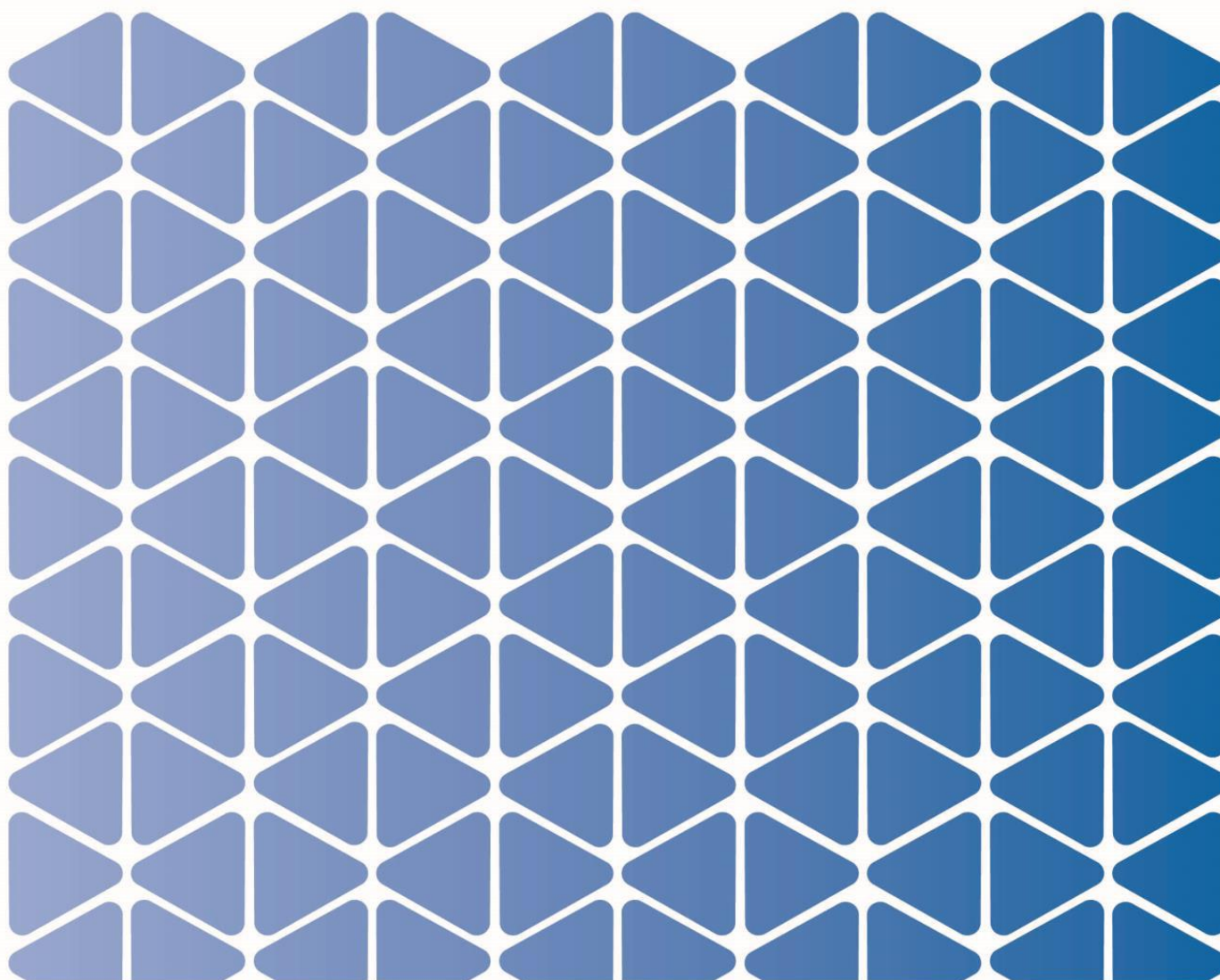




## PATIENT AND CARERS INFORMATION

# Phototherapy at Home

Worcestershire Neonatal Outreach Service



## **Phototherapy at Home Service**

Your baby requires treatment for jaundice in the form of phototherapy. This leaflet explains how we will provide that treatment in your own home.

