

Paediatric Intensive Care Unit

Information for families





We hope this booklet will help you understand more about our specialist Paediatric Intensive Care Unit (PICU) and the team who will be caring for your child.

If you have any questions that are not answered, please talk to any member of staff on the unit.

In the PICU, staff and parents work together. This means we are open and honest with each other, share information freely and make decisions together.

Being a parent in the PICU

For your child, you are the most important person of the team. No-one else can offer your son or daughter the comfort of his or her own family. Even if your child is asleep or unable to move because of tubes and machinery, there are still ways to fulfill your role as a parent.

Your child will gain much comfort from the touch of your hand, the sound of your voice and the familiar ways that you help him or her through fear and pain. Children who are asleep still feel the comfort of a loving presence.

With newborns, being in the PICU can interfere with those precious early days when you get to know your child.

It is important to find ways to introduce yourself to your baby. Babies learn to recognise voices first and your voice will be the one constant for your baby.

Visiting

You can be with your child as often as you like - we do not regard parents as visitors on the unit.

Because the PICU is an open and busy area, we have guidelines for people coming on to the unit:

- Please call via the intercom outside the door before you come in. Our nursing staff are likely to be busy caring for the children so bear with us if the door is not always answered immediately.
- Let staff know if it is your first time on the unit. A member of the team will help you get acquainted with the new surroundings.
- Children may find the PICU a daunting place at first, so feel free to ask your child's nurse to work through any issues that may be concerning them. Sometimes it can be helpful to involve one of our clinical psychologists in supporting you and your child in adapting to a stay on the unit.
- Please remember to supervise your other children while they are visiting the unit.
- We recommend that only two or three people visit at any one time but there are occasions when we can make exceptions. Please speak to the nurse looking after your child about this.
- Infections spread quickly and are more dangerous to children who are very sick. For the protection of all children on the unit, anyone who is sick or has been in contact with an infectious person is asked to stay away.
- Handwashing is extremely important in the hospital – please talk to staff for advice.

Taking care of yourself

Regardless of whether your stay is likely to be long or short, it is important for your child's well-being that you take good care of yourself.

Our tips include:

- Taking occasional walks.
- Eating nourishing meals.
- Trying to get at least a few hours of rest every day.
- Take a break with a friend who is a good listener.
- Remember people outside the hospital are often keen to help.
- It may be helpful to meet with one of our clinical psychologists to talk things through. Please ask a member of staff if you are interested.
- If you are breastfeeding or plan to breastfeed your baby, information is available from your child's nurse. You can also see our infant feeding specialist.



Routines in the PICU

A typical day in the PICU might be along these lines:

8am

Nurses from the night shift report to the day nurses.

8.15am to 8.45am

Nurses carry out a safety check on equipment and examine your child.

8.30am to 9.30am

The doctors, nurse in charge of the shift and other members of the team get together to discuss your child's progress and ongoing treatment. This meeting takes place outside the unit. A doctor is allocated to look after your child for the day.

9.30am onwards

Treatments and tests are carried out. This is an opportunity to discuss any care your child is receiving. The nurse can then share this information with other members of the team.

12pm

Microbiologists visit the unit and discuss with your child's doctor any necessary treatments to treat infection.

2pm to 3pm

If possible, we try to have a quiet time. This is when the lights go down, noise is kept to a minimum and procedures avoided wherever possible.

4.30pm to 5.15pm

PICU doctors visit each child to evaluate daily progress and plan care for the night with other team members. This takes place at the bedside and you are encouraged to stay with your child during the ward round.

8pm

Nurses from the day shift update those on nights.

10pm onwards

Children are given as much rest as possible but intensive care continues throughout the night.

Fire safety

If our fire alarms are activated, we ask parents and visitors to wait outside the hospital and await further instructions. Staff will be kept updated by the fire brigade



People in PICU

While your child is on the unit, you and your family will come into contact with many different people who are all part of the intensive care team.

