Bwrdd Iechyd Addysgu Powys
Powys Teaching Health Board

Jaundice in the Neonate

Document Reference No:	PTHB / MAT 076
Version No:	2
Publication Date:	11 June 2026
Review Date:	21 July 2028
Expiry Date:	21 October 2028
Author:	Midwife
Document Owner:	Head of Midwifery and Sexual Health Services
Accountable Executive:	Executive Director of Nursing, Quality, Women and Family Health
Approved By:	Women & Children's Policies and Procedures Governance Group
Approval Date:	21 October 2025
Document Type:	Guideline
Parent Policy:	
Scope:	Midwifery and Health Visiting

Powys Teaching Health Board is the operational name of Powys Teaching Local Health Board
Bwrdd Iechyd Addysgu Powys yw enw gweithredol Bwrdd Iechyd Lleol Addysgu Powys

To ensure that you are always using the latest version of this written control document, please refer to the version on the Corporate Governance SharePoint site

Section	Contents	Page
	Associated Policies and Written Control Documents	3
	Version Control	3
	Engagement & Consultation	3-4
1.0	Introduction	4
2.0	Objective	4
3.0	Equality Statement	5
4.0	Definitions	5
5.0	Responsibilities	6
5.1	Head of Midwifery & Sexual Health and Head of Children’s Public Health Nursing	6
5.2	Assistant Head of Midwifery and Sexual Health Services and Assistant Head of Children’s Public Health Nursing	6
5.3	Band 7 Operational Team Lead (OTL) – Midwifery and Health Visiting Team Leads	6
5.4	Consultant Midwife	6
5.5	Clinical Supervisor for Midwives (CSfM)	6
5.6	Women and Children’s Rik and Governance Lead	6
5.7	All staff working within maternity and health visiting services	7
6.0	Assessment for Neonatal Jaundice	7-8
6.1	Monitoring jaundice <24 hours old	8-10
6.2	Prolonged jaundice	10
7.0	Safeguarding	10
8.0	Monitoring Compliance, Audit & Review	11
9.0	References and Bibliography	11
	Appendices	
A	Transcutaneous Bilirubinometer	12
B	NICE Threshold Table	13-14
C	Flow Chart for management of neonatal jaundice in the community in term babies <14 days old and pre-term <21 days only	15
	Equality Impact Assessment	16

Associated Policies and Written Control Documents
Jaundice in Newborn babies under 28 days Nice Clinical guideline [CG98] Published date: 19 May 2010 Last updated: 31st October 2023 Overview | Jaundice in newborn babies under 28 days | Guidance | NICE Nice CKS: Jaundice in the Newborn Revised November 2015

Version Control

Version	Summary of Changes/Amendments	Publication Date
1	Initial Issue	Jan 2022
2	Reviewed – updated in accordance with updated NICE guidance	11/06/2026

Engagement & Consultation

Key Individuals/Groups Involved in Developing this Document

Role / Designation
Clinical Supervisor for Midwives
Band 6 midwife
Consultant Midwife
Neonatologist - SBUHB

Circulated to the following for Consultation

Date	Role / Designation
07/07/2025	Midwifery Leadership and Management Team
07/07/2025	Wales Maternity & Neonatal Network Neonatologist
07/07/2025	Health Visiting Leadership and Management Team
07/07/2025	Powys Midwives
07/07/2025	Powys Health Visiting
07/07/2025	Women and Children's Guidelines/policy group members
07/07/2025	Powys Safeguarding team

Groups approved at

Date	Group
14/10/2025	Maternity guidelines Group
21/10/2025	Women and Children's Policies and Procedures Governance Group

1.0 Introduction

Jaundice is a yellow colouration of the skin and sclerae (whites of the eyes) caused by the accumulation of bilirubin, a bile pigment which is mainly produced from the breakdown of red blood cells. A raised level of bilirubin in the circulation is known as hyperbilirubinaemia.

Bilirubin levels are higher in neonates than in adults because newborn babies have a higher concentration of red blood cells, which also have a shorter lifespan.

For most babies, jaundice is harmless and is not an indication of an underlying disease ('physiological jaundice'). Physiological jaundice can occur in breastfed and formula-fed babies. The expression 'breastmilk jaundice' describes a prolongation of physiological jaundice in breastfed babies.

Some neonatal jaundice is pathological - this can be caused by a number of factors, including blood group incompatibility; sepsis; bruising; metabolic disorders; Gilbert's syndrome and Crigler-Najjar syndrome; glucose-6-phosphate-dehydrogenase deficiency; and congenital obstruction and malformations of the biliary system, such as biliary atresia.

