

**THAMES VALLEY & WESSEX NEONATAL OPERATIONAL DELIVERY NETWORK**

<b>THAMES VALLEY &amp; WESSEX ODN NEONATAL CARDIAC PATHWAYS</b>	
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Authors	<b>Dr Victoria Puddy TV &amp; Wessex Clinical Lead</b>
Distribution	<b>Thames Valley and Wessex Neonatal Clinical Forums Thames Valley and Wessex Neonatal Network website</b>
Related documents	<p>BAPM 2022 Service Standards and Quality Standards for provision of Neonatal Care in the UK 2022 <a href="https://www.bapm.org/resources/service-and-quality-standards-for-provision-of-neonatal-care-in-the-uk">https://www.bapm.org/resources/service-and-quality-standards-for-provision-of-neonatal-care-in-the-uk</a></p> <p>Report of Department of Health Expert Working Group on Neonatal Intensive Care Services (2003)</p> <p>Department of Health: Toolkit for High Quality Neonatal Services (2009)</p> <p>Paediatric Congenital Heart Disease Specification May 2016 NHS England</p> <p>NHS England Neonatal critical care Service Specification 2015</p> <p>NHS England Neonatal Intensive Care Transport Service</p> <p><a href="#"><b>Implementing the Recommendations of the Neonatal Critical Care Transformation Review December 2019</b></a></p>
Implications of race, equality & other diversity duties for this document	<b>This guideline must be implemented fairly and without prejudice whether on the grounds of race, gender, sexual orientation or religion.</b>

## 1.0 Aim of Pathway

The aim of TV & Wessex Neonatal cardiac pathways is to describe the pathway for neonates who have been identified as having a cardiac abnormality or needing cardiothoracic surgery i.e. patent ductus arteriosus ligation within Thames Valley and Wessex Neonatal Network.

## 2.0 Scope of Pathways

This pathway applies to all neonatal and maternity units covered by Thames Valley Neonatal Network. This includes the following hospitals:

Thames Valley		
TRUST	Hospital	Designation
Oxford University Hospitals NHS Foundation Trust	- John Radcliffe Hospital, Oxford	NICU Cardiac
Buckinghamshire Healthcare NHS Trust	- Stoke Mandeville Hospital, Aylesbury	LNU
Frimley Health NHS Foundation Trust	- Wexham Park Hospital, Slough	LNU
Milton Keynes University Hospital NHS Foundation Trust	- Milton Keynes General Hospital	LNU
Royal Berkshire NHS Foundation Trust	- Reading	LNU

Wessex		
TRUST	Hospital	Designation
University Hospital Southampton NHS Foundation Trust	- Princess Anne Hospital	NICU Cardiac Surgical
Portsmouth Hospitals University NHS Trust	- Queen Alexandra Hospital	NICU
Dorset County Hospital NHS Foundation Trust	- Dorset County Hospital, Dorchester	SCU
Hampshire Hospitals NHS Foundation Trust	- Basingstoke and North Hampshire Hospital	LNU
Hampshire Hospitals NHS Foundation Trust	- Royal Hampshire County Hospital, Winchester	LNU
Isle of Wight NHS Trust	- St Mary's Hospital	SCU
University Hospitals Dorset NHS Foundation Trust	- Poole Hospital	LNU
Salisbury NHS Foundation Trust	- Salisbury District Hospital	LNU
University Hospitals Sussex NHS Foundation Trust	- St Richard's Hospital, Chichester	SCU

## 3.0 Background

Currently 5.9 / 1,000 babies born in England have some form of Congenital Heart Disease (CHD) and paediatric cardiac care is managed within paediatric cardiac networks. This includes those infants who are diagnosed antenatally or postnatally e.g., at Newborn Infant Physical Examination NIPE. The care of children with congenital heart disease is provided in different types of children's cardiac centres within the UK as set out in NHS England Paediatric Congenital Heart Disease May 2016, including Specialist Children's surgical centres (Level 1 services), Specialist Children's Cardiology Centres (Level 2 services) and local Children's Cardiac Centres (Level 3)

This document outlines the clinical cardiac pathways for neonates within Thames Valley and Wessex Neonatal Network.

