

DDH MANAGEMENT FLOWCHART

It is important to identify DDH early so treatment can be initiated to prevent later problems.

While most people with DDH are asymptomatic during childhood, it can cause significant impairment in young adulthood with hip pain, abnormal gait, early degenerative hip disease, functional disability, and secondary issues with the spine and knees.

Clinical management

DDH pathway flowchart

Arranging hip X-rays

Hip examination

GP letter

Info for families

Waitemata DDH pamphlet

Starship Ortho DDH pamphlet

Further reading and information

DDH Educational Module

Starship DDH guideline

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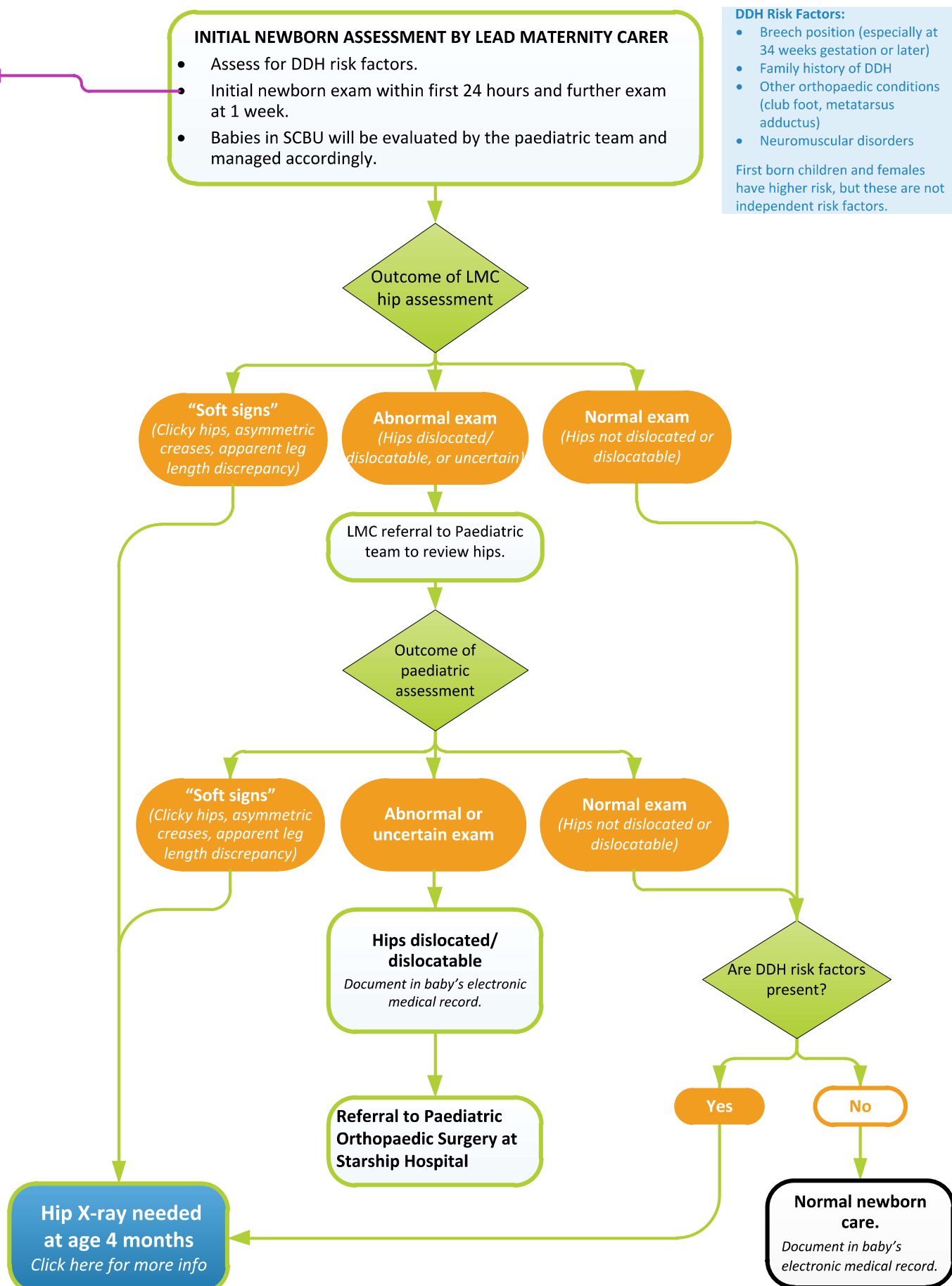
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DDH Risk Factors:

- Breech position (especially at 34 weeks gestation or later)
- Family history of DDH
- Other orthopaedic conditions (club foot, metatarsus adductus)
- Neuromuscular disorders

First born children and females have higher risk, but these are not independent risk factors.