2.0 Objective

This guideline will be applicable to all staff who come into clinical contact with neonates (babies up to 28 days of life)

This document covers the assessment, diagnosis and referral to secondary care of jaundice, in neonates. It aims to help detect or prevent very high levels of bilirubin, which can be harmful if not treated. It also aims to provide guidance on how and when to refer babies to secondary care promptly for treatment.

3.0 Equality Statement

Powys Teaching Health Board Maternity Services are committed to:

- The elimination of unlawful and unfair discrimination
- The active promotion of equal opportunities for women and their families and our workforce
- The protection of the human rights of women and their families and our workforce
- The promotion of inclusive relationships between groups who share protected characteristics and those who don't
- The valuing of the diversity inherent in the communities we serve and in our workforce.

The words 'woman' and 'women' have been used throughout this document as this is the way that the majority of those who are pregnant and having a baby will identify. For the purpose of this document, this term includes girls. It also includes people whose gender identity does not correspond with their birth sex or who may have a non-binary identity. Similarly, where the term 'parents' is used, this should be taken to include anyone who has main responsibility caring for a baby. It is recognised that there are many different family arrangements.

When translation services are required, there is the expectation that a face-to-face translator or digital interpretation services will be provided. The Language Line App is available to all maternity staff to use for this purpose. Consideration is required with written documents and leaflets to be provided in a woman's preferred or 1st language.

For further support and advice contact PTHB Equality Team: powys.equalityandwelsh@wales.nhs.uk

4.0 Definitions

- **PTHB** – Powys Teaching Health Board
- **Neonate** – a newborn child up to 28 days of life
- **TCB** – transcutaneous bilirubinometer – a noninvasive test performed in the community for estimation of serum bilirubin
- **SBR** – serum bilirubin – a blood test performed at a DGH laboratory
- **DGH** - District General Hospitals
- **OTL -** Band 7 Operational Team Lead
- ***CSfM** - Clinical Supervisor for Midwives*

5.0 Responsibilities

5.1 Head of Midwifery and Sexual Health Services and Head of Children's Public Health Nursing

The Head of Midwifery and Sexual Health Services and Head of Children's Public Health Nursing must:

- Ensure all staff read and understand this procedure
- Arrange regular review to monitor compliance with this procedure

5.2 Assistant Head of Midwifery and Sexual Health Services and Assistant Head of Children's Public Health Nursing

The Assistant Head of Midwifery and Sexual Health Services and Assistant Head of Health Visiting has responsibility for:

- Ensuring dissemination of this document to all relevant staff

5.3 Band 7 Operational Team Lead (OTL) – Midwifery and Health Visiting Team Leads

The OTL and health visiting team lead has responsibility for:
Ensuring compliance with this document by the teams that they manage

5.4 Consultant Midwife

The consultant midwife has responsibility for:

- Supporting implementation of this document
- Reviewing any new evidence or guidance that is produced that may influence the service
- Communicating any key changes in advice that might influence service provision to the Midwifery Leadership and Management team for consideration.

5.5 Clinical Supervisor for Midwives (CSfM)

The CSfM has responsibility for:

- Supporting implementation of this document within midwifery through group supervision sessions

5.6 Women and Children's Risk and Governance Lead

The Women and Children's Risk and Governance Lead has responsibility for:

- Monitoring review of incidents in relation to content of this document

5.7 All Staff working within maternity and health visiting services

All staff working at the maternity and health visiting services have responsibility for:

- Reading and being familiar with contents of this document
- Referring neonates appropriately for additional care where required

6.0 Assessment for Neonatal Jaundice

Information for parents or caregivers

Offer parents or carers information about neonatal jaundice that is tailored to their needs and expressed concerns. This information should be provided through verbal discussion backed up by written information. Care should be taken to avoid causing unnecessary anxiety to parents or carers. Information should include:

- Factors that influence the development of significant hyperbilirubinaemia
- How to check the baby for jaundice
- What to do if they suspect jaundice
- The importance of recognising jaundice in the first 24 hours and of seeking urgent medical advice
- The importance of checking the baby's nappies for dark urine or pale chalky stools
- The fact that neonatal jaundice is common, and reassurance that it is usually transient and harmless
- Reassurance that breastfeeding can continue.