## 4.0 Principles

Key principles which have been agreed nationally and are widely accepted include:

- Paediatric cardiac services are provided in designated cardiac centres within a managed paediatric cardiac network of care.
- Individual Trusts are responsible for ensuring neonates requiring cardiology services should be referred to the designated centre within the paediatric cardiac network.
- Neonates who need cardiac surgery should be referred to the designated specialist paediatric cardiac surgical centre where paediatric and neonatal intensive care capacity is available.
- When an antenatal cardiac abnormality diagnosis is made it is expected that women are referred to fetal medicine services for a fetal echocardiogram and cardiology assessment. A management plan including location of delivery should be discussed with the fetal medicine team, cardiology team and neonatal/ local paediatric and obstetric teams and parents.
- Neonatal cardiac care should be provided in a centre as close to the neonates home or booked hospital as possible

### Appendices:

Appendix 1: Thames Valley & Wessex Neonatal Cardiac pathway: Antenatal diagnosis

Appendix 2: Thames Valley & Wessex Neonatal Cardiac Referral pathway

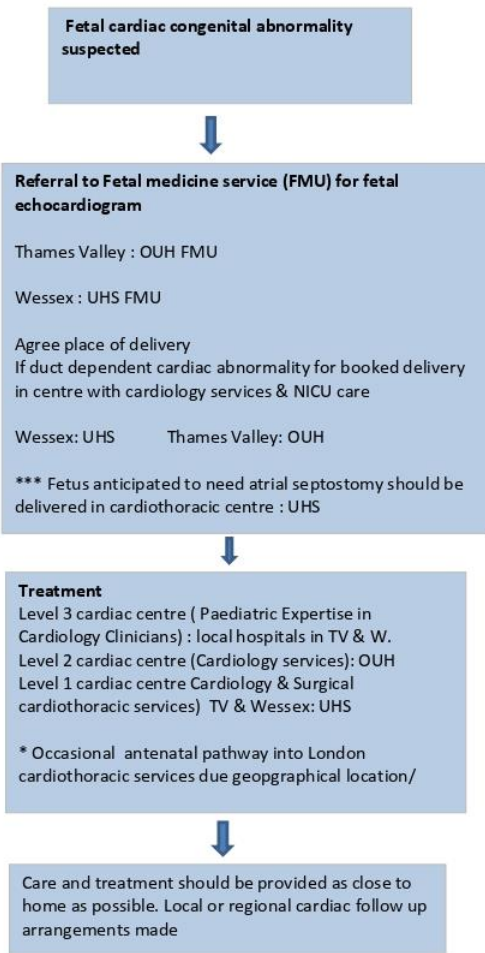
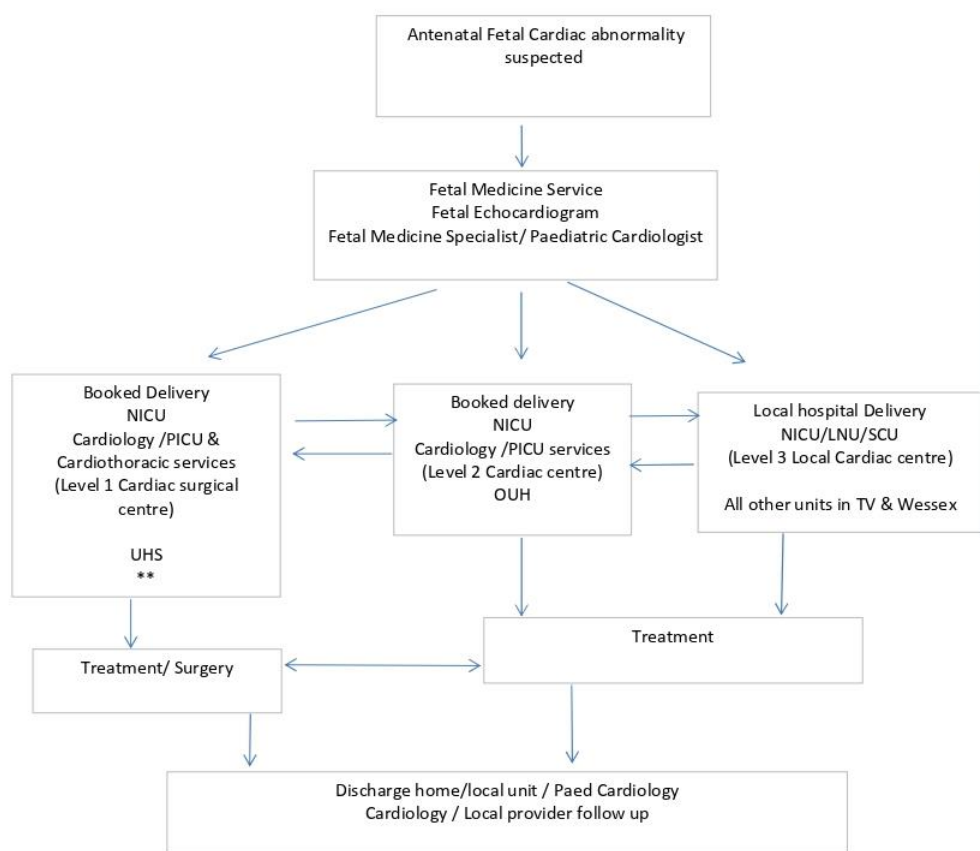
Appendix 3: Thames Valley & Wessex Neonatal Patent Ductus Arteriosus Ligation Referral pathway

