NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

NICE indicator validity assessment

Indicator IND77

The proportion of babies with a screen positive newborn hip result who attend for ultrasound scan of the hips within the designated timescale.

Data currently collected by maternity services. This proposal assesses the potential as a NICE CCG level indicator

Importance

Considerations	Assessment
Priority identified by Public Health England. Newborn and infant physical examination is one of 11 NHS national population screening programmes available in England. This indicator would facilitate local areas to include specific and measurable goals in local improvement plans.	The indicator reflects a specific priority area identified by Public Health England.
The NHS Long Term Plan identifies "A strong start in life for children and young people", including maternity and neonatal services, as a priority for care quality and outcomes improvement.	The indicator reflects a specific priority area identified by NHS England.
Data is not published relating to screen positive newborn hip result and ultrasound.	Data is not available to determine whether the indicator addresses variation in practice.
PHE indicates that approximately 1 or 2 in 1,000 babies have hip problems that may require surgery and 3 to 5 per 1,000 babies may require a Pavlik harness. Undetected unstable hip(s) with delayed treatment may result in the need for complex surgery and, or long-term complications such as impaired mobility and pain, osteoarthritis of the hip and back. Early diagnosis and intervention should improve health outcomes and reduce the need for surgical intervention.	The indicator will lead to a meaningful improvement in patient outcomes.

Evidence base

Considerations	Assessment
Newborn physical examination is supported by: NICE's guideline on Postnatal care recommendation 1.3.3 Screening and ultrasound is recommended by: UK National Screening Committee (NSC) recommendation on Developmental dislocation of the hip screening in newborns (2006) Screening is carried out in the first week of life and again at 6-8 weeks of age. The first screen is a question to identify high risk factors. Babies with risk factors should be referred for ultrasound examination.	The indicator is derived from a high-quality evidence base. The indicator aligns with the evidence base.

Specification

Considerations	Assessment
Numerator: number of babies in the denominator who attend for ultrasound scan of the hips who are between: • 4 and 6 weeks of age for babies born ≥ 34 weeks and zero days (34^{+0}) gestation • 38^{+0} and 40^{+0} weeks corrected age for babies born <34^{+0} weeks gestation. Denominator: number of babies born in the reporting period who have a screen positive newborn hip result. A screen positive newborn hip result is defined as those with: • suspected dislocated or dislocatable hip(s) at clinical examination, or • presence of one or more national hip risk factors (see NIPE clinical handbook for list of risk factors). Excluding babies who: • die before the ultrasound appointment date • are found to have 'clicky hips'. NIPE hip risk factors are: • first degree family history of hip problems in early life- this includes baby's parents or siblings who have had a hip problem that started as a baby or young child that needed treatment with a splint, harness or operation • breech presentation at or after 36 completed weeks of pregnancy, irrespective of presentation at birth or mode of delivery- this includes babies who have had a successful external cephalic version (ECV) • breech presentation at the time of birth between 28 weeks gestation and term. For babies with any of the above risk factors, hip ultrasound examination should be arranged. In the case of multiple births with these risk factors, all babies in this pregnancy should have a hip ultrasound examination. Performance calculated by dividing numerator by denominator and multiplying by 100 to give a percentage.	The indicator has defined components necessary to construct the indicator, including numerator, denominator and exclusions.
NICE CCG level indicators are intended for use where there is an average of 50 patients or more per CCG.	The indicator outlines minimum numbers of patients

The antenatal and newborn screening annual KPI data indicates that in 2019-20, there were 1,999 babies in England who had a positive screen test on newborn physical examination for developmental dysplasia of the hip. This included babies who were found to have dislocated or dislocatable hips on newborn physical examination. This equates to approximately 15 babies per CCG (1,999/135). The definition of a screen positive hip result was extended to include those with one or more national hip risk factors in April 2021. The Royal College of Obstetricians and Gynaecologists indicates that 3-4% of babies are in the breech position after 36 weeks. The Office for National Statistics reports 640,370 live births in England in 2019: 640,370/135 = 4743 births per CCG. If we assume that 3-4% of babies have hip risk factors due to breech presentation after 36 weeks, there will be between 142 and 190 babies per CCG who need a hip ultrasound. The number of babies in the breech position at the time of birth between 28 weeks and term, and the number with first degree family history of hip problems in early life, are unknown. Based on the data available we expect a minimum of between 157 (142 breech after 36 weeks + 15 via physical examination) and 205 (190 + 15) babies per CCG who need a hip ultrasound.	needed to be confident in the assessment of variation.

Feasibility

Considerations	Assessment
Data is collected as part of the NHS newborn and infant physical examination (NIPE) screening programme.	The indicator is repeatable.
A data submission template and screening standards are available from gov.uk	The indicator is measuring what it is designed to measure. The indicator uses existing data fields.

Acceptability

Considerations	Assessment
The provider retains care obligations throughout the NIPE care pathway. Babies who require referral are discharged from the screening programme once they have been reviewed for further assessment.	The indicator assesses performance that is attributable to or within the control of the audience
The UK NSC recommendation on Developmental dislocation of the hip screening in newborns (2006) states that there is evidence that the screening is clinically, socially and ethically acceptable to health professionals and the public. The guidance for patients on Eyes, heart, hips and testes (physical examination) states that there are no risks associated with having this test.	The indicator assesses performance that is acceptable to patients and is partially within the control of the audience
Data tables could be published as part of the NHS Screening programme KPI reports to compare practice and assist in quality assurance procedures.	The results of the indicator can be used to improve practice

Risk

Considerations	Assessment
The NHS newborn and infant physical examination (NIPE) screening programme operates under published standards and quality assurance frameworks.	The indicator has an acceptable risk of unintended consequences.

NICE indicator advisory committee recommendation

The NICE indicator advisory committee approved this indicator for publication on the menu.