ARRANGING HIP X-RAYS FOR A BABY WITH RISK FACTORS FOR DDH

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The clinician caring for the baby (LMC or Paediatric team) must do the following:

Give DDH pamphlet to the family.

[Waitemata DDH Pamphlet](#)

[Starship Orthopaedics DDH pamphlet](#)

Notify GP about the need for DDH screening x-rays

- The LMC sends a copy of the GP letter to the GP and gives copy to the parents. [GP letter](#)
- The Paediatric team can tick “ADVICE TO GP – Developmental Dysplasia of the Hips (DDH)” on a Paediatric Progress Note for babies on the maternity ward or Electronic Discharge Summary for babies admitted under Paediatric services.

Complete documentation on baby’s Electronic Medical Record

- including risk factors, exam findings, and communication with parents and GP.

General Practitioner’s responsibilities

- **Organise and review AP pelvis x-ray at 4 months of age (corrected gestational age).**
Request a copy of x-ray to Paediatric Orthopaedic Surgery department, Starship Hospital.
- **If patient DNA** for x-ray, the referring physician will be notified by radiology department and is responsible for re-ordering the x-ray.

Outcome of
Hip X-ray

Abnormal or
indefinite result

Normal

Referral to Paediatric
Orthopaedic Surgery at
Starship Hospital.

Normal newborn care.

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NEWBORN HIP EXAMINATION

Watch videos about the hip exam on the DDH Educational Module.
A hip doll is available on maternity wards and in SCBU for practice.

Evaluate for underlying health issues.

Neuromuscular problems

- Weakness (poor tone, poor suck, weak cry)
- Spasticity, asymmetric tone or movement of extremities

Other orthopaedic problems

- Range of motion of hips (limited movement, arthrogryposis or fixed joint contractures)
- Club foot (talipes equinovarus) or metatarsus adductus
- Spine abnormalities (sacral dimple, lipoma or hairy patch along spine, torticollis)

Syndromes

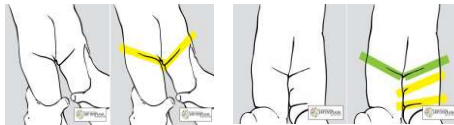
- Dysmorphic features suggestive of a syndrome

Ortolani and Barlow manouvres

- These tests check for hip instability. A normal test may indicate whether the hip dislocates; however, it does tell you if the hip has developed appropriately. If there are risk factors, a screening hip x-ray is still necessary.
- It is useful up to 3 months old, because most hips that were initially unstable will stabilise by 3 months old.

Other signs (sometimes called “soft signs”)

- Asymmetric skin creases



- Apparent leg length discrepancy



Galeazzi sign

Note that the right knee appears lower because the hip is dislocated posteriorly.

- Limited range of motion in hips
 - Limited hip abduction less than 45 degrees
 - Most reliable sign of DDH in child older than 2-3 months
- Clicky hips

Note: If both hips are abnormal, then they may not appear asymmetric.

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RESOURCES AND DEVELOPMENT TEAM

REFERENCES

- Starship Paediatric Orthopaedic Clinical Information, December 2014 <http://www.healthpoint.co.nz/public/paediatrics/starship-paediatric-orthopaedics/?medpro=show&solo=mpTreatmentGuidelinesList&index=3>
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PATHWAY DEVELOPMENT TEAM

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AUDIT CRITERIA

The following criteria will be used to audit the pathway:

- 1) Percentage of breech babies who have x-rays requested.
- 2) Who ordered the x-rays (LMC, GP, paediatrician, orthopaedics)
- 3) Percentage of breech babies with x-rays completed by 6 months
- 4) Random chart reviews of documentation of hip examination
- 5) Percentage of abnormal hip x-rays which have been reviewed by Orthopaedics.
- 6) Percentage of babies with abnormal x-rays which have been referred to Orthopaedic Surgery.

PUBLISHPMENT AND REVIEW DATES

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12/1/2019

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1/2026