Consultant intensivists are specialists in critical care and in charge of the day-to-day medical care of children on the unit.

Assisting them are **registrars** and **senior house officers (SHOs)**, who are doctors gaining additional experience with the care of critically ill children. These doctors watch your child's condition and treatments closely and keep you and their consultant or surgeons updated with any changes.

Matron, who wears a purple uniform, has overall responsibility for PICU nurses and the ward environment.

Sisters or **charge nurses** co-ordinate and supervise the care provided by nursing staff on each shift.

Nurses care for your child on the unit. Working with family members and the rest of the team, the nurse helps to meet a child's physical and emotional needs.

Our nurses write an individual care plan for each child, which you can discuss to ensure it works best for your son or daughter.

Clinical psychologists are available to provide additional emotional support to families. As well as offering individual time with parents, siblings and other family members to work through their experiences, they are available to support communication and achieve shared understanding with the medical team.

Support workers assist nursing staff caring for the children and help with the smooth running of the unit.

Physiotherapists assess your child's breathing and help to keep his or her lungs clear. This can involve anything from encouraging breathing exercises to specific chest physical therapy treatments. They also help to prevent joint stiffness and muscle weakness with gentle exercise.

Sometimes the physiotherapist will need to help your child start moving again. They also assist in encouraging your child's normal development and movement through individual activities, and sometimes with the aid of special equipment.

Social workers are available to provide support and counselling to families as they cope with the social, emotional and practical impact of their child's injury or life-threatening illness.

Dieticians make sure your child is receiving the necessary nutrition for his or her medical condition, and for growth and development. Some patients in the PICU are on reduced amounts of fluid, so the dietician can suggest ways of providing adequate calories in smaller volumes.

Pharmacists visit the unit every day to discuss your child's medication with the doctors and nurses.

The **lecture practitioner** is responsible for on-going education for critical care nursing. You may see him or her working alongside nurses with your child.

The **research and audit sister** or **charge nurse** is one of the clinical nurses involved in promoting research on the unit. Research is important to ensure that we are always providing the best care for the children. You may be invited to participate in one of these studies.

Specialist nurses are highly trained in specific areas of nursing and may be asked to visit you and your child during your stay. They may be linked to a specialist ward, which your child has either come from or is likely to be moved to.

Technicians play an important role with equipment used in the PICU. They will ensure that the equipment being used for your child is in top condition and help move children who require scans or transportation with monitoring and ventilation.

Spiritual care

Hospital chaplains are on call 24 hours a day, seven days a week, and offer spiritual comfort and support to patients and families of any faith, tradition or spirituality.

The chaplain will listen to any concerns, offer emotional support, help you explore difficult questions and issues of grief and loss, offer spiritual support and prayer, provide prayer books or sacred text for reading, or contact a local minister or spiritual leader of your faith.

Any member of staff will be able to contact a chaplain for you. In special circumstances, a christening or other religious ceremonies can be arranged on the unit.

Alternatively, your own religious leader is welcome to visit your child at any time.

You can find the hospital chapel by turning right outside the PICU, following the corridor towards the lifts and heading towards the doorway on the right (marked 'Stairs'). Cross over the staircase and continue through the double doors, down the corridor and you will find the chapel.

Equipment in the PICU

Some of the medical equipment on the unit can appear quite daunting until you know more about its functions.

All our children are connected to machines that bleep and alarm frequently, and our staff understand these sounds and know how to respond.

During your child's stay on the unit, you will learn more about these machines but please ask the staff if you have any questions.

Some of the more common pieces of equipment include:

Heart and breathing monitor: This is a screen that gives a picture recording of your child's heart and breathing patterns. The monitor is linked to your child's chest with a thin wire and three to five electrodes. These stick to the chest like plasters.

Endotracheal tube (ET tube): This is a tube through the mouth or nose that is connected to a breathing machine to help send oxygen to the lungs. The tube passes between your child's vocal chords and, because of this, he or she will be unable to speak or cry until it is removed.