You may have noticed that your baby's skin and whites of their eyes are a bit yellow. The yellow colour is due to raised bilirubin levels and is referred to as jaundice. Jaundice is very common in the 1<sup>st</sup> week of a baby's life and 10% of breastfed babies may still be jaundiced at 1 month. Jaundice is largely harmless but a few babies develop high levels of bilirubin, which if untreated would be harmful.

### **How will jaundice be checked?**

A baby's jaundice level can be checked by measuring the amount of bilirubin in the baby's body. The first time we check may be with a small handheld device that uses light to measure the levels of bilirubin in the skin. It's an instant, painless and easy test. If this test shows a high level of bilirubin then we'll need to take a blood test to get an accurate level to know if treatment is required. The blood tests are done by taking a small sample of blood from a heel prick.

### **How will jaundice be treated?**

Feeding helps baby's to process the bilirubin, so it's important that jaundiced baby's feed well and often, as the bilirubin is removed from the body when baby passes urine.

Depending on the bilirubin levels the baby may need to be treated by fluorescent lights called phototherapy.

Phototherapy is a blue light treatment which shines on the baby's skin and helps to break down the bilirubin. In hospital phototherapy may be provided by a light which shines above the baby in an incubator or by a pad which baby can lie on. It is important that as much of the baby's skin is in contact with the light, so they will be dressed in just a nappy.

The baby will have regular blood tests to check that the bilirubin levels are reducing and once the bilirubin is below a certain level the phototherapy can be stopped. Once the phototherapy is stopped a further blood test will be taken 8 – 12 hours after stopping to make sure the level is not rising again.

## **How long will jaundice last?**

The length of time babies remain jaundice varies. Usually levels rise in the first few days then decrease over the next week or two. If your baby requires phototherapy it usually takes a couple of days for the levels to reduce.

## **What is phototherapy at home?**

If your baby needs a course of phototherapy we will consider providing that care in your own home. Before we do that, we need to be confident that your baby is:

- More than 35 weeks gestation
- More than 48 hours old
- Weighs more than 2.5Kg
- Feeding well and passing urine and stools
- Keeping themselves warm

The doctor will make an assessment of your baby and discuss with you before making the decision to discharge you home with phototherapy. They will ask you to sign a consent form agreeing to follow all instructions. If this is appropriate you will meet a member of the Neonatal Outreach Team who will go through a teaching package with you to ensure you know how to care for your baby whilst having phototherapy.

**For effective treatment, phototherapy needs to be continuous.** You can give your baby short breaks for nappy changing or a bath.

## **How to use the Bilicocoon**

The Bilicocoon bag LED Phototherapy System provides light therapy for the treatment of jaundice. The Outreach team will show you how to setup the system at home.

It would be helpful to watch the YouTube clip -

<https://www.youtube.com/watch?v=hMaKro2KxR8>

1. Place the bilicocoon cover on a flat surface with the patterned front facing upwards.
2. Gently insert the fiberoptic light pad with the label on into the bottom cover. The light side should face up and should be against the padded side of the cover.
3. Then insert the 2<sup>nd</sup> fiberoptic light pad into the patterned cover. The light should face downwards.
4. Cross and secure the pad fixing tapes so the pads cannot slip out.
5. Undress your baby leaving only a small nappy on.

6. Unfold the cover and the infant fastening system.
7. Place baby on the cover using the neck cut-out line as a guide to adjust position.
8. Secure baby using the infant fastening system (fold any flaps which are too long to ensure maximum skin exposure)
9. Check baby is securely positioned then fold the front patterned part over the baby's chest and secure the adhesion surfaces.
10. Position and secure the shoulder fastening adhesion surfaces
11. Make sure your baby's head is OUTSIDE the bag.
12. COVER YOUR BABIES EYES. It is extremely important that your baby's eyes are protected from the blue light.
13. Insert the fiberoptic cable into the light box.
14. Turn the Bilicocoon box on using the black switch. The timer will have been set to count down however if you need to switch the equipment off for nappy change etc. Use the black on/off switch

