

## Trust Guideline for the Screening of Developmental Dysplasia of the Hip (DDH)

### Trust Guideline for the Screening of Developmental Dysplasia of the Hip (DDH) in newborn children

#### Document Control:

<b>For Use In:</b>	Norfolk and Norwich University Hospitals (NNUH)		
	NICU, Delivery Suite, Post-Natal Wards, Radiology, Physiotherapy and Orthopaedics		
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<b>Document Author:</b>	Mr Anish P Sanghrajka, Paediatric Orthopaedic Consultant		
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## **Trust Guideline for the Screening of Developmental Dysplasia of the Hip (DDH)**

Printed copies of this document should be considered out of date. The most up to date version is available from the Trust Intranet.

### **Consultation**

The following were consulted during the development of this document:

Charlotte Aldous, Antenatal/Newborn Screening Coordinator

Samantha Low, Consultant Radiologist

Paediatric department, the radiology department, physiotherapy and orthopaedics

### **Monitoring and Review of Procedural Document**

The document owner is responsible for monitoring and reviewing the effectiveness of this Procedural Document. This review is continuous however as a minimum will be achieved at the point this procedural document requires a review e.g. changes in legislation, findings from incidents or document expiry.

### **Relationship of this document to other procedural documents**

This document is a clinical guideline applicable to Norfolk and Norwich University Hospitals (NNUH); please refer to local Trust's procedural documents for further guidance.

### **Guidance Note**

This guideline has been approved by the Trust's Clinical Guidelines Assessment Panel as an aid to the diagnosis and management of relevant patients and clinical circumstances. Not every patient or situation fits neatly into a standard guideline scenario and the guideline must be interpreted and applied in practice in the light of prevailing clinical circumstances, the diagnostic and treatment options available and the professional judgement, knowledge and expertise of relevant clinicians. It is advised that the rationale for any departure from relevant guidance should be documented in the patient's case notes.

The Trust's guidelines are made publicly available as part of the collective endeavour to continuously improve the quality of healthcare through sharing medical experience and knowledge. The Trust accepts no responsibility for any misunderstanding or misapplication of this document.

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**Quick reference guideline/s**

Algorithm.

The bold letters refer to sections of the following text.

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## 1. Introduction

### 1.1. Rationale

Developmental Dysplasia of the Hip occurs in approximately 1.5/1000 births in this country. Identification of the condition early is important for effective intervention with a Pavlik harness. Early detection maximises the chances of successfully treating a dysplastic hip with simple means such as a Pavlik Harness. This guideline therefore promotes early identification of babies with clinically detectable hip problems (and those at high risk), early ultrasound scanning for classification and prompt referral for intervention.

### 1.2. Objective/s

To enable all those involved in the examination of the newborn to be familiar with hip dysplasia and the appropriate process of screening.

### 1.3. Scope

This document provides guidance for the management of babies suspected to have developmental dysplasia born within the Women and Children's services at the Norfolk & Norwich University Hospital. The guidance should be used by all clinicians or health care professionals who would be responsible for screening, further investigation or initial management of babies suspected to have developmental dysplasia of the hip.

### 1.4. Glossary

Term	Definition
ANNBS FSO	Antenatal and Newborn Screening Failsafe Officer
DDH	Developmental Dysplasia of the Hip
DNA	Did not attend
EIA	Equality Impact Assessment
FH	Family History
NNUH	Norfolk and Norwich University Hospitals
NIPE	Newborn and Infant Physical Examination
USS	Ultrasound Scan
WNB	Was not brought

## 2. Responsibilities

Midwife/Paediatric doctor: Screening assessments (history and examination) of the newborn baby. Request of ultrasound scan of hips if any risk factors or abnormal examination

Consultant Radiologist/Sonographer: Vetting of ultrasound requests, and performance/reporting of the ultrasound scan. Referral to the Orthopaedic Team if hip not normal.

Orthopaedic Consultant/ Extended Scope Practitioner: Assessment of baby, decisions around whether to observe or institute management of the hip dysplasia using a Pavlik Harness, and then continued follow-up.

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### 3. Processes to be followed

#### 3.1. Clinical examination

**A** Clinical evaluation of the unstable hip at birth includes Barlow and Ortolani tests. In dislocated and irreducible hips these tests will be negative. It is important to look for a discrepancy in length between the two lower limbs. In addition, assess the range of abduction of the flexed hip; a dislocated hip will have a significant limitation in this movement (difficulty reaching 90 degrees).

**The newborn physical examination should be performed within 72hrs, in accordance with the national newborn and infant physical examination guidelines.**

**B** Any baby with clinically detectable hip instability or dislocated hips must be referred for ultrasound scan to paediatric radiologists for urgent scan at age 4-6 weeks (or corrected gestational age 38-40 weeks if born before 34 weeks).