The tube is taped to your child's face to keep it in place, and these tapes are changed from time to time as needed.

When the tube is in place, the child will also be unable to cough up any mucus from the lungs.



The nurse clears mucus out of the tube by putting a thinner tube into it and applying suction (called suctioning). A small amount of normal saline (salty water) can be put down the tube to loosen secretions.

Saline and suctioning may make your child cough.

Placing an ET tube is known as intubation and a child with an endotracheal tube is intubated. When the tube is removed, it is called extubation.

Ventilator: This machine helps your child breathe. It delivers air, with the right amount of oxygen, through the ET tube into the lungs.

Saturation monitor: A special light probe placed on a toe, foot or finger used to measure the oxygen saturation of the blood.

Nasogastric tube (NG tube): This tube is passed through the nostril or the mouth into the stomach, and drains air and fluid to help breathing and prevent vomiting. The tube can also be used to give feeds and medicines.

Chest drains: These are plastic tubes that drain air, blood or fluid from the area around the lungs or heart.

Oxygen mask/head box/nasal prongs: These are ways of giving oxygen to the lungs without intubation.

Urinary catheter: This tube is placed through the urinary opening into the bladder to empty urine from the bladder into a collection bag.

Central line: This is a tube placed in a major vein in the neck or groin. This type of line allows us to give stronger medications that might harm a child's smaller blood vessels. These lines can also be connected to the monitor to measure the amount of blood flowing into the heart.

Intravenous line (IV): Intravenous means "into a vein". An IV is a small tube placed into a vein and connected to longer tubing through which fluid, nourishment and medications can be given, usually using special pumps. An IV may need to be replaced from time to time.

Arterial line: A thin tube placed into an artery (usually in the arm, groin or foot). The line is joined to a monitor and allows us to read blood pressure without disturbing the child. Blood samples are taken from the tubing to measure important levels like oxygen and carbon dioxide.

Medications

Your child may be given a variety of medications while they are a patient on the unit. Some of the drugs that may be used include:

Pain relievers (analgesics): There are many drugs available that help with managing pain. The two main types are opioid, such as Morphine and Fentanyl, and non-opioid, such as Paracetamol.

Usually, the opioids are given with an intravenous (IV) pump. The doctors and nurses taking care of your child control the amount of the drug given and assess your child continuously to determine how he or she is feeling.

Older children may receive the drugs through an IV pump called a patient controlled analgesia (PCA), which gives your child control over the amount of medication he or she receives.

The pump is programmed to prevent too much medication being given.

Paracetamol can be given orally, often through a feeding tube. Occasionally, it may be given as a suppository rectally.

Paracetamol is also given as an antipyretic, a drug that assists the body in lowering its temperature.

It is important to know that your child will not become addicted to medication given to relieve pain. The drugs are used to keep children as comfortable as possible and assist them to get better.

Sedatives: In addition to pain relievers, your child may receive sedatives, which are medications to relieve anxiety.

In the PICU, the most frequently used is Midazolam, which is given intravenously when required. Other common sedatives used are Chloralhydrate, Vallergan and Clonidine.

Diuretics: While on the unit, your child may be given medications to help them get rid of extra fluid or to help their kidneys work better. These drugs may be given as one-off doses or more regularly.



In some instances, they are given as continuous IV infusions. Frusemide and Spironolactone are examples of diuretics.

Muscle relaxants: Suxamethonium, Vecuronium and Atracurium are examples of muscle relaxants used in the PICU.

These drugs may be given to your child to prevent him or her from moving. You may hear this called “paralysis” but please be reassured that this is temporary. Your child will be sedated while on these drugs.

Heart medications: Many different types of medications are available to help the heart work at its best. In the PICU, your child may receive one or more of the following:

Inotropes (support drugs) are a type of medication that support the heart and are given on a continuous basis and controlled at a certain rate by an IV pump.