### **Important things to note**

- For hygienic purposes, never place baby directly on the bare fiberoptic light pad. The light pad must be covered with the disposable Pad Cover.
- Do not lay or hang the fiberoptic cable where it could be crushed, this could damage the cable's outer protective cover and the optical fibres.
- Do not bend the fiberoptic light pad or cable at a sharp angle.
- Do not place anything on the fiberoptic cable.
- If the fiberoptic cable or light pad is ripped, punctured or otherwise damaged, stop using and contact the Outreach team immediately.
- Do not scratch, touch or soil the fiberoptic lenses at the end of the fiberoptic cable.
- The light box is not waterproof. **Do not put it somewhere where it will be exposed to liquids.**
- Liquids that enter the unit can damage it and create an electric shock hazard.
- Do not place the box near a heat source and ensure the air vents are free.

### **How often will blood tests be done?**

When a baby is on phototherapy we do regular blood tests to check the bilirubin level (the yellow pigment making a baby look jaundiced) which needs to be below a certain level before deciding to stop phototherapy. The blood tests are done by taking a small sample of blood from a heel prick. One of our nursing team will visit daily to take a blood sample to check your baby's jaundice level. If the level is rising, we may need to consider readmission to the hospital for further assessment. Our team will let you know when

phototherapy can be stopped. Once the phototherapy has been stopped we will need to take a further blood test to make sure the level is not rising again the day after stopping.

## Temperature

It is important to monitor your baby's temperature when they are receiving the phototherapy treatment. You will be taught how to take your baby's temperature before you go home and we advise that you check the temperature at each nappy change to ensure that it is within the normal limits **Normal Temperature: 36.5 – 37.1C** Please adjust your baby's blankets accordingly to try and keep their temperature within this range

## Skin care advice

We advise that you do not use any creams, lotions or oils on your baby's skin whilst they are receiving the light therapy as there is a risk of burns to baby's skin if these are used. Phototherapy can cause a mild skin rash so if you have any concerns regarding your baby's skin please contact the Neonatal Outreach Team.

## Feeding

It is very important that your baby feeds well during this time as

- Effective feeding can help resolve the jaundice
- If your baby is having more frequent stools they will be losing more fluid than normal

Baby's receiving any type of phototherapy will often have more frequent and loose stools that are sometimes greenish in colour. This is normal as it is the way the body removes the bilirubin. It is temporary and will resolve when the phototherapy stops.

You will be asked to monitor both your baby's feeding and nappies so that the Outreach Nurse can assess your baby accurately when they visit.

If you are concerned about your baby's feeding or wet /dirty nappies, please contact the Neonatal Outreach Team

## Eye Protection

There is some evidence to suggest that phototherapy can be damaging to baby's eyes. For this reason, we will ask that your baby wears phototherapy goggles while receiving phototherapy treatment. You will be shown how to use the goggles before you are discharged from hospital

If you have any further questions before consenting to phototherapy at home the Neonatal Outreach team, Neonatal and Transitional Care Unit staff will be happy to chat with you to answer all queries.

### Who to Contact

Neonatal Outreach Team  
7 days a week 8am – 4pm  
**Tel 01905 760661**  
**Mobile 07834 172 337**

Worcester Neonatal Unit  
**24 hours a day 7 days a week**  
**Tel 01905 760661**

**If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.**

### **Patient Experience**

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

### **Feedback**

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

### **Patient Advice and Liaison Service (PALS)**

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

### **How to contact PALS:**

**Telephone Patient Services: 0300 123 1732 or via email at: [wah-tr.PALS@nhs.net](mailto:wah-tr.PALS@nhs.net)**

### **Opening times:**

The PALS telephone lines are open Monday to Thursday from 8.30am to 4.30pm and Friday: 8.30am to 4.00pm. Please be aware that a voicemail service is in use at busy times, but messages will be returned as quickly as possible.

If you are unable to understand this leaflet, please communicate with a member of staff.