Role of the Midwife

- Neonates should be examined for jaundice at every opportunity, especially within the first 72 hours of life, naked, in natural or bright light.
- Examine the sclerae and gums and press lightly on the skin to check for signs of jaundice in 'blanched' skin, especially in babies whose parents are not of a white ethnicity. Be aware that changes to skin pigmentation because of hyperbilirubinaemia may be harder to see in darker skin.
- Enquire about dark urine and/or pale, chalky stools – these are both ‘red flag’ symptoms and need urgent hospital review.
- All jaundice levels need to be checked either with a TCB or SBR measurement, the severity of jaundice **cannot** be estimated visually. Midwives should be aware that visual inspection of jaundice in darker tones is ‘almost impossible’ (NICE, 2023). The

NHSRHO (2023) report suggests health care professionals should access signs of yellow in the sclera and gums in newborns of black, Asian and ethnic minorities.

- Do not measure bilirubin levels routinely in babies who are not visibly jaundiced.

Identify babies as being more likely to develop significant hyperbilirubinaemia if they have any of the following factors:

- Gestational age under 38 weeks
- A previous sibling with neonatal jaundice requiring phototherapy
- Exclusively breastfeeding
- Visible jaundice in the first 24 hours of life

Ensure babies with factors associated with an increased likelihood of developing significant hyperbilirubinaemia receive an additional visual inspection by a healthcare professional during the first 48 hours of life.

6.1 Monitoring Jaundice < 21 hours old

- Babies who are jaundiced within the first 24 hours of life need an urgent (within two hours) hospital review, with a paediatrician or neonatologist depending on local services
- **If a baby with obvious jaundice has** features of bilirubin encephalopathy (for example atypical sleepiness, poor feeding, irritability) a**rrange emergency admission** (via 999 ambulance)
- Jaundice first appearing at or after day seven of life needs urgent hospital review (within six hours, or sooner if there are other concerns)

Assessing and monitoring visibly jaundiced neonates >35 - 38 weeks' gestation, who are well AND are > 24 hours old

- If transcutaneous bilirubinometer (see Appendix A) is available take measurement, record the level within 6 hours and assess using the appropriate threshold chart for age and flowchart in see appendix B
- If a transcutaneous bilirubinometer measurement indicates a bilirubin level greater than 250 micromol/litre, serum bilirubin measurement is needed
- If transcutaneous bilirubinometer measurement is <250, liaise with a paediatricain or neonatologist for plan of care going forward.

Assessing and monitoring jaundiced neonates born at >38 weeks' gestation AND are >24 hours old

- If transcutaneous bilirubinometer (see Appendix A) is available take measurement, record the level within 6 hours and assess using the threshold chart (see appendix B)
- If a transcutaneous bilirubinometer measurement indicates a bilirubin level greater than 250 micromol/litre, a serum bilirubin measurement is needed
- In babies who are clinically well, have a gestational age of 38 weeks or more, > 24 hours old, and who have a bilirubin level that is below the phototherapy threshold, but within 50 micromol/litre of the threshold (see the threshold table and the treatment threshold graphs), repeat bilirubin measurement as follows:
  - **within** 18 hours for babies with risk factors for neonatal jaundice *(those with a sibling who had neonatal jaundice that needed phototherapy or a mother who intends to exclusively breastfeed)*
  - **within** 24 hours for babies without risk factors.
- In babies who are clinically well, have a gestational age of 38 weeks or more are > 24 hours old, and who have a bilirubin level that is below the phototherapy threshold by more than 50 micromol/litre, do not routinely repeat bilirubin measurement.
- If a transcutaneous bilirubinometer is not available, measure the serum bilirubin via referring baby in to chosen DGH. However, if midwives suspect jaundice a TCB should be performed.
- Use serum bilirubin measurement if bilirubin levels are at or above the relevant treatment thresholds for their age, and for all subsequent measurements.
- Babies who have had phototherapy are not suitable for TCB measurement

If transcutaneous bilirubin measurements are unavailable, refer to a neonatal or paediatric unit (depending on local arrangements) for measurement of a serum bilirubin level within 6 hours.

A summary flowchart can be found in Appendix C.

Information for parents and caregivers on treatment

Offer parents or carers information about treatment for hyperbilirubinaemia, including:

- Anticipated duration of treatment

- Reassurance that breastfeeding, nappy-changing and cuddles can continue.
- Encourage mothers of breast-fed babies with jaundice to breastfeed frequently, and to wake the baby for feeds if necessary. Advise a minimum of 8 feeds in a 24-hour period, skin to skin, the laid back position and discuss feeding cues to respond to.

Provide lactation/feeding support to breastfeeding mothers whose baby is visibly jaundiced. Encourage regular feeding (every 3 hours) and support with expressing if baby is a reluctant feeder. Midwives should use the breastfeeding assessment in the postnatal notes to guide their conversation and assessment of current breastfeeding. See Mat 029 infant feeding guideline.