### Version Control:

Version	Date	Details	Author(s)	Comments
1.0	October 2017		Dr Victoria Puddy Dr Eleri Adams	
1.1	August 2018	Amendment for IOW redesignation and update ODN Website	Dr Victoria Puddy Dr Eleri Adams	
1.2	January 2023	Minor amendments to provider unit service designation. No change to pathways	Dr Victoria Puddy	T Bharucha Cons Paediatric Cardiologist UHS L Yianni Neonatal Transformation Fellow
1.3	March 2023	Minor change to Appendix 2 to specify SOnET team	Dr Victoria Puddy	P McEwan, Cons Neonatologist Poole
<b>Review Date:</b>	<b>March 2026</b>			

# Appendix I: Thames Valley & Wessex Neonatal Cardiac pathway: Antenatal diagnosis

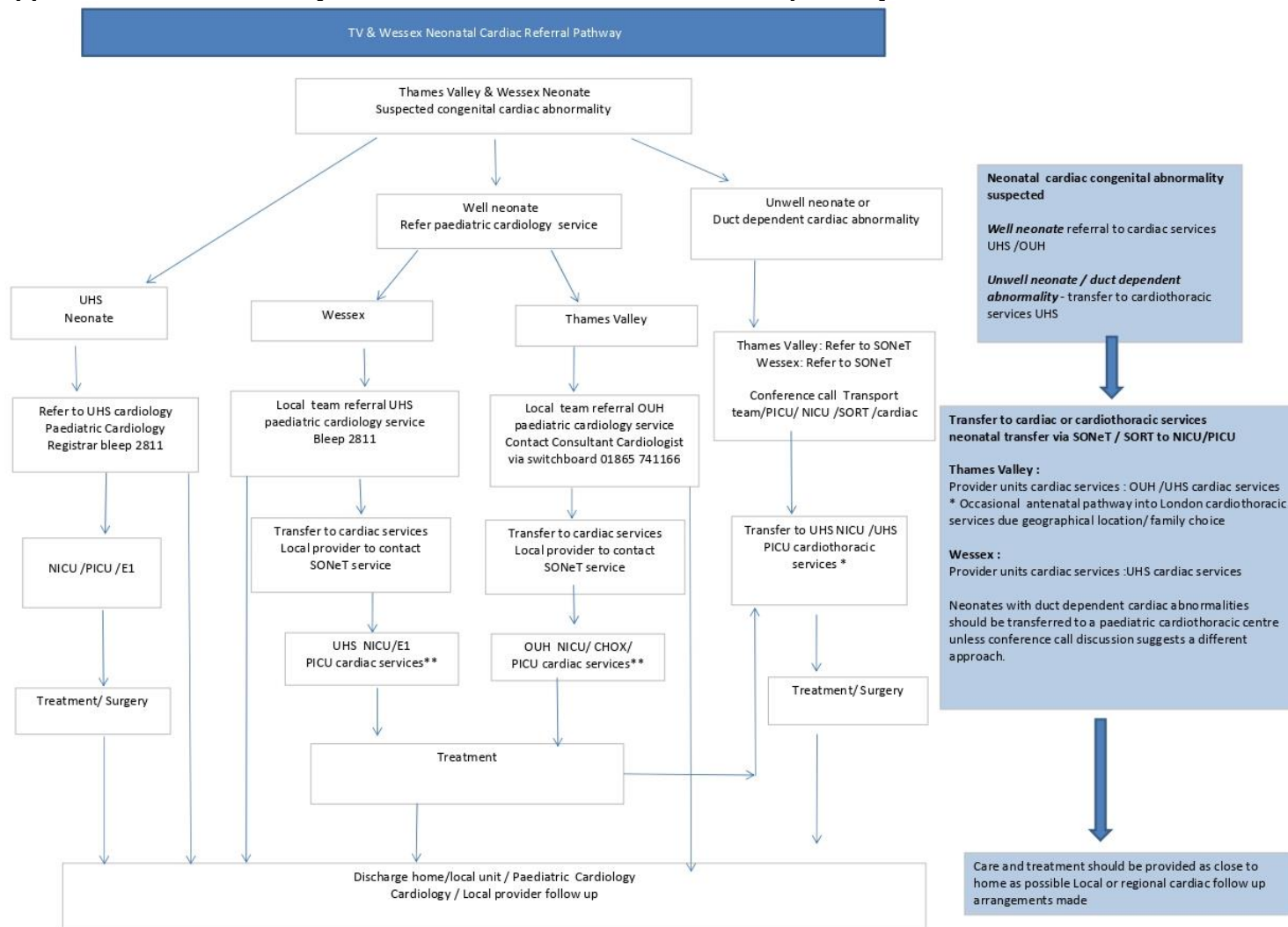
## TV & Wessex Neonatal Cardiac Pathway : Antenatal Diagnosis



\*\* No Network Neonatal, Cardiac or PICU bed available SONeT to arrange referral & transfer out of network if in utero transfer has not been arranged

\*\*\* Fetus with conditions that are anticipated to need atrial septostomy should be referred for delivery in UHS