One group helps by making the heart pump blood out with a stronger, more effective force, usually also increasing your child’s heart rate and blood pressure.

If your child’s heart needs some assistance before or after surgery to pump blood well, one or more of these drugs may be given – Dopamine, Dobutamine, Adrenaline, Noradrenaline and Milrinone.

Another group of support drugs are called **Vasodilators**. These drugs may be used before or after surgery to help the heart by decreasing the force needed to get blood out to the body. They also lower your child’s blood pressure. The names of commonly used drugs are Labetalol, Glyceryl Trinitrate (GTN) and Nitroprusside.

Anticoagulants (blood thinners): Sometimes children require medications to thin their blood and prevent blood clots from forming. These drugs are referred to as anticoagulants.

Heparin and Warfarin are the most common anticoagulants. Heparin is commonly given as an IV infusion. It can also be given as an injection, requiring a fine needle to be inserted under the skin surface. Warfarin is given in liquid or tablet form.

Bronchodilators (breathing medications): Your child may need medication to help keep his or her airway open. Swelling of the airway is common in children due to asthma, infections or trauma.

The medications most often used in the PICU are Salbutamol, Aminophylline and Adrenaline.

Antibiotics: When your child is admitted to the unit, he or she is monitored for infection. If the doctors suspect an infection, they may start antibiotics that cover most types of infections.

Once the tests have confirmed a certain cause for the infection (usually between 12 and 24 hours), the doctors may change the antibiotics to treat the specific bacteria or stop it if there are no signs of infection.

Anticonvulsants: Some children have convulsions (fits) due to fever, infection or trauma, but others have them and we never know why.

When a child is admitted to the PICU with fits or has had one on the unit, medication is given to either stop or control it.

The most common anticonvulsants used are Phenobarbitone and Phenytoin, which can be given by mouth, as a single IV dose or by a continuous IV infusion. Sometimes Diazepam is given to stop convulsions that continue for a long time. This can be given intravenously or rectally.

Family resources

Our parents' accommodation, across the main corridor from the PICU, is equipped with a kitchen, television lounge, waiting room and toilets for your use.

If you are staying here, ask for a tour and let our staff know if you have any questions.

Our housekeeper will oversee the day to day running of the accommodation, including topping up of tea, coffee, milk and sugar.

We recommend that you keep your door locked at all times, even when you are inside your room. Please leave your bin outside if you would like it to be emptied.

Arrangements can be made via your child's nurse to have your room cleaned.

Any food kept in the fridge or freezer should be labelled.

Room availability is reviewed on a daily basis, and it is possible that you could be asked to move to alternative accommodation if there is a greater need for another family.

A playroom is located in the PICU waiting area. This is kept locked for safety reasons but the key is available from staff. We ask that any play is supervised.

The Eaterie, the hospital's restaurant for patients, visitors and staff, can found on B level. Discount vouchers are available for families from our nurses.

There are also other food outlets in the hospital's main entrance area on C level.

Breast pumps are available for mothers who wish to breastfeed.

Free meals for breastfeeding mothers can be delivered direct to the unit until your baby is ten days old. Please arrange this through your baby's nurse.

Parking discount vouchers are available for families – again, please ask your child's nurse for details.

We will do everything possible to make your stay in our parents' accommodation a comfortable one and remind you to consider other occupants while you are with us.

Any feedback about what we are doing well or what could be improved will be welcomed.

Please speak to the matron or fill out and return a feedback form available from the hospital main entrance.

Alternatively, contact us via the Trust's website www.suht.nhs.uk or email yoursay@suht.swest.nhs.uk

Transferring to the ward

When your child is well enough to leave the PICU, he or she will be transferred to one of the hospital's wards.

This new environment may feel very different at first, as there will be less monitoring and the nursing staff will have more than one patient to look after.

Due to limited accommodation, only one parent can stay with their child on the ward.

Please ask if you have any questions.

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