6.2 Prolonged Jaundice

Babies with prolonged jaundice: > 14 days in term babies (over 37 weeks) and 21 days in preterm babies (under 37 weeks) need a prompt review in secondary care for bloods for conjugated bilirubin, blood and maternal blood group and urine culture. Reassure parents that this is to exclude very rare but potentially serious disease.
This referral can be undertaken by anyone in clinical contact with the infant and is not solely a midwifery responsibility.

7.0 Safeguarding

Midwives should complete a routine risk assessment for lone working if there are any concerns. If there is any known risk to lone working or completing home visits, ensure the PTHB home risk assessment is shared in a timely manner with the smoking advisors and email a copy to stopsmoking.powys@wales.nhs.uk.
Midwives should ensure any updates regarding safeguarding if passed to the smoking advisors. If any safeguarding concerns or significant risk factors are identified for a child or young person/vulnerable adult, practitioners must follow Wales Safeguarding Procedures (2019) and SGP036 Safeguarding Policy Policies & Written Control Documents - SGP 036 Safeguarding Policy.pdf (sharepoint.com).
Advice and support concerning any safeguarding issue can be sought from PTHB Safeguarding Team via the Safeguarding Hub on 01686 252806 or email PowysTHB.Safeguarding@wales.nhs.uk. (Monday-Friday 09:00-17:00, excluding Bank Holidays). Outside of office hours, Local Authority can be contacted on 0345 0544 847 or contact Silver on Call. All registered practitioners should access appropriate safeguarding supervision and training as per guidance. Safeguarding Supervision (sharepoint.com).

8.0 Monitoring, Compliance, Audit & Review

Compliance with this guideline will be monitored through Datix reporting. A Datix must be submitted for any admissions as a result of jaundice.
Compliance will also be assessed on an annual basis through the record keeping audits. Opportunities to discuss cases will be provided through group supervision sessions.
This document will be reviewed every three years or earlier should audit results or changes to legislation / practice within PTHB indicate otherwise.

9.0 Reference and Bibliography

Jaundice in Newborn babies under 28 days Nice Clinical guideline [CG98]
Published date: 19 May 2010 Last updated: 31st October 2023
Nice CKS: Jaundice in the Newborn Revised November 2015

NHSRHO. Review of neonatal assessment and practice in Black, Asian and minority ethnic backgrounds. (2023). https://www.nhsrho.org/wp-content/uploads/2023/08/RHO-Neonatal-Assessment-Report.pdf

Appendix A: Transcutaneous Bilirubinometer
Available at: Appendix A - Transcutaneous Bilirubinometer.docx

The Dräger Transcutaneous Serum Bilirubinometer is a non-invasive tool which allows the operator to read the bilirubin of the baby more easily. The accuracy of transcutaneous bilirubinometers has been adequately demonstrated in term babies (bilirubin less than 250 micromol/litre). Thus a reading >250micromols/litre determines which infants are at higher risk and require formal blood sampling.

The meter is not indicated for use in newborn infants who:
- Are less than 35 week gestation
- Are more than 14 days old
- Have undergone blood transfusion or phototherapy

Prior to use perform a quality check. Monitor checks and operating procedure should follow manufacturers guideline [these should be displayed next the machine within the birth centre.]

Use touch screen to select Checker- wipe probe and charcoal base of docking station with an alcohol wipe to clean. Press probe onto charcoal pad to perform check. If numbers displayed correspond with the range displayed on the charging unit the machine is safe to use.

To screen baby for jaundice, use the touch screen to select measure. Wipe probe with an alcohol wipe to clean.

- Measurement site should be the babies mid sternum
- Place monitor flat against the skin and press lightly till you hear a click. Lift monitor from the skin and pause until green light shows. Repeat test until the required number [3] of measurements have been taken. The result will be shown on the display and should be recorded in the babies postnatal pathway.

Appendix B: NICE Threshold Table
Available at: appropriate threshold chart for age

Consensus-based bilirubin thresholds for management of babies 38 weeks or more gestational age with hyperbilirubinaemia

Age (hours)	Bilirubin measurement (micromol/litre)	
0	> 100	> 100
6	> 125	> 150
12	> 150	> 200
18	> 175	> 250
24	> 200	> 300
30	> 212	> 350
36	> 225	> 400
42	> 237	> 450
48	> 250	> 450
54	> 262	> 450
60	> 275	> 450
66	> 287	> 450
72	> 300	> 450
78	> 312	> 450