**C** *Any baby with any of the following risk factors should be referred for USS to be performed at 4-6 weeks' age (or corrected gestational age 38-40 weeks if born before 34 weeks):*

- Family history of hip dysplasia – first degree family history of hip problems in early life as defined by a positive response to the question, "Is there anyone in the baby's close family, that is, mother, father, brother or sister, who has had a hip problem that started when they were 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 delivery or mode of delivery, or breech presentation at delivery if this is earlier than 36 weeks. In the case of a multiple birth, if any of the babies is breech presentation, all babies in this pregnancy should have an ultrasound examination
- Foot abnormality: Whilst the relationship between DDH and foot deformity remains controversial, any newborn with a foot deformity (including congenital talipes equinovarus, calcaneovalgus and metatarsus adductus) should have an ultrasound scan of their hips
- Torticollis is a "packaging disorder", as is DDH, and so all newborns with torticollis should be referred for hip ultrasound scan.

Any baby not brought to their Hip USS should be followed up as per 'Baby was not brought (WNB) to Hip USS Pathway' (See Appendix 1).

### 4. References

- 1 Newborn and Infant Physical Examination screening programme handbook, April 2021. <https://www.gov.uk/government/publications/newborn-and-infant-physical-examination-programme-handbook/newborn-and-infant-physical-examination-screening-programme-handbook#screening-examination-of-the-hips>  
Last accessed 20/8/2022.

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### 5. Audit of the process

Compliance with the process will be monitored through the following:

Key elements	Process for Monitoring	By Whom (Individual / group /committee)	Responsible Governance Committee /dept	Frequency of monitoring
All babies examined prior to discharge or within 72 hours of birth	Regular audit using NIPE data	NNUH DDH in newborn group	NNUH Antenatal & Newborn Screening Programme Board / NNUH Women and Childrens Services	Annual
Ultrasound for babies suspected to have DDH should be performed between 4-6 weeks' age (or corrected gestational age 38-40 weeks for babies born <34 weeks gestation)	Regular audit using NIPE date	NNUH DDH in newborn group	1) NNUH Antenatal & Newborn Screening Programme Board / NNUH Women and Childrens Services 2) NNUH Radiology department	Annual
Any newborn referred to the Paediatric Orthopaedic MDT DDH clinic should be seen within one week (internal standard 95%).	Regular audit	NNUH DDH in Newborn Group	NNUH Trauma & Orthopaedic Department	Annual

The audit results are to be discussed at relevant governance meetings (NNUH DDH in newborn Group) to review the results and recommendations for further action. Then sent to (NNUH Antenatal & Newborn Screening Programme Board) who will ensure that the actions and recommendations are suitable and sufficient.

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**6. Appendix 1: Baby was not brought (WNB)/ Did not attend (DNA) Hip USS  
Pathway**



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**7. Equality Impact Assessment (EIA)**

<b>Type of function or policy</b>	Existing
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<b>Division</b>	Surgical Division	<b>Department</b>	Trauma & Orthopaedics
<b>Name of person completing form</b>	Anish Sanghrajka	<b>Date</b>	27/9/23

<b>Equality Area</b>	<b>Potential Negative Impact</b>	<b>Impact Positive Impact</b>	<b>Which groups are affected</b>	<b>Full Impact Assessment Required YES/NO</b>
Race	None	None	N/A	No
Pregnancy & Maternity	None	None	N/A	No
Disability	None	None	N/A	No
Religion and beliefs	None	None	N/A	No
Sex	None	None	N/A	No
Gender reassignment	None	None	N/A	No
Sexual Orientation	None	None	N/A	No
Age	None	None	N/A	No
Marriage & Civil Partnership	None	None	N/A	No
<b>EDS2 – How does this change impact the Equality and Diversity Strategic plan (contact HR or see EDS2 plan)?</b>	This policy has no impact on the Equality and Diversity Strategic Plan of the Trust.			

<ul style="list-style-type: none"> <li>• <b>A full assessment will only be required if: The impact is potentially discriminatory under the general equality duty</b></li> <li>• <b>Any groups of patients/staff/visitors or communities could be potentially disadvantaged by the policy or function/service</b></li> <li>• <b>The policy or function/service is assessed to be of high significance</b></li> </ul>
<b>IF IN DOUBT A FULL IMPACT ASSESSMENT FORM IS REQUIRED</b>
<b>The review of the existing policy re-affirms the rights of all groups and clarifies the individual, managerial and organisational responsibilities in line with statutory and best practice guidance.</b>