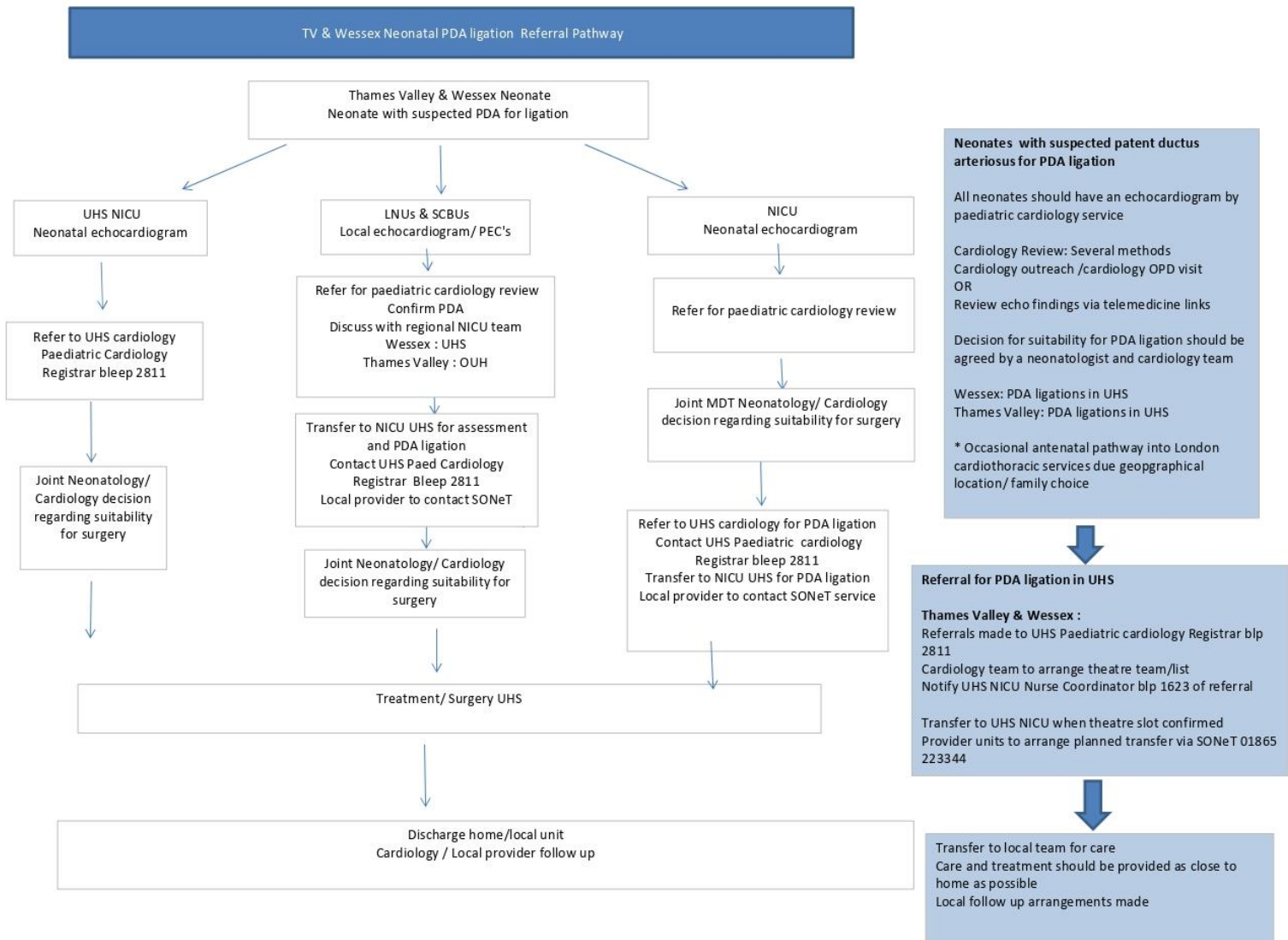
## Appendix 2: Thames Valley & Wessex Neonatal Cardiac Referral pathway



\*\* No Network Neonatal cardiac bed available SONEt/ SORT to arrange referral & transfer out of network

For babies with suspected cardiac abnormality identified through failed neonatal pulse oximetry screening (POS) , follow the POS guideline pathway

### Appendix 3: Thames Valley & Wessex Neonatal Patent Ductus Arteriosus Ligation Referral pathway



**Neonates with suspected patent ductus arteriosus for PDA ligation**

All neonates should have an echocardiogram by paediatric cardiology service

Cardiology Review: Several methods  
Cardiology outreach /cardiology OPD visit  
OR  
Review echo findings via telemedicine links

Decision for suitability for PDA ligation should be agreed by a neonatologist and cardiology team

Wessex: PDA ligations in UHS  
Thames Valley: PDA ligations in UHS

\* Occasional antenatal pathway into London cardiothoracic services due geographical location/ family choice

**Referral for PDA ligation in UHS**

**Thames Valley & Wessex :**  
Referrals made to UHS Paediatric cardiology Registrar blp 2811  
Cardiology team to arrange theatre team/list  
Notify UHS NICU Nurse Coordinator blp 1623 of referral

Transfer to UHS NICU when theatre slot confirmed  
Provider units to arrange planned transfer via SONEt 01865 223344

Transfer to local team for care  
Care and treatment should be provided as close to home as possible  
Local follow up arrangements made

\*\* No Network Neonatal NICU or PICU bed available UHS SONEt / local team to arrange referral & transfer out of network  
PEC's : Paediatrician with Expertise in Cardiology