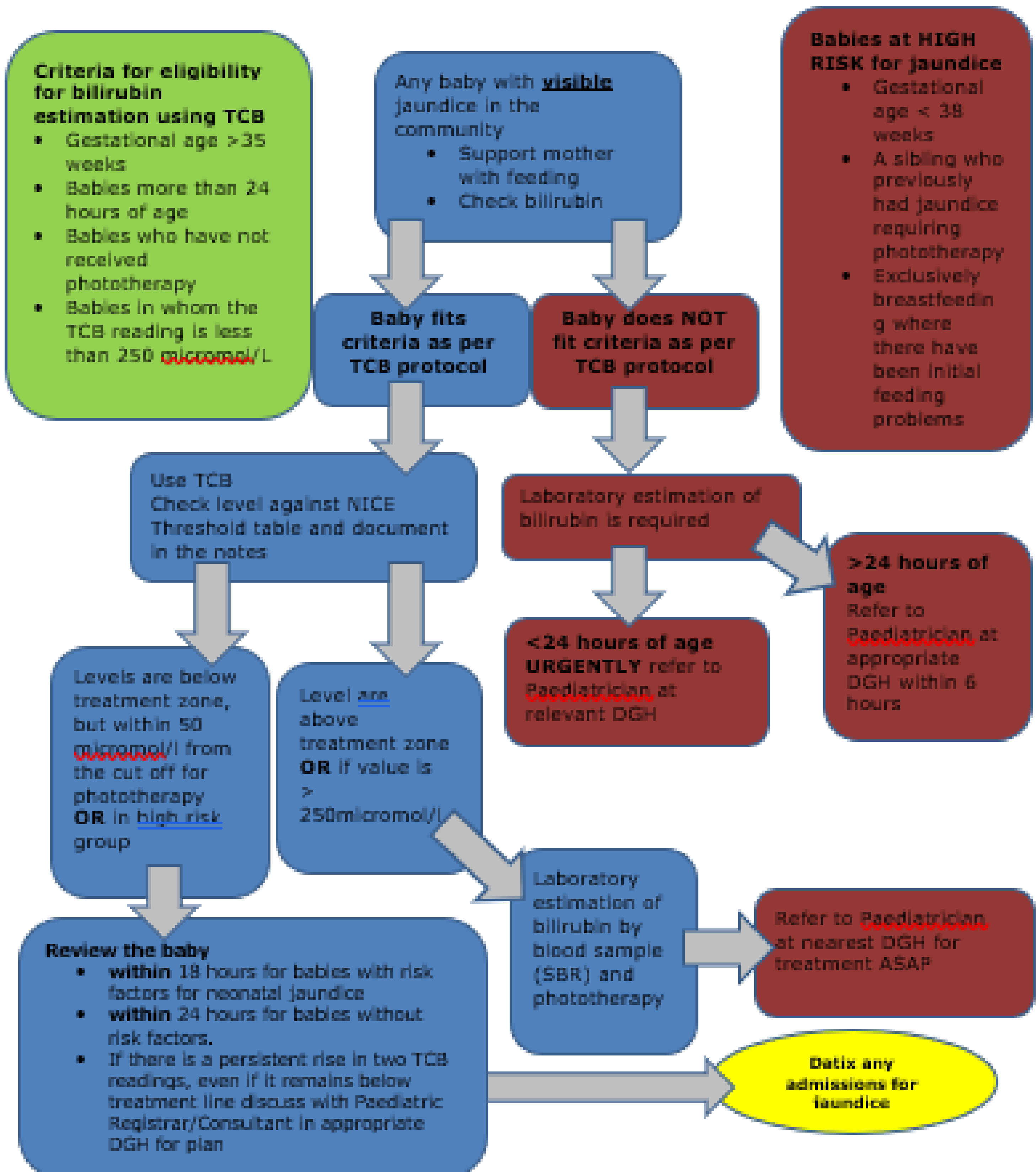
84	> 325	> 450
90	> 337	> 450
96+	> 350	> 450
Action	**Start phototherapy**	**Perform an exchange transfusion unless the bilirubin level falls below threshold while the treatment is being prepared**

For gestations less than 38 weeks refer to threshold tables here: https://www.nice.org.uk/guidance/cg98/resources

Appendix C:

Flow Chart for management of neonatal jaundice in the community in term babies <14 days old and pre-term <21 days only

Appendix C - Flow Chart for management of neonatal jaundice in the community in term babies 14 days old and pre-term 21 days.docx



5.0 Equality Impact Assessment

It is not mandatory to complete an Equality Impact Assessment (EIA) for a written control document. If you feel it would be of benefit, please complete the box below and attach an EIA as an appendix to this document.

Has an Equality Impact Assessment (EIA) been completed		**NO**
Name of the person giving this response	Community Midwife	
If NO:	**N/A**	
If YES:		