

# Document Control

<b>Title: Acute Post Natal Cardiac Pathway</b>			
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<b>Network: North West, North Wales and Isle of Man Congenital Heart Disease Operational Delivery Network</b>			
Version	Date Issued	Status	Comment/ Change/ approval
V1.0	01/08/2018	Final	Original document written by Emma Kyte and ratified by NWNODN (PW-ODN_01) – for review on 01/08/2021
V2.0	25/10/2020	Draft	Minor adjustments to “suspected cardiac diagnosis/ECHO not available. NWTS Contact added
V2.1	29/10/2020	Draft	Add in Arrhythmia. Consider pre-term babies <34/40. Add” ventilation optimized and <75% + > 75%
V2.2	23/11/2020	Draft	Clarify difference between Connect NW + NWTS
V2.3	30/11/2020	FINAL	Add Krasi Atanosov as contributor and change stakeholders to organisations
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<b>Superseded Documents:</b>			
Original document written by Emma Kyte and ratified by NWNODN (PW-ODN_01) – for review on 01/08/2021			
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January 2021		January 2024	3 years
<b>Stakeholders Consulted (list all)</b>			
<ul style="list-style-type: none"> <li>&gt; North West Neonatal Operational Delivery Network</li> <li>&gt; North West and North Wales Paediatric Transport Service (NWTS)</li> <li>&gt; Connect North West (Neonatal Transport Service)</li> <li>&gt; North West Paediatric Critical Care Network</li> <li>&gt; Dr Krasi Atanosov (Consultant Cardiologist and Clinical Lead at RMCH)</li> <li>&gt; Dr Gordon Gladman (Consultant Cardiologist and Network Director)</li> <li>&gt; Dr Ian Dady (Consultant Neonatologist and Lead for Connect NW)</li> <li>&gt; Dr Suzy Emsden (NWTS Lead Consultant)</li> <li>&gt; Dr Ben Lakin &amp; Dr Jon McViety (Lead Cons, NW Paediatric Critical Care Network)</li> <li>&gt; Dr Michael Bowes (Consultant Cardiologist at Alder Hey NHS Foundation Trust)</li> <li>&gt; Dr Kate Parkins (Consultant Intensivist, NWTS)</li> <li>&gt; Dr Nim Subhedar (Consultant Neonatologist and Cheshire and Merseyside neonatal network)</li> <li>&gt; Dr Ruth Gottstein (Consultant Neonatologist St Marys, Manchester)</li> <li>&gt;</li> </ul>			



Approved By: Paediatric RT+FG On behalf of the CHD Network Board

Date: 27/01/2021

Comments



# Acute Postnatal Cardiac Pathway for neonates and infants

Date: 09-12-2020

## Contributors:

North West Neonatal Operational Delivery Network  
North West and North Wales Paediatric Transport Service (NWTS)  
Connect North West (Neonatal Transport Service)  
North West Paediatric Critical Care Network

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# Acute Postnatal Cardiac Pathway for neonates and infants

## Purpose

The purpose of this Acute Postnatal Cardiac pathway is to ensure all infants born in the North West of England, North Wales and The Isle of Man with a confirmed or suspected cardiac anomaly receive equitable, high quality cardiac care. It is important that specialist cardiac resources and services are utilised efficiently and appropriately.

Please contact Connect North West or NWTs (numbers below) as appropriate in the first instance. They will set up a conference call with the relevant cardiology team to develop a specific management plan.

## Useful Contact Numbers:

### Transport Teams

Connect North West (Neonatal transport team)

➤ 0300 330 9299

North West and North Wales Transport Team – NWTs (Paediatric transport team)

➤ 08000 848 382

## Acknowledgement

The North West Neonatal Operational Delivery Network (NWNODN) and The North West, North Wales and Isle of Man Congenital Heart Disease Operational Delivery Network (NWCHDODN) who reviewed and developed this document would like to acknowledge and thank all those individuals and organisations who have contributed to the development of this acute cardiac pathway. This guideline builds upon previous work undertaken across the region.



Cyanosed or poorly perfused neonate/infant with suspected cardiac disease and/or arrhythmia following resuscitation with ABC measures

**Antenatal Diagnosis**

Unplanned/preterm delivery outside cardiac centre  
**\*\*read fetal report and follow management plan\*\***

**No Antenatal Diagnosis**

Cardiac Malformation clinically suspected

**\*common CHD requiring urgent surgery or intervention**

- TGA
- TAPVD
- Unstable Fallots
- CoA (no Duct)

Continue stabilisation and investigations  
Assess with echocardiography if available

**Neonatal Units contact – Connect North West 0300 330 9299    Infants or neonates outside of neonatal units contact –NWTS 08000 848 382**  
Transport team will set up a **conference call** to include the referring hospital, cardiology and the appropriate transport team (Connect NW or NWTS). The call will allow a management plan to be developed regarding management and support (**including the potential of initiating Prostin/iNO**).

**Cardiac Diagnosis confirmed on ECHO**

Lesion likely to require surgery, intervention or ECMO support <48hrs  
*Refer to info box\**

Transfer to Alder Hey

Lesion unlikely to require early intervention

Transfer to nearest cardiac centre  
AHCH or SMH/RMCH

**Cardiac Diagnosis Suspected**  
ECHO not available

SpO<sub>2</sub> < 75%  
(ventilation optimised)  
Poor response to iNO,  
ongoing cardiovascular compromise, inotropic reqmt  
Arrhythmia

Transfer to Alder Hey

SpO<sub>2</sub> ≥ 75%  
Response to initiating prostin

Transfer to nearest cardiac centre  
AHCH or SMH/RMCH

**Diagnosis Unknown**  
ECHO not available

Good response to iNO/intensive care Rx  
Pre term infant < 34 weeks

Transfer to NICU/PICU with access to ECHO

**If Level 1 centre has no appropriate bed**

Transport team should conference call cardiology at AHCH and/ or RMCH to discuss management if diagnosis unclear. Every effort should be made to provide a definitive diagnosis within the NWNODN by a Cardiology team prior to bed re-evaluation and consideration of transfer to another surgical cardiac centre outside of the North West CHD Network