a NIPE.
- The failsafe mechanism implemented resulted in a significant improvement in NIPE practice.
- We hope that, as a result of this project, potential morbidity from late diagnosis of treatable congenital abnormalities (such as developmental dysplasia of the hip) will be avoided within this population.